



# County of Santa Cruz 917

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## PLANNING DEPARTMENT

701 OCEAN STREET, 4<sup>TH</sup> FLOOR, SANTA CRUZ, CA 95060

(831) 454-2580 FAX: (831) 464-2131 TDD: (831) 454-2123

ALVIN D. JAMES, DIRECTOR

June 1, 1999

AGENDA: June 8, 1999

Board of Supervisors  
County of Santa Cruz  
701 Ocean Street  
Santa Cruz, CA 95060

### STUDY SESSION WITH THE PAJARO VALLEY WATER MANAGEMENT AGENCY

Members of the Board:

On April 20, 1999, your Board considered a report on ongoing activities to mitigate overdraft in the Pajaro Valley and heard testimony from Pajaro Valley Water Management Agency staff on a number of issues pertaining to the Agency's efforts to address the situation. At that time, the Board scheduled a June 15, 1999 report back date to review a number of concerns expressed by your Board. Subsequently, on May 18, 1999, your board scheduled a Study Session with the Pajaro Valley Water Management Agency (PVWMA) for May 25, 1999 to address a number of issues that were scheduled to be included in the June 15, 1999 report. On May 25, 1999, your Board rescheduled the Study Session for today's agenda.

In preparation for this Study Session and to help focus the discussion among the two boards, County staff has coordinated with PVWMA staff to prepare an agenda for the Study Session. The proposed agenda is included as Attachment 1.

The following issues will be discussed by PVWMA and County staff during the Study Session:

- Basin Water Balance, including statements clarifying overdraft and seawater intrusion.
- Status Reports on Long-term Water Supply Project Planning.
- Status Report on Local Recharge Projects.
- The Issues Surrounding the Declaration of a Groundwater Emergency.
- An Update On County Well Ordinance Regarding Replacement or Supplemental wells.

In addition, your Board raised a number of questions concerning the need for PVWMA to provide updated information concerning a variety of issues of concern to your Board. These issues include:

- Trends in cropping patterns and the impact on water use
- Updated data based on actual crop and residential water use during the 1990's
- Revised projections for future residential water use based on more realistic growth projections rather than a reliance upon AMBAG figures
- The timeline and schedule for implementing various conservation measures
- Addressing Nitrate levels in the Pajaro Valley
- The Status of Proposition 204 Funding
- Other pertinent variables including climate and economic factors relative to agricultural practices

Your agenda packet includes the above talking points and background information provided by the Pajaro Valley Water Management Agency (PVWMA) (see Attachment 2). Your agenda packet also includes updated information pertinent to these matters. The updated information is included as exhibits in support of Attachment 2. Your Board should be assured that the Pajaro Valley Water Management Agency is prepared to discuss these issues as part of their presentation.


While County staff is fully prepared to address the items included on the proposed agenda, it is worth noting that your Board had previously scheduled a June 15, 1999 status report to discuss providing clarification to ongoing activities to mitigate the overdraft in the Pajaro Valley. In addition, in accordance with your Board directive concerning the potential for the Board to declare a groundwater emergency, the June 15, 1999 status report will be agendized in a manner which gives the Board the option of taking initial steps toward the declaration of a groundwater emergency in the Pajaro Valley. Exhibit 5 also includes letters from the County and District legal counsel concerning the legal authorities of the entities.

It should be noted by your Board, that while staff is prepared to discuss the status of the proposed amendments to the Well Ordinance in connection with the overdraft situation in the Pajaro Valley, Environmental Health and Planning staff continue to seek clarification on potential ordinance amendments. Questions along these lines have been submitted to outside Counsel and a response is anticipated to be received in time for the June 15, 1999 Board meeting. A subsequent report will be provided to your Board at that time.

In conclusion, the Agenda, talking points, and previous issues identified as requiring clarification should provide an appropriate core of material from which your Board and the Board of Directors of the Pajaro Valley Water Management Agency can explore issues related to ongoing activities to mitigate the overdraft in the Pajaro Valley.

It is therefore RECOMMENDED that your Board conduct the joint study session and accept and file this report.

