

## Community Dialogue: Pajaro Valley Water

Meeting 4: March 28, 2011

### Meeting Notes

---

#### Meeting Overview

The Community Dialogue held its quarterly meeting on March 28, 2011 from 9 am – 12 pm in the Watsonville Civic Center Community Rooms. The meeting was again well attended by about 50 people, a good cross-section of the community. A list of attendees is included in Appendix A.

The goals for the day included:

1. Update on Dialogue Purpose/Goals; Coordinating Group role and members
2. Introduce online tool and ensure knowledge of how to access and use
3. Updates on BMP, recharge project, and other key activities/projects underway

The agenda included the following components.

#### **Agenda Component**

***Dialogue Feedback Session report back (Kelley Bell)***

***Community Dialogues Purpose and Structure (Kelley Bell)***

***BMP Update (Chuck Allen and Frank Capurro)***

***Online tool show and tell (Lisa Dobbins)***

***Simultaneous related efforts: what else is happening we want to monitor and potentially influence? What are you involved in? What is your role/connection to the effort?***

***Recharge status/update (Andy Fisher)***

***Presentation on Irrigation Efficiency Tools (John Eiskamp and Kevin Healey)***

***General updates***

A summary of the key issues and discussions are included in the body of this report.

***Reminder for anyone who wants to be more involved: You are welcome to join a working group. Please contact Seth Edman [seth.edman@driscolls.com](mailto:seth.edman@driscolls.com). Information for each group is included in the Appendix with the Group's reports.***

## Community Dialogue: Pajaro Valley Water

Meeting 4: March 28, 2011

### Meeting Notes

---

#### **Dialogue Feedback Session**

**Kelley Bell**

At the December Dialogue, we asked everyone to respond in writing to two questions: *What is one thing you are getting from the Community Dialogue that you don't get anywhere else? What could we (the Community Dialogue) do differently?*

The full report of responses was provided to the group in advance of this meeting. Kelley Bell reviewed the highlights.

#### ***What is one thing you are getting from the Dialogue you don't get anywhere else?***

- Ideas and information
- a clearer picture of the seriousness of the aquifer overdraft problem
- Reinforcement of the belief that the basin overdraft situation will be solved
- What info or assistance agencies can provide
- What practices or projects are a priority for growers and what is needed
- Latest update of efforts to identify recharge areas, and an understanding of who the players are that are committed to balancing water supply and use
- Inspiration and a sense of community
- Generally positive spirit regarding the Pajaro Valley water issues
- The apparent cooperative nature of those working in committees, some who maybe don't trust or like each other is somewhat unusual for this area
- Community input and cooperation
- Valuable process – a model of grassroots commitment and participation

#### ***What can we do differently?***

- Use the large group convenings for deeper conversation:
- Work in small groups, reports on action
- Continue to strengthen the structure and process of working groups: Set goals & uniform ways of reporting progress

## Community Dialogue: Pajaro Valley Water

Meeting 4: March 28, 2011

### Meeting Notes

---

- Broaden outreach so that we include those who aren't yet connected and involved
- Overall initiative: miscellaneous ideas to consider
  - We need a few tangible wins in the next two quarters
  - Consider leading field trips to areas of interest
  - In the future, we can use this effort to market sustainability of Pajaro Valley grown produce
  - Explore opportunities to attract grant funds to support efforts and address data gaps
- We like what's happening! Keep up the great work.

### Large Group Discussion

There was general affirmation of the feedback, and agreement that the Dialogue effort is providing a critical and positive venue.

## Community Dialogue: Pajaro Valley Water

Meeting 4: March 28, 2011

### Meeting Notes

---

#### **Dialogue Purpose and Structure Updates**

**Kelley Bell**

Kelley Bell updated the group on the progress and decisions related to the overall structure of the Community Dialogue.

In response to the emerging structural needs of the effort, a Planning Group made of volunteers has formed that will provide coordination for the Community Dialogue effort.

#### **Community Dialogue Purpose Statement**

The following purpose statement was presented and affirmed by the large group.

