

TO: BOARD OF DIRECTORS  
FROM: MICHAEL LEBRUN *MSL*  
INTERIM GENERAL MANAGER  
DATE: JANUARY 7, 2011

**AGENDA ITEM  
E-1**

**JANUARY 12, 2011**

**RECEIVE GROUNDWATER INDEX PRESENTATION  
BY BRAD NEWTON, Ph.D, PG FROM WAGNER & BONSIGNORE  
CONSULTING CIVIL ENGINEERS**

**ITEM**

Presentation of the fall groundwater index for the Nipomo Mesa area. [Receive Report]

**BACKGROUND**

Brad Newton of Wagner & Bonsignore is scheduled to summarize the attached report. The report is an independent product of Wagner & Bonsignore and is not reviewed or recognized by the Nipomo Mesa Management Area Technical group.

**FISCAL IMPACT**

Preparation of this report is included in the FY 2010-11 Budget.

**RECOMMENDATION**

Staff recommends that the Board receive the Report and give direction to staff.

**ATTACHMENTS**

- Fall 2010 Groundwater Index

t:\board matters\board meetings\board letter\2011\110112 ground water index.doc



TO: NCS D Board of Directors

RE: Fall 2010 GWI

DATE: December 15, 2010

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## 1 **Groundwater Surface Elevation Measurements**

2 Groundwater surface elevation data were obtained from SLO DPW, NCS D, USGS, and  
3 Woodlands. SLO DPW measures GSE in monitoring wells during the spring (April) and the fall  
4 (October) of each year. Woodlands and NCS D measures GSE in their monitoring wells  
5 monthly. For the years 1975 to 1999, available representative GSE data were used to compute  
6 GWI. For the years 2000 to 2010, only GSE data from the same 45 wells were used to compute  
7 GWI.

8 The GSE data was reviewed in combination with well completion reports and historical  
9 hydrographic records in order to exclude measurements that do not accurately represent static  
10 water levels within the principal production aquifer. Wells that do not access the principal  
11 production aquifer or were otherwise determined to not accurately represent static water levels  
12 within the aquifer were not included in analysis.

## 13 **Groundwater Surface Interpolation**

14 The individual GSE measurements from each year were used to produce a GSE field by  
15 interpolation using the inverse distance weighting (IDW) method.

## 16 **Groundwater Index**

17 The GWI is defined as the saturated volume above sea level and bedrock multiplied by the  
18 specific yield of 11.7 percent. The value of the groundwater index was computed for the area  
19 defined in Phase III of the trial. The base of the saturated volume is mean sea level surface  
20 (elevation equals zero) or the bedrock above sea level, whichever is higher. The bedrock surface  
21 elevation is based on Figure 11: Base of Potential Water-Bearing Sediments, presented in the  
22 report, Water Resources of the Arroyo Grande - Nipomo Mesa Area (DWR 2002). The bedrock  
23 surface elevation was preliminarily verified by reviewing driller reports obtained from DWR.  
24 The specific yield is based on the average weighted specific yield measurement made at wells  
25 within the Nipomo Mesa Hydrologic Sub-Area (DWR 2002, pg. 86).

## 26 **Key Well Index**

27 The NMMA Technical Group selected the data from eight inland key wells to represent  
28 the whole of the NMMA. The Key Well Index was calculated annually using Spring GSE  
29 measurements from 1975 to 2009. The Key Wells were selected to represent various portions of  
30 the groundwater basin within the NMMA. In selecting the eight key wells, the following  
31 criteria were applied so that the wells generally represent the NMMA as a whole:

- 32 (1) The wells are geographically distributed,
- 33 (2) No single well overly influences the Key Well Index.

34 The first criterion was met in the selection of the wells, such that no well represented a  
35 disproportionate area. To meet the second criterion, groundwater elevations from each well  
36 were normalized so that any well where elevations were on the average higher or lower than

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1 the other wells did not overly influence the magnitude of the Key Well Index. This  
2 normalization was accomplished by dividing each spring groundwater elevation measurement  
3 by the sum of all the Spring GSE data for that well.

4 The Key Well Index was defined for each year as the average of the normalized spring  
5 groundwater data from each well. The lowest value of the Key Well Index could be considered  
6 the "historical low" within the NMMA.

7

## 8 **REFERENCES**

9 Department of Water Resources (DWR). 2002. Water Resources of the Arroyo Grande -  
10 Nipomo Mesa Area, Southern District Report.

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Table 1

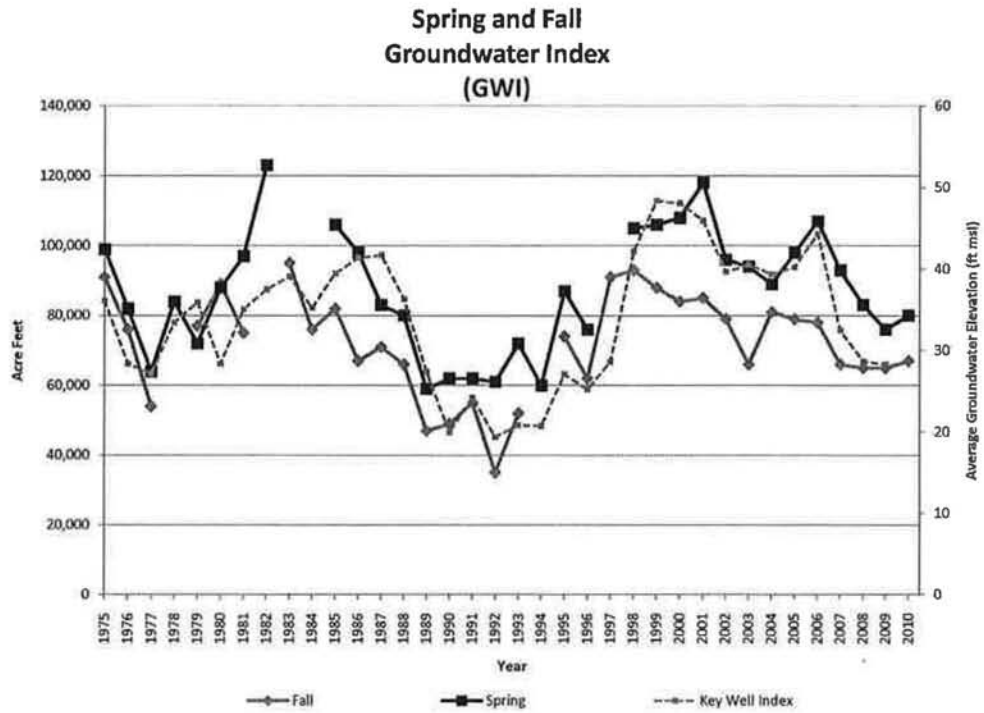
Spring and Fall  
 Groundwater Index  
 (GWI)

Year	Rainfall (inches)	Spring GWI (Acre-Feet)	Number of Wells	Fall GWI (Acre-Feet)	Number of Wells	Spring to Fall Difference (Acre-Feet)
1975	17.29	99,000	54	91,000	54	8,000
1976	13.45	82,000	45	76,000	65	6,000
1977	10.23	64,000	59	54,000	63	10,000
1978	30.66	84,000	62	---	35	---
1979	15.80	72,000	57	77,000	63	(5,000)
1980	16.57	88,000	55	89,000	46	(1,000)
1981	13.39	97,000	46	75,000	47	22,000
1982	18.58	123,000	42	---	31	---
1983	33.21	---	35	95,000	42	---
1984	11.22	---	14	76,000	37	---
1985	12.20	106,000	37	82,000	41	24,000
1986	16.85	98,000	51	67,000	51	31,000
1987	11.29	83,000	48	71,000	52	12,000
1988	12.66	80,000	51	66,000	49	14,000
1989	12.22	59,000	47	47,000	57	12,000
1990	7.12	62,000	55	49,000	53	13,000
1991	13.06	62,000	52	55,000	54	7,000
1992	15.66	61,000	52	35,000	48	26,000
1993	20.17	72,000	54	52,000	61	20,000
1994	12.15	60,000	54	---	36	---
1995	25.47	87,000	35	74,000	52	25,000
1996	16.54	76,000	45	62,000	57	14,000
1997	20.50	---	20	91,000	48	---
1998	33.67	105,000	41	93,000	44	12,000
1999	12.98	106,000	56	88,000	49	18,000
2000	14.47	108,000	44	84,000	41	24,000
2001	18.78	118,000	43	85,000	35	33,000
2002	8.86	96,000	29	79,000	41	17,000
2003	11.39	94,000	37	66,000	42	28,000
2004	12.57	89,000	42	81,000	35	8,000
2005	22.23	98,000	38	79,000	39	19,000
2006	20.83	107,000	44	78,000	41	29,000
2007	6.96	93,000	44	66,000	42	27,000
2008	15.18	83,000	43	65,000	42	18,000
2009	10.31	76,000	44	65,000	43	11,000
2010	17.05	80,000	45	67,000	42	13,000

---: insufficient for evaluation

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Figure 1



TO: BOARD OF DIRECTORS  
FROM: MICHAEL LEBRUN *MSL*  
INTERIM GENERAL MANAGER  
DATE: JANUARY 7, 2011



## **REVIEW RURAL WATER COMPANY APPLICATION TO CALIFORNIA PUBLIC UTILITIES COMMISSION FOR EXPANDED SERVICE AREA**

### **ITEM**

Review December 3, 2010 application by Rural Water Company to Cal PUC for expanded service area.

### **BACKGROUND**

Rural Water Company is a water purveyor operating on the Nipomo Mesa. Rural Water Company uses groundwater underlying the Nipomo Mesa to supply its customers with potable water. Rural Water Company is a partner with the District in the effort to bring supplemental water to the Nipomo Mesa.

Rural Water Company is a California Public Utilities regulated water purveyor. On December 3, 2010, Rural Water Company applied to the PUC for an expansion of service area to include a 21-lot subdivision known as 'Tentative Tract 2993'.

### **FISCAL IMPACT**

Budgeted staff time was used to review materials and prepare this report.

### **RECOMMENDATION**

Staff recommends that the Board review the attached materials and give direction to staff.

### **ATTACHMENTS**

- December 3, 2010 Advice Letter 66-W, Rural Water Company
- December 20, 2010 Will Serve Letter

# FRANK B & ASSOCIATES

WATER MANAGEMENT CONSULTING

December 3, 2010

E-mailed & Mailed

California Public Utilities Commission  
Attn. Water Branch  
505 Van Ness Avenue, Room 3106  
San Francisco, CA 94102-3106

Subject: Advice Letter 66-W, Rural Water Company

Attached are the original and 4 copies of the Advice Letter 66-W new service area map for new service area and to include a previously served area that has not been included for the Rural Water Company including the following:

1. Advice Letter No. 66-W
2. Cover Sheet
3. Tariff Sheets
4. WSQ, fire flow test, Fire Dept Letter & map
5. Service List

No customer notice is required as no change in rates is requested, however attached service list is noticed.

