AGENDA
Borrego Water District Board of Directors
Special Meeting
March 17, 2015 9:00 a.m.
806 Palm Canyon Drive
Borrego Springs, CA 92004

I. OPENING PROCEDURES

A. Call to Order
B. Pledge of Allegiance
C. Roll Call
D. Approval of Agenda
E. Comments from Directors and Requests for Future Agenda Items
F. Comments from the Public and Requests for Future Agenda Items (comments will be limited to 3 minutes)

II. CURRENT BUSINESS MATTERS

A. Public meeting to discuss Groundwater Sustainability Plan Policy Recommendations

a. Borrego Water Coalition Policy Recommendations (3-8)
b. Downey Brand article on Groundwater Legislation
c. Association of California Water Agencies (ACWA) Groundwater Fact Sheet
d. ACWA Frequently Asked Questions
e. BWD Frequently Asked Questions
f. Timeline
g. Borrego Valley Groundwater Basin Historical Delineations
h. Sustainable Groundwater Management Act

B. Review of Town Hall presentations

a. State of the District briefing on infrastructure, groundwater levels, basin inflow/outflow, water quality and the general direction of the groundwater management by General Manager Jerry Rolwing (9-11)
b. How does the Sustainable Groundwater Management Act affect the citizens of Borrego Springs by Board President Beth Hart
c. What will it cost for developing a plan to manage the Borrego Valley Groundwater Basin (BVGB), who all will pay these costs, and how much will ratepayers be asked to pay? PowerPoint presentation by Director Lyle Brecht (12-24)

C. Discussion and potential decision regarding status of direct placement financing to refinance the Viking Ranch note. (25-27)

D. Update on submittals of solar Request For Proposals

E. Discussion of potential agenda items for March 25th board meeting

III. INFORMATIONAL ITEMS

a. Volatile Organic Compound (VOC) regulations (28)
b. Articles from The Desert Sun (29-30)
c. Letter from M. McElhatton, ABDNHA (31)

IV. CLOSING PROCEDURE

The next Regular Meeting of the Board of Directors is scheduled for March 25, 2015 at the Borrego Water District.
Town Hall meeting Wednesday March 25, 2015, 4:00 PM at the Performing Arts Center

BORREGO WATER COALITION MEMBER LIST

November 6, 2014

#	NAME	INTEREST AREA	AFFILIATION
1	Bill Bauer	Agriculture	AAWARE/Borrego Farms
2	David Bauer (alternate)	Agriculture	AAWARE/Borrego Farms
3	Dennis Jensen	Agriculture	AAWARE/Oasis Ranch Management
4	Duane Young	Agriculture	AAWARE/Cocopah Nurseries
5	Jim Seley	Agriculture	AAWARE/Seley Ranches
6	Mike Seley (alternate)	Agriculture	AAWARE/Seley Ranches
7	Ryan Hall (alternate)	Agriculture	AAWARE/Borrego Farms
8	Bill Berkley	Recreation	Rams Hill Partners/Rams Hill Golf Course
9	Dan Wright	Recreation	The Springs at Borrego and Road Runner Club
10	Jack Cameron (alternate)	Recreation	Borrego Springs Resort & Spa
11	Jim Moxham	Recreation	Borrego Springs Resort & Spa
12	Jim Wermers	Recreation	de Anza Country Club
13	Beth Hart	District Rate Payers; Registered Voters	Borrego Water District
14	Jerry Rolwing	District Rate Payers; Registered Voters	Borrego Water District
15	Lyle Brecht	District Rate Payers; Registered Voters	Borrego Water District
16	Marshal Brecht (alternate)	District Rate Payers; Registered Voters	Borrego Water District
17	Anne Bogardt (alternate)	School District	Borrego Springs Unified School District
18	Martha Deichler	School District	Borrego Springs Unified School District
19	Jim Wilson	Public Use Area	Christmas Circle Community Park Foundation
20	Linda Haddock	Commercial Businesses	Borrego Springs Chamber of Commerce
21	Jack McGrory	Resorts and Lodging	La Casa Del Zorro Resort & Spa
22	Casey Brown (alternate)	Resorts and Lodging	La Casa Del Zorro Resort & Spa
23	Kathy Dice	Watershed & Desert Ecosystems	Anza-Borrego Desert State Park
24	Paige Rogowski (alternate)	Watershed & Desert Ecosystems	Anza-Borrego Foundation
25	Ralph Singer	Watershed & Desert Ecosystems	Anza-Borrego Foundation
26	Laura Peters	not applicable; non-voting member	CA Department of Water Resources
27	Tim Ross	not applicable; non-voting member	CA Department of Water Resources
28	Jim Bennett	not applicable; non-voting member	San Diego County Planning & Dev. Services

For assistance with contacting one of your representatives, contact Linda Haddock, Executive Director, Borrego Springs Chamber of Commerce at (760) 767-5555 or lhaddock@bscvb.com, or Dorian Fougeres, Facilitator, Center for Collaborative Policy, CSUS at (916) 531-3835 or dfougeres@ccp.csus.edu

BORREGO WATER COALITION
GROUNDWATER MANAGEMENT
POLICY RECOMMENDATIONS

This document articulates policies the Borrego Water Coalition's (BWC; "the Coalition") members recommend to the Borrego Water District's (BWD; "the District") Board of Directors ("the Board").[1]

The Coalition recommends the inclusion of the following policies in the Borrego Valley's Groundwater Sustainability Plan (GSP) required under the Sustainable Groundwater Management Act (SGMA; the Act; collectively SB 1168, SB 1319 and AB 1739, as amended):[2]

(1) The Coalition recommends a Physical Solution of sufficient reductions in Basin withdrawals from the baseline in order to achieve a Sustainable Yield goal of approximately 5,600 acre-feet per year (AFY).[3] These reductions shall be achieved at a minimum within a 20-year period beginning no later than January 31, 2020, with 5-year minimum interim reduction targets of [4]:

No Later Than February 1, ____:

a. 2025: approximately 20% from the Baseline
b. 2030: approximately 40% from the Baseline
c. 2035: approximately 60% from the Baseline
d. 2040: approximately 70% from the Baseline[5]

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[1] See Memorandum of Understanding for Borrego Water Coalition dated March 29, 2013 at: http://watermanager.borregospringschamber.com/bwc/documents/BWCMOUFinal-Revision_12-05-13.pdf.

[2] The Act establishes that it is the policy of the State of California that groundwater resources be managed sustainably for long-term water reliability and multiple economic, social, or environmental benefits for current and future beneficial uses [SB 1168, Section 1.(a)].

[3] United States Geological Survey, 2014, "Hydrogeology, Hydrologic Effects of Development, and Simulation of Groundwater Flow in the Borrego Valley, San Diego County, California. Draft Report." Claudia C. Faunt, Christina L. Stamos, Peter Martin, Lorraine E. Flint, Michael T. Wright, Matthew K. Burgess, Michelle Sneed, Justin Brandt, and Alissa L. Coes.

[4] January 31, 2020 is the final due date established by the SGMA legislation for a basin in critical overdraft to have a GSP approved by DWR. All GSPs must include a reduction schedule with no more than 5-year benchmarks. A GSP may be approved and commence without penalty at any date before this final date.