##### **Overarching Purpose of the Community Dialogue Effort**

---

To provide a forum for a diverse and representative group of Pajaro Valley stakeholders, committed to a common vision, to be educated on the facts behind the water issue and the potential solutions, exchange ideas and leverage each other in order to **spur individual and collaborative action** within the community.

We will work together to develop a set of recommendations to influence related water efforts that comprehensively and systematically address the imbalance of water supply and demand while ensuring agricultural viability in the Pajaro Valley.

Kelley described the job description for the Coordinating Group and the overall Dialogue structure.

- Reviewed and affirmed by the large group, and are included on the following two pages.

**Community Dialogue: Pajaro Valley Water**

**Meeting 4: March 28, 2011**

**Meeting Notes**

---

**Coordinating Group Description**

<p><b>Coordinating Group Purpose and Focus</b></p>	<p>Provide overarching direction and structure for the Dialogue process</p> <p>Guide creation of achievable goals, and strategies to meet those goals, gathering input from participants and identifying ownership within the larger group</p> <p>Provide structure and process to encourage alignment between overall Dialogue goals and Working Group goals</p> <p>Provide structure and process to foster connections and communications across Dialogue effort</p> <p>Develop self-propelling momentum to encourage and ensure action and progress beyond the leadership of this group (<i>work ourselves out of a job</i>)</p> <p>Coordinate resources and provide support to funding efforts for the Dialogue itself (not necessarily specific Working Group activity or projects)</p> <p>Provide trouble shooting and problem-solving as needed to the Chairs of the various groups within the Dialogue structure</p> <p>Set agendas, coordinate Dialogue meetings, and anticipate and address any organizational issues</p> <p>Identify and help develop emerging leadership</p> <p>Recognize the expertise and participation of all members in other aspects of the water issue and bring that knowledge sharing into the forum</p> <p>Encourage an <b>outward look</b> at the issue, committing to participate in all appropriate angles of the issue, and influence activity and decision-making where it is appropriate and aligned with our goals</p>
<p><b>Coordinating Group Goals for 2011</b></p>	<ol style="list-style-type: none"> <li>1. Tangible activity underway</li> <li>2. Awareness of the Dialogue and Working Group efforts – within the membership and in the broader community</li> <li>3. Organizational structures and resources are in place to support the Dialogue and Working Group efforts</li> <li>4. Provide structure and process to result in recommendations to water related efforts in the community where appropriate</li> </ol>
<p><b>Voluntary Coordinating Group Members</b></p>	<p>Kelley Bell, Nik Strong-Cvetich, Kelli Camara, Dave Runsten, Frank Capurro, Chuck Allen, Lisa Dobbins, John E. Eiskamp, Dobie Jenkins, Terry Corwin, Matt Freeman</p>
<p><b>Meeting Timeline</b></p>	<p>Quarterly, in between the quarterly Community Dialogue meetings</p>

# Community Dialogue: Pajaro Valley Water

Meeting 4: March 28, 2011

## Meeting Notes

---

The Overall structure of the Dialogue is as follows:



**Community Dialogue: Pajaro Valley Water**

**Meeting 4: March 28, 2011**

**Meeting Notes**

---

**PVWMA Basin Management Plan Revision**

**Chuck Allen**

Chuck Allen provided the following updates:

- Possible new PVWMA efforts at college lake and Bolsa de San Cayetano
- Steve Palmisano recommended using sewer lines to bring water from treatment plant to college lake for storage purposes
- Water quality board has regulations on percolation/injection
- Chuck is trying to convince Roger from the CCRWQCB to change their standards, or make an exemption for the Pajaro Valley.

## Community Dialogue: Pajaro Valley Water

Meeting 4: March 28, 2011

### Meeting Notes

---

#### **Communications tool: Pajaro River Watershed Website      Lisa Dobbins**

Lisa Dobbins of Action Pajaro Valley provided an overview and “tour” of the Pajaro River Watershed Website - [www.pajarowatershed.org](http://www.pajarowatershed.org). The website will provide a space for the Community Dialogues to post information, and keep participants updated and connected to each other and the Dialogues.