Sincerely,

*Frank Brommenschenkel*

Frank Brommenschenkel  
Frank B & Associates

Attachments

134 DAVIS ST • SANTA PAULA • 93060  
PHONE: 805-525-4200 • FAX: 805-525-7284  
Frank.brommen@verizon.net



<b>CALIFORNIA PUBLIC UTILITIES COMMISSION DIVISION OF WATER AND AUDITS Advice Letter Cover Sheet</b>	(Date Filed / Received Stamp by CPUC)
----------------------------------------------------------------------------------------------------------------------	---------------------------------------

AL # 66-W	Date Mailed to Service List: <b>December 3, 2010</b>	Requested Effective Date: <b>December 20, 2010</b>	Requested Tier: Tier 1 <u>Tier 2</u> Tier 3
-----------	---------------------------------------------------------	-------------------------------------------------------	------------------------------------------------

Replacing AL#:	Authorization for Filing: Standard Practice U-14	Compliance Filing? Yes <u>No</u> <input type="checkbox"/>	Rate  Impact	\$	No Change
				%	No Change

<u>The public has 20 days from Date Mailed (above) to protest this advice letter. If you chose to protest or respond to the advice letter, send Protest and/or Correspondence within 20 days to:</u>	Director Division of Water and Audits 505 Van Ness Ave. San Francisco, CA 94102
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------

<u>and if you have email capability, also email to:</u>	water_division@cpuc.ca.gov
---------------------------------------------------------	----------------------------

<u>Your protest also must be served on the Utility</u>	(see attached advice letter for more information and grounds for protest)
--------------------------------------------------------	---------------------------------------------------------------------------

Company Name: Rural Water Company	CPUC Utility Number:
Address: PO Box 1826	WTA _____
City, State, Zip: Pismo Beach, CA 93448	WTB _____
	WTC <u>311</u> _____
	WTD _____
	SWR _____

	Contact Name:	Phone No.	Fax No.	Email Address:
Filer	Frank Brommenschenkel	805-525-4200	805-525-7284	Frank.brommen@verizon.net
Alternate	Charles Baker	805-481-4150	481-4266	ruralwater@me.com

**Description:**  
 In this space or on the back of this form:

1. Explain justification for requested Tier: **Standard Practice U-14**
2. Describe service affected and how it is affected; **No change in rates or service**
3. Describe differences from related Advice Letters (Similar service, replacement filing) **Standard filing**

(FOR CPUC USE ONLY)			
WTS Budget/Activity/Type	Process as: <input type="radio"/> Tier 1 <input type="radio"/> Tier 2 <input type="radio"/> Tier 3		
_____ / _____ / _____	20th Day		30th Day
Project Manager:	Suspended on:		
Analyst:	Extended on:		
Due Date:	Resolution No.:		
Completion Date:	AL/Tariff Effective Date:		

# RURAL WATER COMPANY

San Luis Obispo County

December 3, 2010

Advice Letter No. 66-W

TO THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Rural Water Company (Rural) hereby transmits for filing the following changes in its tariff schedules, which are attached hereto:

<u>Cal. P. U. C. Sheet No.</u>	<u>Title of Sheet</u>	<u>Canceling Sheet No.</u>
380-W	SERVICE AREA MAP	332-W
381-W	TABLE OF CONTENTS	379-W

The present rates of Rural became effective on July 1, 2010 pursuant to Resolution W-4797, which authorized a surcredit. The last general rate increase became effective June 1, 2010 pursuant to Resolution W-4794, which authorized a general rate decrease of \$116,871 or 17.4% and an annual rate of margin of 19%.

These tariffs are submitted pursuant to Water Industry Rule 8 of General Order Number 96-B and copies of this Advice Letter are being circulated to those on the attached service List. Customer notice is not required as the rates for water service will remain the same.

Additions to the Rural service area boundary being requested are the following:

1. The proposed development reflected on the attached map is currently referred to as tentative tract 2993 with 21 lots, approximately 38 acres and is the large blue area adjacent to Cypress Ridge Parkway. The water supply questionnaire, fire flow test and fire department letter are attached for staff review.
2. A second blue area triangular shaped along Los Barros Road has been served for an indefinite period of time and needs to be brought into the service area so it can be included in the proposed Nipomo Mesa Management Assessment District that is being established. Water service has been and will continue to be provided to this area.

There are two ways to respond to this notice. You can send a **protest** to the CPUC and, if you do, you must send a copy of the protest to the utility; or you can send a **response** to the CPUC with a copy to the utility if you wish. A **protest** is a document objecting to the granting in whole or in part of the authority sought in this advice letter. A **response** is a document that does not object to the authority sought, but nevertheless

Post Office Box 1826 Pismo Beach, CA 93448 Phone 805-481-8432 Fax 805-457-8882

presents information that the party tendering the response believes would be useful to the CPUC in acting on the request.

A **protest** must be mailed within 20 days of the date the CPUC accepts the advice letter for filing served on the utility. The filing date is the date the advice letter was put on the CPUC Calendar. The Calendar is available at the CPUC Website of [www.cpuc.ca.gov](http://www.cpuc.ca.gov). A **protest** must state the facts on which the protest is based, the effect that approval of the advice letter might have on the protestant, and the reasons the **protestant** believes the advice letter, or a part of it, is not justified. If the protest requests an evidentiary hearing, the protest must state the facts the protestant would present at an evidentiary hearing to support its request for whole or partial denial of the advice latter. The utility must respond to a **protest** within five days.

All **protests** and **responses** should be sent to: CPUC, Water Utilities Branch, Room 3106, 505 Van Ness Avenue, San Francisco, CA 94102, FAX: 415-703-4426 or E-Mail: [water\\_division@cpuc.ca.gov](mailto:water_division@cpuc.ca.gov)

All **protests** should be sent to **Rural Water Company, Inc.**, Post Office Box 1826 Pismo Beach, CA 93448 Phone 805-481-8432 Fax 805-481-9072 or [ruralwater@earthlink.net](mailto:ruralwater@earthlink.net). If you have not received a reply to your protest from the utility within 10 business days, contact Frank Brommenschenkel at 805-525-4200 or [frank.brommen@verizon.net](mailto:frank.brommen@verizon.net).

Rural Water Company

*Frank Brommenschenkel for*

By: \_\_\_\_\_  
Charles M. Baker, President

Attachments: Tariff Sheets, AL Cover Sheet, Service List, WSQ, Fire Flow Test and location map



Rural Water Company

Revised Cal. P.U.C. Sheet No 381-W

San Luis Obispo County

Canceling Revised Cal. P.U.C. Sheet No 379-W

TABLE OF CONTENTS

The following listed tariff sheets contain all effective rates and rules affecting the charges and service of the utility, together with other pertinent information:

<u>Subject Matter of Sheet</u>	<u>Cal. P.U.C. Sheet No.</u>
Title page	378-W
Table of Contents	381-W, 368-W (T)
Preliminary Statement	252-W, 253-W, 374-W, 375-W
Service Area Map	380-W (C)

Rate Schedules:

Schedule No. 1 - General Metered Service	372-W
Schedule No. LC, Late Payment Charge	279-W
Schedule No. UF, Surcharge to Fund PUC Reimbursement Fee	354-W
Schedule F - Facilities Fees	377-W

Rules:

No. 1 Definitions	127-W, 128-W
No. 2 Description of Service	8-W
No. 3 Application for Service	355-W
No. 4 Contracts	10-W
No. 5 Special Information Required on Forms	356-W - 358-W
No. 6 Establishment & Re-establishment of Credit	13-W
No. 7 Deposits	359-W, 360-W
No. 8 Notices	258-W, 259-W
No. 9 Rendering and Payment of Bills	280-W, 281-W
No. 10 Disputed Bills	361-W - 362-W
No. 11 Discontinuance and Restoration of Service	282-W - 289-W
No. 12 Information Available to Public	24-W, 25-W
No. 13 Temporary Service	26-W, 27-W
No. 14 Continuity of Service	28-W
No. 15 Main Extensions	226-W -238-W, 273W
No. 16 Service Connections, Meters and Customer's Facilities	240-W- 246-W
No. 17 Standards for Measurement of Service	113-W
No. 18 Meter Tests and Adjustment of Bills for Meter Error	42-W, 44-W
No. 19 Service to Separate Premises and Multiple Units; and Resale of Water	147-W, 148-W
No. 20 Water Conservation	363-W
No. 21 Fire Protections	364-W

(Continued)

(To be inserted by utility)

Issued by

(To be inserted by Cal. P.U.C.)

Advice Letter No. 66-W

Charles M. Baker

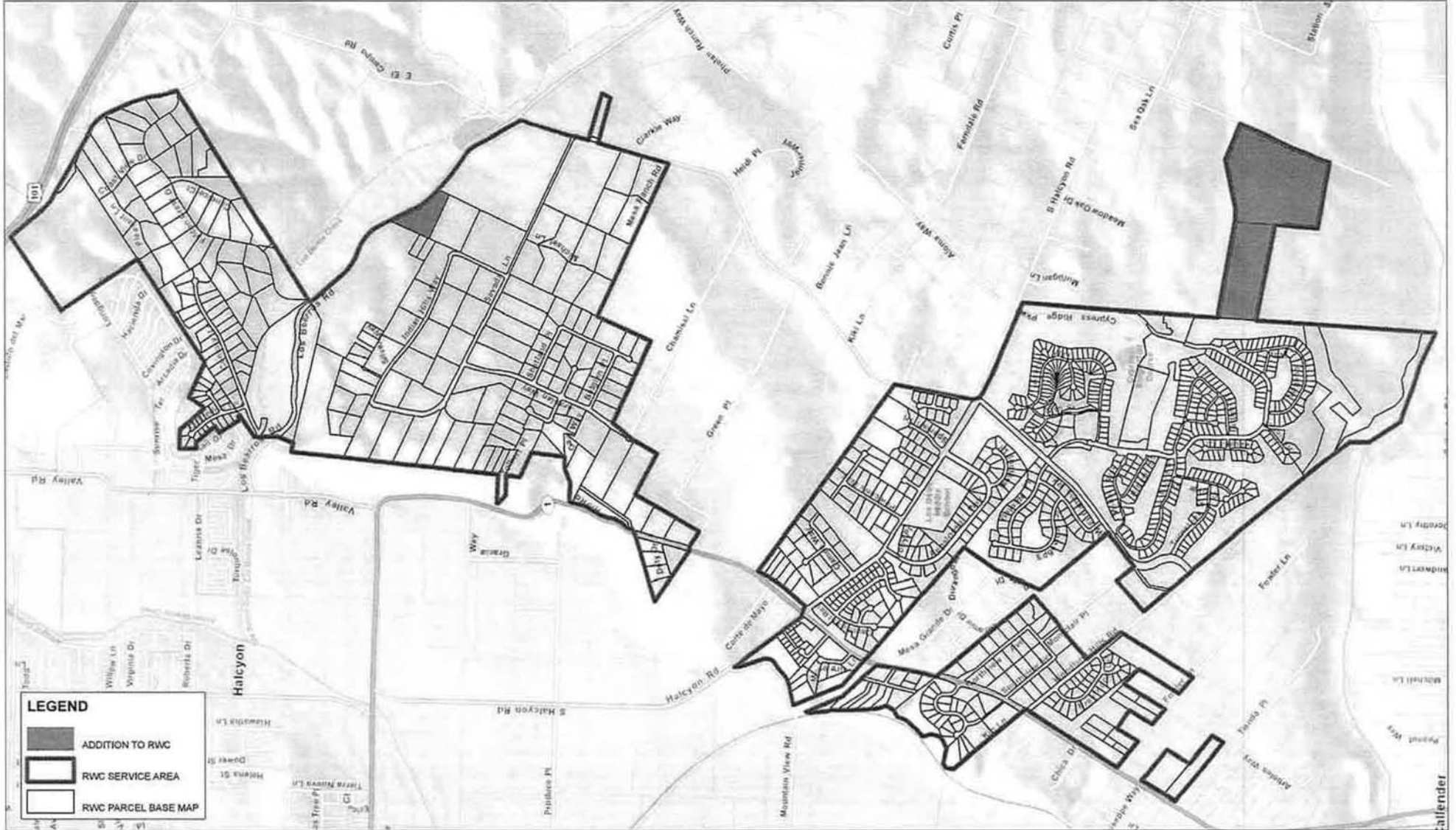
Date Filed \_\_\_\_\_

Decision No. \_\_\_\_\_

President

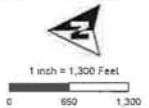
Effective \_\_\_\_\_

Resolution No. \_\_\_\_\_



**LEGEND**

- ADDITION TO RWC
- RWC SERVICE AREA
- RWC PARCEL BASE MAP



**RURAL WATER COMPANY  
SERVICE AREA EXPANSION**

JOB NO: 0673-0008  
 MAP DOC:  
 CREATED BY: RAL  
 DATE: 12-02-10  
 EXHIBIT NOTES:  
 WALLACE GROUP DID  
 NOT PERFORM SURVEY  
 SERVICES FOR THIS MAP.  
 NOT A LEGAL DOCUMENT.