Sincerely,



ALVIN D. JAMES  
Planning Director

RECOMMENDED



SUSAN A. MAURIELLO  
County Administrative Officer

Blc/WRM99-06

cc: Pajaro Valley Water Management Agency  
Environmental Health Services

Attachment 1: Proposed Agenda

Attachment 2: Talking Points and Background Information for Joint Study Session

- Exhibit 1: Information regarding cropping trends
- Exhibit 2: Updated information regarding crop water use
- Exhibit 3: Department of Finance Population figures
- Exhibit 4: Information regarding Nitrate levels and potential activities directed at nutrient management
- Exhibit 5: Materials regarding the Declaration of a Groundwater Emergency

**AGENDA**

**JOINT BOARD MEETING  
SANTA CRUZ COUNTY BOARD OF SUPERVISORS  
PAJARO VALLEY WATER MANAGEMENT AGENCY**

***STUDY SESSION ON ONGOING ACTIVITIES TO MITIGATE OVERDRAFT IN THE  
PAJARO VALLEY***

**JUNE 8, 1999  
7:30 p.m.**

1. Introductions
2. Call Meeting To Order: Roll Call
  - a) Santa Cruz County Board of Supervisors
  - b) Pajaro Valley Water Management Agency
3. County Staff Overview of Problems in the Pajaro Valley Water Basin and Discussion of County Water Management Activities
4. Presentation by Pajaro Valley Water Management Agency
5. Discussion
6. Chart Future Direction
7. Adjourn

**STUDY SESSION ON ONGOING ACTIVITIES TO MITIGATE OVERDRAFT IN THE  
PAJARO VALLEY - June 8, 1999**

**TALKING POINTS**

- Declaration of a Groundwater Emergency
- Minute Order from April 20, 1999 Report
- Update on County Well Ordinance for Replacement or Supplemental Wells
- Basin Water Balance (Statement of Basin Overdraft)
- Long-term Water Supply Project
- Local Recharge Projects
- Preserving Proposition 204 Funding

**ISSUES NEEDING CLARIFICATION FROM 4/20/99 REPORT**

- Assumptions About Agricultural Water Use
- Population Growth Figures
- Quantification of Annual Pumpage
- Water Conservation
- Addressing Nitrates



**PAJARO VALLEY WATER MANAGEMENT AGENCY**

36 BRENNAN STREET • WATSONVILLE, CA 95076

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email: [info@pvwma.dst.ca.us](mailto:info@pvwma.dst.ca.us) • <http://www.pvwma.dst.ca.us>

June 1, 1999

VIA FAX AND U.S. MAIL  
(831)-454-3420

Mr. Jeff Almquist, Chairperson  
Board of Supervisors  
County of Santa Cruz  
701 Ocean Street, Room 500  
Santa Cruz, California 95060

**Re: Background Information for joint Board Study Session on June 8, 1999**

Dear Mr. Almquist:

On behalf of the Pajaro Valley Water Management Agency (PVWMA), I would like to thank you and your Board for accepting our offer to meet for a joint study session and also to thank you for agreeing to hold this joint meeting in Watsonville. We at the PVWMA are looking forward to this opportunity for frank and in-depth dialogue. Based on comments already received, it seems likely that the public's attendance will be strong and their participation spirited.

It is my understanding that your Board materials for the joint study session will include as Attachment 2 a list of "Talking Points" and a list of "Issues Needing Clarification from 4/20/99 Report." The intent of this letter is to address the latter list, as well as other issues raised by your Board on April 20th. These issues are itemized below.

Issues cited in Attachment 2

Assumptions about agricultural water use  
Population growth figures  
Quantification of annual pumpage  
Water conservation  
Addressing nitrates

Other issues raised on April 20th

Climate change and water demand  
Agro-biotechnology advances, methyl bromide phase-out and water demand  
Annual reporting

Mr. Jeff Almquist  
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**Assumptions about agricultural water use.** The PVWMA's central planning document remains the Basin Management Plan (BMP), which was adopted in 1993 after years of preliminary study and public participation. One of the most contentious issues during BMP development was the projection of agricultural water demand into the future. Our Technical Advisory Committee was divided among those who were convinced demand would continue to increase, those who were as equally convinced it would begin to decline, and those who fell somewhere between the extremes. Strong opposing opinions persist.