Generally, Lisa described the original purpose of the site:

The website was developed through funds from the IRWM – Prop 50 that was passed a few years ago. Prop 50 provides funding for Action Pajaro Valley to develop a flood prevention community consensus. The site addresses the need to focus holistically on a watershed scale. Pajaro watershed is much larger than just the Pajaro Valley

Lisa highlighted various sections on the web site, including:

- A link to recent river flows were approaching flood levels - ~23ft when flood level is about 32ft
- A calendar which is kept up to date with all the goings on in the world of the Pajaro River watershed
- Information about progress on various flood control projects:
  - the bench excavation project is progressing, and what it will involve
  - various levee projects which have been proposed, their associated costs and benefits
  - current status of overall planning effort
- The site has a list of government employees which have jurisdiction in the watershed. This gives users an understanding of the people who are making decisions about their watershed.
- WATER SUPPLY – qualitative overview and history of water supply in the valley. This is largely influenced by the PVWMA which is the main agency responsible for managing existing and supplemental supplies within the Pajaro Valley.

#### **Large Group Discussion**

The Community Dialogue group needs to be included in the website, but this has been delayed until we know that the effort will continue to develop. People can sign up on the website and receive updates via email of any news or info regarding the watershed.

The site can be used as a data hub for the various working groups. This data can be public or private.

Kelley Bell asked if people would be interested in using the site as a data hub for the working groups? It was agreed that, yes, the working groups should begin coordinating with APV to organize information and events.

→APV will add a page for the various grants available for water supply, flood protection and water quality related projects.

Other ideas:

A suggestion was made to highlight the Pajaro River Watershed Flood Prevention Authority – they are a great resource.



## Community Dialogue: Pajaro Valley Water

Meeting 4: March 28, 2011

### Meeting Notes

---

John Martinelli: is anyone watching the flows of the Salsipuedes and Corralitos or other tributaries?

Steve Palmisano of the City volunteered to assist APV to show the gauges or flow at those locations

→Links to US Fish and Game should be included

Regulation to water supply and habitat

→It would be good if people find that there are emerging issues or regulations related to the Pajaro Watershed that they email [info@pajarowatershed.org](mailto:info@pajarowatershed.org) and staff will link to those particular pages

Harkins slough project should be highlighted

Lisa asked if there is value in knowing the stage in College Lake. It was agreed that that would be very interesting to look at.

→If anyone has any information or ideas they want to suggest for the site, please contact Lisa Dobbins at Action Pajaro Valley, [lisa@actionpajarovalley.org](mailto:lisa@actionpajarovalley.org).

#### Action Items recap:

→Links to US Fish and Game should be included (APV)

→ If there are emerging issues or regulations related to the Pajaro Watershed - email [info@pajarowatershed.org](mailto:info@pajarowatershed.org) and staff will link to those particular pages

→If anyone has any information or ideas they want to suggest for the site, please contact Lisa Dobbins at Action Pajaro Valley, [lisa@actionpajarovalley.org](mailto:lisa@actionpajarovalley.org).

## Community Dialogue: Pajaro Valley Water

Meeting 4: March 28, 2011

### Meeting Notes

---

#### **GIS Recharge Potential**

**Andy Fisher**

Andy provided a quick summary of the GIS Recharge work, and progress to date:

We have developed a map which outlines the “recharge potential” using various data sets which contribute to recharge: Soils, slope, land use, bedrock geology, stream data.

This map outlines where additional recharge would potentially be useful if the location were developed for recharge. So far this map is based off of surface data, but we are currently tying it in with subsurface data provided by the PVWMA-USGS model. We are also looking into where water supply is (i.e. PVWMA CDS turnouts, stormwater capture projects, etc.). We have already had some people show interest in having their properties tested for percolation ability, and plan to conduct tests once the percolation rig is assembled. We want to show the CCRWQCB that recharge can be done without degrading water quality, as is the case in the Harkin slough project. These field tests will also be used to confirm the maps ability to predict percolation rates.