**CPUC  
WATER SUPPLY QUESTIONNAIRE (WSQ)  
(FOR OTHER THAN A PUBLICLY-OWNED, OR A MUTUAL, WATER UTILITY)**

**Water Supply Utility:**

Utility Name: Cypress Ridge Subsection of the Rural Water Company, Inc.  
(not including the Basic Rural Water System which runs independently from this system.)

Mailing Address: PO Box 745  
City Grover Beach State CA Zip 93483

Telephone No.: ( 805 ) 481-4150

Fax No.: ( 805 ) 481-6686

Contact Person: Charles M. Baker, President

**Department of Real Estate (DRE) Information:**

Mailing Address: Box 187005  
City Sacramento State CA Zip 95818-7005

Telephone No.: ( 916 ) 227-0813

Contact Person: Darlene North

Assigned DRE No.: 123641 SA-F00

Is a DRE letter required? yes (Yes) \_\_\_\_\_ (No)

**Subdivision to be Served:**

Subdivision name: APN 075-351-022 & APN 075-351-028

Tract No.: 2993

Location Zenon Way – 1900 degree South of Halcyon

County: San Luis Obispo

Owner: Cypress Ridge L.P.

Number of Lots: 24 Number of Acres: 60.8

Number of Dwelling Units: 21

The subdivision is to be fully developed by 2013  
(approximate date)

**A. WATER SUPPLY AVAILABLE FOR ENTIRE SYSTEM AT PRESENT TO MEET THE MAXIMUM DAY DEMAND**

All sources referenced below must be listed individually along with their corresponding supply amounts and all supporting calculations must be shown in Section G.

(1) Flow available for this subdivision from all sources, except distribution storage, on the day of maximum demand [from Section G(1)] ° ..... 429 gpm

(2) Total discharge capacity from distribution storage [from Section G(2)(a) or G(2)(b)] ..... 1191 gpm

(3) Total supply available [A(1) + A(2)] ..... 1620 gpm

How many independent sources of supply are being utilized? ..... 5 wells

How many such maximum day's storage, or fraction thereof, are available? [from Section G(2)(b)(i)] .... 0.52 days

NOTE: The water system must be capable of replenishing the storage lost on the peak day, or long weekend, over the intervening periods of below average water consumption.

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° During maximum use hours.



## **B. WATER SUPPLY REQUIREMENTS**

(1) Total number of existing and potential residential and business customers:

(a) Number of residence and business customers in existing filed tariff area .....	<u>370</u>
(b) Vacant or unserved lots in existing filed tariff area entitled to water service. (e.g. undeveloped lots in previously approved subdivisions) .....	<u>26</u>
(c) Number of customers in the fully developed applied for subdivision .....	<u>21</u>
(d) Total number of customers to be served [B(1)(a) + B(1)(b) + B(1)(c)] .....	<u>417</u>

(2) Required water supply for **total residential and business customers** ( $Q_T$ ):

$$Q_T = Q_F + Q_M = ( \underline{0} ) + ( \underline{417} ) = ( \underline{417} )$$

Where,

$Q_F$  = Water supply required for flat rate customers.  
[From Section H(1)(a)]

$Q_M$  = Water supply required for metered rate customers.  
[From Section H(1)(b)]

NOTE: If there is no flat rate service,  $Q_F$  is equal to zero.

**B. WATER SUPPLY REQUIREMENTS (CONT.)**

(3) Required water supply for existing and anticipated industrial, irrigation, and public authority commitments, including those of the subdivision:

	<u>No. of Service Connections</u>	<u>Maximum Demand gpm</u>
(a) Industrial Customers ° .....	<u>0</u>	<u>          </u>
(b) Irrigation Customers ° .....	<u>0</u>	<u>          </u>
(c) Public Authorities ° .....	<u>0</u>	<u>          </u>
(d) Subtotal [B(3)(a) + B(3)(b) + B(3)(c)] ...	<u>0</u>	<u>          </u>

(if none, state so)

These connections are included in Section B(1)(d) and Section B(2) for domestic supply only.

° If any of the maximum demands entered always occur during periods of off-peak system demand, indicate instead your estimate of the demand of each such class of service during the period of maximum system demand.

(4) Total water supply requirements:

(a) Residential and business water supply requirements [Q <sub>T</sub> , from Section B(2)] .....	<u>732</u> gpm
(b) Industrial, irrigation, and public authority requirements [From Section B(3)(d)] .....	<u>0</u> gpm
(c) Total water supply requirements [B(4)(a) + B(4)(b)] .....	<u>732</u> gpm

### **C. WATER SUPPLY CONCLUSION**

(1) Apparent excess or deficiency in water supply (in maximum day requirements):

(a) Total water supply available at present [From Section A(3)] .....	<u>1620</u> gpm
(b) Total water supply requirements [From Section B(4)(c)] .....	<u>732</u> gpm
(c) Apparent excess (or deficiency) in water supply [C(1)(a) - C(1)(b)] .....	<u>888</u> gpm

(2) If a deficiency is apparent:

Explain plans for meeting such deficiency fully, including a statement of the numbers, types, and capacities of new water supply sources or storage facilities. Use additional sheets if necessary.

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## D. MINIMUM 2 HOUR TOTAL FLOW REQUIREMENT

(1) Fire Flow Required: \_\_\_\_\_ gpm, as indicated in the attached letter [From Section I] dated 1997 Uniform Fire Code 903, Appen III -A, from the applicable fire protection agency.

(2) Average Daily Requirement (ADR) within the planned subdivision. Determine by calculating the average daily requirement per existing customer in gpm and multiply it by the number of customer connections (lots) planned in the subdivision:

(No. of lots planned) x  $\frac{\text{(Present annual consumption, in gallons)}}{\text{(All existing customers) x (365 days) x (1440 minutes/day)}}$

Indicate calculation:

$$\text{ADR} = \left( \frac{1}{370} \right) \times \left( \frac{212.6 \times 43560 \times 7.48}{(365) \times (1440)} \right)$$
$$= \underline{0.356} \text{ gpm/user}$$

(3) Total flow requirement:

- (a) Land use fire flow requirement of local fire protection agency [From Section D(1)] ... 1000 gpm
- (b) Average daily requirement within subdivision [From Section D(2)] .....  $0.356 \times 21$  ..... 7.5 gpm
- (c) Minimum 2-hour total flow requirement [D(3)(a) + D(3)(b)] ..... 1007.5 gpm

**E. MINIMUM 2 HOUR TOTAL FLOW CONCLUSION**

Apparent excess or deficiency in total flow:

- (1) State the flow available from the existing system for two hours, at point clearly designated on the water system plan. If subdivision is to be served by extension of an existing system, attach a plan of the proposed water extension [From Section J] ..... 2289 gpm

Indicate how determined:

  x   i. Fire flow test made on 11/16/2010 (date)

       ii Other. (Explain): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- (2) Flow available from new source of supply provided in support of this subdivision. Indicate on water system plan (e.g. well supply or connection to other supply agency) ...   0   gpm

- (3) Distribution storage discharge capacity (2 hour flow available) [from Section A(2)] ..... 1191 gpm

- (4) Total 2-hour flow available to subdivision, [E(1) + E(2) + E(3)] ..... 3480 gpm

- (5) Minimum 2-hour flow requirement in subdivision [from Section D(3)(c)] ..... 1007.5 gpm

- (6) Excess (or deficiency) [E(4) – E(5)] ..... 2472.5 gpm

**F. WATER SUPPLY SUMMARY**

(1) Does water system meet or exceed:

(a) Maximum daily requirements for a fully developed service area?

Yes       No

(b) Total flow requirements of the subdivision?

Yes       No

If no to (a) or (b) above, please explain: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(2) Main Extension Agreement with \_\_\_\_\_ N/A \_\_\_\_\_.

(a) Is this a standard agreement?  Yes       No

If no, explain: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(b) Date of agreement: \_\_\_\_\_ N/A \_\_\_\_\_

**G. SUPPORTING CALCULATIONS FOR SECTION A**  
**[Water Supply Available For Entire System At Present To Meet The**  
**Maximum Day Demand]**

NOTE: Data submitted should be no more than 1 year old. If supply is from another water agency, you must also include a statement from that agency indicating the available quantity.

(1) List all water supply sources, except distribution storage, and show the total in Section A(1):

	<b>SOURCE DESCRIPTION (WELL, SPRING, ETC.)</b>	<b>QUANTITY AVAILABLE (GPM)</b>
1		
2		
3	Well #3	130
4	Well #4	130
5	Well #5	45
6	Well #6	64
7	Well #7	60
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
	<b>TOTAL QUANTITY AVAILABLE</b>	<b>429</b>

**G. SUPPORTING CALCULATIONS FOR SECTION A (CONT.)**  
**[Water Supply Available For Entire System At Present To Meet The**  
**Maximum Day Demand]**

NOTE: Data submitted should be no more than 1 year old.

(2) List all distribution storage sources:

<b>STORAGE</b>	<b>DESCRIPTION</b>	<b>QUANTITY (GALLONS)</b>
<b>1</b>	Tank @ Pump Stn #1	275,000
<b>2</b>	Tank @ Pump Stn #1	275,000
<b>4</b>		
<b>5</b>		
<b>6</b>		
<b>7</b>		
<b>8</b>		
<b>9</b>		
<b>10</b>		
	<b>TOTAL STORAGE CAPACITY</b>	<b>550,000</b>



**G. SUPPORTING CALCULATIONS FOR SECTION A (CONT.)**  
**[Water Supply Available For Entire System At Present To Meet The**  
**Maximum Day Demand]**

Total discharge capacity is the lesser of (a) total storage capacity [from Section G(2)] divided by 240 minutes (4 hours) or (b) the discharge capacity that represents the use of storage during 4 hours of peak or near-peak demand where one or more maximum days' storage are available. If less than one maximum day's storage is available, the resulting rate should be reduced by multiplying it by the ratio of the total storage to one maximum day's requirements.

Show both methods of calculating total discharge capacity. Enter the lesser of these two figures in Section A(2).

(a) total storage capacity [from Section G(2)] divided by 240 minutes:

$$\frac{550,000}{240} = 2291 \text{ gpm}$$

(b) Discharge capacity that represents the use of storage during 4 hours of peak or near-peak demand where one or more maximum days' storage are available. If less than one maximum day's storage is available, the resulting rate should be reduced by multiplying it by the ratio of the total storage to one maximum day's requirements:

$$2291 \times 0.52 = 1191.3$$

i) Show calculation for how many maximum day's storage, or fraction thereof, is available:

$$\frac{550,000}{732 \times 1440} = 0.52$$

**H. SUPPORTING CALCULATIONS FOR SECTION B**  
**[Water Supply Requirements]**

- (1) Show calculations for total required water supply for residential and business customers ( $Q_T = Q_F + Q_M$ ), where the sum of the water supply required for flat rate customers ( $Q_F$ ) and the water supply required for metered rate customers ( $Q_M$ ) equals the total required water supply ( $Q_T$ ).

$$Q = N \cdot c \cdot f$$

Where,

**N** = The total number of existing and potential residence and business customers [From H(2)].

**c** = Gallons per minute (gpm), a water use variable depending upon whether the area is to be served at flat or metered rates and depending upon other factors such as area, experience, community, standard of living, climate, class of consumer, quality, and cost of water and sewer facilities. Varies between 5 and 9 for flat rate service and 2 and 5 for metered service, reflecting maximum day domestic usage.

**f** = A factor to reflect diversity which varies roughly as follows:

For 10 Customers	.....	1.80
For 25 Customers	.....	1.33
For 50 Customers	.....	.97
For 100 Customers	.....	.70
For 300 Customers	.....	.41
For 1,000 Customers	.....	.30 (Minimum)

(a)  $Q_F = (\text{_____}) \cdot (\text{_____}) \cdot (\text{_____}) = \text{_____ gpm}$   
 (b)  $Q_M = (417) \cdot (4.5) \cdot (0.39) = 732 \text{ gpm}$

- (2) Provide breakdown of residential and business customers in the system used to determine c factor in Section H(1):

TYPE OF CUSTOMER	NUMBER OF CUSTOMERS
FLAT RATE	0
METERED RATE	417
<b>TOTAL CUSTOMERS</b>	<b>417</b>

**H. SUPPORTING CALCULATIONS FOR SECTION B (CONT.)**

**[Water Supply Requirements]**

(3) Justify c factor used in calculations (varies between 5 and 9 for flat rate service and 2 and 5 for metered service):

4.5 is near max. for metered services.