[5] The precise percentage is the amount necessary to achieve Sustainable Yield. This percentage reduction will be refined during the GSP period based on difference of actual withdrawals from the Sustainable Yield goal.

(2) The Coalition recommends a Baseline be established for each Owner based on either documented metered usage or on estimated average annual usage for the 10-year period 2004-2014 that fairly establishes historical Production at full operation;

(3) The Coalition recommends that the GSP include an annual Non-Compliance Fee based on an Owner's Production (acre-feet of withdrawals) exceeding the interim targets and thereafter exceeding the proportionate permanent reductions in annual withdrawals required to achieve the Physical Solution. The purpose of the Non-Compliance fee is primarily to deter Owners from exceeding their annual extraction limits and secondarily to support implementation of the GSP[6]. Accordingly, the Non-Compliance Fee should be set at a level consistent with a fee for the unauthorized diversion of water;

(4) The Coalition recommends and supports the development of separate funding mechanisms, both public and private, including acquiring and/or fallowing agricultural land as a way to expedite bringing the basin into balance; for transfers of pumping rights among Owners; for paying for the implementation of the Physical Solution. Without such funding, support for these recommendations from all the members of the Coalition should be considered to be non-binding;

(5) The Coalition recommends and supports the imposition of an approved, defined, and reasonable fee to be imposed on Owners specifically to cover the Administrative Costs of the GSP as may be required by the California Department of Water Resources (DWR) SGMA regulations;

(6) The Coalition recommends that the County and District establish a Joint Powers Agreement (JPA), or similar legal structure, comprised of the appropriate Basin agencies and stakeholders, including Borrego Water Coalition members, for purposes of

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[6] AB-1739, Chapter 8 (Financial Authority), 10730(a) states: "A groundwater sustainability agency may impose fees, including, but not limited to, permit fees and fees on groundwater extraction or other regulated activity, to fund the costs of a groundwater sustainability program, including, but not limited to, preparation, adoption, and amendment of a groundwater sustainability plan, and investigations, inspections, compliance assistance, enforcement, and program administration, including a prudent reserve. A groundwater sustainability agency shall not impose a fee pursuant to this subdivision on a de minimis extractor unless the agency has regulated the users pursuant to this part."

effectively implementing the Physical Solution. Also, the JPA should work to align the County's General Plan, land-use policies, and the well permitting practices of the Department of Environmental Health (DEH) with the GSP, in support of Basin sustainability;[7]

(7) The Coalition recommends that the District review its Policy for Water and Sewer Service to New Developments and its Water Credits Policy (WCP) so as to bring these policies into alignment with the Physical Solution and that the policies facilitate economic growth and free market trading among Owners to arrive at a Sustainable Community Solution (SCS);

(8) The Coalition recommends that Owners be mandated to install meters on their Production wells and submit verified withdrawals data twice a year to the Basin Engineer. The Coalition agrees that a penalty be imposed for Owners failing to meter their Production wells no more than two-years from the date of the approved GSP;

(9) The Coalition recommends that Owners be required to allow access to their Production wells for the collection of Water Quality Data (WQD), as required by state regulations. The Coalition agrees that a penalty be imposed for Owners failing to provide access to their Production wells for sampling by the Basin Engineer or other designated qualified water quality professional as specified by the GSP;

(10) The Coalition recommends that the GSP include how it will involve the Coalition in an ongoing role in developing, monitoring, and periodically reviewing the elements of the GSP and include such mechanism(s) as a formal component of the GSP.

Definitions

Acre-feet per year (AFY) - a unit of measuring water usage over time corresponding to covering one acre of land with one foot of water over the course of one year. An acre-foot of water equals 43,560 cubic-feet of water or 325,851.4 U.S. gallons. A football field is about 1.1 acres. One cubic-foot contains 7.48 gallons of water.

[7] The Act requires the County planning agency, before adopting or substantially amending a general plan, to review and consider the GSP for the Basin.

Administrative Costs – legitimate and necessary GSP administration, legal, engineering, planning, technical and other costs not covered by State and/or Foundation grants and/or bond financing.

Basin – groundwater underlying the Borrego Valley alluvial basin boundaries that underlie the District and San Diego County and under their authority as determined by SGMA. Note: this is only a part of the basin as defined by DWR in its 2003 Bulletin 118, which includes other land within the jurisdiction of San Diego County, Imperial County, the Bureau of Land Management, and potentially the California Department of Parks and Recreation.

Basin Engineer – qualified professional engineering firm hired by the Groundwater Sustainability Agency to administer the implementation of the GSP.

Groundwater Sustainability Agency (GSA) – Agencies that have been created by statute to manage groundwater are deemed the exclusive agency to comply with the Sustainable Groundwater Management Act ("the Act") within their boundaries unless the agency elects to opt out [Section 10723 (c)(1) and (c)(2)]. Otherwise, any local agency or combination of local agencies overlying a groundwater basin may elect to be a GSA [Section 10723]. Local agencies, such as the District [California Water Code Section 35562] and the County, have until June 30, 2017 to form a GSA [Section 10735.2(1)]. A GSA may adopt rules, regulations, ordinances, and resolutions for the purposes of the Act.

Joint Powers Agreement (JPA) – formal agreement of how two or more agencies plan to work together to achieve a common purpose.

Non-Compliance Fee – an annual fee for Owners failing to meet their withdrawals reduction target. The fee would be assessed on the basis of Production exceeding an Owner's reduction target.

Physical Solution - A physical solution is a technical legal term for an operational plan that: (i) preserves water rights and, at the same time; (ii) enables all water users to exercise those rights fully even when there might not be sufficient water if there was strict compliance with the water rights system.

Policy for Water and Sewer Service to New Developments – see http://www.borregowd.org/uploads/Borrego_WD_2013_Proposed_New_Development_Policy_with_Detail_Sheet_and_Who_Pays_for_Growth_Policy_Feb_20_2012_Cle.pdf.

Owner – a person owning a groundwater extraction facility or an interest in a groundwater extraction facility in the Basin.

Production – annual groundwater withdrawals from the Basin.

Sustainable Community Solution – the transfer of sustainable Production among Owners that results in the desired mix of economic activity that achieves withdrawals within the Sustainable Yield of the Basin.

Sustainable Yield – the average annual natural recharge to the Basin as determined by the US Geological Survey (USGS)

Water Credits Policy – http://www.borregowd.org/uploads/Water_Credit_policy_revision_06.25.2014.pdf

Water Quality Data (WQD) – data required under the various state agency programs, as amended (e.g. Salt and Nutrient Monitoring Program) that preserves the privacy of Owners' wells' data.