Our tests vary from traditional percolation tests in the size of the testing area, as well as the time scale over which we will be testing: Traditional tests tend to be on much smaller scales, both spatially and temporally. When you put water on dry ground it will absorb it very quickly, but it is not recharging, the water is filling pore spaces.

The percolation rig itself can run tests up to 2 weeks, functioning autonomously and at a variety of rates. Holds 1000gal, can run for about 24hrs in high percolation soils, and will likely need to be topped off continuously as the tests progress.

As far as Andy knows there is no other system like this, which is why they built it.

One of the big questions will be what happens to water quality with percolation. Generally this improves water quality, and this data will be important to make the argument that lower quality water can be safely recharged.

#### **Large Group Discussion**

Lisa – are you going to have permits for conducting these tests?

Andy – no, we are essentially using water which would have been used for irrigation.

- If we can eventually prove that percolation improves water quality we would want to use stormwater runoff. Pits will be designed based off of preliminary percolation testing, the greater the percolation rate, the smaller the pit.

## Community Dialogue: Pajaro Valley Water

Meeting 4: March 28, 2011

### Meeting Notes

---

Kelley – Is there anything you need from this group?

- Not right now, we want to get some data together before we go public with this. We need to coordinate very carefully not to get in the way of the BMP process

Has there been any percolation testing on the stream bottoms?

- Yes, along Corralitos and Pajaro, they both have reaches which are losing 2000-8000Af per year, or would be if they didn't go dry

Natalia - When and where will you present the results of your research

- We will certainly keep in touch with this group and likely post it on the web, or somewhere where people can access it
- The results of the percolation tests will also be presented publicly

Do you need any volunteers?

- Not really, we have all the participation we need, but we will let you know if and when we need more participation

Do you have to wait for the ground to dry out before you can test percolation?

- Wet ground actually gives a better indication of sustainable recharge rate, the problem is getting the rig in and out of muddy ground

## Community Dialogue: Pajaro Valley Water

Meeting 4: March 28, 2011

### Meeting Notes

---

#### **Other Simultaneous Water Efforts – Discussion**

**Liza Culick**

Liza Culick, Facilitator, asked on behalf of the Coordinating Group that everyone to familiarize yourself with six water related efforts identified as important for the Dialogues to know about, monitor, and potentially be involved with. Participants were asked to indicate if they were connected with any of the efforts, and if there were others we should pay attention to.

The other water efforts are described below, and include the names of Dialogues participants who are involved.

***Integrated Regional Water Management Plan (IRWMP)*** integrates planning efforts for water supply, flood protection, wastewater treatment, watershed planning, environmental protection and water quality into a single document for a region. The IWRMP will allow public agencies, cities, counties, non-profit organizations and private water companies maximize local resources, prioritize planning and implementation funding, and foster regional partnerships.

- John Ricker – County of Santa Cruz – Pajaro and Santa Cruz Stakeholder, Steering Committee
- Nik Strong-Cvetich – Santa Cruz RCD
- Donna Bradford – County Of Santa Cruz
- Matt Freeman – Land Trust Santa Cruz – Interested Organization / potential project partner
- Carol Presley - SCVWD
- Steve Palmisano – Watsonville
- Lisa Dobbins – Action Pajaro Valley – Web Portal – Attendee, steering committee, IRWMP Planning

***The Conservation Blueprint*** is a science-based and community-informed document that recommends strategies for conservation and resource stewardship in Santa Cruz County to address water resources, biodiversity, working lands, and healthy communities. The document is intended as a strategic tool for the Land Trust. This is a resource document for conservation partners, nonprofit organizations, landowners and other community stakeholders to collaboratively advance conservation efforts.

- Bob Culbertson – Watsonville Wetlands Watch
- John Ricker – County of Santa Cruz – Steering committee
- Rich Casale – USDA-NRCS
- Matt Freeman – Land Trust Santa Cruz
- Lisa Dobbins - Action Pajaro Valley – Web Portal – Forum for update at GMS meetings – Advisor (technical)

## Community Dialogue: Pajaro Valley Water

Meeting 4: March 28, 2011

### Meeting Notes

---

**Regional Water Quality Control Board (RWQCB)** is in the process of approving a new Ag. Waiver that regulates irrigation water and storm water discharges from ag. Fields to waterways and ground water. RWQCB is very concerned about the "overdraft" problem of the Pajaro Valley.