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**I. SUPPORTING DOCUMENTATION FOR SECTION D**  
**[Minimum 2 Hour Total Flow Requirement]**

- (1) Attach a letter from the applicable fire protection agency stating their fire flow requirement for Section D(1).

NOTE: Data submitted should be no more than 1 year old.

- (2) The flow standards for public fire protection purposes, set forth below, are those the CPUC considers appropriate for application on an average statewide basis. However, the CPUC recognizes that there are widely varying conditions bearing on fire protection throughout the urban, suburban, and rural areas of California. Therefore, the standards prescribed by the local fire protection agency or other prevailing local governmental agency will govern. Such local flow standards shall be provided whether greater or lesser than those set forth below.

<u>Land Use</u>	<u>Minimum Flow</u>
Rural, residential with a lot density of two or less per acre, primarily for recreational and/or part-time occupancy.	250 gpm
Lot density of less than one single-family residential unit per acre.	500 gpm
Lot density of one or two single-family residential units per acre.	750 gpm
Lot density of three or more single-family residential units per acre, including mobile home parks.	1,000 gpm
Duplex residential units, neighborhood business of one story.	1,500 gpm
Multiple residential, one and two stories light commercial or light industrial.	2,000 gpm
Multiple residential, three stories or higher, heavy commercial or heavy industrial.	2,500 gpm

**J. SUPPORTING DOCUMENTATION FOR SECTION E**  
**[Total Flow Conclusion]**

(1) Attach any applicable fire flow test results for Section E(1)(i).

NOTE: Data submitted should be no more than 1 year old.

(2) Attach the plan of the proposed water extension and flow availability at identified point(s) for Section E(1).

## **K. SYSTEM MAP AND PROPOSED SUBDIVISION MAP**

(1) Attach a map which delineates the subdivision and which clearly shows that the subdivision is entirely within the certificated service area of the utility. Indicate on the map the locations of:

- |                                     |                   |
|-------------------------------------|-------------------|
| (a) all fire flow test(s) conducted | Attached          |
| (b) all water sources               | See map attached. |
| (c) all storage facilities          | See map attached. |
| (d) all pressure zones              | See map attached. |

(2) Attach a subdivision-specific map which clearly shows the details of the subdivision. (See attached)

NOTE: Data submitted should be no more than 1 year old.

## CERTIFICATION AND VERIFICATION

I am the owner, co-owner, or an officer in the corporation shown as the water public utility herein; I have read the statements in this document and known them to be true of my own knowledge, except as to the matters which are therein stated on information or belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on Nov. 30 2010, at San Luis Obispo, California.

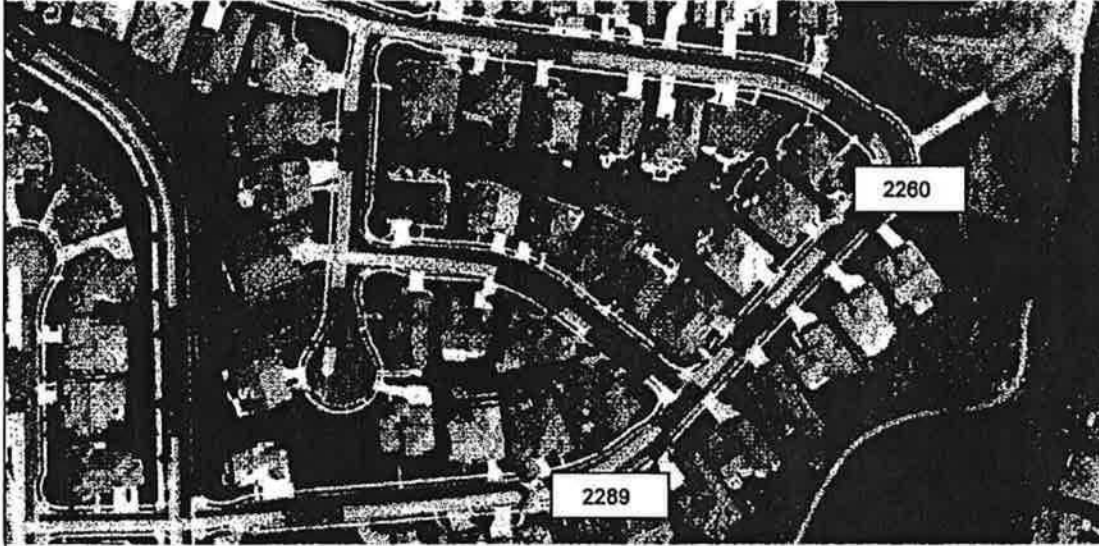
Charles M. Baker PRESIDENT  
Signature (If corporate officer, also show title.)

**FLUID RESOURCE MANAGEMENT  
FIRE HYDRANT FLOW TEST WORKSHEET**

**WATER SYSTEM** Rural Water Co. Cypress Ridge

**DATE** 11/16/2010

**TIME** 10:13am

<b>WATER TANK LEVELS</b> _____		<b>PUMP LEVELS</b> <u>N/A</u>		
				
<b>Flowing Hydrant(s)</b>	<b>Concurrent Flow</b>			<b>Residual Hydrant</b>
	# 1	# 2	# 3	
Hydrant #	2289			Hydrant #
Static Pressure (psi)	69			Static Pressure (psi)
Test Gauge #	1			Residual Pressure (psi)
Pitot Pressure (psi)	8			Test Gauge #
Test Gauge #	1a			Tested by
Nozzle Size (inches)	2.5			
Nozzle Coefficient				
Hydrant Flow (gpm)	480			
Tested by	RE			
Projected Flow @ 20 psi	See Comment			
<b>Comments :</b>				
Booster Skid: 10 h.p. PM Pump, (2) 40 h.p. Pumps, 75 h.p. fire pump. The tested fire hydrant is downstream of a booster pump station. As a result, the application of a gravity-based projected flow formula is not recommended. Given the tested flow and residual pressure, the system can readily provide 1,000 gpm at a residual of 20 psi.				







**CAL FIRE**  
**San Luis Obispo**  
**County Fire Department**

635 N. Santa Rosa • San Luis Obispo, CA 93405  
Phone: 805.543.4244 • Fax: 805.543.4248  
www.cdfso.org



*Matt Jenkins, Fire Chief*

December 1<sup>st</sup>, 2010

Charles M. Baker, President  
Rural Water Company, Inc.  
2299 Tattler Avenue  
Arroyo Grande, CA 93420

Re: Fire Hydrant Clearance Letter

I have received your letter (Advice Letter No. 66) dated 11/30/2010 requesting a review of the hydrant testing done by Fluid Resource Management Inc. for Rural Water Company. I have reviewed the letter from Fluid Resource Management Inc. written on 11/16/10 by Robert S. Miller, P.E. and attached hydrant testing sheet. The department has found the testing was done in accordance with the "conditions of approval" for compliance with the Uniform Fire Code, Appendix III-A.

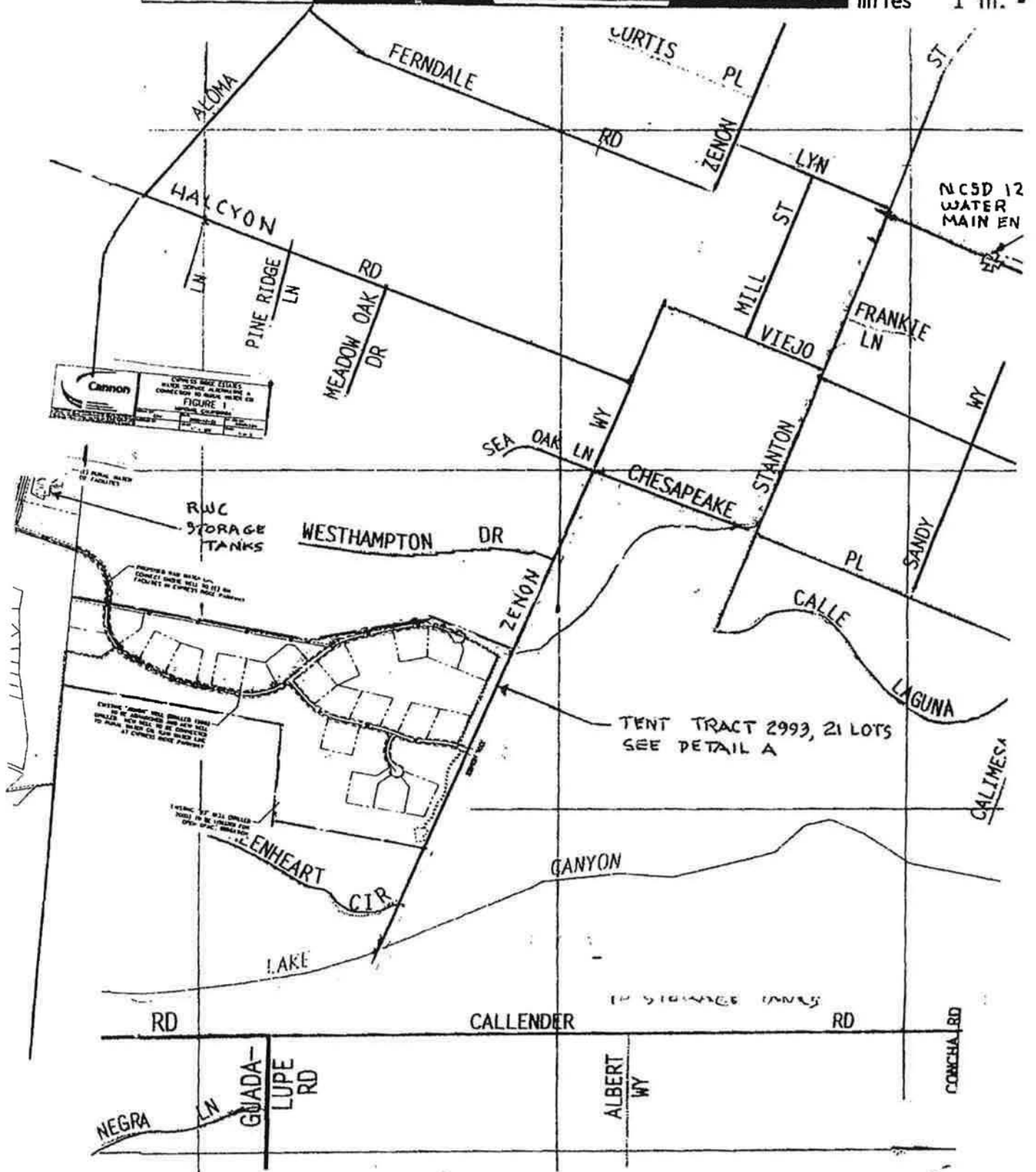
If I can provide additional assistance, please call 543-4244.