14TH ANNUAL TOWN HALL MEETING
"TAKING CONTROL OF OUR WATER FUTURE"

HIGHLIGHTS

- 1) Water and Wastewater Infrastructure
- 2) CASGEM Water Levels
- 3) Annual Residential Water Usage
- 3) Groundwater Basin, Inflow vs. Outflow
- 4) Water Quality Program
- 5) Groundwater Sustainability Plan

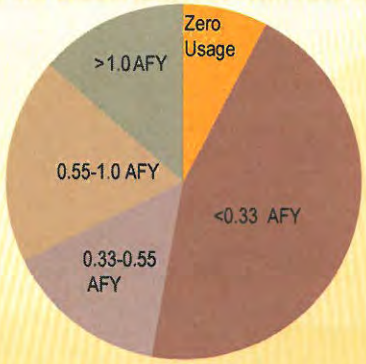
WATER INFRASTRUCTURE

Wells: routine casing perforation cleaning
Pumps and motors: replace based on efficiency
Reservoirs: recoating inside surfaces
Pipelines: replace old lines and/or add new lines
Meters: replace meters not recording properly
Cross Connection Protection: install and testing

SEWER INFRASTRUCTURE

- Collection System:
  - Make necessary repairs to pipelines, valves etc.
  - clean and video collection lines (20 miles)
- Wastewater Treatment Plant;
  - Redesigned and build aerator at stabilization basin
  - Relining inside surfaces of clarifiers
  - Ongoing maintenance of aging concrete structures

FY 2013-14 RESIDENTIAL WATER USAGE



CASGEM WATER LEVELS

- CASGEM – CAlifornia Statewide Groundwater Elevation Monitoring
- Program designed by Department of Water Resources for reporting of static water levels
- Levels reported semi-annually by local groundwater agencies
- Agencies not reporting are not eligible for DWR grant funding opportunities

WATER LEVEL DATA

- *Data from three monitor wells and three inactive production wells spread across the Valley.*

- North end of Valley: -3 feet/year
- Middle Valley: -2 feet/year
- South end of Valley: very little change to date due to no large production wells

BASIN INFLOW VS. OUTFLOW

- *Sustainability is the balance of*
- *natural recharge vs. water pumped.*
- U.S. Geological Survey calculates 5,600 Acre Feet per Year (AFY) of natural recharge based on 65 years of collected data
- BWD estimates reflect 19,000 AFY pumped
- **Difference is the Overdraft of 13-14,000 AFY**

WATER QUALITY PROGRAM

- Missing link in collected data of the Valley.
- Need for an on-going monitoring network:
  - Set up and maintain monitoring program
  - Public and private wells with State Well Completion Reports to confirm screened production zones
  - Perform "depth dependent" water sampling to analyze different qualities down the hole

GROUNDWATER SUSTAINABILITY PLAN

- Achieve balance of natural recharge and extractions over a 20 year period
- Create a groundwater reduction plan through the Sustainable Groundwater Management Act
- Utilize Stakeholder input/support of the Borrego Water Coalition and community members affected by the reduction Plan

END RESULT – A SUSTAINABLE WATER SUPPLY

- BORREGO cannot afford to import water
- DESERT dwellers strive to use water efficiently
- WE, as a community, have the opportunity to
- *Take Control of our Water Future!*

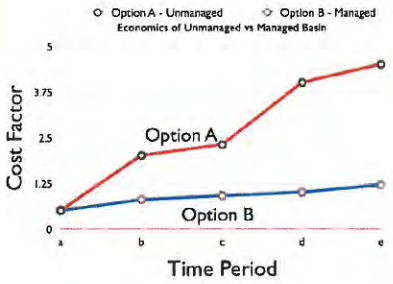
MANAGING THE BORREGO VALLEY GROUDWATER BASIN

Maximizing Economic Value for Borrego Valley Property Owners & Businesses

DRAFT v4 March 7, 2015 - FOR DISCUSSION ONLY - NOT FOR DISTRIBUTION

1

WHY BOTHER?



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TWO FORCING METHODS

State legislated mandates (i.e. Sustainable Groundwater Management Act - *SGMA*)

Litigation - adjudication

3

WHAT DOES "MANAGED BASIN" MEAN?

A plan to achieve *sustainable yield* within a defined timeframe

Sustainable yield means average annual net withdrawals are not greater than average annual net inflows from all sources

What this means for the Borrego Valley Groundwater Basin is that average annual net withdrawals must decrease by ~70%

SGMA allows 20-years from 2020 to achieve this result (this is approximately the same time a court would use if the Basin was adjudicated)

4

HOW DO WE KNOW THIS?

~$2.3 million has been spent over the years to determine for certain an overdraft exists, its magnitude, and that no other sources of water are economically available to the Valley at this time.

The most recent study is by the US Geological Survey (2015); $550,000 cost ($350,000 District ratepayers, $200,000 USGS)

There are no productive aquifers over the next hill - US Environmental Protection Agency study (2013); $450,000 cost ($200,000 ratepayers, $250,000 USEPA)

No other sources of water are economically available to the Valley at this time - US Bureau of Reclamation study (2015); $900,000 cost ($12,000 ratepayers, $900,000 Reclamation)

5

LITIGATION

Benefits

- takes time (delays everything). Courts will require a 20-year plan, similar to SGMA
- produces a definite outcome (everyone knows their water rights when all is said and done)

Drawbacks

- Uncertain outcome (there usually are winners & losers)
- takes time (often delay is not in anyone's best economic interests)
- uses up financial resources (to play, one must pay)
- A reduction plan is still required by courts. Planning costs are not avoided.

6

BORREGO WATER COALITION POLICY RECOMMENDATIONS

Develop a *Groundwater Sustainability Plan* (GSP)

Reach sustainable yield in no more than 20-years from 2020

Implement penalties for pumpers who do not meet annual reduction targets

Require meters for all production wells in Valley (over a nominal amount pumped)

Coalition members represent ~80% of total annual withdrawals & usage

7

GSP OPTIONS TO ACHIEVE RESULTS

Command & Control Regulations ("You Must Do this or Else")

Public Finance ("All we need is a public bond")

Market Based Solution ("the Market will solve our problem")

Do Nothing (wait for the State to take control of the Basin)

8

Each option has some benefits & some drawbacks

benefits & drawbacks for each option have vastly different economic costs

9

COMMAND & CONTROL REGULATIONS

- Benefits
  - Appears certain & low cost
  - Can plan on a specific outcome by a specific date
- Drawbacks
  - Almost always leads to litigation (often ends up being very costly)
  - Regularly delays reaching specific goals

10

PUBLIC FINANCE

- Benefits
  - Solves problem without costly litigation
- Drawbacks
  - Who will supply the credit?
  - The community is unlikely to possess adequate debt capacity
  - Valuation is an issue - can not use usual valuation techniques

11

MARKET-BASED

- Benefits
  - Freely made trades among willing market participants
  - Lower risk for litigation
- Drawbacks
  - Markets need structure to work
  - Markets need solid pricing signals for fair trades

12

DO NOTHING - WAIT FOR STATE TO TAKE CONTROL OF BASIN

Benefits

- low upfront costs
- automatic delay

Drawbacks

- May be most expensive option as this is likely to lead to command & control regulations & litigation
- Supply uncertainty - economic consequences as investment decisions by businesses & property owners are delayed

13

GSP Development Costs Estimate

Likely ~$1,500,000 over 2-3 years (+/- ~$300,000)

15

FOR CONSIDERATION

- Develop GSP with market-friendly regulations that provide structure and pricing signals that promote market-based trading
- Develop GSP that supports some amount of public finance for speeding-up market-based trading
- IF community can't or won't cooperate to develop an acceptable GSP, then adjudicate and let the chips fall where they may
- Each of the above options are likely economically preferable to doing nothing and waiting for the state to take control of the Basin

14

WHO PAYS?