- John Ricker – County of Santa Cruz
- Lisa Dobbins – APV monitoring activity + Web Portal

**State Watershed Program** The purpose is to advance sustainable watershed-based management of California's natural resources through community-based strategies. Watershed management is the process of creating and implementing plans and projects to sustain and enhance watershed functions. Administered through the Department of Conservation and includes grants for watershed coordinators. The Santa Cruz RCD was recently awarded almost \$300,000 for a watershed coordinator.

- Nik Strong-Cvetich – Santa Cruz RCD

**Pajaro River Flood Protection Project** Involves rebuilding the U.S. Army Corps of Engineers (USACE) flood protection levees along eleven miles of the Lower Pajaro River. Water supply and water retention are elements that could be folded into the project. Important that the community (PVWMA, Community Dialogue, Ag Groups, APV River Task Force, Sierra Club and others) coordinate water supply project ideas with Santa Cruz and Monterey Counties, City of Watsonville and the USACE throughout the planning and design phases.

- Karen Miller
- John Martinelli
- Carol Presley – SCVWD
- Steve Palmisano – Watsonville
- Lisa Dobbins – Pajaro River Task Force + Stream Team + Web Portal

**Pajaro Valley Water Management Agency Basin Management Plan** is the key, principal document that guides all of the major projects and programs pursued by the Agency. The BMP will be a combination of activities and projects that will provide solutions to the overdraft problem. The Dialogues is involved because the solution to our Pajaro Valley "over drafted" aquifer represents the life blood of our local economy, now and long into the future. "If not US who, and if not NOW, when."

- Bob Culbertson – Environmental representative on the AD HOC Committee
- John Ricker – County of Santa Cruz – Committee Member
- John Martinelli – Committee Member
- Steve Palmisano – Watsonville
- Lisa Dobbins – Some outreach – Web Portal – APV Board Members on AD HOC (Bob Culbertson and Amy Newell)

## Community Dialogue: Pajaro Valley Water

Meeting 4: March 28, 2011

### Meeting Notes

---

#### What else is happening that we should monitor and potentially influence?

- 4 county flood agency – Bob Culbertson \*Soap Lake flood protection & water supply for downstream ACE flood protection 25% = Soap Lake
- Ag Water Enhancement Program (AWEP) Rich Casale – USDA-NRCS – Financial assist to growers for Ag water catchments
- Hoop House (USDA) Rich Casale – USDA-NRCS – Financial assist to growers for hoop houses/demonstrations

## Community Dialogue: Pajaro Valley Water

Meeting 4: March 28, 2011

### Meeting Notes

---

#### **RAC PV Water Strategy Update**

**John Eiskamp, Jr. and Kevin Healey**

John Eiskamp and Ken Healey framed this conversation with the importance of agriculture water conservation would be a huge help to the overdraft situation. They discussed technologies that can assist, and their experiences with various tools.

- WHY
  - Stewardship is number one, reducing our impact on the environment, become more sustainable, improve resource use, improve efficiency, address regulation and reduce costs.
- HOW
  - ET, Soil Moisture, Soil Water Volume, Pressure bombs, Neutron probes, NDVI/Imaging/temp - Near-infrared Digital Vegetated Index
- OVERVIEW OF each of the tools/approaches:
  - ET use for raspberries had positive results, and water use was reduced, but it may not be the best fit for berries
  - Soil moisture volume does not completely address all of RAC's needs – it lacks comparability and uniform measure from field to field
    - There is no differentiation between really wet and very wet
  - Neutron Probes – there is a limited use in RACs history
    - A lot of use in vineyard industry
  - Pressure Bombs
    - Again limited use
    - Use in vineyards and fruit trees
    - Very accurate
    - “specialized” operation and operator
    - Again it is not something that can be easily implemented by everyone, so it is not used by RAC in general
  - Soil Moisture Tension
    - Hortau is very promising
- Hortau - RAC is expanding the use of and deployment of these systems
  - They have decreased water use and maintained yield
  - It allows for field to field comparison in real time
  - There is potential for automation and/or hybridization
  - There is a sizable amount of coverage throughout the valley, but there is definitely room for expansion and collaborative opportunity
  - A comparison was made between 3 ranches in which all soil was the same, and the results show a 20% reduction in water use, whilst maintaining about the same quality. Interestingly there was a 25% increase in use efficiency (yield per unit of water)
- WHERE – Watsonville, Santa Maria, Oxnard, with potential in Salinas, and international production