The truth is that there are counter-tendencies at work, some tending to drive agricultural demand higher and others tending to reduce it. Some of the persuasive arguments from the BMP development period are listed below, and indeed all of these remain germane today.

Factors tending to increase demand

Conversion to higher value/higher water use crops (e.g., apples to strawberries)  
Continuing expansion onto prior unfarmed land  
Longer growing season, higher yielding varieties through crop breeding programs  
Increasing multiple cropping (driven by economics)  
Higher planting densities (especially orchards)

Factors tending to decrease demand

Irrigation technology advances (expanding drip acreage, computerization, etc.)  
Loss of ag land to urban and rural residential encroachment  
Incentive to conserve due to PVWMA meters and water charges  
Failure of marginal farm operations due to PVWMA, other increasing costs

Our 1993 BMP evaluated three future water use scenarios. The "Basic" scenario assumed that there would be no net change in basin-wide agricultural demand. Scenario "A" assumed higher per acre crop water demand duties, while Scenario "B" assumed that all orchard acreage would be converted to higher water-using strawberries. Thus, future water demand for both "A" and "B" was projected as greater than for the "Basic" assumption. For water supply planning purposes, it was determined that the "Basic" assumption was most appropriate because it yielded the most conservative estimate of project supply capacity needs.

A number of years have passed since 1993, and we now have additional information which is of some usefulness. First, as shown in Exhibit 1, total irrigated acreage in the Pajaro Valley has not changed at all since 1989 and has increased only slightly since 1966.

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Second, as shown in Exhibit 2, there is a relatively steady, long-term trend to convert from apple orchards to strawberries and other higher water-use crops. Third, as shown in Exhibit 3, annual water meter data are highly variable due to year-to-year weather patterns; these data will begin to take on more significance once a longer historical record is established.

The PVWMA is now preparing a Basin Management Plan Update, scheduled to be released in January, 2000, as a public review document. This BMP Update will take another look at future agricultural demand projections, and input from your Board and staff will be most welcome as we complete this new analysis.

**Population growth figures.** The 1993 BMP relied on population growth figures from the Association of Monterey Bay Area Governments (AMBAG). More recent AMBAG growth estimates were published in AMBAG's 1997 Regional Population and Employment Forecast for Monterey, San Benito and Santa Cruz Counties Final Report. Based on unconstrained growth, these 1997 estimates project that population in the PVWMA will increase as follows.

|               |        |
|---------------|--------|
| 1990 census   | 71,268 |
| 2000 forecast | 82,421 |
| 2010 forecast | 90,926 |
| 2020 forecast | 98,172 |

Your Board expressed concern on April 20th regarding the use of these unconstrained AMBAG growth estimates for water supply planning purposes. We understand that County staff is obtaining comparative population figures from the State Department of Finance and that this information is being provided to you as part of your agenda materials for the June 8th meeting. Certainly, our staff is most willing to work with yours to attempt to establish a population forecast that is as accurate as possible.

In any event, we do not intend to rely on population projections to estimate future urban and rural water needs for the purposes of the BMP update. Instead, we will utilize approved land use as represented in the adopted General Plans for Santa Cruz County, Monterey County, and the City of Watsonville. We will apply water use factors to each land use category to estimate future water needs. The water use factors will be based on historic water use by land use classification, with an assumed level of water conservation that can be achieved within each land/water use classification. The analyses provided in the 1998 Pajaro Valley Futures Study and the City of Watsonville's response to this study will serve as important foundations for our work. Again, we anticipate working closely with your staff as we proceed on this task.



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**Quantification of annual pumpage.** We have two different methods available for quantifying annual pumpage. One is the direct use of water meter data. The other is through operation of our model, the Pajaro Valley Integrated Ground and Surface Water Model (PVIGSM).

The PVWMA maintains water meters on the 700 wells in the district area that pump in excess of 10 acre-feet per year (afy). Baseline meter data are now available beginning in July, 1996, as shown in Exhibit 3. This information includes both meter readings and estimates for known unmetered uses.