Ratepayers or Farmers or Recreation (golf) - non-defensible

All present Basin users pay their fair proportional share - defensible

16

WHAT IS FAIR PROPORTIONAL SHARE OF GSP DEVELOPMENT?

- proportional share of owned acreage
- proportional share of annual withdrawals
- proportional share of property values
- proportional share of potential water rights
- blended proportional share

17

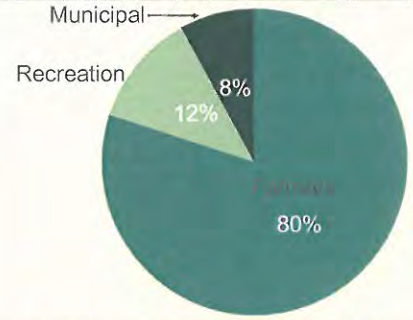
PROPORTIONAL SHARE OF OWNED ACREAGE

- Unfair

Three largest land owners in Valley - Anza Borrego Desert State Park, Anza-Borrego Foundation and Dennis Avery estate are some of the lowest water users

18

PROPORTIONAL SHARE OF ANNUAL WITHDRAWALS



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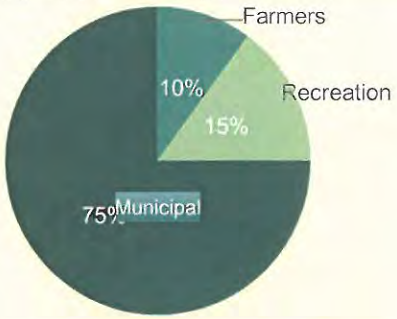
PROPORTIONAL SHARE OF PROPERTY VALUES



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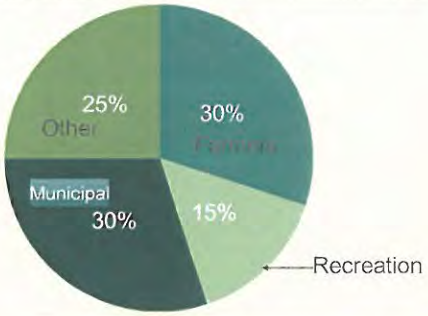
PROPORTIONAL SHARE OF WATER RIGHTS



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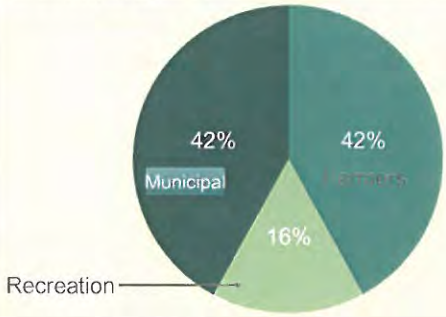
BLENDED APPORTIONED COSTS

	FARMERS	RECREATION	MUNICIPAL
SHARE OF TOTAL	$630,000	$240,000	$630,000
ANNUAL SHARE PAID 5-YEARS	$126,000	$48,000	$126,000
COST/ AF OF WITHDRAWALS	~$9.00	~$18.00	~$60.00

23

BLENDED PROPORTIONAL SHARE



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GSP ALLOCATED COST DIVIDED BY ANNUAL USAGE FOR 5-YEARS

- Metered usage pays based on actual usage
- Unmetered agricultural usage pays based on maximum ET for crop times maximum acreage of that crop based on aerial mapping
- Unmetered recreational (golf) usage pays based on maximum ET for turf times maximum acres of turf based on aerial mapping
- Unmetered residential usage pays based on assumed minimum of 3 AFY

24

MUNICIPAL COSTS (ESTIMATED)

# OF RATEPAYERS	USAGE (AFY AVERAGE)	ANNUAL COST FOR 5-YEARS	MONTHLY COST FOR 5-YEARS
141	0	$0.00	$0.00
838	0.33	~$19.80	~$1.65
275	0.55	~$33.00	~$2.75
350	1.00	~$60.00	~$5.00

25

WHY DO WE WANT TO ACT NOW, NOT LATER?

- First mover advantage for obtaining state assistance. Waiting reduces probability for state funding
- Professional talent is limited. A small Basin like ours will be in competition for professional talent with larger, better funded basins all trying to get work done within state-mandated timeframes
- DWR spent 2-years and $160,000 to develop the capacity of the Borrego Water Coalition as a legitimate and productive stakeholder group. Requiring them to wait around for many months before the County and District act is a waste of this community resource

27

STATE GRANTS

- If any grants are awarded to defray the costs of developing the GSP,
- the grant proceeds will reduce the amount of each sector's share of costs proportionally
- during the year the grant funding is actually received, not awarded

26

NEXT STEPS

- Water District Board needs to approve budget to develop defensible professional GSP development costs estimate
- Legal counsel needs to prepare recommendations for the revenue mechanism
- District staff needs to prepare draft GSA application
- District and County staff need to discuss results from GSP costs estimate, revenue mechanism recommendations & draft GSA application
- District needs to conduct public review process for revenue mechanism

28

SOME CONTEXT

- Future freshwater availability in US is on Department of Defense's National Security Threat Matrix
- US Intelligence Community researchers say that the US does not possess enough freshwater for future energy (largest water user), agriculture, industrial, commercial, and residential needs at present end-use efficiency levels
- Climate change is a game changer for states in the Colorado River Basin due to projected lower snowpack in Rockies & Cascades (30% less rainfall may change recharge rates by 70% - NCAR)

