



Daniel R. Feron  
SAN JUAN BASIN AUTHORITY  
and the Board of Directors thereof

## **AGENDA**

**SAN JUAN BASIN AUTHORITY  
BOARD OF DIRECTORS' MEETING  
SANTA MARGARITA WATER DISTRICT  
BOARD ROOM  
January 8, 2013  
1:30 p.m.**

*Upon Request, this agenda will be made available in appropriate alternative formats to persons with disabilities, as required by Section 202 of the Americans with Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such request to Daniel Feron, Secretary, Board of Directors, at (949) 459-6590 at least 48 hours before the meeting if possible.*

### **ITEMS DISTRIBUTED TO THE BOARD LESS THAN 72 HOURS PRIOR TO MEETING**

Pursuant to Government Code section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Board less than seventy-two (72) hours prior to the meeting will be available for public inspection in the lobby of the Authority's business office located at 26111 Antonio Parkway, Rancho Santa Margarita, California 92688, during regular business hours. When practical, these public records will also be made available on the Santa Margarita Water District's Internet Web Site, accessible at <http://www.smwd.com>. All documents available for public review are on file with the Authority's Secretary located at 26111 Antonio Parkway, Rancho Santa Margarita, California 92688.

- I. CALL MEETING TO ORDER
- II. PLEDGE OF ALLEGIANCE
- III. ADMINISTRATION OF OATH OF OFFICE
- IV. ORAL COMMUNICATIONS
  - A. Persons wishing address the Board of Directors on matters not listed on the Agenda may do so at this time. "Request to be Heard" forms are available at the entrance to the Board Room. Comments are limited to three minutes, unless further time is granted by the Presiding Officer. Please submit the form to the Secretary prior to the beginning of the meeting.

Those wishing to address the Board of Directors on any items listed on the Agenda should submit a "request to be Heard" form to the Secretary before the Presiding Officer announces that agenda item. Your name will be called to speak at that time.

V. CONSENT CALENDAR

- A. Consideration and Action on Minutes of Regular Meeting of December 11, 2012 ..... **Page 4**

**Staff Recommendation:** Approve subject minutes.

- B. Consideration and Action on Monthly Financial Statements for December 2012 ..... **Page 8**

**Staff Recommendation:** Receive and file the Monthly Financial Statements.

Note: Items on the CONSENT CALENDAR will be considered for approval without discussion in one vote. A Director may request that an item be taken off the Consent Calendar for full discussion.

**[END OF CONSENT CALENDAR]**

VI. ACTION ITEMS

- A. Presentation on San Juan Basin Authority Joint Powers Agreement and History ..... **Page 11**

**Staff Recommendation:** No action required; provide direction as appropriate.

- B. Consideration and Action on Authorization of 2013 San Juan Basin Management Monitoring and Reporting Program ..... **Page 37**

**Staff Recommendation:** Authorize professional service contract in the amount of \$139,119 with Wildermuth Environmental for monitoring services in Calendar Year 2013.

VII. CHAIRMAN'S REPORT

VIII. ATTORNEY'S REPORT

IX. OTHER MATTERS

- A. Open Discussion or items received too late to be agendized.

X. INFORMATION ITEMS

A. Update on Development of Groundwater Management Plan.

XI. ADJOURNMENT

The next Regular Board of Directors' meeting is scheduled for **February 12, 2013 at 1:30 p.m.** at the Santa Margarita Water District, 26111 Antonio Parkway, Rancho Santa Margarita, California.

**MINUTES OF THE MEETING  
OF THE BOARD OF DIRECTORS  
OF THE  
SAN JUAN BASIN AUTHORITY  
December 11, 2012**

**Unapproved**

A Meeting of the Board of Directors (Board) of the San Juan Basin Authority (SJBA) was held on Tuesday, December 11, 2012 at its principal place of business located at 26111 Antonio Parkway, Suite A, Rancho Santa Margarita, CA 92688. The following Directors and/or Alternate Directors were present:

**Directors Present:**

LARRY McKENNEY, Moulton Niguel Water District  
LAURA FREESE, City of San Juan Capistrano  
DON BUNTS, Santa Margarita Water District  
WAYNE RAYFIELD, South Coast Water District

Chairperson  
Vice Chairperson  
Alternate Director  
Alternate Director

**Directors Absent:** None

**Support Services Present:**

DANIEL R. FERONS, Administrator  
WEST CURRY Administrator

**Others Present:**

Vanessa Locklin, Legal Counsel  
Samantha Adams, Wildermuth Environmental  
Mark Wildermuth, Wildermuth Environmental  
Sharon Brimer, Recording Secretary

**I. CALL MEETING TO ORDER**

Chairperson McKenney called the meeting to order at 1:30 p.m.

**II. PLEDGE OF ALLEGIANCE**

Chairman McKenney led the Pledge of Allegiance.

**III. ADMINISTRATION OF OATH OF OFFICE**

Vanessa Lockline administered the oath office to Don Bunts, Santa Margarita Water District, and Wayne Rayfield, South Coast Water District, as alternate directors for their respective agencies.

**IV. ORAL COMMUNICATIONS**

Chairperson McKenney invited members of the public to address the Board of Directors (Board) on matters that were not on the agenda. There were no comments. Chairperson McKenney proceeded with the meeting.

Former Director Dunbar and Director Freese were acknowledged for their contributions and service with commendations.

Photographs were taken. Mr. Dunbar thanked the Board for the opportunity to serve on the Board. Director Freese thanked the Board for the recognition.

V. CONSENT CALENDAR

- A. Consideration and Action on Minutes of Regular Meeting of November 13, 2012.
- B. Consideration and Action on Monthly Financial Statements for October and November 2012.

**MOTION NO. 2012-14**

Thereafter, upon a motion duly made by Director Freese, seconded by Director Bunts, to approve the Consent Calendar (Item A – Approve the November 13, 2012 meeting minutes of the regular meeting. Item B – Receive and file the monthly financial statements for October and November 2012.) Motion passed 4-0.

VI. ACTION ITEMS

- A. Presentation by Mark Wildermuth, Wildermuth Environmental on San Juan Basin Groundwater Management Plan

Director Ferons offered the San Juan Basin Groundwater Management Plan has been under development for approximately two years. The delays are not due to Wildermuth Environmental efforts, but can be attributed to the modeling efforts and making sure the data is solid and a clear understanding of the Basin. The goal is to have the Plan completed within the current fiscal year.

Mark Wildermuth provided an update on the San Juan Basin Groundwater Management Plan. The new estimate is a draft report due for the April 2013 meeting.

He highlighted the following items:

- 1. Data is now showing that yields may be lower than anticipated.
- 2. With lower yields and current pumping requirements, sea water intrusion will become an issue.

He noted that the basin will not be managed like a big groundwater basin, but will be managed adaptively. There may be a need to develop facilities to help augment yield and protect the Basin.

Chairperson McKenney expressed concerns on the management of sea water intrusion and if recommendations will be forthcoming to prevent this type of contamination for the Basin.

Mr. Wildermuth noted that monitoring of sea water intrusion will be required.

Director Rayfield asked for information on the affect the MWDOC Desalination Plant will have on the Basin. Mr. Wildermuth noted he will respond to the concerns at the April, 2013 meeting.

Director Freese asked about the potential for lowering the yields.

Mr. Wildermuth responded that storage capacity is currently limited. He noted the pumping may become a year-to-year decision.

Mr. Ferons noted that meetings with the Technical Advisory Committee (TAC) and member agencies will be conducted between now and April 2013 to solidify the Plan.

B. Consideration and Action on Authorization of 2013 Groundwater Monitoring Program.

Director Ferons commented that the goal is to develop the monitoring that will be necessary to implement the adaptive monitoring method in 2013.

Samantha Adams, Wildermuth Environmental, reported on the transition to annual reporting. She noted that the goal in 2012 was monitoring for basin management. In 2013, the anticipated changes shift the focus from permit monitoring to producing reports to the Board to help monitor and support decision making, while continuing to meet State reporting requirements, also to begin collecting data on sea water intrusion.

Chairperson McKenney asked about the feasibility of obtaining information from the Ranch. It was noted this is a private company pumping water from the Basin. This is outside the current evaluation methodology. Director McKenney noted there would be value in including the Ranch in the Basin's modeling.

**MOTION NO. 2012-15**

Thereafter, upon a motion duly made by Director Rayfield, seconded by Director Freese, to accept staff's recommendation and authorize negotiations with Wildermuth Environmental for monitoring services in Calendar Year 2013. Motion passed 4-0.