We are now in the process of completing an extensive update of the PVIGSM to support the BMP update. This model work is being coordinated with Dr. Randy Hanson of the USGS to ensure independent expert review of geohydrology, water quality, and other aquifer parameters. Preliminary model results suggest higher water totals than suggested in Exhibit 3. For example, these model results indicate that current agricultural pumping probably totals about 57,000 afy. This difference could be attributable to a number of factors, including unusual weather patterns, meter inaccuracies, incorrect assumptions about net irrigated acreage, conservation at levels higher than anticipated, and/or imperfect estimates of non-metered pumpage. Additional work remains in this area to fully understand the meter data, the refined model, and their relationship. Again, input from your staff will be welcome and helpful as we attempt to clarify these figures.

**Water conservation.** All water supply alternatives evaluated in the 1993 Basin Management Plan included a common water conservation element. This element consisted of a long-range program targeted to generate conservation savings of up to 9,200 afy. Of this total, 5,200 afy was projected to come from agricultural savings and the remaining 4,000 afy from urban and rural residential savings. Program implementation envisioned three basic steps: (1) installing water meters, (2) creating economic and other incentives, and (3) developing educational programs and other tools to assist water users. A fourth and final step – pumping regulation -would be taken only if it proved impossible to develop sufficient supplies.

Since 1993, the PVWMA has made significant progress in implementing this conservation program. Step 1 is now complete as water meters have been installed at virtually every agricultural well and other large capacity well in the PVWMA area. Installing and maintaining these meters has cost the agency and its rate-payers more than \$1 ,000,000. This well metering program is unique in Santa Cruz County, and it has no parallel in the Salinas Valley or other nearby coastal ground water basins.

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Step 2 was initiated with the PVWMA's first augmentation charge assessments in 1994. The augmentation charge is directly related to the amount of water used and therefore creates what we believe to be the best possible conservation incentive — economic self-interest. The true strength of this incentive is difficult to evaluate; there are many who believe that Measure D was all about rolling back the augmentation charge rate to escape the burden of these charges.

Progress on Step 3 has been slower, but we have planned from the outset that educational efforts and other more targeted programs would follow Steps 1 and 2 in time. There are two quite different reasons for this approach. The first is a practical one. We have made a huge investment in the metering program in terms of money, time, and staff resources. Now that the metering program is in place and operating more or less smoothly, we have an ability to redirect resources to Step 3 efforts. The second reason is a strategic one. Educational efforts and targeted programs are more likely to be effective after implementation of metering and incentives. In any event, it is clear that we can and should devote more effort to our conservation programs. Our current program consists of the following activities:

- Establishment of a PVWMA Conservation Coordinating Committee of representatives from diverse farming organizations and local governments, including a representative from your staff,
- Implementation of a \$40,000 irrigation demonstration project, pursuant to this committee's initial recommendation,
- Initiation of a review of changes in irrigation practices since 1993, pursuant to the committee's recommendations,
- Consideration of additional committee recommendations, which are anticipated to be forthcoming later this month,
- Funding of up to \$1,500 for mobile irrigation laboratory services (to help growers improve on-farm irrigation efficiencies) provided in cooperation with the U.S. Bureau of Reclamation and the San Luis and Delta-Mendota Water Users Authority, and
- Participation on Santa Cruz County's recently formed water conservation committee.

There is one important constraint to conservation plan implementation, however, and this constraint is money. The PVWMA enabling statute specifies that augmentation charge

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revenues may be used for two purposes only: to capture flood waters within the basin and to import water from outside the basin. This limitation was pointed out last year by the Santa Cruz County Farm Bureau, and our counsel concurs with the Farm Bureau that the statute language does not appear to allow a broad use of these revenues. Last fall, we initiated a process to seek a legislative amendment to allow expenditures for conservation (and other potential supply projects such as wastewater reclamation and reuse), but we determined not to pursue this amendment when faced with strong opposition from the Farm Bureau. Since then, we have had several discussions on this point with Farm Bureau representatives, and I am hopeful that an acceptable solution is near at hand.

The BMP conservation target of potential savings of up to 9,200 afy will be re-evaluated in the BMP Update, although this figure still appears defensible. As shown in Exhibit 4, recent data suggest that savings of up to about 5,700 afy could come from the agricultural sector. As shown in Exhibit 5, the realistic potential for residential savings is somewhat less than the 4,000 afy projected in 1993 and is linked to the rate of population growth. Exhibit 6 is included for purposes of comparison; this recent Santa Cruz City analysis projects maximum potential conservation program savings at 915 afy.