Respectfully,

Tina Rose  
Fire Inspector

TENT TRACT 2993

21 LOTS



**Cannon**

CONCRETE BEST ESTIMATES  
 WATER SERVICE ALIGNMENT &  
 CONNECTION TO EXISTING MAIN OR  
 FIGURE 1

NO. OF LOTS	NO. OF LOTS	NO. OF LOTS	NO. OF LOTS

EXISTING "ROAD" WILL REMAIN 100%  
 UNCHANGED. NEW WELLS TO BE CONNECTED  
 TO ALMA MAIN ON EAST SIDE OF  
 AT CORNER OF WESTHAMPTON

WORKING OF WELLS UNCHANGED FROM  
 1980 TO BE CONNECTED TO  
 ALMA MAIN ON EAST SIDE OF  
 AT CORNER OF WESTHAMPTON

NCSD 12  
 WATER  
 MAIN EN

TENT TRACT 2993, 21 LOTS  
 SEE DETAIL A

Rural Water Company  
Advice Letter 66-W  
December 3, 2010  
**Service List:**

Cypress Ridge Owners' Association  
Attn. President  
3563 Empleo Street, Ste "B"  
San Luis Obispo, CA 93401

Rural Water Company  
[ruralwater@me.com](mailto:ruralwater@me.com)

County Government Center  
1050 Monterey Street, Rm. 207  
San Luis Obispo, CA 93408

Ann Watson  
[watconsult@sbcglobal.net](mailto:watconsult@sbcglobal.net)

Roland Tanner  
Golden State Water Company  
1920 West Corporate Way  
Anaheim, CA 92801

Ron Green  
[rgreen2275@charter.net](mailto:rgreen2275@charter.net)

LAFCO  
County Government Center  
San Luis Obispo, CA 93408  
[dchurch@slolafco.com](mailto:dchurch@slolafco.com)

The parties on the list above were served on the above listed date by:

*Frank Brommenschenkel*

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Frank Brommenschenkel

# RURAL WATER COMPANY, INC.

P.O. Box 745  
Grover Beach, California 93483  
Telephone & Fax (805) 481-8432

December 20, 2010

**Cypress Ridge Partners, L P**  
950 Cypress Ridge Parkway  
Arroyo Grande, CA 93420

**Subject:** Will Serve Letter for Cypress Ridge Partners, L. P. for Vesting Tentative Tract Map 2993, (Current APN of 075-351-022 & 028) with 21 Residential Lots and Three open space Lots located on Zenon Way, Nipomo Mesa.

**To Whom It May Concern:**

This in response to your letter request and Vesting Tentative Tract Map 2993 dated 2/2/09 and updates to the Nipomo Mesa Management Area planning process for your project having frontage on Zenon Way to initiate the development planning process.

Rural Water Company, Inc. (Rural) will serve water for domestic and fire protection purposes to twenty-one (21) lots and three open space lots all being a part of an un-approved Tract Map No. 2993, a copy of which is attached.

Will serve letter "Conditions of Approval" are as follows:

1. Applicant shall contribute \$3,000 per  $\frac{3}{4}$ " service connection (lot) Facilities Fee per Tariff book Schedule "F" upon signing Main Extension Contract.
2. Applicant shall contribute an additional \$4,000 per service connection (lot) towards an intertie water transmission line commencing at the Nipomo Community Services District 8" water distribution mainline located in the vicinity of Stanton St and Lyn Road, terminating at the Rural Water Company 275,000 gallon steel storage tank located at 796 Cypress Ridge Parkway, to deliver imported water minimizing the need for groundwater pumping capacity to protect against seawater intrusion, see Exhibit "A" attached hereto. Intertie fees shall be paid at the time of signing of the Main Extension Contract.
3. You should be aware of the supplemental water development fee of \$13,200 imposed by San Luis Obispo County Building Department as identified in

new subsection E.1.b. of Ordinance No. 3090 Amending Title 22 of the Land Use Ordinance Section 22.112.020 relating to the delivery of imported water to the Nipomo Mesa Water Conservation Area.

4. Applicant shall be responsible for updating the service area map, including the preparation and filing cost with the California Public Utilities Commission (PUC) to include this development. Advice Letter 66-W was filed with the Commission on December 3, 2010 for this purpose.
5. Applicant shall obtain all governmental approvals required including but not limited to:
  - a. All environmental documentation necessary for the project.
  - b. County subdivision approval requirements.
  - c. Comply with all aspects of PUC General Order 103-A minimum standards and any County waterworks standards that may supersede PUC construction standards.
  - d. Water usage and water irrigation estimated requirements in accordance with Santa Clara County Superior Court Case No. CV770214 the groundwater basin adjudication and County Ordinance No. 3090.
  - e. The department of real-estate filing requirements.
6. Applicant shall contribute to Rural the use of the one well if it complies with Health Department standards until such time the Intertie referenced above in item #2 is installed and operating replacing this water well supply.
7. Applicant shall supply all offsite water mains for the transmission of domestic water from the existing water system to onsite mains for the individual lot service connections and fire protection.
8. All water system improvements indicated above shall be paid by the applicant and donated to Rural as a contribution in aid of construction not subject to refund in accordance with PUC Rule 15.
9. Applicant shall pay in advance of signing the Main Extension Contract the recorded and estimated cost for all engineering, design, permitting, inspection costs for all water facilities installation necessary to serve this proposed development, and costs related to confirming existing water well

December 20, 2010

capacity and quality to complete the water supply questionnaire for the PUC service area expansion approval.

10. Upon completion of all water facilities 'as built' drawings will be supplied to Rural, reflecting all easement areas, dimensions to valve covers that may get paved over in the future.
11. Signing of the Main Extension Contract will be required prior to the start of any construction indicating the engineering estimate of the cost of water mains, services, and hydrants to be installed and upon completion of the project the as-built costs of mains, services and hydrants will be provided to Rural so contributed capital amounts can be recorded in the respective PUC plant accounts.
12. If a construction water meter is required, applicant shall be required to apply for that service and pay the then current quantity and monthly service charge rates for that service.
13. Applicant shall prepare in a manor ready for County recording all water facility easements.
14. This will serve agreement shall expire in 36 months from the date signed below and will then be subject to conditions that may be necessary at that time.

Sincerely,



Charles M. Baker  
President

CC: Susan Roberts  
Cannon & Associates  
1050 Southwood Drive  
San Luis Obispo, CA 93401

TO: BOARD OF DIRECTORS  
FROM: MICHAEL LEBRUN  
INTERIM GENERAL MANAGER  
DATE: JANUARY 7, 2011



## **RATIFY 2011 COMMITTEE/DELEGATE ASSIGNMENTS**

### **ITEM**

Ratify 2011 Committee/Delegate assignments [RECOMMEND APPROVAL]

### **BACKGROUND**

Attached is a listing of assignments proposed by President Harrison.

### **RECOMMENDATION**

Staff recommends that the Board ratify the proposed assignments and direct staff to post these assignments in compliance with state law.

### **FISCAL IMPACT**

Budgeted staff time

### **ATTACHMENTS**

- Proposed Assignments

t:\board matters\board meetings\board letter\2011\110112 committee assignments.doc

# 2011 NCSD COMMITTEE ASSIGNMENTS

## Standing Committee Assignments (2 members)

Supplemental Water Project Design & Construction  
 Finance and Audit  
 Parks  
 Southland Wastewater Treatment Facility Upgrade  
 Water Conservation  
 Personnel

## Chairperson

Ed Eby  
 Larry Vierheilig  
 Jim Harrison  
 Michael Winn  
 Michael Winn  
 Larry Vierheilig

## Member

Jim Harrison  
 Ed Eby  
 Dan Gaddis  
 Jim Harrison  
 Larry Vierheilig  
 Jim Harrison

## DELEGATES

SCAC  
 Water Resources Advisory Committee (WRAC)  
 Chamber of Commerce meets last Thursday Blacklake at noon  
 City of Santa Maria/CCWA  
 Olde Towne Nipomo Association  
 Blacklake Village Council/Committees  
 Liaison to the Nipomo Incorporation Committee for Education (NICE)  
 Representative to the Board of Supervisors  
 Representative to the Planning Commission  
 Representattive to the NMMA

## MEMBER

Michael Winn  
 Michael Winn  
 Dan Gaddis  
 Jim Harrison  
 Larry Vierhelig  
 Dan Gaddis  
 Jim Harrison  
 Jim Harrison  
 Michael Winn  
 Ed Eby

## ALTERNATE

None per SCAC  
 Bylaws  
 Ed Eby  
 Jim Harrison  
 Ed Eby  
 Jim Harrison  
 Larry Vierhelig  
 Larry Vierhelig  
 Michael Winn  
 Jim Harrison  
 Rotational

Assignments are made by the president of the Board of Directors.

\*Subject to other requirements of the Brown Act, Committee appointments are not to be interpreted as limiting contacts between individual Board Members or any other person or persons.



TO: BOARD OF DIRECTORS  
FROM: MICHAEL LEBRUN *ML*  
INTERIM GENERAL MANAGER  
DATE: JANUARY 7, 2011



## ADOPT 2011 INVESTMENT POLICY

### ITEM

Adopt 2011 Investment Policy [Recommend Approval]

### BACKGROUND

The California Government Code Section 53646 (2) requires local government entities adopt an annual investment policy.

GC§ 53646(2) reads as follows:

**In the case of any other local agency, the treasurer or chief fiscal officer of the local agency shall annually render to the legislative body of that local agency and any oversight committee of that local agency a statement of investment policy, which the legislative body of the local agency shall consider at a public meeting. Any change in the policy shall also be considered by the legislative body of the local agency at a public meeting.**

There have not been any changes to the Government Code relating to investment policies for local government agencies since the last review and adoption. Staff does not propose any changes to the Investment Policy.

### RECOMMENDATION

Staff recommends that the Board approve Resolution 2011-Invest adopting the Year 2011 District Investment Policy.

### ATTACHMENTS

Resolution and Investment Policy

**NIPOMO COMMUNITY SERVICES DISTRICT  
RESOLUTION NO. 2011-xxxx**

**A RESOLUTION OF THE  
BOARD OF DIRECTORS OF THE  
NIPOMO COMMUNITY SERVICES DISTRICT  
ADOPTING THE YEAR 2011 DISTRICT INVESTMENT POLICY**

**WHEREAS**, the Board of Directors of the Nipomo Community Services District ("District") believes that public funds should, so far as is reasonably possible, be invested in financial institutions to produce revenue for the District rather than to remain idle, and

**WHEREAS**, from time to time there are District funds which for varying periods of time will not be required for immediate use by the District, and which will, therefore, be available for the purpose of investing in financial institutions with the objectives of safety, liquidity, yield and compliance with state and federal laws and policies.

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Directors of the Nipomo Community Services District as follows:

1. The District hereby adopted the Investment Policy attached hereto as Exhibit "A" as the District's Investment Policy;
2. The District General Manager shall act as Treasurer/Finance Officer of the District and is authorized to invest and re-invest funds in accordance with the Investment Policy for the succeeding twelve (12) month period or until such time as the delegation of authority is revoked.

**PASSED AND ADOPTED** by the Board of Directors of the Nipomo Community Services District this 12<sup>th</sup> day of January, 2011, on the following roll call vote:

AYES:  
NOES:  
ABSENT:  
ABSTAIN:

\_\_\_\_\_  
James Harrison, President  
Nipomo Community Services District

ATTEST:

APPROVED AS TO FORM:

\_\_\_\_\_  
Michael LeBrun  
Secretary to the Board

\_\_\_\_\_  
Jon S. Seitz  
District Legal Counsel

**RESOLUTION 2011-xxxx  
EXHIBIT A**

**YEAR 2011 INVESTMENT POLICY  
NIPOMO COMMUNITY SERVICES DISTRICT**

**1. INTRODUCTION**

The purpose of this written *Investment Policy* is to establish the guidelines for the prudent investment of Nipomo Community Services District funds (herein referred to as District's funds). The objectives of this policy are safety, liquidity, yield, and compliance with state and federal laws and policies.

District funds are to be managed with a high degree of care and prudence. Though all investments contain a degree of risk, the proper concern for prudence, maintenance of high level of ethical standards and proper delegation of authority reduces the potential for any realized loss.

This policy establishes the standards under which the District's Finance Officer will conduct business with financial institutions with regard to the investment process.

**2. FINANCE OFFICER**

The Board of Directors appoints the General Manager as the District Finance Officer and Treasurer. The District's Assistant General Manager shall serve as the District's Finance Officer and Treasurer in the absence of the District's General Manager.

**3. SCOPE**

The District investment portfolio shall consist of money held in a sinking fund of, or surplus money in, the District's treasury not required for the immediate necessities of the District. The District's investment portfolio shall be invested in accordance with this policy.

**4. OBJECTIVES**

The primary objectives are safety, liquidity, yield, and compliance.

**A. SAFETY**

The investment portfolio shall be managed in a manner that ensures the preservation of capital. The objective is to minimize credit risk and interest rate risk.

**B. LIQUIDITY**

The investment portfolio shall remain sufficiently liquid to meet all operating requirements. This shall be accomplished by structuring the investment portfolio so that investments mature concurrent with cash needs.

**C. YIELD**

Yield shall be a consideration only after the requirements of safety and liquidity have been met.