VII. CHAIRMAN'S REPORT  
No report

VIII. ATTORNEY'S REPORT  
No report

IX. OTHER MATTERS

A. Open Discussion or items received too late to be agendized.

X. INFORMATION ITEMS

A. Update on the Development of a Governance Master Plan.

Director Ferons reviewed the Mission Statement, background on the formation of the Basin Authority and options to consider for the Governance Master Plan: contraction, expansion, develop a staff, become a regional voice, operate projects, stay-the-course.

He reviewed a proposed approach which is to move forward with a series of facilitated workshops to establish goals, direction and to develop an implementation plan. Part of the project would be to include adjacent agencies to explore the feasibility of expanding the Basin's membership.

Director Freese noted her biggest concern was that it is her opinion that "staying-the-course" would not be a benefit to the Authority.

Director Rayfield supported Director Freese's comment. He offered it may be appropriate to expand the definition to adjacent agencies to include adjacent cities.

Director McKenney recommended a workshop to re-visit the mission statement, discuss the vision and focus of the Authority.

It was agreed that the January 2013 meeting would be an educational meeting. Director Rayfield suggested extending an invitation to the Ranch.

XI. NEXT MEETING

The next Regular Board of Directors' meeting is scheduled for Tuesday, **January 8, 2013 at 1:30 p.m.** at the Santa Margarita Water District, 26111 Antonio Parkway, Rancho Santa Margarita, California.

XII. ADJOURNMENT

There being no further business before the Board of Directors, a motion was duly made and seconded to adjourn the meeting at 2:40 p.m. Motion passed unanimously.

Respectfully submitted,  
Sharon D. Brimer, Recording Secretary

I DO HEREBY CERTIFY that the foregoing Minutes are true and correct copy of the Minutes adopted by the Board of Directors of the SAN JUAN BASIN AUTHORITY.

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West Curry, Administrator  
SAN JUAN BASIN AUTHORITY

**San Juan Basin Authority**  
**Financial Statements**  
**December 2012**

	G/L 21 General Fund	P.C. 1 G/L 26 Ortega Well	P.C. 4 G/L 22 Desalter	P.C. 4 G/L 31 Debt Svc	P.C. 9 G/L 29 Well Field	P.C. 10 G/L 25 Monitoring	P.C. 11 G/L 20 Future Proj	P.C. 13 G/L 32 USGS Co-Op GIS	Total
<b>ASSETS</b>									
Cash and Investments	\$ 217,905	\$ -	\$ 62,809	\$ -	\$ -	\$ 191,372	\$ 3,816	\$ 53,189	\$ 529,091
Cash and Investment-Restricted for Debt Service	-	-	-	2,413,549	-	-	-	-	2,413,549
Accounts Receivable - Lease prin	-	-	-	23,348,140	-	-	-	-	23,348,140
Utility Plant in Service	147,274	493,254	-	-	489,004	42,187	-	-	1,171,719
(Less) Accumulated Depreciation	(147,274)	(426,945)	-	-	(461,534)	(42,187)	-	-	(1,077,940)
<b>TOTAL ASSETS</b>	<b>\$ 217,905</b>	<b>\$ 66,309</b>	<b>\$ 62,809</b>	<b>\$ 25,761,689</b>	<b>\$ 27,470</b>	<b>\$ 191,372</b>	<b>\$ 3,816</b>	<b>\$ 53,189</b>	<b>\$ 26,384,559</b>
<b>LIABILITIES AND FUND EQUITIES</b>									
Current - Accounts Payable	\$ -	\$ -	\$ 960	\$ 431,882	\$ -	\$ 1,806	\$ -	\$ -	\$ 434,648
Bonds Payable	-	-	-	25,735,000	-	-	-	-	25,735,000
<b>TOTAL LIABILITIES</b>	<b>-</b>	<b>-</b>	<b>960</b>	<b>26,166,882</b>	<b>-</b>	<b>1,806</b>	<b>-</b>	<b>-</b>	<b>26,169,648</b>
<b>FUND EQUITIES</b>									
SMWD	\$ 21,249	\$ 36,037	\$ 10,396	\$ -	\$ 14,820	\$ 32,582	\$ 954	\$ 6,671	\$ 122,709
MINWD	22,301	-	10,396	-	-	48,983	954	8,081	90,715
CITY OF SAN JUAN CAPISTRANO	22,285	36,038	10,396	(109,425)	14,820	54,076	954	8,081	37,225
SCWD	22,723	-	10,396	-	-	18,871	954	9,490	62,434
Current Year Fund Balance	129,347	(5,766)	20,265	(295,768)	(2,170)	35,054	-	20,866	(98,172)
<b>TOTAL FUND EQUITIES</b>	<b>217,905</b>	<b>66,309</b>	<b>61,849</b>	<b>(405,193)</b>	<b>27,470</b>	<b>189,566</b>	<b>3,816</b>	<b>53,189</b>	<b>214,911</b>
<b>TOTAL LIABILITIES AND FUND EQUITIES</b>	<b>\$ 217,905</b>	<b>\$ 66,309</b>	<b>\$ 62,810</b>	<b>\$ 25,761,689</b>	<b>\$ 27,470</b>	<b>\$ 191,372</b>	<b>\$ 3,816</b>	<b>\$ 53,189</b>	<b>\$ 26,384,559</b>
<b>REVENUES</b>									
Investment Income	\$ 6	\$ -	\$ -	28,144	-	-	-	-	28,150
Special assessments	132,125	-	25,000	-	-	75,000	-	29,000	261,125
<b>TOTAL REVENUES</b>	<b>\$ 132,131</b>	<b>\$ -</b>	<b>\$ 25,000</b>	<b>\$ 28,144</b>	<b>\$ -</b>	<b>\$ 75,000</b>	<b>\$ -</b>	<b>\$ 29,000</b>	<b>\$ 289,275</b>
<b>EXPENDITURES-OPERATING</b>									
Consulting Services	\$ 203	\$ -	\$ 4,735	\$ -	\$ -	\$ 39,946	\$ -	\$ 8,134	\$ 53,018
Accounting Expense	147	-	-	-	-	-	-	-	147
Legal Fees	1,749	-	-	-	-	-	-	-	1,749
Dues	685	-	-	-	-	-	-	-	685
<b>TOTAL EXPENDITURES-OPERATING</b>	<b>2,784</b>	<b>-</b>	<b>4,735</b>	<b>-</b>	<b>-</b>	<b>39,946</b>	<b>-</b>	<b>8,134</b>	<b>55,599</b>
<b>EXPENDITURES NON-OPERATING</b>									
Depreciation Expense	\$ -	\$ 5,766	\$ -	\$ -	\$ 2,170	\$ -	\$ -	\$ -	\$ 7,936
Debt Service and Interest Expense	-	-	-	323,912	-	-	-	-	323,912
<b>TOTAL EXPENDITURES NON-OPERATING</b>	<b>-</b>	<b>5,766</b>	<b>-</b>	<b>323,912</b>	<b>2,170</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>331,848</b>
<b>TOTAL EXPENDITURES</b>	<b>\$ 2,784</b>	<b>\$ 5,766</b>	<b>\$ 4,735</b>	<b>\$ 323,912</b>	<b>\$ 2,170</b>	<b>\$ 39,946</b>	<b>\$ -</b>	<b>\$ 8,134</b>	<b>\$ 387,447</b>
<b>NET INCOME/(LOSS)</b>	<b>\$ 129,347</b>	<b>\$ (5,766)</b>	<b>\$ 20,265</b>	<b>\$ (295,768)</b>	<b>\$ (2,170)</b>	<b>\$ 35,054</b>	<b>\$ -</b>	<b>\$ 20,866</b>	<b>\$ (98,172)</b>