**Addressing nitrates.** The PVWMA agrees with your staff that the groundwater nitrate issue has been neglected in the focus on pumping overdraft and seawater intrusion. Our staff has, however, been sampling approximately 80 to 100 wells annually for nitrates and other mineral constituents. These data will be thoroughly analyzed by Jones & Stokes Associates during the next six months as part of our recently initiated State of the Basin project. This project will implement a Geographic Information System (GIS), review and report on the full record historical water resources, and provide recommendations for data monitoring and reporting improvements.

**Climate change and water demand.** There continues to be significant debate regarding the impacts of global warming and the potential for changes in future weather patterns. There does not, however, appear to be any reliable methodology for quantifying what these impacts are likely to be. We are therefore committed to developing a water supply that provides flexibility to meet uncertain and changing future land and water uses.


**Agro-biotechnology advances, methyl bromide phase-out and water demand.** Again, it is very difficult to quantify how these factors will affect future water use rates. We believe that our objective to seek flexibility in supply is the best approach for dealing with this type of uncertainty.

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**Annual reporting.** Among its other purposes, the State of the Basin project will create GIS tools and other data management capabilities for enhanced annual report preparation. We anticipate that future annual reports will be consistent from year to year and will contain informative, timely hydrologic records. Meanwhile, a draft 1998 annual report is scheduled for review by the PVWMA Board on June 3rd.

It is my sincere hope that you and your Board will find the information provided in this letter complete and satisfactory for your purposes. If any clarification or addition is needed, please let me know as soon as possible before the June 8th study session.

Yours truly,

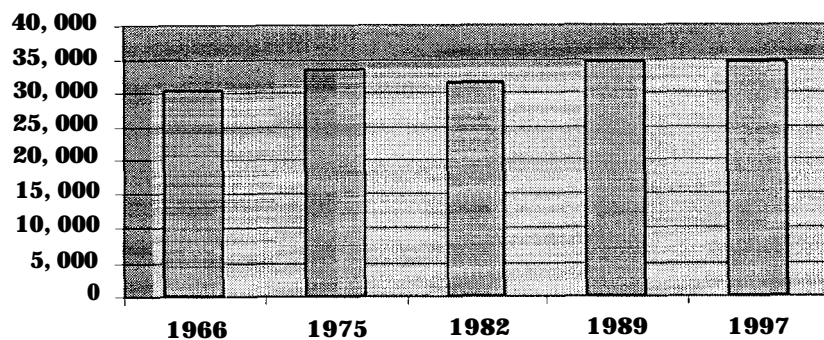


Charles McNiesh  
General Manager

**Attachments**

- Exhibit 1: Total Pajaro Valley agricultural acreage
- Exhibit 2: Changes in Pajaro Valley crop acreages
- Exhibit 3: PVWMA water meter data
- Exhibit 4: Estimated maximum potential agricultural conservation savings
- Exhibit 5: Estimated maximum potential agricultural conservation savings
- Exhibit 6: City of Santa Cruz's estimated potential conservation savings

## EXHIBIT 1. TOTAL PAJARO VALLEY AGRICULTURAL ACREAGE



Note: All values are in gross irrigated acres and are based on California Department of Water Resources aerial surveys.

## EXHIBIT 2. CHANGES IN PAJARO VALLEY CROP ACREAGES

**DWR Crop Surveys  
Pajaro Valley Crop Acreage**

| Crop Type                        | 1966          | 1975          | 1982          | 1989          | 1997          |
|----------------------------------|---------------|---------------|---------------|---------------|---------------|
| Strawberry                       | 1,754         | 4,372         | 5,974         | 6,514         | 7,004         |
| Irrigated Fallow                 | 4,384         | 3,911         | 3,133         | 3,906         | 4,182         |
| Vine (bushberries, grapes, etc.) | 22            | 0             | 505           | 1,512         | 1,652         |
| Vegetable Row Crops              | 14,612        | 13,038        | 10,442        | 13,020        | 13,940        |
| Field Crops                      | 647           | 1,170         | 1,724         | 908           | 644           |
| Deciduous                        | 7,516         | 8,578         | 7,434         | 5,729         | 3,892         |
| Pasture                          | 1,175         | 1,780         | 1,004         | 894           | 1,227         |
| Nursery                          | 237           | 392           | 910           | 1,386         | 1,476         |
| Nursery (indoor)                 | 101           | 168           | 390           | 594           | 633           |
| <b>Total Crop Acreage</b>        | <b>30,448</b> | <b>33,409</b> | <b>31,516</b> | <b>34,463</b> | <b>34,650</b> |

Source: PVWMA Hydrologic Analysis and Modeling Draft Technical Memorandum 2.3, May 1999, AT Associates.