29

SOME CONTEXT

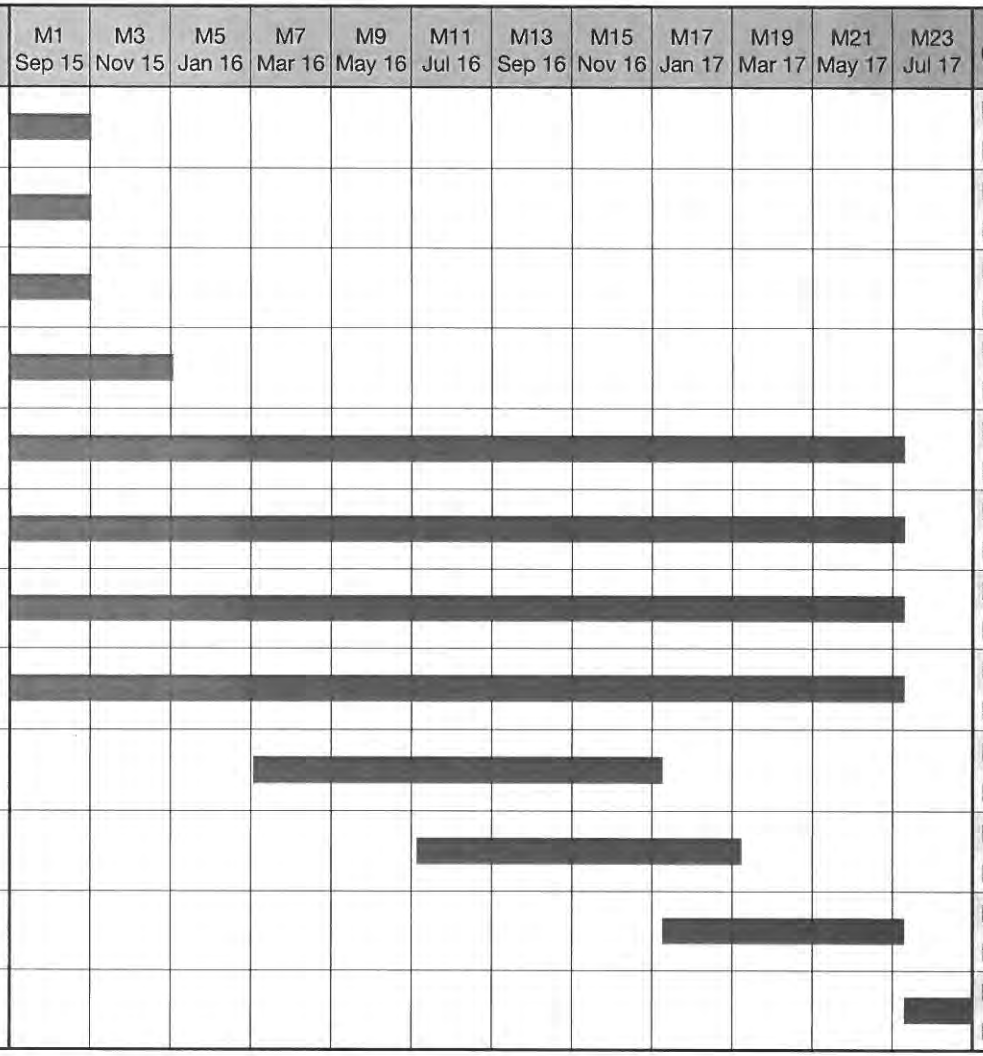
- State-wide, regionally (Colorado River Basin), nationally (US), and world-wide, there are few groundwater basins that are not in overdraft or heavily polluted. Nationally, many basins are more severely overdrafted than BVGB
- In San Diego County, southern California, and statewide, many groundwater basins are in more severe overdraft than BVGB
- Actually, the overdraft of the BVGB is one of the simplest and least expensive groundwater systems in the state to address

30

March 7, 2015 at 12:59 PM

BVGB GSP Development Costs

	Task	Owner	Cost
1	prepare GSA application for BVGB	County/District	Planned $6,000.00 Forecas $6,000.00
2	prepare roadmap of necessary elements & costs for GSP	Engineer	Planne $24,000.00 Foreca $24,000.00
3	regulatory fee process for financing GSP development	Attorney	Planne $45,000.00 Foreca $45,000.00
4	economics study for market-based GSP	Economist	Planne $50,000.00 Foreca $50,000.00
5	technical background for GSP (requires USGS & Reclamation)	Engineer	Planne $24,000.00 Foreca $24,000.00
6	prepare policy document for reduction plan	Engineer	Planne $16,000.00 Foreca $16,000.00
7	depth dependent water quality study & economic forecast	Hydrologist/Engi	Plann $300,000.00 Forec $300,000.00
8	CEQA costs of reduction plan (necessary for court validation)	Engineer	Plann $500,000.00 Forec $500,000.00
9	produce implemention funding plan for court validation	Bond Counsel	Planne $70,000.00 Foreca $70,000.00
10	develop credit mechanism for GSP implementation	Underwriter	Plann $100,000.00 Forec $100,000.00
11	produce written GSP for court validation process	Engineer	Planne $30,000.00 Foreca $30,000.00
12	court validation process (includes some litigation costs	Attorney	Plann $400,000.00 Forec $400,000.00



	Definition of Success
1	Depth dependent water quality results & economic forecast used to establish reductions
2	Return flows & depth dependent water quality results used to establish TDS-Tax per AF returns
3	GSP makes it through court validation process & establishes ability for public finance options

	Current Status
1	When can the District & County start accruing expenses related to GSP Development costsd
2	How soon can a revenue mechanism be put in place to pay for GSP development costs?
3	Given the long timeframe to develop data on depth dependent water quality economics, how soon can we start this work?

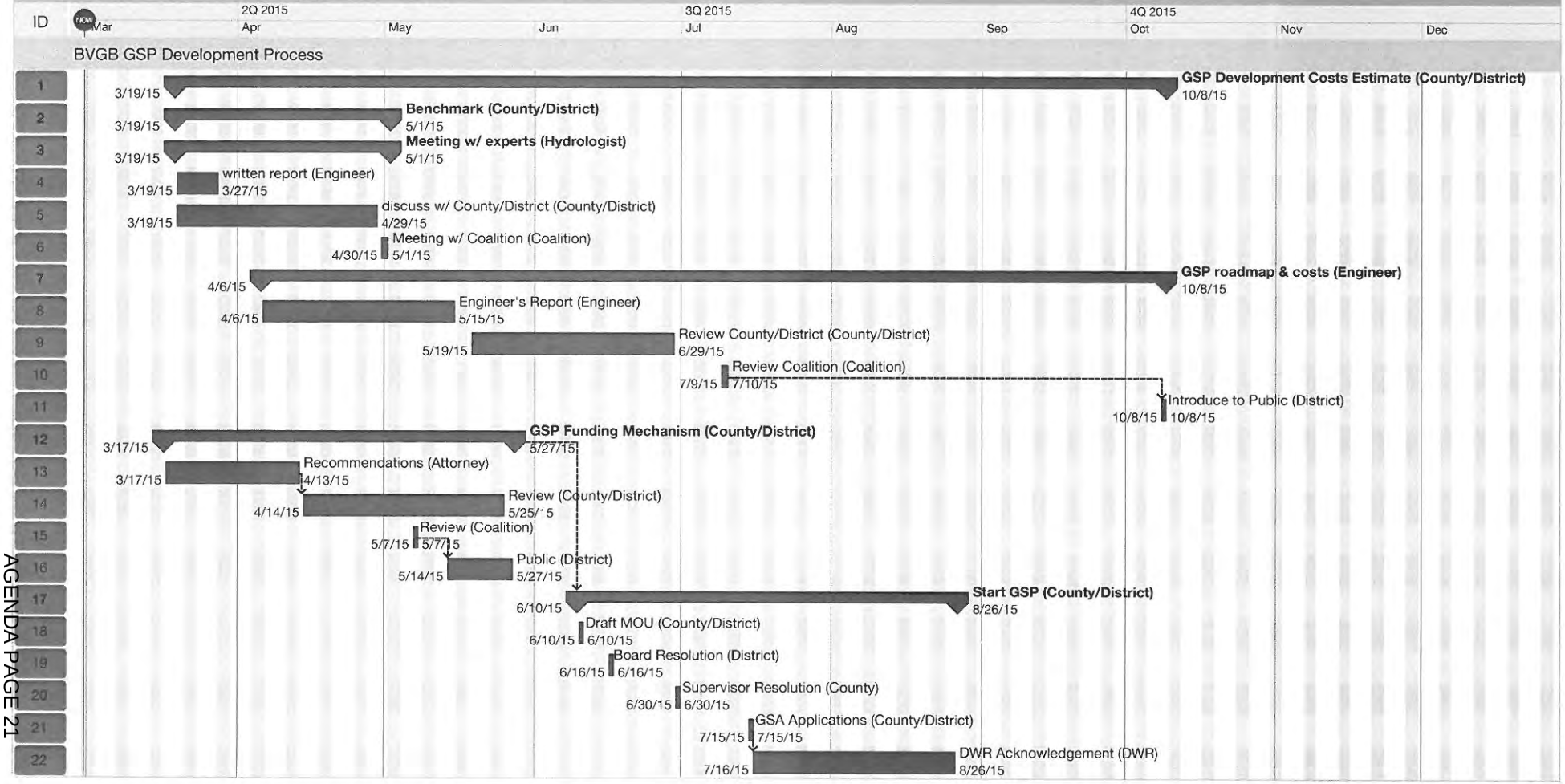
Cost Summary	
Planned	$1,565,000.00
Forecast	$1,565,000.00
Variance	$0.00