**San Juan Basin Authority**  
**Budget vs Actual**  
**Fiscal Year 2012/2013**

	July 2012	Aug 2012	Sept 2012	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	March 2013	April 2013	May 2013	June 2013	Year to Date Expenditures Actual	Budget Remaining
Budget	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual
<b>GENERAL FUND (021)</b>														
Financial Services														
Legal Fees	94	593	-	855	207	-	-	-	-	-	-	-	-	6,225
Secretarial Administration	-	-	204	-	-	-	-	-	-	-	-	-	1,749	13,252
Audit Services	-	-	-	-	147	-	-	-	-	-	-	-	204	4,196
Miscellaneous	-	-	-	-	685	-	-	-	-	-	-	-	147	6,353
Project Management Services	-	-	-	-	-	-	-	-	-	-	-	-	685	(685)
	94	593	204	855	1,038	-	-	-	-	-	-	-	2,784	100,000
														129,341
<b>Project Committee 4 (022)</b>														
Vegetation Monitoring	-	2,288	-	-	-	2,447	-	-	-	-	-	-	4,735	20,265
	-	2,288	-	-	-	2,447	-	-	-	-	-	-	4,735	20,265
<b>PROJECT COMMITTEE 10 (025)</b>														
Water Rights Monitoring - Field	-	11,483	7,246	6,412	-	319	-	-	-	-	-	-	25,460	49,540
** Groundwater Management Plan	-	2,792	8,188	3,506	-	-	-	-	-	-	-	-	14,486	85,514
	-	14,275	15,434	9,918	-	319	-	-	-	-	-	-	39,946	135,054
<b>PROJECT COMMITTEE 13 (032)</b>														
USGS-Loop Agreement Steam Gauging	8,134	-	-	-	-	-	-	-	-	-	-	-	8,134	20,866
	8,134	-	-	-	-	-	-	-	-	-	-	-	8,134	20,866
<b>TOTAL BUDGETED EXPENDITURES</b>	<b>8,228</b>	<b>17,156</b>	<b>15,638</b>	<b>10,773</b>	<b>1,038</b>	<b>2,766</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>55,599</b>	<b>305,526</b>

\*\* Per 6.12.12 meeting member agencies agreed to retain the GWMP in the budget but defer invoicings until funds are needed

**SAN JUAN BASIN AUTHORITY**  
**OPERATING BUDGET DETAIL/CHECK REGISTER**  
**AS OF DECEMBER 31, 2012**

Ck #	Date	Vendor	CHECK AMOUNT	Prior Yr Expenses	GENERAL FUND (21)					(021) TOTAL	PC 4 DESALTER (22) Veg Monitoring	(022) TOTAL
					Financial	Legal Fees	Secretarial	Audit	Misc			
					\$ 6,225.00	\$ 15,000.00	\$ 4,400.00	\$	\$	\$ 132,125.00	\$ 25,000.00	\$ 25,000.00
		ACCRUALS BAL FWD Prior Year		179,569.54								
2543	7/26/2012	Santa Margarita Water District	98.40	(98.40)								
2544	7/26/2012	Stradling Yocca Carlson & Rauth	979.76	(920.76)								
2545	7/26/2012	Sharon Brimer	220.00	(220.00)		59.00				59.00		
2546	7/26/2012	Psomas-Misc review of Wtr Rights file	2,807.92	(2,807.92)								
2547	7/26/2012	Wildermuth Environmental	28,751.43	(28,751.43)								
2548	9/4/2012	U.S. Geology Survey	24,850.00	(24,850.00)								
2549	9/5/2012	Stradling Yocca Carlson & Rauth	34.10			34.10				34.10		
2550	10/11/2012	Wildermuth Environmental	31,998.23								2,288.38	2,288.38
2551	10/11/2012	Santa Margarita Water District	8,150.40	(8,150.40)								
2552	10/11/2012	Sharon Brimer	264.00				264.00			264.00		
2553	11/12/2012	Craig R. Fechter	5,946.00	(5,800.00)				146.00		146.00		
2554		VOID										
2555	11/27/2012	State Water Resources Board	684.60									
2556	11/27/2012	Stradling Yocca Carlson & Rauth	1,656.00			1,656.00			684.60	684.60		
2557	11/27/2012	Wildermuth Environmental	9,917.88							1,656.00		
		Refund of Domain Registry ck	(60.00)				(60.00)			(60.00)		
		Reversal of D.S. accrual	107,970.63	(107,970.63)								
		Prior year pending accrual balance										
		Adjustment from FY 2010 prep acct		8,134.00								
		Accrual from FY 12.13										
					\$ 6,225.00	\$ 13,250.00	\$ 4,196.00	\$	\$ (684.60)	\$ 129,341.30	\$ 959.98	\$ 959.98
		BUDGET REMAINING 2012.13									\$ 20,264.96	\$ 20,264.96

Ck #	Date	Vendor	PC 10 MONITORING		(10) TOTAL	PC 13 USGS CO-OP		(13) TOTAL	(31) Debt Svc Pmts	TOTAL BUDGET Used/Remaining
			Grdwtr monitoring	Grnd Mgmt Plan		Lp Agree	Stm Gauging			
			\$ 75,000.00	\$ 100,000.00	\$ 175,000.00	\$	\$ 29,000.00	\$ 29,000.00		\$ 381,125.00
2543	7/26/2012	Santa Margarita Water District								
2544	7/26/2012	Stradling Yocca Carlson & Rauth								
2545	7/26/2012	Sharon Brimer								(59.00)
2546	7/26/2012	Psomas-Misc review of Wtr Rights file								
2547	7/26/2012	Wildermuth Environmental								
2548	9/4/2012	U.S. Geology Survey								
2549	9/5/2012	Stradling Yocca Carlson & Rauth								(34.10)
2550	10/11/2012	Wildermuth Environmental	18,729.85	10,980.00	29,709.85					(31,998.23)
2551	10/11/2012	Santa Margarita Water District								
2552	10/11/2012	Sharon Brimer								(264.00)
2553	11/12/2012	Craig R. Fechter								(146.00)
2554	1/01/2013	VOID								
2555	11/27/2012	State Water Resources Board								(684.60)
2556	11/27/2012	Stradling Yocca Carlson & Rauth								(1,656.00)
2557	11/27/2012	Wildermuth Environmental	4,925.20	3,506.00	8,431.20					(9,917.88)
		Refund of Domain Registry ck								60.00
		Adjustment from FY 2010 prep acct					8,134.00	8,134.00		(8,134.00)
		Accruals from FY 2012.13	1,805.80		1,805.80				**431,882.00	(2,765.78)
		BUDGET REMAINING 2012.13	\$ 49,539.15	\$ 85,514.00	\$ 135,053.15	\$	\$ 20,866.00	\$ 20,866.00	\$	\$ 305,525.41

\*\* Debt Service is not included in the budget - it is paid by the City of San Juan Capistrano separately



## SAN JUAN BASIN AUTHORITY

26111 Antonio Parkway • Rancho Santa Margarita, CA 92688 (949) 459-6400 FAX (949) 459-6463

**TO:** Board of Directors **DATE:** January 8, 2013

**FROM:** Dan Ferons

**SUBJECT:** **Presentation on San Juan Basin Authority Joint Powers Agreement and History**

### **SUMMARY**

**Issue:** At the December 2012 Board meeting, the Authority discussed a process to review the governance of the Authority. The first step that was identified was to review the authorizing agreements and history of the Authority.

**Recommendation:** No action required; provide direction as appropriate.

**Fiscal Impact:** Revision to the governance or Authority structure may result in fiscal impacts in the future.

**Previously Related Action:** The Authority is currently developing an updated groundwater management plan and is proposing a review of the governance structure as part of the project.

### **DISCUSSION**

A presentation will be made at the meeting that will review the attached Joint Powers Agreement establishing the Authority in 1971 as well as the subsequent agreements and activities to provide a historical context for the current activities.

P:\SJBA\Joint Powers Agreement and History staff memo.doc.cl

JOINT EXERCISE OF POWERS AGREEMENT  
CREATING THE  
SAN JUAN BASIN AUTHORITY  
Orange County, California

JOINT EXERCISE OF POWERS AGREEMENT  
CREATING THE  
SAN JUAN BASIN AUTHORITY  
Orange County, California

THIS AGREEMENT is made and entered into as of the 22nd day of November, 1971, by and between the following parties:

- (a) Capistrano Beach County Water District;
- (b) Orange County Waterworks District No. 4; and
- (c) Santa Margarita Water District.

R E C I T A L S:

A. The parties to this agreement hereto have and possess power and authorization to acquire and construct facilities to supply the inhabitants and lands within their respective boundaries with water for irrigation, domestic and municipal purposes and in carrying out such purposes to provide for the development and conservation of water supplies.

B. Each of the parties are entirely within the San Juan Creek Watershed.

C. Based upon the findings in a recent San Juan Creek Basin Area Study, there is a need for coordinated regional management of the San Juan Creek Basin and the waters tributary to said Basin for the benefit of each of the parties.

D. A water basin management program can best be achieved through the cooperative action of the parties operating through a joint exercise of powers agency.