**D. COMPLIANCE**

This Investment Policy is written to be in compliance with California and Federal law.

**RESOLUTION 2011-xxxx  
EXHIBIT A**

**YEAR 2011 INVESTMENT POLICY  
NIPOMO COMMUNITY SERVICES DISTRICT**

**5. STANDARDS OF CARE**

**A. PRUDENCE**

The Finance Officer will manage the portfolio pursuant to the "Prudent Investor Standard." When investing, reinvesting, purchasing, acquiring, exchanging, selling and managing public funds in the District's investment portfolio, the Finance Officer shall act with care, skill, prudence, and diligence under the circumstances then prevailing, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the District.

**B. DISCLOSURES**

Finance Officer shall disclose any material interest in financial institutions with which he/she conducts the District business.

**6. INVESTMENTS AUTHORITY**

**A. PERMITTED INVESTMENTS**

The District Finance Officer is authorized to invest in the following institutions:

1. County pooled funds (California Government Code § 61730)
2. The Local Agency Investment Fund created by the California State Treasury (California Government Code § 16429.1)
3. One or more FDIC insured Banks and/or Savings and Loan Associations that are designated as District depositories by resolution of the Board of Directors (California Government Code § 61053).
4. Such other financial institutions or securities that may be designated by the Board of Directors from time to time in compliance with California and Federal law.

**B. PROHIBITED INVESTMENTS**

The District's Finance Officer shall not invest in:

1. Inverse floaters, range notes or interest only strips that are derived from a pool of mortgages.
2. Any security that could result in a zero interest accrual if held to maturity.
3. A state or federal credit union, if a member of the District's Board of Directors or an administrative officer also serves on the Board of Directors, or any committee appointed by the Board of Directors, or the credit committee or supervisory committee, of the state or federal credit union.

**C. DIVERSIFIED INVESTMENTS**

Investments, other than investments referenced in paragraphs **6-A** (1) and (2) above, will be diversified to avoid losses that may be associated with any one investment.

**RESOLUTION 2011-xxxx  
EXHIBIT A**

**YEAR 2011 INVESTMENT POLICY  
NIPOMO COMMUNITY SERVICES DISTRICT**

**7. REPORTS**

**A. MONTHLY REPORT**

Finance Officer/Treasurer shall make monthly reports to the Board of investments made or retired during the preceding month.

**B. QUARTERLY REPORT**

Finance Officer shall file a quarterly report that identifies the District's investments and their compliance with the District's Investment Policy. The quarterly report must be filed with the District's auditor and considered by the District's Board of Directors within thirty (30) days after the end of each quarter (i.e., by May 1, August 1, November 1, and February 1) (California Government Code § 53646). Required elements of the quarterly report are as follows:

1. Type of Investment
2. Institution
3. Date of Maturity (if applicable)
4. Amount of deposit or cost of the security
5. Current market value of securities with maturity in excess of twelve months (if applicable)
6. Rate of Interest
7. Statement relating the report to the Statement of Investment Policy
8. Statement of the District's ability to meet cash flow requirements for the next six months.
9. Accrued Interest (if applicable)

**C. ANNUAL REPORT**


Prior to February 1, of each year, the Finance Officer shall file and submit an annual report to the District's auditor and Board of Directors which will contain the same information required in the quarterly report.

The annual report will include a recommendation to the Board of Directors to either:

1. Readopt the District's then current annual Investment Policy; or
2. Amend the District's then current Investment Policy.

**D. LIMITED QUARTERLY REPORT**

If the District has placed all of its investments in the Local Agency Investment Fund (LAIF), created by California Government Code § 16429.1, or in Federal Deposit Insurance Corporation, insured accounts in a bank or savings and loan association, in a County investment pool, or any combination of these, the Finance Officer may submit to the Board of Directors, and the auditor of the District the most recent statement or statements received by the District from these institutions in lieu of the information required in paragraph 7.B, above. This special reporting policy does not relieve the Finance Officer of the obligation to prepare an annual investment report as identified in paragraph 7.C, above.

TO: MICHAEL LEBRUN   
INTERIM GENERAL MANAGER

FROM: CELESTE WHITLOW  
CONSERVATION SPECIALIST

DATE: JANUARY 6, 2011



**SCIENCE DISCOVERY PRESENTATION AND  
2011 CONTRACT CONSIDERATION**

**ITEM**

SCIENCE DISCOVERY PRESENTATION AND 2011 CONTRACT CONSIDERATION  
[RECEIVE PRESENTATION CONSIDER CONTRACT]

**BACKGROUND**

Science Discovery (SD), a local company, provides age- and class-grade appropriate, science classroom presentations to schools in San Luis Obispo County (SLO County) and Santa Barbara County. Science Discovery has an excellent reputation, both for the quality of presentations they provide and the supportive and professional manner in which they interact with teachers, principals, students, and other people encountered in the process of scheduling and providing presentations.

Science Discovery's presentations are geared to address aspects of the California Curriculum Standards (State-mandated teaching content requirements). SD's presentations already provide many of the water-conservation education "Best Management Practices" elements recommended to California water purveyors.

SD has a very low-key "marketing" approach to teachers. At the beginning of a school year, during a teachers' staff meeting, SD presents a brief description of the classroom presentations and services provided. Usually, teachers then call SD to schedule a presentation, if they wish. SD's reputation is such that sometimes teachers call SD to schedule a classroom presentation before SD has made the beginning-of-the-school-year's teachers' staff meeting.

For a more detailed description of the scope of services SD provides, see the attached *Proposal to Provide Water Conservation Education to Schools, 2010-11 School Year, for Golden State Water Company-Nipomo and Nipomo Community Services District-Scope of Services*.

In February 2008, Governor Schwarzenegger initiated the "20 x 2020" program, with a goal of decreasing California's urban water use by 20% by the year 2020. The final *20x2020 Water Conservation Plan* was released in February 2010.

As part of the requirements of this program, certain information must be submitted by each water purveyor to the California State Department of Water Services (DWR) to document progress on both meeting the water-conservation goals, and performance on a set of Best Management Practices (BMPs). One of the BMPs (BMP 2.2) covers education and outreach to school.

The final draft of the *BMP 2.2 School Education Guidebook to Implementation* was recently released. On review of the material, SD already incorporates many of the recommendations for made for meeting the BMP.

The education guidebook, which provides ideas for water providers starting an education program for the first time, makes many recommendations and suggestions for important issues to look for when

designing or contracting for a school education-outreach program. SD already incorporates many of these recommended elements into their program:

- **Meeting California Curriculum Standards.** SD meets these standards for the subjects they present.
- **Tailoring materials to meet the local needs of teachers.** SD has over ten years of experience providing classroom presentations in SLO County.
- **Contacting local teachers and professionals for input before deciding on an education program.** Before staff recommended NCS D consider using SD's services, staff saw an actual presentation and spoke with San Luis Obispo County environmental/water conservation staff (SLO County utilizes SD's services for water conservation and water pollution/quality presentations).
- **A "pushy" marketing approach is usually not productive.** SD's approach is very low-key, respectful, and supportive.
- **Tracking success.** Recommendations are made for student take-home audits (which student and family complete), and pre- and post-presentation assessments as a means to track the success of the program. Tracking success is one of elements of the 20x2020 BMP 2.2 for education and outreach, and it is part of the proposed Science Discovery 2010-2011 School Year agreement.
- **Provide student materials that reinforce the presentation contents.** SD provides a variety of materials for the classroom presentations.
- **Provide scheduling and tracking of presentations.** SD provides a written record of presentations provided.
- **Emphasis is placed on working with other agencies or wholesalers.** NCS D is already partnered with GSWC-Nipomo in a cost-sharing agreement to provide water conservation presentations to Nipomo schools by SD. A proposal to extend the existing agreement for the 2010-2011 school year is attached. (*See Proposal to Provide Water Conservation Education to Schools, 2010-11 School Year, for Golden State Water Company-Nipomo and Nipomo Community Services District-Scope of Services.*)

### **Contracting History**

2008-2009 School Year: A multi-agency, cost-sharing program between five San Luis Obispo County water purveyors (Nipomo Community Services District, Los Osos Community Services District, Golden State Water Company-Nipomo, Golden State Water Company-Los Osos, and S&T Water Company), San Luis Obispo County (SLO), and Science Discovery was initiated.

The program went well, and a number of presentations were scheduled and made. This was the first time SD had offered water-conservation presentations to Nipomo area schools. The complaint most participating purveyors had was that the contracting process between four purveyors took too long, and pushed back the start date for SD. Agreement was reached to start earlier in the year on the agreement renewal.

2009-2010 School Year: The number of classroom presentations increased, and positive word-of-mouth from the teachers helped scheduling. Again, because of the time required to get the annual agreement signed by all parties, SD started offering presentations after the beginning of the school year. The NCS D Water Conservation Committee requested that SD do a presentation at a Lucia Mar School District meeting. District staff attempted, unsuccessfully, to arrange for the presentation.

2010-2011 School Year: Your Board directed staff to include a requirement that SD schedule and perform a presentation to the LMUSD. In separate action, the four-purveyor coalition decided to split

into two two-member regional groups (NCSD and GSWC-Nipomo in our region). NCSD staff drew up the agreement between the two Nipomo water purveyors, based on the previous agreements, and included the specification on a presentation at a LMUSD meeting. SD is attempting to schedule a presentation to LMUSD, to date, with no success. On October 27, 2010, your Board considered renewal of the contract with SD, made a number of suggestions, and tabled a decision pending a presentation by SD to your Board.

### **Summary**

Science Discovery has successfully performed water conservation school-outreach presentations for NCSD and other purveyors. The services SD provides are an asset to water purveyors, teachers, and students. In addition, the program is structured to meet many of the State BMP 2.2 education requirements.

Both NCSD staff and SD have attempted to schedule a presentation to the Lucia Mar Board of Trustees without success.

The Board has stipulated that SD not attempt to schedule presentations in Nipomo schools until a formal agreement is established. Prior to this stipulation, SD made two presentations in Nipomo schools as the result of calls made to SD by teachers. These presentations were provided by SD at no cost to the District.

### **FISCAL IMPACT**

Program cost for NCSD's cost-share is \$941.25. The costs for presentations are additional and depend on the number of presentations made. An estimate of twelve presentations for 2010-2011, at a shared-cost of \$690, for a total of \$1631.25 for NCSD. SD's charges for presentations are invoiced after the presentation is made.

Water Conservation and Public Outreach Budget for Science Discovery's program is included in a group of similar expenses. The group's budgeted expense is \$6000. Funding in this expense group is available for the SD program.

### **RECOMMENDATION**

Staff recommends that your Honorable Board consider the presentation by Science Discovery and accept the earnest and repeated attempts made by NCSD and Science Discovery staff to schedule a presentation before the Lucia Mar Board of Trustees. Staff further recommends the Board execute the agreement between NCSD, GSWC-Nipomo, and Science Discovery, which will allow school presentations to continue.

### **ATTACHMENTS**

- *Proposal to Provide Water Conservation Education to Schools, 2010-11 School Year, for Golden State Water Company-Nipomo and Nipomo Community Services District-Scope of Services.*
- *Cooperative Agreement Between Nipomo Community Services District and Golden State Water Company-Nipomo to Fund the Development of the Water Conservation Education Program by Science Discovery, 2010 – 2011 School Year.*
- *BMP 2.2 School Education, Guidebook to Implementation*



# COOPERATIVE AGREEMENT TO FUND THE DEVELOPMENT OF THE WATER CONSERVATION EDUCATION PROGRAM BY SCIENCE DISCOVERY 2010 – 2011 SCHOOL YEAR

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Water is a precious commodity. For this reason, the efficient use of water is a priority for the Nipomo Community Services District (NCSD) and Golden State Water Company-Nipomo(GSWC), who together provide water service to thousands of customers within Nipomo. Each water purveyor is striving to find new ways to reduce their per-capita demand.