Note: All values are in gross irrigated acres and are based on California Department of Water Resources aerial surveys.

## EXHIBIT 3. PVWMA WATER METER DATA

|                              | 7/96-12/96 | Total<br>1996 | 1/97-6/97 | 7/97-12/97 | Total<br>1997 | <del>1198-6198</del> 7198-I | 2/98   | Total<br>1998 |
|------------------------------|------------|---------------|-----------|------------|---------------|-----------------------------|--------|---------------|
| Agriculture                  | 21,464     | n/a           | 25,190    | 22,323     | 47,513        | 9,622                       | 24,311 | 33,933        |
| Commercial/Industrial        | 753        | n/a           | 893       | 936        | 1,829         | 705                         | 829    | 1,534         |
| Watsonville -- ground water  | 3,698      | n/a           | 3,047     | 3,242      | 6,289         | 2,898                       | 3,291  | 6,189         |
| Rural residential            | 2,331      | n/a           | 2,415     | 2,011      | 4,426         | 1,689                       | 1,883  | 3,572         |
| Total ground water           | 28,246     | n/a           | 31,545    | 28,512     | 60,057        | 14,914                      | 30,314 | 45,228        |
| Watsonville -- surface water |            | n/a           |           |            | 923           |                             |        | 980           |
| Total -- both sources        |            | n/a           |           |            | 60,980        |                             |        | 46,208        |

Note: All figures in acre-feet. Totals include both metered wells and estimates where meter data are unavailable.

EXHIBIT 4. ESTIMATED MAXIMUM POTENTIAL AGRICULTURAL  
CONSERVATION SAVINGS

|  | <b>1993<br/>BMP</b> | <b>Current<br/>estimates</b> |
|--|---------------------|------------------------------|
| Total ag pumping (afy)                     | 52,000              | 57,000                       |
| Irrigation efficiency                      | n/a                 | 60-75%                       |
| Potential efficiency increase              | 20%                 | 20%                          |
| Potential gross savings (afy)              | 10,400              | 11,400                       |
| Fraction recycling to groundwater recharge | 0.5                 | 0.5                          |
| Potential net savings (afy)                | 5,200               | 5,700                        |

Notes:

Current total ag pumping estimate based on preliminary model results.

Irrigation efficiency range based on crop evapotranspiration requirements and PVWMA report, Crop Water Use Study, 1994-1997, prepared by Vanessa Bogenholm.

Irrigation efficiencies above 80% are generally considered to be excellent.

Approximately half of irrigation losses in the Pajaro Valley ultimately return to the pumping aquifers.



EXHIBIT 5. ESTIMATED MAXIMUM POTENTIAL URBAN AND RURAL  
RESIDENTIAL CONSERVATION SAVINGS

|   |        |        |         |
|---|--------|--------|---------|
| Total population (hypothetical)                 | 80,000 | 90,000 | 100,000 |
| Estimated current PVWMA use<br>(gal/person/day) | 152    | 152    | 152     |
| Current Santa Cruz City use<br>(gal/person/day) | 123    | 123    | 123     |
| Estimated savings potential<br>(gal/person/day) | 29     | 29     | 29      |
| Estimated total savings potential (afy)         | 2,598  | 2,922  | 3,247   |

Notes:

Figures represent a hypothetical population range.

Current PVWMA use rates based on 1993 BMP, melding both City and rural residential users.

City of Santa Cruz use rates selected for purposes of establishing target goal; lower overall use rate at least partially attributable to fewer rural residential users.

EXHIBIT 6. CITY OF SANTA CRUZ'S ESTIMATED POTENTIAL CONSERVATION SAVINGS

(See following page)

Note: Handwritten figures shown conversion of maximum annual savings to acre-feet per year (afy).