E. Each of the parties are authorized to contract with each other for the joint exercise of any common power under Article I, Chapter 5, Division 7, Title 1 of the Government Code of the State of California.

#### COVENANTS

In consideration of the mutual promises and covenants herein contained, the parties hereto agree as follows:

#### PURPOSES AND POWERS

1. Agency Created. There is hereby created a public entity to be known as the "San Juan Basin Authority". The Authority is formed by this agreement pursuant to the provisions of Article I, Chapter 5, Division 7, Title 1 of the Government Code of the State of California. The Authority shall be a public entity separate from the parties hereto.

2. Purpose of the Agreement; Common Power to be Exercised. Each member has in common the power to plan for, acquire, construct, maintain, repair, manage, operate and control facilities to supply the inhabitants and lands within their

respective boundaries with water for irrigation, domestic and municipal purposes and in carrying out such purposes to provide for the development and conservation of water supplies. The purpose of this agreement is to jointly exercise the foregoing common powers in the manner hereinafter set forth.

3. Powers. The Authority shall have the power in its own name to do any of the following:

(a) To exercise jointly the common powers of its members in studying and planning ways and means to provide a reasonable water basin management program for the San Juan Creek Basin and the waters tributary thereto; including studies of other public entities existing or that can be formed to implement the purposes herein set forth.

(b) To prepare and support legislation that may be necessary to implement the powers of this entity or to create a new public entity to achieve the objectives herein set forth.

(c) To make and enter into contracts.

(d) To contract for the services of engineers, attorneys, planners, financial consultants, and separate and apart therefrom to employ such other persons, as it deems necessary.

(e) To acquire, construct, manage, maintain and operate any buildings, works, or improvements.

(f) To acquire, hold and dispose of property.

(g) To incur debts, liabilities, or obligations subject to limitations herein set forth.

(h) To sue and be sued in its own name.

(i) To apply for an appropriate grant or grants under any Federal, State or local programs for assistance in developing any of its programs.

(j) To the extent not herein specifically provided for, to exercise any powers in the manner and according to the methods provided under the laws applicable to Orange County Waterworks District No. 4.

4. Definitions. For the purpose of this agreement, the following words shall have the following meanings:

(a) "Agreement" means this joint exercise of powers agreement.

(b) "Authority" means the San Juan Basin Authority formed pursuant to this agreement.

(c) "Board or Board of Directors" means the governing body of the Authority.

(d) "Member or Party" means each of the parties that become a signatory to this agreement, accepting the rights and obligations of the Authority hereunder, including any public entity executing an addendum of the original agreement as hereinafter provided.

(e) "Original Member or Original Party" means Capistrano Beach County Water District, Orange County Waterworks District No. 4 and Santa Margarita Water District.

(f) "Participating Member" means a member that has or will acquire rights and assume obligations in connection with a particular project.

(g) "Participating Director" means the director representing a participating member.

(h) "Fiscal Year" means July 1st to and including the following June 30th.

(i) "Facility or Facilities" means any building, works or improvements acquired or constructed by the Authority.

(j) "Project" means the facilities constructed by the Authority pursuant to the project budget procedure.

(k) "Project Water" means any water made available for use for irrigation, domestic or municipal uses through the efforts of the Authority.

(l) "General Budget" means the approved budget applicable to the expenses of administration of the Authority.

#### ORGANIZATION

5. Membership. The members of the Authority shall be each original parties hereto and such other public entity which may execute this agreement, or any addenda, amendment or supplement thereto, and which has not, pursuant to the provisions hereof, withdrawn therefrom.

6. Names. The names, particular capacities, and addresses of the members at any time shall be as shown on the signatory page, or on an addendum attached hereto, as amended or supplemented from time to time.

7. Designation of Directors. Within thirty (30) days after the execution of this agreement by all of the original members, each member shall designate and appoint, by resolution

of its governing body, one person to act as its director on the board. Each member shall also appoint one alternate director whose name shall be on file with the board and who may assume all rights and duties of the absent director representing the appointing member. Each director and alternate shall hold office from the first meeting of the board after his appointment by the governing body he represents until his successor is selected. Directors and alternates shall serve at the pleasure of the governing board of the appointing member and may be removed at any time, with or without cause, in the sole discretion of said member's governing board. A director or alternate may be a member of the governing board of the appointing members. A director may receive such compensation from the Authority for his services as may from time to time be established by the board. A director may be reimbursed for expenses incurred by such director in the conduct of the business of the Authority.

8. Principal Office. The principal office of the Authority shall be established by the board. The board is hereby granted full power and authority to change said principal office from one location to another in the County of Orange. Any change shall be noted by the secretary under this section but shall not be considered an amendment to this agreement.

9. Meetings. The board shall meet at the principal office of the Authority or at such other place as may be designated by the board. The time and place of regular meetings of the board shall be determined by resolution adopted by the board, a copy of such resolution shall be furnished to each party hereto. Any meeting of a project committee shall be deemed to be a meeting of the Authority and all such meetings of the Authority shall be open to all directors. Regular, adjourned and special meetings shall be called and held in the manner as provided in Chapter 9, Division 2, Title 5 of the Government Code of the State of California (commencing at Section 54950).

10. Quorum. A majority of the directors or of participating directors, as the case may be, shall constitute a quorum for the purpose of the transaction of business relating to the Authority or to a project.

11. Powers and Limitations Thereon. All of the power and authority of the Authority shall be exercised by the board, subject, however, to the reserved right of the members as herein set forth. Unless otherwise provided herein, each director or participating director shall be entitled to one vote and a vote of the majority of those present and qualified to vote may adopt any motion, resolution or order and take any other action they deem appropriate to carry forward the objectives of the Authority or of a project committee.

12. Minutes. The secretary of the Authority shall cause to be kept minutes of regular, adjourned regular and special meetings of the board, and shall cause a copy of the minutes to be forwarded to each director and to each of the members hereto.

13. Rules. The board may adopt from time to time such rules and regulations for the conduct of its affairs as may be required.

14. Vote or Assent of Members. The vote, assent or approval of members in any matter requiring such vote, assent or approval hereunder shall be evidenced by a certified copy of the resolution of the governing board of such member filed with the Authority.

15. Officers. There shall be selected from the membership of the board, a chairman and a vice chairman. The board shall appoint a secretary who may be a director. The treasurer of Orange County Waterworks District No. 4 shall be the treasurer of the Authority, to be the depositary and have custody of all money of the Authority from whatever source. The auditor of Orange County Waterworks District No. 4 shall be the auditor of the Authority and shall draw all warrants and pay demands against the Authority approved by the board.

In addition, the board shall have the power to appoint such additional officers as it deems necessary. The treasurer and auditor hereby designated may be changed only by the consent of all directors. The chairman, vice chairman, and secretary shall hold office for a period of one year commencing July 1st of each and every fiscal year; provided, however, the first chairman, vice chairman and secretary appointed shall hold office from the date of appointment to June 30th of the ensuing fiscal year. Any officer, employee or agent of the board may also be an officer, employee or agent of any of the members. The appointment by the board of such a person shall be evidence that the two positions are compatible. The public officer or officers or persons who have charge of, handle, or have any access to any property of the Authority shall be bonded and the amount of their bond shall be designated in the applicable budget and thus fixed.

All of the privileges and immunities from liability, exemption from laws, ordinances and rules, all pension, relief, disability, workmen's compensation and other benefits which apply to the activity of officers, agents, or employees of any of the members when performing their respective functions shall apply to them to the same degree and extent while engaged in the performance of any of the functions and other duties under this agreement. None of the officers, agents,

or employees appointed by the board shall be deemed by reason of their employment by the board to be employed by any of the members or by reason of their employment by the board to be subject to any of the requirements of such members.

#### PLANNING

16. Planning Policy. In keeping with the purpose of this agreement, the members hereby authorize and direct the board to undertake such studies and planning to provide a water basin management program, including the control of waters, natural and flood, tributary to the basin; provided, however, by this agreement none of the parties relinquish any water or water rights of any nature owned or hereafter acquired by them. The specific objectives of the study shall be to determine the feasibility of (i) replenishing and utilizing the San Juan Basin; (ii) prohibiting salt water intrusion; (iii) providing water sources upstream of the San Juan Basin. To achieve this objective, the study may include proposals for the construction of water transmission and pumping facilities, dams and lakes. The study or studies shall also concentrate on the methods of financing any construction proposed and the allocation of construction costs among the benefited members. Consideration shall be given to the value to the Authority of acquiring and/or operating facilities presently owned by

members. It is the intent of the parties that to the extent that existing facilities may be useful to the Authority, the contribution thereof to the Authority could be considered as a credit to the contributing member on its share of the cost of regional facilities. The study shall also consider all phases of the maintenance and operation of regional facilities and the allocation to the benefited members of the maintenance and operating costs. Studies shall be made as to whether the objectives herein set forth can be carried out by the Authority with its present powers, the need for additional powers of the Authority or, as an alternative, the creation of another public entity to implement said objectives.