A proposal was provided to these water purveyors to implement a Water Conservation Education Program for elementary schools in the Nipomo area (see attached proposal). The proposal is provided by Science Discovery, whose mission statement is:

*“Science Discovery will implement a water conservation school education program of exceptional quality. Class presentations will meet the educational objectives of the water purveyors AND correlate with the California Academic Science Standards, meeting the needs of the local teachers.”*

A large number of the customers have children attending Nipomo elementary schools. Educating children about water use efficiency is an important part of future sustainability of our water resource. After a Science Discovery classroom presentation, students will take home insight on measures they and their families can adopt to reduce the amount of water they use on a daily basis.

In the Nipomo area, efficient use of water and the secure and sustainable future of our water supply is of concern to the residents and other community members, businesses and other organizations, including NCSD and GSWC. For this reason, GSWC and NCSD are joining to help develop the material to be used by Science Discovery in teaching elementary-level students how they and their families can use water efficiently, and help protect the Nipomo community's water supply.

Based on the proposal issued by Science Discovery, the fees to develop this program are provided in the following Table. The fees are based on the following assumptions:

- The Project Development Costs for the Nipomo component will be shared equally between GSWC - Nipomo and NCSD.
- The costs of the class presentations will be split equally between NCSD and GSWC – Nipomo for all presentations given in Nipomo.

NCSD has requested an additional meeting with the Lucia Mar School District. A separate agreement will be made between NCSD and Science Discoveries, and the cost will only be borne by NCSD.

## **Scope of Proposed Services**

**Program Update.** Science Discovery staff will update program information as directed by Nipomo Partners (Nipomo Community Services District and Golden State Water Company). This may include topics such as new statistical information, services offered by water purveyors, or current conservation procedures that the Partners would like communicated.

**Write and Distribute Teacher Newsletter.** Science Discovery will prepare a four-page newsletter, describing the water conservation program to local teachers. The newsletter will include a description of the program along with photos, science correlations for grades 3-5, and a sign-up form. Nipomo Partners will have the opportunity to review and edit the newsletter before final copying and distribution.

**Pre/Post Test Development.** Should the Nipomo Partners desire an assessment of student learning resulting from the class program, Science Discovery will create a pre/post test. The test will measure increases in student knowledge of water use and conservation. The pre-test shall be given 1-2 days prior to the class program. The post-test shall be administered within 24 hours of the class program. The tests can be administered by the classroom teachers, but is dependent upon their approval and willingness to do so.

**Program Administration.** This aspect of the program includes all communications with teachers and Partners' staff, minor changes to the program, cleaning presentation materials, phone, fax and postage costs.

**Presentation to School Board.** Science Discovery will provide an overview of the water conservation education program to Lucia Mar Unified School District Governing Board. This overview would provide the program concepts and goals to the board members.

**Class Presentations.** It is estimated that 12 classroom presentations will be given during the 2010-2011 school year, at a cost of \$115 for each presentation. Billing for presentations will not occur until after the presentation has been given.

**Costs**

This contract acts as and accepts the proposal with Science Discovery for the 2010/11 School Year based on the final costs as follow:

<b>Annual Project Administration Costs</b>		<b>Costs/ Purveyor</b>	
		<b>GSWC</b>	<b>NCSD</b>
Program Update	\$110.00	\$55.00	\$55.00
Write an Distribute Teacher Newsletter <i>(Price does not include copy/print costs)</i>	\$425.00	\$212.50	\$212.50
Pre/Post Test Development	\$220.00	\$110.00	\$110.00
• Evaluation and scoring of tests by independent, educator consultants (up to 100 tests)	\$850.00	\$425.00	\$425.00
Annual Operating Costs	\$687.50	\$343.75	\$343.75
Presentation to School Board	\$220.00	\$0.00	\$220.00
<b>Subtotal:</b>	<b>\$2,512.50</b>	<b>\$1,146.25</b>	<b>\$1,366.25</b>
<b>Estimated Costs for Presentations</b> <i>(Billing for the presentations will not be billed until the presentation is made)</i>		<b>Costs/ Purveyor</b>	
		<b>GSWC</b>	<b>NCSD</b>
Class presentations (12 @ \$115.00/program)	\$1,380.00	\$690.00	\$690.00
<b>Subtotal:</b>	<b>\$1,380.00</b>	<b>\$690.00</b>	<b>\$690.00</b>
<b>Total Costs per Purveyor</b>		<b>GSWC</b>	<b>NCSD</b>
		<b>\$1,836.25</b>	<b>\$2,056.25</b>

Costs provided, above, do not include the cost for copy/print of the letters. Costs are only an estimate for budgeting purposes. The exact number of presentations to be given is unknown at this time. Science Discovery will bill for the presentations once the class presentation is given.

Below is acknowledgment from each of the water purveyors of their participation in this cooperative agreement and commitment to support the development of the Water Conservation Education Program developed by Science Discovery

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Edwin DeLeon  
Golden State Water Company

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Michael LeBrun, Interim General Manager  
Nipomo Community Services Company

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Mike DiMilo  
Science Discoveries

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Proposal to Provide

**Water Conservation Education To Schools**

2010-11 School Year

for

**Golden State Water Company-Nipomo**

**Nipomo Community Services District**

Submitted By

**Science Discovery**

242 Luneta Dr. San Luis Obispo, CA 93405 Phone: 781-8341 Fax: 781-8343 E-mail:  
[sciencediscovery@sbcglobal.net](mailto:sciencediscovery@sbcglobal.net)

## Scope of Services

### Annual Project Administration Costs, Program Development, Presentations

#### **Program Update**

Science Discovery staff will update program information as directed by Nipomo Partners (Nipomo Community Services District and Golden State Water Company). This may include topics such as new statistical information, services offered by water purveyors, or current conservation procedures that the Partners would like communicated.

#### **Write and Distribute Teacher Newsletter**

Science Discovery will prepare a four-page newsletter, describing the water conservation program to local teachers. The newsletter will include a description of the program along with photos, science correlations for grades 3-5, and a sign-up form. Nipomo Partners will have the opportunity to review and edit the newsletter before final copying and distribution.

#### **Pre/Post Test Development**

Should the Nipomo Partners desire an assessment of student learning resulting from the class program, Science Discovery will create a pre/post test. The test will measure increases in student knowledge of water use and conservation. The pre-test shall be given 1-2 days prior to the class program. The post-test shall be administered within 24 hours of the class program. The tests can be administered by the classroom teachers, but is dependent upon their approval and willingness to do so.

We suggest that the completed student tests be scored and evaluated by a qualified, independent, education evaluator. Science Discovery has worked with *Out of Chaos Consulting* for such educational reviews. We recommend the use of their services to obtain a statistically significant analysis and summary of results.

#### **Program Administration**

This aspect of the program includes all communications with teachers and Partners staff, minor changes to the program, cleaning presentation materials, phone, fax and postage costs.

#### **Presentation to School Board**

Science Discovery can provide an overview of the water conservation education program to Lucia Mar Unified School District Governing Board. This overview would provide the program concepts and goals to the board members. We suggest that this be communicated using a slide show, assuming that the school district board meeting can facilitate the use of a projector at their meeting. School district board meetings agendas are generally impacted, as such any allotment of agenda time would be limited to less than 10 minutes of presentation time.

#### **Class Presentations**

It is estimated that 12 classroom presentations will be given during the 2010-2011 school year, at a cost of \$115 for each presentation. Billing for presentations will not occur until the presentation has been given.

## **BMP 2.2 School Education Guidebook to Implementation**

### **A. Why School Education?**

As a Foundational BMP, School Education is considered to be an essential water conservation activity by any water utility and is adopted for implementation by all signatories to the MOU as an ongoing practice with no time limits.

Sustainable water use is crucial for social and economic stability as well as for a healthy environment. This challenge is becoming even more important as climate change and population growth affect the amount of water available to competing interests.

Education is a fundamental element for promoting wise water use among customers. It has the power to influence sustainable behavior among future customers. School education programs can provide young people with a deeper understanding of complex environmental issues as well as equip them to contribute toward solutions.

Water conservation education can encourage a lifelong understanding and commitment to responsible use of water. When school-aged children are provided with knowledge, they can become the champions and leaders in water conservation.

The three main benefits of school education programs are:

- Children develop good water use habits at a young age.
- Children are likely to take the information learned home to influence their families to conserve.
- Leaves a lasting impression and improves water use behavior in the next generation.

For more information visit the Alliance for Water Efficiency ([www.allianceforwaterefficiency.org/school\\_education.aspx](http://www.allianceforwaterefficiency.org/school_education.aspx)).

### **B. Meeting Coverage Requirements**

1. **First Requirement: Tie into Content Standards** All school districts must ensure that their curriculum meets California Content Standards (<http://www.cde.ca.gov/be/st/ss/>). **Educators will be much more likely to teach water conservation if your materials help them cover required content.** The standards often suggest a sequence for presenting content, moving from simple concepts with younger children to more complex presentations of the same ideas with older children. Content also may follow a set sequence within grade levels. School districts can use a variety of materials to meet the content standards, and many teachers supplement with other materials. As long as the standards are taught at some point in the year, teachers usually have a lot of flexibility.
  - a. **How do you confirm materials meet the state education framework requirements and are grade-level appropriate?** The content standard should be stated in the materials. Look for lesson plans developed by credentialed

teachers who are familiar with the content standards. When presentations are contracted out, presenters should be experts in teaching water conservation and water science. They should understand and teach to the content standards.

- b. **How should an agency find curriculum that meets the standards?** Many agencies, both large and small, use an "education in a box" approach with materials developed by experts such as Project WET (<http://www.projectwet.org/>) and Water Education Foundation (<http://www.watereducation.org/doc.asp?id=873>). For those with a small education budget, this approach may make the most financial sense. There are many other resources for curriculum, including:
- i. Department of Water Resources (DWR) Education Committee: This is an ad hoc group of people involved in water education that meets twice a year to share ideas and resources. Getting involved is one of the best ways to find out what other water agencies are doing to meet their School Education BMP and find resources that you can adapt locally. Contact Carolyn Tucker, Water Education Specialist at DWR, (916) 653-9892, [carolyn@water.ca.gov](mailto:carolyn@water.ca.gov).
  - ii. Education and Environment Initiative (EEI) (<http://www.calepa.ca.gov/education/eei/>): EEI has developed curriculum units with standards and grade levels identified, some of which deal with water. Curriculum development is complete and draft lessons are available online. If additional funding becomes available in the future, EEI will distribute its materials to all California schools.
  - iii. California Environmental Education Community Network ([www.creec.org](http://www.creec.org)): The California Department of Education operates this program, which is coordinated locally through County Offices of Education. CREEC maintains a database of environmental education resources, including lesson plans on water conservation. Contact your local CREEC coordinator or the Science Resource Coordinator at your County Office of Education.
  - iv. Metropolitan Water District (<http://www.mwdh2o.com/>): Some wholesalers, such as Metropolitan Water District, conduct periodic meetings on water education and can provide lesson plans and other guidance. Any agency can participate in the MWD education meetings. Many other wholesalers offer educational resources. See the Resources section (link) for more ideas.
- c. **When should an agency develop its own curriculum?** With all of the resources available today, it seldom is necessary to develop custom curriculum. Building close relationships with your schools will help your agency tailor existing materials to the needs of local teachers.
- d. **How can non-classroom activities be pegged to content standards?** Many agencies, teachers, and facilities work together to customize tours, gardens, and

projects to meet current lessons and the associated standards. For examples, see these case studies and links: American River Water Education Center (link to case study), Otay Water District Demonstration Garden (link to case study) and Discovery Science Center (<http://www.discoverycube.org/education.aspx?q=107>).

**2. Second Requirement: Distribute materials to K-6 students and, when possible, also to grades 7-12.**

Although many water agencies hire teachers or send other employees into classrooms, there are many other effective ways to distribute age-appropriate classroom materials on water conservation. You can offer Project Wet training for teachers (link to Solano County case study) and/or support teachers' efforts with lesson plans, equipment loans, and supplies (link to Hidden Valley Lake case study). Third-party providers offer turnkey assembly and classroom programs for a fixed cost per student (links to ZunZun-ACWD and Resource Action Programs-GSW case studies). Poster and calendar contests offer opportunities to reach out to students and their families (link to Lake Arrowhead and San Juan case studies).