February 28, 2015 at 11:51 AM

Project Info for BVGB GSP Development Process

Description	List ot tasks necessary to begin BVGB GSP
Objective 1	Develop estimate of GSP funding costs
Objective 2	Decelop GSP development funding mechanism
Objective 3	District & County Apply for GSP status

Task Chart for BVGB GSP Development Process



AGENDA PAGE 21

Task List

ID	Task Name	Work	Start	End	% Done	Cost	People	Predecess	Project
1	**GSP Development Costs Estimate**	**102 days**	**Thursday 3/19/15**	**Thursday 10/8/15**	**0%**	-	**County/District**		**BVGB GSP Development**
2	**Benchmark**	**39 days**	**Thursday 3/19/15**	**Friday 5/1/15**	**0%**	-	**County/District**		**BVGB GSP Development**
3	**Meeting w/ experts**	**39 days**	**Thursday 3/19/15**	**Friday 5/1/15**	**0%**	-	**Hydrologist**		**BVGB GSP Development**
4	written report	7 days	Thursday 3/19/15	Friday 3/27/15	0%	-	Engineer		BVGB GSP Development
5	discuss w/ County/District	30 days	Thursday 3/19/15	Wednesday 4/29/15	0%	-	County/District		BVGB GSP Development
6	Meeting w/ Coalition	2 days	Thursday 4/30/15	Friday 5/1/15	0%	-	Coalition		BVGB GSP Development
7	**GSP roadmap & costs**	**63 days**	**Monday 4/6/15**	**Thursday 10/8/15**	**0%**	-	**Engineer**		**BVGB GSP Development**
8	Engineer's Report	30 days	Monday 4/6/15	Friday 5/15/15	0%	-	Engineer		BVGB GSP Development
9	Review County/District	30 days	Tuesday 5/19/15	Monday 6/29/15	0%	-	County/District		BVGB GSP Development
10	Review Coalition	2 days	Thursday 7/9/15	Friday 7/10/15	0%	-	Coalition		BVGB GSP Development
11	Introduce to Public	1 days	Thursday 10/8/15	Thursday 10/8/15	0%	-	District	10	BVGB GSP Development
12	**GSP Funding Mechanism**	**61 days**	**Tuesday 3/17/15**	**Wednesday 5/27/15**	**0%**	-	**County/District**		**BVGB GSP Development**
13	Recommendations	20 days	Tuesday 3/17/15	Monday 4/13/15	0%	-	Attorney		BVGB GSP Development
14	Review	30 days	Tuesday 4/14/15	Monday 5/25/15	0%	-	County/District	13	BVGB GSP Development
15	Review	1 days	Thursday 5/7/15	Thursday 5/7/15	0%	-	Coalition		BVGB GSP Development
16	Public	10 days	Thursday 5/14/15	Wednesday 5/27/15	0%	-	District	15	BVGB GSP Development
17	**Start GSP**	**34 days**	**Wednesday 6/10/15**	**Wednesday 8/26/15**	**0%**	-	**County/District**	**12**	**BVGB GSP Development**
18	Draft MOU	1 days	Wednesday 6/10/15	Wednesday 6/10/15	0%	-	County/District		BVGB GSP Development
19	Board Resolution	1 days	Tuesday 6/16/15	Tuesday 6/16/15	0%	-	District		BVGB GSP Development
20	Supervisor Resolution	1 days	Tuesday 6/30/15	Tuesday 6/30/15	0%	-	County		BVGB GSP Development
21	GSA Applications	1 days	Wednesday 7/15/15	Wednesday 7/15/15	0%	-	County/District		BVGB GSP Development
22	DWR Acknowledgement	30 days	Thursday 7/16/15	Wednesday 8/26/15	0%	-	DWR	21	BVGB GSP Development

ACWA Legislative Symposium Focuses on Groundwater Adjudication, Prop. 218 Changes

Submitted by Pamela Martineau on Wed, 03/04/2015 - 5:12pm

ACWA's 2015 Legislative Symposium held in Sacramento today focused on key water issues being addressed this legislative session, including the streamlining of groundwater basin adjudications and possible changes to Proposition 218.

The day-long conference, held at the Sacramento Convention Center, offered more than 140 attendees an opportunity to hear differing perspectives on water issues facing lawmakers this term. ACWA Vice President Kathy Tiegs opened the conference with welcoming remarks.

The first panel – "To Adjudicate or Not to Adjudicate? That is the Question" – explored proposals to streamline the groundwater adjudication process. The streamlining was addressed in the context of how it might intersect with the newly passed Sustainable Groundwater Management Act. Eric Garner, an attorney with Best, Best and Krieger, moderated the panel.

Panelist Gordon Burns, undersecretary for the California Environmental Protection Agency, said the Brown Administration is currently studying ways to streamline groundwater basin adjudications. While no specific proposals have been developed, the Administration is seeking to make the process more cost-effective, fair, and in harmony with the SGMA. The adjudication streamlining also must be in line with the principles outlined in Gov. Jerry Brown's California Water Action Plan.

"We want to help put the state on a path to a more sustainable water system generally. Groundwater is a piece of that," said Burns.

Jack Rice, associate counsel for the California Farm Bureau Federation, added that: "We don't want the adjudication process to become a disruption of SGMA."

Panelists said some of the issues that may need to be addressed within streamlining proposals are: defining the role of State Water Resources Control Board in an adjudicated basin if that basin is on probation with the State Board for non-compliance with SGMA; defining the boundaries of adjudicated basins when the State Board is using Bulletin 318 to set boundaries; and harmonizing the court's definition of "safe yield" with the SGMA's definition of "sustainable yield."