#### BUDGETS AND PAYMENTS

17. General Budget. Within sixty (60) days after the first meeting of the board, a general budget shall be adopted for the balance of the fiscal year and the ensuing fiscal year. The initial budget and each succeeding budget shall include the following: (a) the general administrative expenses of the Authority to be incurred during the period covered by the budget; and (b) the allocation among the members of the amounts necessary to cover the general budget expenditures. The expenditures required in the initial budget (from formation to June 30, 1972) shall be shared equally. If after the initial budget the board provides an allocation to the members

on some basis other than equal amounts, the general budget must be approved by the unanimous consent of all of the directors. After the first full fiscal year, at or prior to each June meeting of the board, a general budget shall be adopted for the ensuing fiscal year.

18. Project Budgets. In addition to the general budget, the board may budget at any time for the study, implementation or construction of any specific project proposed to be constructed by the Authority. Each project budget shall include the following:

(a) the administrative expenses allocated to the project during planning and construction;

(b) the cost of studies and planning for the project;

(c) the cost of the engineering and construction of the project;

(d) the allocation among the participating members the total project costs;

(e) an estimate of annual maintenance and operating expenses; and

(f) a formula for allocating annual maintenance and operating expenses.

After the board approves a project budget, it shall be submitted to each participating member that is to be obligated for the payment of any amount thereunder and the Authority shall not incur any expense for the project until the project budget has been approved by the governing body of each of the proposed participating members. In the event a project budget is not approved, the cost of preparing the budget shall be divided among the proposed participating members in accordance with the proposed allocation of the total project cost.

19. Maintenance and Operation Budgets. For each project maintained and operated by the Authority, a maintenance and operation budget shall be prepared and approved at or prior to each June meeting of the board for the ensuing fiscal year. Said budget shall include the following:

- (a) the expenses of maintaining the project;
- (b) the expense of operating the project;
- (c) an estimate of income from operations, if any; and
- (d) the allocation of maintenance and operation expenses among the participating members in accordance with the formula set forth in the approved project budget.

A maintenance and operating budget must be approved by two-thirds (2/3rds) of the directors or by two-thirds (2/3rds) of the participating directors if the budget affects less than the entire membership. Copies of each operating budget shall be mailed to each participating member within thirty (30) days of its adoption.

In regard to payment of expenses of the Authority, it is agreed as follows: (a) all operational costs and maintenance costs directly related to use of the facilities, including necessary improvements, repairs, adjustments, replacements and incidental accounting and administrative costs in connection therewith shall be paid by each member using the facilities in proportion to their use; and (b) the maintenance costs not directly related to use of the facilities, including necessary improvements, repairs, adjustments, replacements and extraordinary or standby maintenance, and incidental accounting and administrative costs in connection therewith, shall be paid by the participating members in proportion to their respective percentage share of the costs of said facilities as herein provided. Any change of the foregoing may be made by the unanimous consent of all of the participating members.

20. Effective Failure of Approval of Budget. If, after one hundred twenty (120) days from the first submission of a general budget, the budget fails to attain the required vote,

the consenting directors of members, in the case of the general budget, or the consenting members, in the case of a project budget, may treat the refusal of the representative director or member to approve the budget as a request for a withdrawal from the Authority, in the case of failure to approve a general budget, or from the project, but not from the Authority, in the case of failure to approve a project budget, by such member and the remaining members may thereafter, upon giving the non-consenting member thirty (30) days' prior written notice, proceed with the adoption of a revised budget and the non-consenting member shall not be obligated for future debts of the Authority or of the project, as the case may be, nor shall it receive any benefits therefrom. The foregoing is subject to the provisions of Section 37 hereof.

21. Expenditures for the Approved Budget. All expenditures within the designations and limitations of approved general, project or maintenance and operation budgets shall be made on the authorization of a majority of the directors for general budget expenditures or of a majority of the directors of the participating members for other expenditures. No expenditures in excess of those budgeted shall be made without the unanimous consent and approval of all of the directors representing the member affected by the budget under consideration.

22. Payment of Amounts Due. Amounts required to be paid by any member shall be due and payable forty-five (45) days after receipt of billing therefor from the board.

23. Reimbursement of Funds. Grant funds received by the Authority from any Federal, State or local agency to pay for budgeted expenditures for which the Authority has received all or a portion of said funds from its members shall be proportionally paid to said members to reimburse the members for the funds advanced to the Authority for the construction of the facilities for which grant money has been received.

#### BOND FINANCING

24. Revenue Bonds. The board shall have the power and authority to issue revenue bonds for the purposes and in accordance with the procedure and requirements set forth in Article 2, Title 1, Division 7 of the Government Code of the State of California (commencing at Section 6540).

#### PROJECT CONSTRUCTION

25. Acquisition and Construction of Projects. No project shall be acquired or constructed by the board without the unanimous consent of every member, or if it is a project of less than all of the members, the unanimous consent of all of the participating members. Approval of a project budget by

all of the participating members shall constitute consent for the acquisition and construction of the project.

26. Project Members. If it is determined that a proposed project of less than all of the members, the participating directors for each project shall constitute a subcommittee of the board referred to as the "                     Project Committee". All actions by a project committee shall be deemed actions of the Authority and shall be taken in the name of the Authority, however, only the participating members of a project shall have rights and obligations in said project as herein provided.

## MAINTENANCE AND OPERATION OF FACILITIES

27. Maintenance and Operation of Facilities. The board, or the project committee, as the case may be, shall determine prior to the acquisition or construction of any project, whether or not the Authority shall maintain and/or operate such facilities. If the Authority is to maintain and/or operate such facilities, it shall do so in an efficient and economical manner and in a manner not detrimental to the other members. It is the intent of the parties that any project may be maintained and operated in the name of the Authority although, as herein provided, a majority of the participating directors shall make all determinations of the Authority in

connection therewith. If it is determined that one or more of the members shall maintain and/or operate said facilities, said members shall by written agreement consent thereto prior to the acquisition or construction thereof.

#### WATER PURCHASES AND SALES

28. Water Purchases. The board may purchase from any source available any water necessary to the project.

29. Water Sales. The board may sell project water to any member and may establish rates and charges therefor.

#### ACCOUNTING AND AUDITS

30. Accounting Procedures. Full books and accounts shall be maintained for the Authority in accordance with practices established by, or consistent with, those utilized by the Controller of the State of California for like public entities. In particular, the Authority's controller and treasurer shall comply strictly with requirements of the statute governing joint powers agencies, Chapter 5, Division 7, Title 1 of the Government Code of the State of California commencing at Section 6500.

31. Audit. The records and accounts of the Authority shall be audited annually by an independent certified public accountant and copies of such other reports shall be filed

with the County Auditor, the State Controller and each participating member within six (6) months of the end of the fiscal year under examination.

#### PROPERTY RIGHTS

32. Project Facilities. All facilities constructed or acquired by the Authority shall be held in the name of the Authority for the benefit of the membership of the Authority in accordance with the terms of this agreement. Capacity rights in respective project facilities shall be held for the benefit of the participating members in proportion to each members agreed percentage of capacity rights in such project facility unless otherwise agreed to in writing by said participating members. It is the intent of the foregoing provision that the Authority shall not acquire any unallocated capacity rights in any facility for disposal or use, except for the benefit of the participating members in proportion to their original percentage of capacity rights in said facility. Capacity rights may not be reallocated, sold, leased or assigned without the written consent of all participating members in said project.

33. Distribution of Assets and Termination of Authority. To the extent that any funds (or property in lieu of funds)

received from any member are used for the acquisition or construction of facilities, the same shall be allocated annually on the books of the Authority to the credit of said contributing member. Upon termination or dissolution of the Authority herein created, the facilities, and any funds, in possession of the Authority at such time shall be distributed in kind or sold, and the proceeds thereof distributed to the members at the time of termination as their interests appear on the books of the Authority.