## Community Dialogue: Pajaro Valley Water

Meeting 4: March 28, 2011

### Meeting Notes

---

- Dan – We want people to utilize the technologies within our zones, so you are all welcome to use it. This is a community problem and we should all work together to solve it.
- Personal Hortau System Implementation - John Eiskamp

The system monitors soil moisture at various depths. You can see this on an hourly basis. You can automate by giving a threshold for starting and stopping irrigation. To expect that you can look at 3 points on their ranch and know all the conditions is not realistic. People should continue their old methods as well. The data can be retrieved on a cell phone.

### Large Group Discussion

How much do probes cost?

- \$2300 for a probe which will last ~10 years
- The base model for a transmission tower is about \$3500

Dobie – are there any examples of water agencies in the state adopting this technology

- Not that I am aware of. The AWEF program could be utilized by the PVWMA to provide funding to growers to utilize this technology

Kelley – we believe that there would be funding for utilizing these technologies as a group

Nik – RCD has been trying to fund this through one of their grants, but it's still pending

Bill Scurich – different plants need saturation to different depths, and these vary with the different types of soil. There are different ways of going about this, and different systems. Perhaps we should compare Hortau with some other systems.

Kevin – John's data indicates that while the root zone may be saturated the subsurface is generally not. This has implications regarding the CCRWQCB belief about irrigation water reaching groundwater.

### Action Items:

→ Agreement to create plan to get this technology/tool into hands of those who want it. Share information.

→ Next Big Projects meeting will be Wednesday, March 30<sup>th</sup>, 3:30pm @ the farm bureau office.



## Community Dialogue: Pajaro Valley Water

Meeting 4: March 28, 2011

### Meeting Notes

---

#### General Updates

1. Mary Bannister: In the board meeting last Wednesday Brian made a presentation on a “base run model” in which they took the past 30 years of climate and broadcasted 30 years of climate in the future and approximated about 12,000AF per year deficit. This depends on where you take/put water. This is considering no agricultural growth, no climate change and no city expansion. This is comparable to the 18,000AF deficit, & shows that PVWMA projects are working. Brian will be presenting this at the next AD HOC BMP meeting.
2. IRWM pays for PVWMA projects, and they just got a new million dollar grant which will update older projects and \$200,000 to do a college lake management plan.

## Community Dialogue: Pajaro Valley Water

Meeting 4: March 28, 2011

### Meeting Notes

---

#### Appendix A

#### 3/28 Attendees:

Chuck Allen, Dan Balbas, Mary Bannister, Estelle Basor (Kent Morrison), Kelley Bell, Donna Bradford, Nick Bulaich, Rich Casale, Don/Diane Cooley, Sam Cooley, Terry Corwin, Bob Culbertson, Lisa Dobbins, Steven Dobler, Nick Drobac, Sam Earnshaw, Seth Edman, John E. Eiskamp, Andrew Fisher, Matt Freeman, Dobie Jenkins, Margie Kay, Stuart Kitayama, Brian Lockwood, John Martinelli, Clint and Karen Miller, Natalia Neerdaels, Steve Palmisano, Ellen Pirie, Carol Presley, Peter Radin, John Ricker, Dave Runsten, Bill Scurich, Ginger McNally, Warren Koenig, Nik Strong-Cvetich, Chris Enright, Casey Meusel, Angie Quintnan, Amy Kaplan, Kathy Trafton