A later panel on proposed changes to Proposition 218 was moderated by Kathy Cole, a legislative representative with the Metropolitan Water District of Southern California. Cole said that many water agencies lack the revenue to pursue stormwater projects and Prop. 218 has the potential to "stymie the pursuit" of such projects since it requires the funding stream to be put to

the voters. Some stakeholders are proposing a reform to 218 that would add stormwater to the list of exemptions from 218 requirements. Others are proposing exemptions that would allow assistance to ratepayers who can't pay their water bills.

Justin Malan, with EcoConsult, said an exemption for stormwater projects would help local agencies because 80% to 90% of funding for such projects comes from local jurisdictions.

Omar Carrillo, of the Community Water Center, stressed that changes in the area of assistance to ratepayers would be especially helpful since the cost of water is likely to rise in coming years.

During the lunchtime panel, the chair and vice chair of the Assembly Water, Parks and Wildlife Committee, talked about what to expect on water issues in the Legislature in 2015. Assemblymember Marc Levine, (D-San Rafael) chair of the committee, said it is important to the Legislature that Proposition 1 money is "spent wisely and efficiently and effectively."

Assemblymember Frank Bigelow (R-O'Neals), vice chair of the committee, also said the Legislature will be interested in ensuring that the intent of the Proposition 1 water bond is adhered to during disbursement of the funds.

Levine also advised water agencies interested in applying for water bond funds to "make the case early that your agency's project is the best project.'

Levine also said that as the dismal readings of low Sierra snowpack continue, California needs to prepare for a time when the snowpack is diminished and "we don't get that reservoir of water that is time-released."

Status Summary of Direct Placement Bids to the Borrego Water District

Provided by Andrew G. Ciocca, Vice President
Stern Brothers & Company

Items to Be Addressed

- Current Bids;
- Bid Comparisons:
  - Projected Debt Service Comparison;
  - Comparison of Terms;
- Projected Schedule.

Current Bids

- At present there are two bids, a firm bid from BBVA Compass Bank of 5.100% and a verbal bid from Umpqua Bank of 4.550%.
  - "Firm" means a binding term sheet has been presented – "verbal" implies a good faith quote from a representative of the bank without approval by their Credit Committee;
  - The Credit Committee at Umpqua has requested more clarification in regards to water preservation plans (they have background in agriculture in the San Joaquin and Central Valleys which is the root of the concern – the clarification questions should help alleviate these concerns).

Bid Comparisons

Date	Principal	Interest	Total P+I
06/01/2015	-	-	-
06/01/2016	88,755.99	56,257.61	145,013.60
06/01/2017	93,340.27	51,673.34	145,013.61
06/01/2018	98,161.32	46,852.29	145,013.61
06/01/2019	103,231.37	41,782.23	145,013.60
06/01/2020	108,563.30	36,450.31	145,013.61
06/01/2021	114,170.61	30,842.99	145,013.60
06/01/2022	120,067.56	24,946.05	145,013.61
06/01/2023	126,269.08	18,744.52	145,013.60
06/01/2024	132,790.91	12,222.69	145,013.60
06/01/2025	139,649.59	5,364.01	145,013.60
TOTAL:	$1,125,000	$325,136.04	$1,450,136.04

BBVA (Firm Bid)

Date	Principal	Interest	Total P+I
06/01/2015	-	-	-
06/01/2016	91,118.62	50,162.68	141,281.30
06/01/2017	95,311.68	45,969.62	141,281.30
06/01/2018	99,697.69	41,583.61	141,281.30
06/01/2019	104,285.54	36,995.77	141,281.31
06/01/2020	109,084.50	32,196.80	141,281.30
06/01/2021	114,104.31	27,177.00	141,281.31
06/01/2022	119,355.11	21,926.20	141,281.31
06/01/2023	124,847.55	16,433.77	141,281.32
06/01/2024	130,592.72	10,688.59	141,281.31
06/01/2025	136,602.28	4,679.03	141,281.31
TOTAL:	$1,125,000	$287,813.07	$1,412,813

Umpqua (Unconfirmed)

Comparison of Terms

Category	Terms
Term	10-Years
Pledge	Water Revenue (after ID-4)
Debt Service Coverage Req *	1.25x
Default Penalty**	5.000% over proposed rate
Estimated Closing Costs***	$8,000 to $12,500
Interest Cost	$325,136

BBVA (Firm Bid)

Category	Terms
Term	10-Years
Pledge	Water Revenue (after ID-4)
Debt Service Coverage Req *	1.25x
Default Penalty	*Unknown*
Estimated Closing Costs ***	$5,000 to $12,500
Interest Cost	$287,813

Umpqua (Unconfirmed)

**Debt service coverage of 1.25x is an industry standard for water revenue debt.*
*** At 5% a reduction default penalty would be requested.*
**** Closing costs are estimates based off historic transactions with these institutions.*

Projected Schedule

- 7 – 10 Days (March 25-28): Receive firm bid from Umpqua;
- 10-20 Days (March 28 – April 3): Finalize loan documents;
- 20-30 Days (April 3 – April 13): Close on loan.

Viking Ranch Refinance

Life	Beginning Balance	3.50% Yrly Cost	3.50% Total Cost	3.50% Savings	4.00% Yrly Cost	4.00% Total Cost	4.00% Savings	4.50% Yrly Cost	4.50% Total Cost	4.50% Savings	5.00% Yrly Cost	5.00% Total Cost	5.00% Savings	5.50% Yrly Cost	5.50% Total Cost	5.50% Savings	6.00% Yrly Cost	6.00% Total Cost	6.00% Savings
25	**1,425,000**		**Original note**		**80,000**	**2,450,000**													
10	1,125,000	135,272	1,352,715	1,097,285	138,702	1,387,023	1,062,977	142,176	1,421,762	1,028,238	145,693	1,456,926	993,074	149,251	1,492,512	957,488	152,851	1,528,515	921,485
15	1,125,000	97,678	1,465,173	984,827	101,184	1,517,756	932,244	104,753	1,571,296	878,704	108,385	1,625,776	824,224	112,079	1,681,182	768,818	115,833	1,737,497	712,503
20	1,125,000	79,156	1,583,124	866,876	82,779	1,655,589	794,411	86,486	1,729,713	720,287	90,273	1,805,458	644,542	94,139	1,882,785	567,215	98,083	1,961,653	488,347

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INFO ONLY - JOET 3

VOC Regulations

VOCs - Volatile Organic Compounds - are gases that react with nitrogen oxides (NOx) in the presence of heat and sunlight to form ground-level ozone - the primary component of "smog." VOCs are regulated as "ozone precursors" under the U.S. Clean Air Act and similar state laws.

California is becoming the first state in the nation to invoke regulations to reduce Volatile Organic Compounds (VOC) in agriculture by restricting the use of certain nonfumigant pesticide products during the growing season in the San Joaquin Valley. This CEU explains how the regulations will work.

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INFO ONLY - JOET 4

New bill aims to bring cleaner water to east valley

Paulina Rojas, The Desert Sun *5:21 p.m. PST February 20, 2015*

(Photo: J. Omar Ornelas/ The Desert Sun)

State lawmakers are being asked to consider a locally-authored bill would improve the quality of drinking water in the east valley.

Assembly Bill 434, introduced this week by state Assemblyman Eduardo Garcia, would authorize point-of-use filtration systems as a way to help solve the elevated levels of arsenic in the Coachella Valley.