34. Liabilities. Any liability incurred by the Authority during the course of its existence shall be discharged from payments hereby agreed to be made to the Authority by each of the parties hereto in proportion to their contribution or approved participation in facilities of the Authority for which the liability is attributable. Except as hereinbefore provided, the debts, liabilities and obligations of the Authority shall be the debts, liabilities or obligations of the Authority alone and not of the parties to this agreement.

#### RECISSION, TERMINATION, WITHDRAWAL

35. Term. The Authority shall continue until this agreement is rescinded or terminated as herein provided.

36. Recission or Termination. This agreement may be rescinded and the Authority terminated by written consent of all members.

37. Withdrawal. Any member may withdraw from the Authority at any time upon giving each of the members one hundred and twenty (120) days' written notice prior to the end of a fiscal year; provided, however, in the event the withdrawing member has any rights in any facility or obligations to the Authority, said member cannot sell, lease or transfer said rights or be relieved of its obligations, except its obligation to pay its share of operation and maintenance costs directly related to the use of the facilities, without the execution of a written agreement executed by it and all members affected by such withdrawal. The Authority may not sell, lease, transfer or use any rights of a member who has withdrawn without first obtaining the written consent of the withdrawn member. Upon termination, a withdrawn member will be treated like all other members in regard to the provisions of Section 31 hereof.

38. Admission of New Members. It is recognized that public <sup>Agencies</sup> entities, other than the original <sup>Member Agencies</sup> members, may wish to participate in the Authority. <sup>Companies</sup> Additional public <sup>Agency</sup> entities may become members of the Authority upon such terms and conditions as provided by the board and the unanimous consent of each existing <sup>Member Agencies</sup> member <sup>C</sup> of the Authority, evidenced by the execution of a written addendum to this agreement signed by all of the <sup>existing</sup> members <sup>Agencies</sup> including the additional member.

39. Amendments. This agreement may be amended only by the unanimous vote of all members.

40. Notice. Any notice or instrument required to be given or delivered by depositing the same in any United States Post Office, registered or certified, postage prepaid, addressed to the addresses of the members, shall be deemed to have been received by the party to whom the same is addressed at the expiration of seventy-two (72) hours after deposit of the same in the United States Post Office for transmission by registered or certified mail as aforesaid.

41. Severance Clause. If any section, subsection, sentence, clause or phrase of this agreement, or the application thereof, to any of the members for any other person or circumstances, is for any reason held invalid, the validity of the remainder of the agreement, or the application of such provision to the other members, or to any other persons or circumstances, shall not be affected thereby. Each of the members hereby declares that it would have entered into this agreement, and each section, subsection, sentence, clause or phrase thereof, irrespective of the fact that one or more sections, subsections, sentences, clauses or phrases, or the application thereof, to any member or any other person or circumstance be held invalid.

IN WITNESS WHEREOF, the parties have hereunto set their

hands and seals by their respective corporate officers there-  
unto, duly authorized the day and year first above written.

CAPISTRANO BEACH COUNTY WATER DISTRICT  
Post Office Box 515  
Capistrano Beach, California 92675

(SEAL)

By *M. F. Goble*

By *John P. Perrenes*

ORANGE COUNTY WATERWORKS DISTRICT NO. 4  
Post Office Box 967  
San Juan Capistrano, California 92675

(SEAL)

By *Thomas C. Darr*

By *Virginia S. Newman*

SANTA MARGARITA WATER DISTRICT  
401 Civic Center Drive West  
Santa Ana, California 92702

(SEAL)

By *Richard J. O'Neill*

By *Fritz R. Shadling*



## SAN JUAN BASIN AUTHORITY

26111 Antonio Parkway • Rancho Santa Margarita, CA 92688 (949) 459-6400 FAX (949) 459-6463

**TO:** Board of Directors **DATE:** January 8, 2013

**FROM:** Dan Ferons

**SUBJECT:** Authorization of 2013 San Juan Basin Management Monitoring and Reporting Program

### **SUMMARY**

**Issue:** The Authority authorized soliciting a proposal from Wildermuth Environmental at the December Board meetings for monitoring under its Permit for Diversion and Use of Water from the State Water Resources Control Board as well as under the California Statewide Groundwater Elevation Monitoring (CASGEM) Program. The Authority is proposing additional monitoring during 2013 to identify the amount of water in storage and establish a baseline for seawater intrusion.

**Recommendation:** Authorize professional service contract in the amount of \$139,119 with Wildermuth Environmental for monitoring services in Calendar Year 2013.

**Fiscal Impact:** Monitoring costs are included in the annual budget; the proposed additional services can be accommodated in the current administration budget.

**Previously Related Action:** The Authority has an annual contract for monitoring services. The current contract was through December 2012 with Wildermuth Environmental in the amount of \$96,381.

### **DISCUSSION**

Attached is a detailed proposal from Wildermuth Environmental Inc. (WEI) to provide expanded monitoring services in 2013. WEI provides ongoing monitoring services for the Authority for 2012 at a reduced level in comparison to 2011 and 2010. The Authority selected WEI based on competitive proposals in 2010 and the Board extended the contract in 2011 and currently through December 2012. The Authority's monitoring requirements are based on the amount of water diverted through pumping. The current requirements are based on a projected pumping over 4,800 acre feet per year.

The recommendation to continue with WEI is based on the following:

- The annual reports prepared by WEI are detailed and well-received by the member agencies and the State Water Resources Control Board.
- WEI is developing an on-line database for the monitoring information that also incorporates other water quality data from the member agencies.
- WEI efforts have been cost-effective and under budget.

Funding:

The proposed contract is divided between two fiscal years as noted below:

Account Description	Budget FY 12/13	Notes
<b>Monitoring services budget</b>	\$ 100,000.00	
Current authorization	\$ 74,114.74	2012 monitoring
Proposed authorization	\$ 43,436.00	2013 monitoring in Fiscal 2012-13
<b>Shortfall reallocated from Administration</b>	\$ (17,550.74)	Contingency was included in the administration budget for development of a database and library that has started.
Proposed authorization for Fiscal 2013/14	\$ 95,683.00	Portion of the contract in next fiscal year



January 4, 2013

San Juan Basin Authority  
Attn: Dan Ferons and West Curry  
C/o Santa Margarita Water District  
P.O. Box 7005  
Mission Viejo, CA 92690-7005

**Subject: 2013 San Juan Basin Management Monitoring and Reporting Program**

Dear Messrs. Ferons and Curry:

Pursuant to our professional services agreement (PSA) with the San Juan Basin Authority (SJBA) dated February 14, 2012, Wildermuth Environmental Inc. (WEI) prepared this letter proposal to present the recommended San Juan Basin Management Monitoring and Reporting program for 2013 and the scope-of-work and cost estimate for WEI to implement the recommended program.

**Background**

Since early 2003, the SJBA has implemented a groundwater, surface water, and vegetation field monitoring program to comply with the conditions outlined in the SJBA's Permit for Diversion and Use of Water, No. 21074 (Permit 21074), issued by the State Water Resources Control Board (SWRCB) Division of Water Rights in October 2000. The monitoring program, which was developed in 2001, has focused primarily on collecting the data needed to satisfy the monitoring requirements enumerated in Permit 21074. WEI has implemented the SJBA's field monitoring and reporting program since calendar year 2010. In October 2011, the SWRCB amended Permit 21074 to reflect the results of monitoring performed by the SJBA to date. Program Task III of WEI's 2012 PSA, is to prepare an updated Basin Management Monitoring and Reporting Program, in part to comply with the amended conditions of Permit 21074.

In 2011, the SJBA hired WEI to prepare an updated Groundwater Management Plan for the long-term, sustainable management of the San Juan Basin's water resources. The final task of the Groundwater Management Plan is to recommend a monitoring program to collect the data needed to effectively manage the basin (e.g. assess the impact to groundwater levels and groundwater quality as a result of implementing the Groundwater Management Plan).

The secondary goal of Program Task III is to design the Basin Management Monitoring and Reporting Program such that it addresses the SJBA's regulatory compliance requirements, the recommended monitoring program from the Groundwater Management Plan, and that it identifies and eliminates any redundant data collection efforts of the SJBA and other local agencies collecting data in the San Juan Basin.

As of December 2012, the Groundwater Management Plan is still being developed, and thus the monitoring program to support the plan has not been identified. However, through the process of developing the Groundwater Management Plan, WEI has identified several basin management issues that should be addressed as part of the 2013 Basin Management Monitoring and Reporting

Program in addition to the requirements of Permit 21074: (1) groundwater storage, (2) seawater intrusion, and (3) point-source groundwater contamination from leaking underground storage tanks (LUSTs). Additional monitoring components can be added to the monitoring plan in subsequent years to address any additional management issues that arise as the Groundwater Management Plan is completed in 2013.