- a. **How should you find out what programs teachers will use?** It's best to assess needs before designing a program. Ask local educators what they already teach about water conservation and what enrichment programs they would welcome. Contact science and lead teachers, principals, and district level staff who manage curriculum. Regional coordinators for the California Regional Environmental Education Community (CREEC Network) and the CalServe Service Learning Initiative, usually based in the County Office of Education, may know local educators who are active in environmental education. Also ask neighboring water agencies which of their programs have been popular with teachers.
- b. **Should you "push" programs out to schools or rely on teachers to ask?** Proactive contact is essential to promote new programs. Once established, programs often grow to capacity through returning participants, word of mouth, and annual publicity.
  - i. Getting started: Pilot new programs with a small group of educators. Seek their feedback and tweak programs annually to incorporate suggestions. You may want to explain the program to a school's principal (letter or phone call) before contacting teachers. If a program isn't growing, evaluate why and either change it or discontinue it. Once a program is successful with a core group of teachers, expand to more schools or grade levels.
  - ii. Publicity:
    - a. School office staff usually will distribute flyers, letters, and newsletters to teacher mailboxes. However, many teachers prefer to be contacted by email because they can respond at a time that's convenient for them. Check school web sites for teacher email addresses.



- b. Contact new participants during the fall to schedule presentations for the upcoming academic year (avoid the first two weeks when teachers are especially busy). Contact past participants in the spring to schedule presentations for the next school year, then reconfirm several weeks before the scheduled visit.
    - c. Take advantage of newsletters and websites that teachers read, such as those published by the CREEC Network and your County Office of Education.
  - c. **How do you track success?** As you develop an education plan, determine objective criteria for measuring results. Then design simple ways to obtain and document the required data, such as the following:
    - i. Use pre- and post-assessments to document the level of knowledge gained through your program.
    - ii. Provide a feedback form (and stamped return envelope if necessary) for each classroom presentation to evaluate presenter effectiveness and tally the number of students reached.
    - iii. Look for assembly programs that ask students to answer questionnaires throughout the presentation and turn in at the end or as part of follow-up enrichment activities.
    - iv. For home conservation audits, families must report participation and results. Agencies have used business reply postcards (link to ZunZun/ACWD case study) or worksheets and stamped envelopes. They may ask families to report results on the agency's web site. Consider providing a reward to boost participation (see for example, the Orange County Water Hero campaign <http://www.ocwaterhero.com/>).
    - v. Any time you ask teachers to return evaluation and reporting forms, make it quick and simple. And a small thank-you gift (a \$5 coffee gift card, for example), will be greatly appreciated!

### **C. Starting a School Education Program**

This section suggests a step-by-step roadmap for agencies that are starting a School Education Program.

1. Identify the K-12 schools in your service area. Locate public school districts and private schools in the Yellow Pages or online and then visit their websites.
2. Identify the number of children in each grade level. Phone the school and ask for grade populations. (This will give you an idea as to how many items, booklets, brochures that you may need.)
3. Determine your budget. It will dictate the number of students and/or grade levels you will be able to reach.

4. Call your wholesaler, neighboring water agencies, and other utilities, looking for partnerships, curriculum, training, and grants.
5. Assess teachers' needs as described above (link to section C1).
6. Explore grant funding through the Department of Water Resources,. (Links to more information and sample Grant Funding Proposal.) [We don't have an example of this, and USBR says they are no longer doing grants to educators.]
7. Choose your best options based on budget and time available. Write an Education Plan that includes goals, key messages, measurable objectives, tactics, budget, and ways to measure results.
8. Execute your plan. For BMP reporting and future budgets, document the number of presentations or other activities, dates, students reached, grade levels reached, schools and teachers reached, and all expenses.
9. Evaluate and plan for next year.

**D. Partnerships:** Partnerships can be a valuable asset and can help offset costs associated with a school education program. Through partnerships, an agency may have access to not only funding, but staffing, printing and designing of materials, writing and editing text content, getting the word out, or even planning. To start a partnership, it is imperative to identify the benefits that both agencies have in common and how that will work toward accomplishing their individual goals. Another benefit from partnerships, especially regionally, is economies of scale. Regionally, a group of agencies or partners can order more materials or print more materials at a lower rate per item, reducing the total expense of materials.

BMP 2.2 specifies that, when mutually agreeable and beneficial, the wholesale agency or another lead regional agency can operate all or part of the education program. If the wholesale agency operates all or part of the retail agency's school education program, then it may, by mutual consent with the retail agency, assume responsibility for CUWCC reporting of this BMP. Under this arrangement, a wholesale agency may aggregate all or portions of the reporting and coverage requirements of the retail agencies joining into the mutual consent.

Other water agencies, wholesalers, and regional organizations are common potential partners, but also look to other organizations and businesses. Energy utilities have a growing support in water education due to the links between water and energy conservation in general. Entities that teach how to reduce source point pollution in stormwater also are likely partners for water conservation education, linking irrigation run-off as a potential pollutant in waterways. Local businesses, community groups, and environmental organizations are all potential partners.

#### 1. Wholesale/retail partnerships

- a. MWD <http://www.mwdh2o.com/mwdh2o/pages/education/h2o/h2o.html>
- b. San Diego County Water Authority  
(<http://www.sdcwa.org/education/teachers.phtml>)

## 2. Regional partnerships

- a. Sacramento Regional Water Authority (RWA) is a joint powers authority that serves and represents the interests of 21 water providers in the greater Sacramento, Placer, El Dorado and Yolo County region. The Authority's primary mission is to help its members protect and enhance the reliability, availability, affordability and quality of water resources. They leverage economies of scale to support school education programs throughout the four counties. RWA also participates in a theater assembly program and the Radio Disney Kidcaster program in the Sacramento region.
- b. Solano Water Education Program (SWEP) [cross link to case study]
- c. WEWAC <http://www.usewaterwisely.com/index.cfm>

## 3. Investor-owned utilities

- a. Golden State Water/LivingWise and Water Wise (Resource Action Programs) [case study to come from John Turner]

## E. Planning your budget

### 1. What are typical budgets for small, medium, and large agencies?

CUWCC members reported a wide range of annual budgets for school education programs for 2007 and 2008.

- a. Average (mean) expenditures for all reporting agencies
  - i. Retailers: \$20,781
  - ii. Wholesalers: \$54,743
  - iii. Mixed retail and wholesale sponsorship: \$16,291
- b. Average (mean) expenditures for retail agencies by population served
  - i. Large retailers, populations greater than 200,000: \$94,046
  - ii. Medium-sized retailers, populations between 20,000-200,000: \$14,426
  - iii. Small retailers, populations less than 20,000: \$2,492

### 2. How many students or schools should you try to reach?

- a. BMP 2.2 does not require agencies to serve a specific percentage of students, and agencies interviewed for this guidebook set goals for their programs in different ways. Some strive to reach all students in specific grade levels. For example, they select grade levels where the content standards fit well with key water conservation messages. Other agencies set goals based on the historical growth of their programs, seeking to reach more students each year as budgets permit. Others contact all of their schools each year and serve as many as students as they can on a first-come, first-served basis. Budget is always a factor.
- b. Average (mean) number of students served, as reported by CUWCC agencies for 2007 and 2008:
  - i. Retailers: 2,390 per year

- ii. Wholesalers: 4,015 students per year
  - iii. Mixed retail and wholesale sponsorship: 5,529 students per year
- c. Average (mean) number of students served in 2007 and 2008 for retail agencies by population served
- i. Large retailers, populations greater than 200,000: 11,242
  - ii. Medium-sized retailers, populations between 20,000-200,000: 1,233
  - iii. Small retailers, populations less than 20,000: 330
3. **How do you justify to your board that they should fund a school ed program?**  
 Agencies interviewed for the guidebook said their boards make school education programs a priority for all of these reasons:
- a. Children are water consumers and the next generation of rate-payers. Educating them about the scarcity of water as a resource and the role of essential infrastructure helps agencies meet state mandates to reduce per capita water consumption and build valuable identity in the community.
  - b. Teachers are opinion leaders and educational programs create tremendous goodwill in local communities.
  - c. Data from studies such as the 2009 ACWA survey (*Californians and Water Conservation: Key Findings from Focus Groups and a Statewide Survey*, March 2009) show that kids make the best teachers. Parents listen to their children and are influenced by them.

## F. Resources

1. Classroom presentations:
  - a. Case study: Managing a Growing Classroom Presentation Program (Dublin San Ramon Services District)
  - b. Case study: Small Agency Classroom Program (Hidden Valley Lake Community Services District)
  - c. Case study: Resource Action Programs' LivingWise and WaterWise Programs (Golden State Water) [In progress-John Turner]  
<http://www.getwise.org/index.html>
  - d. Bureau of Reclamation lesson plans  
<http://www.usbr.gov/mp/watershare/resources/lessonplans.html>
  - e. Discovery Science Center  
<http://www.discoverycube.org/education.aspx?q=4&c=103> is the largest provider of water education programs in Southern California. Each year, approximately 110,000 students participate in their school-based water programs. Depending on location, schools may be eligible to sign up at NO COST. Each program includes a Discovery Science Center instructor, free materials for students and aligns with California Science Content Standards.

2. Large group assemblies:
  - a. ZunZun (<http://zunzuntunes.com/intro.php>); case study involving Alameda County Water District
  - b. Discovery Science Center (<http://www.discoverycube.org/education.aspx?q=4&c=103>) Recommended by Irvine Ranch Water District
  - c. EarthCapades <http://www.earthcapades.com/> Recommended by Eastern Municipal Water District
  - d. Shows that Teach (<http://www.showsthatteach.com/>)
3. Children's water festivals or other events:
  - a. Case study: Get W.E.T.
4. Cooperative efforts with existing science/water education programs (various workshops, science fair awards or judging) and follow-up
  - a. Tri-Valley Science and Engineering Fair ([www.tvsef.org](http://www.tvsef.org))
  - b. Eastern Municipal Water District science fair program ([http://www.emwd.org/learning/science\\_project.html](http://www.emwd.org/learning/science_project.html))
5. Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits):
  - a. Dublin San Ramon Services District: When budget cuts suspended its classroom education program, DSRSD posted its lesson plans online and encouraged teachers to borrow equipment and supplies. (<http://www.drsrd.com/Education/lessonplans.html>)
6. Water conservation contests such as poster and photo
  - a. Case study: Conservation Poster Contest (San Juan Water District)
  - b. Case study: Calendar Contest (Lake Arrowhead Community Services District)
  - c. Case Study: Low-cost Poster Contest/Pocket Folder – Alameda County Water District
  - d. Poster Contest (Eastern Municipal Water District, ([http://www.emwd.org/learning/poster\\_contest.html](http://www.emwd.org/learning/poster_contest.html)))
7. Offer monetary awards/funding or scholarships to students: [No examples. Delete?]
8. Teacher training workshops
  - a. Project WET; case study: Solano County Education Program

- b. Eastern Municipal Water District in-service training  
([http://www.emwd.org/learning/educator\\_resources.html](http://www.emwd.org/learning/educator_resources.html))
9. Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens, etc.
- a. Case study: American River Water Education Center
  - b. Case study: Otay Water District Conservation Garden Tour
  - c. Water-wise gardening workshop for teachers, San Diego County Water Authority <http://www.sdcwa.org/education/teachers-workshops.phtml>
10. Careers
- a. Elsinore Valley Municipal Water District  
[http://www.evmwd.com/depts/admin/public\\_affairs/education/default.asp#CAR EER](http://www.evmwd.com/depts/admin/public_affairs/education/default.asp#CAR EER)
  - b. Dublin San Ramon Services District  
<http://www.dsrsd.com/employment/careertraining.html>
11. Grant programs
- a. Elsinore Valley Municipal Water District  
[http://www.evmwd.com/depts/admin/public\\_affairs/education/default.asp#GRANTS](http://www.evmwd.com/depts/admin/public_affairs/education/default.asp#GRANTS)
  - b. Municipal Water District: Educator grants  
(<http://www.wmwd.com/educatorsgrants.htm>) and funding for field trips  
(<http://www.wmwd.com/pdfs/fieldtrip.pdf>)