State lawmakers approved a similar bill in 2010, bringing filtration systems to more than 1,000 people who are living in at least 18 mobile home parks.

But the program expired in January 2014. And Garcia, a Coachella Democrat, said Friday that he hopes to extend and increase the use of the clean water systems under the new legislation.

Salvador Saragosa — who has lived in the Gamez Mobile Home Park in Thermal for the past 15 years — was one of the first residents in the area to get access to the point-of-use filtration systems.

In the two years he's had it, Saragosa said he can notice a difference.

"It is a big change from the water we had before," he said in Spanish. "It had a strange aftertaste, but this water tastes a lot healthier."

According to state drinking water regulations, the maximum contaminant level for arsenic is 10 parts per billion.

Garcia's office noted that in 2010, the Riverside County Department of Environmental Health found 24 water systems in the east valley had arsenic levels above these limits.

Garcia's legislation is sponsored by Pueblo Unido, which joined forces with east valley residents to start the program.

"The experience that we have in the eastern Coachella Valley and across the state in rural communities has challenged us to come up with innovative ideas to provide reliable drinking water to these communities," said Sergio Carranza, Pueblo Unido executive director.

Garcia on Friday said he was "excited to continue this work" and expressed hope that the legislation would garner bipartisan support. He also said the bill would help residents with all income levels, not just under-served communities in the east valley.

"This is not a political issue," Garcia said. "It is a human issue."

Paulina Rojas covers the east valley for The Desert Sun she can be reached at (760)-778-4586 or via Twitter @PerpetuallyPau.

Read or Share this story: http://desert.sn/1EzxzeT

Our Voice: Settlement of suit will help Salton Sea push

5

INFO ONLY - JOE T

The Desert Sun Editorial Board *8:24 p.m. PST February 21, 2015*

(Photo: Zoe Meyers/The Desert Sun)

Imperial County and the Imperial Irrigation District recently announced that they've settled a long-running legal battle over the water transfer deal known as the Quantification Settlement Agreement, or QSA.

The deal ends 12 years of litigation over the water transfer and will allow the two entities to focus on efforts to secure restoration of the ailing Salton Sea.

Imperial County had sued IID years ago over the water agency's approval of the QSA. That water transfer deal will send increasing amounts of water that had been used for Imperial Valley farmland to urban areas in San Diego County and the Coachella Valley.

The county had sued over concerns about the costs of controlling increasing airborne dust as the Salton Sea's decline exposes more and more lakebed.

"At this point, we believe that having that division between the IID and the county is a barrier to finding a solution," Imperial County board Chairman Ryan Kelley told The Desert Sun's Ian James. "The county from the very beginning only wanted to see … a plan to address the air mitigation and to ensure that our residents were not paying for the impacts of the water transfer."

Under the settlement, Imperial Irrigation District waived its court costs and agreed to pay Imperial County $750,000 to dismiss a pending appeal.

For its part, Imperial County and its pollution control agency agreed to support IID's petition to the State Water Resources Control Board that would compel the state to draw up and fund a sea restoration plan. The petition calls for the water board to make water transfers under the QSA contingent on follow through on that restoration plan.

The resolution of this legal battle is a good sign, as these Imperial County entities need to be on the same side in the ongoing battle to save the sea.

"The settlement is an important step forward, and should eliminate a major obstacle to cooperative planning for the future of the Imperial Valley, the Salton Sea, and the region generally," Michael Cohen of the Oakland-based Pacific Institute told The Desert Sun. "The lack of local consensus has slowed progress on the Salton Sea, so this new settlement should help get Salton Sea planning back on track."

It is clear that the sea's future is a key concern for the entire region, including our own Coachella Valley. Time to put in place a realistic effort to save at least some part of the sea is running short.

A 15-year period of so-called "mitigation" flows that IID has been delivering to the sea ends after 2017. Once that happens, the lake's decline is expected to accelerate, with growing stretches of lake bed exposed to aggressive winds, potentially whipping up dust clouds over a region already plagued by high rates of respiratory disease.

While some argue that what they deride as the "lake by mistake" should be allowed to dwindle to the dry lakebed it was before 1905, the threat from a mysterious soup of sediment deposited by agricultural runoff in the decades since looms as too great a threat to contemplate.

The Pacific Institute has projected that without action to address the Salton Sea's deterioration, associated long-term costs — in expected health care expenses and lower property values, among other things — could range between $29 billion and $70 billion over the next 30 years.

In addition, the sea — which was created by the two-year inflow of Colorado River water that breached irrigation canals and flooded the basin — has become a key part of the Pacific Flyway, one of four routes in North America used by millions of migrating birds. The loss of the sea and its marine ecosystem would be a devastating loss of vital year-round habitat for these waterfowl.

The State Water Board has set a March 18 workshop to hear comments and concerns on the sea. And in another sign that the push might be gaining traction, Assemblyman Eduardo Garcia of Coachella announced this month that he'll head a new committee focused on renewable energy and Salton Sea restoration. The panel will facilitate discussions among stakeholders including the governor's office, state agencies and local advocates for the sea.

"We're going to be talking about the Salton Sea, and we're going to talk about the state's unmet obligation," Garcia, whose district covers the Imperial Valley and parts of the Coachella Valley, said last week.

IID's petition is putting increasing pressure on parties to finally get serious about the sea. With the end of their ancillary legal dispute, IID and Imperial County can now speak with greater authority in demanding that long-promised sea restoration finally proceed.

Hello Beth

I wanted to let you know about a special educational program we are doing on April 10 and 11.

We are having a special "Desert Living: Water and Energy" program with top caliber speakers. Everyone interested in water and energy should participate in this opportunity to hear these speakers in the local community..

Full details are here:
http://www.abdnha.org/calendar1.htm#desertliving

I would appreciate it if you could spread the word to those in the "water world", both in Borrego and beyond.

Quick Summary
First we have Jay Famiglietti, senior JPL scientist, UCI professor, to speak on "Disappearing Ground Water in the Western United States" at the Borrego PAC, Friday April 10, 7 PM Jay speaks internationally on water issues, has several documentaries, and is often interviewed by CNN and other national media.

The following morning, April 11, Famiglietti is doing a program on "The Geology of Aquifers" from 10 - 11 a.m. in the ABDNHA library.

In the early afternoon, at 12:30 we have Tom Bialek, Chief Engineer of Smart Grid Technologies, with Sempra speaking on "The Electrical Grid of the Future." Tom is probably the most knowledgeable and well-connected engineer in all of southern California to educate people about the technologies and the science behind the big issues of today, solar, microgrids, transmission, where the science is headed, etc.

Following that we have Vince Signorotti, VP with Energy Source, speaking bout Geothermal Resources at the Salton Sea. from 2:30 - 4.

I appreciate whatever you can do to pass the word on these excellent programs.

Thanks!

Mike

Mike McElhatton
Program Director & Website
Anza-Borrego Desert Natural History Association
P O BOX 310 (652 Palm Canyon Drive)
Borrego Springs, CA 92004
www.abdnha.org 760-767-3052