### **Recommended 2013 Basin Management Monitoring and Reporting Program**

The following is a description of each regulatory or basin management issue that should be addressed as part of the 2013 Basin Management Monitoring and Reporting Program.

#### **Permit 21074 Monitoring and Reporting**

Amended Permit 21074 describes, among other things, the groundwater, surface water, and vegetation monitoring requirements that must be satisfied to evaluate the impacts to groundwater-level elevation, groundwater quality, and riparian vegetation that result from groundwater extractions related to the operation of the SJBA desalter facility at two levels of production: groundwater extractions less than 4,800 acre-feet per year (acre-ft/yr) and groundwater extractions in excess of 4,800 acre-ft/yr. In 2013, the San Juan Basin Authority anticipates groundwater extractions will exceed 4,800 acre-ft/yr. Thus, the monitoring program for extractions in excess of 4,800 acre-ft/yr will be implemented in 2013. The explicit monitoring requirements include (1) quarterly groundwater level monitoring at eight monitoring wells to comply with the Department of Water Resources' (DWR) California Statewide Groundwater Elevation (CASGEM) program, (2) quarterly groundwater quality monitoring for Electrical Conductivity (EC) at eight monitoring wells, and (3) monthly monitoring of riparian vegetation health at five monitoring sites along the San Juan Creek. In addition to the explicit monitoring requirements listed in the permit, additional data is needed satisfy other permit conditions, such as reporting total groundwater extractions from the basin and computing water in storage. The additional data needed address the permit conditions includes groundwater production, total water use, precipitation, groundwater elevation data across the basin, and total dissolved solids (TDS) and chloride concentrations at wells. An annual progress report documenting permit compliance must be submitted to the SWRCB by June 2014.

#### **Groundwater Storage Management**

Through the work performed for the Groundwater Management Plan, WEI identified that the amount of groundwater storage in the San Juan Basin is far less than has long been reported by the DWR and others studying the basin. Furthermore, the water budget of the San Juan Basin is not well understood, particularly as it relates to net inflow to and outflow from the basin. While a groundwater model of the San Juan Basin has been developed to simulate changes in storage, inflow, and outflow based on the pumping plans of the agencies operating in the Basin, real-time data needs to be collected to validate the model results and to assist in the future update and calibration of the model.

We recommend that the SJBA conduct a regional, comprehensive groundwater-level survey and analysis of the San Juan Basin in the spring and the fall of each year to compute the volume of water in storage and the change in storage between each period (spring to fall and fall to spring). The spring levels and storage change calculations can be used by the SJBA to determine an appropriate level of pumping for the following summer. Additionally, the period change in storage and period

pumping can be used to estimate the net period inflow to the San Juan Basin. The net period inflow can then be correlated to precipitation and stream discharge measurements to characterize near-term and long-term recharge. After each groundwater-level survey (spring and fall), WEI will prepare a letter reports to the SJBA summarizing the analysis of storage change, the estimation of net inflow to the San Juan Basin, and recommending pumping plans for the subsequent period.

### **Seawater Intrusion**

Preliminary results of the groundwater modeling performed by Geoscience Support Services (GSS) in support of the Municipal Water District of Orange County's (MWDOC) seawater desalination project predicts that seawater intrusion is an imminent threat to the basin under the groundwater production plans of the SJBA member agencies.

To track seawater intrusion into the San Juan Basin, it is critical to begin collecting baseline data that will help the SJBA to understand the current extent of seawater intrusion. We recommend that this baseline dataset be collected in 2013. This effort would include sampling groundwater and surface water in the Basin, from the coast to the forebay areas, for intrinsic seawater tracers, including boron, bromide, iodide, and strontium. In addition, we recommend that the SJBA coordinate with the South Coast Water District (SCWD) and the City of San Juan Capistrano (CSJC) to request that they sample their production wells for the same intrinsic seawater tracers.

At the conclusion of the baseline data collection effort, a report will be prepared that describes the 2013 monitoring program, analyzes historical and 2013 data to establish the baseline condition of the San Juan Basin as it relates to seawater intrusion, and describe the questions, analytical methods, and ongoing monitoring program to track the future rate of seawater intrusion.

### **Point-Source Groundwater Contamination**

Seven point-sources of groundwater contamination from LUST sites have been identified in the San Juan Basin. Contamination by methyl-tert-butyl-ether, or MTBE, has already required the CSJC to incorporate high-cost treatment systems into their municipal water system. As the pumpers in the San Juan Basin continue to increase production over time, there is a concern that the contaminants associated with the various LUST sites could be mobilized and further impact municipal water supplies. We recommend that the SJBA include an annual groundwater sampling event for volatile organic compounds (VOCs), including MTBE, as part of the monitoring program.

### **Scope of Work**

The following is the scope of work required to implement the recommended monitoring and reporting program described above. The scope of work is designed to rely on groundwater and surface water data collected by others in the basin to the extent possible, and supplements this data with a field monitoring program to fill in data gaps. The Basin Management Monitoring and Reporting Program is divided into three tasks: Field Monitoring Program, Data Acquisition and Management, and Reporting. The objectives, sub-tasks, schedule of implementation, and deliverables for each task are described below.

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## Task 1 –Field Monitoring Program

The objective of the field monitoring program is to collect data in the field that is not available from other agencies that monitor the Basin. This task is broken down into four subtasks based on the data type and monitoring frequency. The duration of the field monitoring program is from January 2013 through December 2013.

***Subtask 1.1 Quarterly Groundwater Level Monitoring.*** Currently, the SJBA has pressure transducers and data loggers installed in eight monitoring wells across the San Juan Basin to continuously record groundwater-level elevations. The data loggers are also equipped to record electrical conductivity (EC). Groundwater elevation and EC data collected from these wells are used for water rights permit compliance reporting, CASGEM reporting, storage management, and seawater intrusion monitoring. Each quarter, WEI will download the groundwater elevation and EC data from the loggers, manually measure groundwater level elevation to calibrate the pressure transducers, calibrate the EC probes, and perform routine transducer maintenance. The field data will be processed, checked for quality assurance/quality control (QA/QC) and loaded into HydroDaVE.

***Subtask 1.2 – Quarterly Groundwater Quality Monitoring.*** To establish the baseline condition for monitoring seawater intrusion into the Basin, WEI will sample 14 monitoring wells in the San Juan Basin on a quarterly basis in 2013. The quarterly groundwater quality sampling events consist of purging each well, measuring field water quality parameters (e.g. temperature, pH, and EC), and collecting a groundwater quality sample for laboratory analysis. Groundwater samples will be delivered to Eurofins—Eaton Analytical Laboratory and analyzed for the constituents listed in Table 1. Note that groundwater samples will only be tested for VOCs during one of the four quarterly sampling events. Data collected for this task can also be used for the analysis and reporting required by Permit 21074. All field and laboratory data will be processed, checked for QA/QC and loaded into HydroDaVE.

***Subtask 1.3 – Surface Water Quality Monitoring.*** To establish the baseline condition for monitoring seawater intrusion into the Basin, WEI will sample up to 5 surface water sites in the Basin. The sites will be sampled twice in 2013 during dry-weather conditions for the constituents listed in Table 1 (excluding VOCs). The field and laboratory data will be processed, checked for QA/QC and loaded into HydroDaVE.

***Subtask 1.4 – Vegetation Monitoring.*** The SJBA's water rights permit requires monthly vegetation monitoring at five sites along San Juan Creek. Monthly vegetation monitoring consists of a biologist visiting five monitoring stations to collect written and photographic records of vegetation health and current climate conditions. The field data will be checked for QA/QC and the photographs stored in a project file. Vegetation monitoring is performed by WEI's sub-consultant, Glenn Lukos Associates.

## Task 2 – Data Acquisition and Management

The objective of this task is to coordinate with and collect data from all public and private entities that are collecting groundwater, surface water, or climate data in the San Juan Basin. This data will supplement the database of field data generated by the SJBA to satisfy the regulatory reporting requirements and basin management issues identified herein. At the end of this task, the SJBA will

have an updated database through December 2013. The duration of this task is from April 2013 through February 2014.

***Subtask 2.1 – Data Acquisition from Collecting Agencies.*** WEI staff will coordinate with each public and private entity on a quarterly basis to collect the relevant data sets (April 2013, July 2013, October 2013, and January 2014). Additionally, in early 2013, WEI staff will coordinate with the SCWD, the CSJC, and the MWDOC, to request that these agencies sample their wells for the intrinsic seawater tracers that are not included as part of their standard analytical testing programs.

***Subtask 2.2 – Data QA/QC, Processing, and Upload to HydroDaVE.*** After each quarterly data collection event, all groundwater, surface water, and climate data will be processed, checked for QA/QC, and loaded in to HydroDaVE.

### **Task 3 – Reporting**

The objective of this task is to prepare reports and presentations summarizing the data collected in the San Juan Basin during 2013.

***Subtask 3.1 – Water Rights Permit Reporting.*** WEI will prepare a letter report to the SWRCB summarizing the status of compliance with the requirements of Permit No. 21074. This report will be formatted as a letter report that directly answers the questions posed in the permit. A draft letter report will be submitted to the SJBA for review and comment by March 31, 2014. A final letter report, which incorporates the comments on the draft, will be submitted to the SWRCB by May 31, 2014.

***Subtask 3.2 – CASGEM Reporting.*** WEI will upload the quarterly groundwater sampling data collected in Task 1.1 to the DWR through the CASGEM online reporting system. Data will be uploaded in April 2013, July 2013, October 2013, and January 2014.

***Subtask 3.3 – Biannual Storage Change Reports.*** WEI will prepare two letter reports to the SJBA summarizing the analysis of storage change, the estimation of net inflow to the San Juan Basin, and recommending pumping plans for the subsequent six month period. The first letter report will document the change in storage in the San Juan Basin from fall 2012 to spring 2013 and will be submitted to the SJBA by May 31, 2013. The second letter report will document the change in storage in the San Juan Basin from spring 2013 to fall 2013 and will be submitted to the SJBA by November 30, 2013.

***Subtask 3.4 – Seawater Intrusion Monitoring Report.*** WEI will prepare a seawater intrusion monitoring report at the conclusion of the four quarterly groundwater quality sampling events in 2013. The report will describe the 2013 monitoring program, analyze historical and 2013 data to establish the baseline condition of the basin as it relates to seawater intrusion, and describe the questions, analytical methods, and ongoing monitoring needed to track seawater intrusion in subsequent years. A draft monitoring report will be submitted to the SJBA for review and comment by December 31, 2013. A final report incorporating comments on the draft will be submitted by February 28, 2014.

***Subtask 3.5 – Presentations to the SJBA Board of Directors.*** WEI staff will attend four SJBA Board meetings during 2013 to update the Board on the progress and deliverables produced for the various monitoring and reporting tasks.

***Subtask 3.6 – Miscellaneous Data Requests and Meetings.*** Typically during the year, WEI staff are asked to prepare data deliverables or attend meetings relevant to the work of the SJBA. This subtask assumes WEI will be asked to prepare one data deliverable and attend one meeting per quarter in 2013.

### **Professional Services Fee**

The total cost to complete the scope of work for the 2013 San Juan Basin Monitoring and Reporting Program presented herein is \$139,119. A line-item work breakdown structure is provided in Table 2. We recommend the SJBA budget \$153,031, which includes a contingency budget equal to ten percent of the professional services fee (\$13,912) to cover unanticipated costs that may arise throughout the year. WEI will not utilize the contingency budget without prior consent from the SJBA.

We look forward to continuing to work with the SJBA on this important and timely work. Should you have any questions about the recommendations and scope of work presented herein, please contact us at (949) 420-3030.

Very truly yours,

**Wildermuth Environmental, Inc.**



Samantha S. Adams  
Supervising Scientist



Mark J. Wildermuth, PE  
President, Principal Engineer

### **Enclosures:**

Table 1 – Groundwater Quality Sampling Program – List of Chemical Analyses

Table 2 – Work Breakdown Structure and Fee Estimate for Professional Services

**Table 1**  
**2013 Quarterly Groundwater Quality Sampling Program**  
**List of Chemical Analyses**

Analytes
Alkalinity (Including Bicarbonate, Carbonate, and Hydroxide)
Boron
Bromide
Calcium
Chloride
Fluoride
Hardness
Iodide
Iron
Magnesium
Manganese
Nitrate-nitrogen
pH
Potassium
Sodium
Specific Conductance at 25C
Strontium
Sulfate
Total Dissolved Solids
VOCs (groundwater only, annual sample only)

**Table 2**  
**Work Breakdown Structure and Fee Estimate for Professional Services**  
**2013 San Juan Basin Monitoring and Reporting**

Description	Notes	Labor		Other Direct Charges								Total Program Costs		
		Person Hours	Cost		Travel	Equipment		Subs	Lab	Repro- duction	Total ODCs		Sub-Task	Task
			Sub-task	Task		New	Rental				Sub-task	Task		
Task 1 - Field Monitoring Program		a	\$23,935			\$456	\$520	\$128				\$29,507		\$53,442
1.1	Quarterly Groundwater-Level Monitoring	88	\$9,800			\$456		\$500		\$1,300	\$13,500	\$1,104		\$10,904
1.2	Quarterly Groundwater Quality Monitoring	128	\$10,960									\$15,756		\$26,716
1.3	Bi-annual Dry-weather Surface Water Monitoring	c	\$1,420			\$228		\$100			\$2,070	\$2,398		\$3,818
1.4	Monthly Vegetation Monitoring	d	\$1,755						\$10,250			\$10,250		\$12,005
Task 2 - Data Acquisition and Management		e	\$21,560									\$0		\$21,560
2.1	Data Acquisition from Collecting Agencies	32	\$4,680											\$4,680
2.2	Data QA/QC, Processing, and Upload to HydroDaVE	120	\$16,880											\$16,880
Task 3 - Reporting			\$61,005						\$2,000		\$750	\$2,750	\$3,112	\$64,117
3.1	Water Rights Permit Reporting to the State Board	f	\$12,300											\$15,050
3.2	Quarterly CASGEM Reporting to DWR	12	\$1,620											\$1,620
3.3	Biannual Storage Change Reports to the SJBA Board	g												
3.3.1	Spring 2013 Storage Change Letter Report	77	\$11,870											\$11,870
3.3.2	Fall 2013 Storage Change Letter Report	46	\$6,845											\$6,845
3.4	Seawater Intrusion Monitoring Plan	114	\$19,010								\$250	\$250		\$19,260
3.5	Presentations to SJBA Board of Directors	i	\$4,320			\$56						\$56		\$4,376
3.6	Miscellaneous Meetings and Data Requests	j	\$5,040			\$56						\$56		\$5,096
Sub-total		786		\$106,500		\$1,251	\$520	\$728	\$13,550	\$15,570	\$1,000	\$32,619		\$139,119
Contingency @ 10%		k												\$13,912
Total														\$153,031

**Notes:**

- a Field data collection tasks include review, post-processing, QA/QC, and upload of data to HydroDaVE.
- b Assumes 14 wells will be sampled by WEI staff (7 SCWD monitoring wells and 6 SJBA monitoring wells), and assumes that municipal production wells that need to be tested for seawater intrinsic tracers will be sampled by the well owners (CSJC and SCWD).
- c Assumes 5 surface water sites will be sampled during dry-weather flow.
- d Field work performed by our sub-consultant Glenn Lukos Associates. Labor hours includes coordination with sub-consultant and review of results
- e Includes collection of groundwater production, groundwater level, groundwater quality, surface water quality, and precipitation data collected in the field by cooperating agencies (e.g. SCWD, City of San Juan Capistrano, County of Orange, etc.).
- f A portion of the report is produced by our sub-consultant Glenn Lukos Associates.
- g The initial storage change letter report will require more staff hours than subsequent reports because it is the first time the report is being produced. Also, the initial reporting effort will require water level elevation contouring for multiple time periods (Fall 2012 and Spring 2013). Subsequent reports will only require water level elevation contouring for one time period (Fall 2013) and will rely on figure and text templates developed during the initial reporting effort.
- h After analysis of the water quality data collected in 2013, an ongoing seawater intrusion monitoring program will be recommended. The analysis and recommended monitoring program will be documented in a letter report
- i Assumes a total of four quarterly presentations to the SJBA Board of Directors.
- j Assumes a total of one meeting and one data request per quarter.
- k WEI recommends a contingency budget of \$10,000 to cover unanticipated work. The contingency will not be spent without prior approval from the San Juan Basin Authority