The Santa Cruz Water Department is preparing a plan to expand its efforts in the area of water conservation. The goal is to stretch existing water resources as much as possible to help meet our future water needs. Opportunities to reduce customer water use have been evaluated and the most promising options have been identified. The key features of these options are highlighted below.

## Water Conservation Program Options

Converted  
to dfg


| Program                                    | Measure Description  | Method                                       | Annual Program Cost   | Max. Annual Water Savings (million gal) | Unit Cost* (\$mil/m) | Out-of-pocket Cost per Participant (\$)                |
|--|--|--|-----------------------|---|----------------------|--|
| <b>Residential Programs:</b>               |  |  |                       |   |                      |  |
| Conservation Kit Distribution              | Provide low-flow shower heads, faucet aerators, toilet leak detection kits to every residence.                     | Product giveaway                             | \$37,000              | 18.9<br>5 %                             | \$1.6                | \$0  |
| Residential Water Use Review               | Conduct indoor and outdoor water review by trained auditor for top 20% of residential water users.                 | Technical assistance;<br>Direct installation | \$92,000              | 33.7<br>103                             | \$2.9                | \$30   |
| Plumbing Fixture - Time of Sale Regulation | Mandatory installation of low flow fixtures whenever change in property ownership occurs.                          | Regulation                                   | \$92,000              | 110.4<br>334                            | \$0.5                | \$400-\$500  |
| Toilet Rebate Program                      | Provide \$75-\$100 rebate for replacing conventional toilet with 1.6 gallon per flush toilet.                      | Financial incentive                          | \$121,000 - \$143,000 | 47.5<br>146                             | \$1.2-\$1.4          | \$40-\$65  |
| Front Loading Washing Machine Rebate       | Provide \$50-\$200 rebate (in conjunction with \$100 PG&E rebate) for purchasing new front loading clothes washer. | Financial incentive                          | \$24,000 - \$81,000   | 22.9<br>70                              | \$0.7-\$2.4          | \$250  |
| Apartment Submetering                      | Rebate half the cost of installing separate water meters to measure individual dwelling unit water use.            | Financial incentive                          | \$15,000              | 2.8<br>9                                | 1.8                  | \$4,788  |
| <b>Commercial Programs:</b>                |  |  |                       |   |                      |  |
| Commercial Toilet Rebate Program           | Provide rebate for installation of 1.6 gallon toilets in commercial, industrial and institutional buildings.       | Financial incentive                          | \$64,000              | 14.9<br>46                              | \$2.2                | \$165  |
| Commercial Water Use Review                | Conduct review of indoor water use by trained auditor for top 20% of commercial water users, UCSC.                 | Technical assistance;<br>Direct installation | \$80,000              | 32.1<br>98                              | \$2.2                | Business: \$2,500<br>UCSC: \$32,500                    |
| Large Landscape Water Use Review           | Evaluate irrigation system; prepare customized watering schedule; offer rebate for system upgrades.                | Technical assistance<br>Financial incentive  | \$23,000              | 8.5<br>26                               | \$2.0                | Business: \$250<br>Residential: \$300<br>Golf: \$3,000 |
| Parks Water Use Review and System Upgrade  | Evaluate irrigation system; prepare customized watering schedule; offer rebate for system upgrades.                | Technical assistance<br>Financial incentive  | \$18,000              | 6.5<br>20                               | \$1.2                | \$7,500  |

\* Refer to Task 3 technical memorandum for derivation of unit cost; mgd = million gallons per day

TOTAL = 915

935

COUNTY OF SANTA CRUZ  
Inter-Office Correspondence

DATE: June 2, 1999  
TO: Board Members  
FROM: Supervisor Jan Beautz   
RE: STUDY SESSION REGARDING PAJARO VALLEY WATER  
MANAGEMENT AGENCY

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At the last hearing regarding this matter, I asked about the Agency's status with the State Water Resources Control Board. Attached is the most recent agenda from that Board and an item regarding the PVWMA.

**JKB:pmp**  
Attachment

**1714C1**

## STATE WATER RESOURCES CONTROL BOARD WORKSHOP AGENDA

Wednesday, June 2, 1999 – 9:00 a.m.

First-Floor Hearing Room  
Paul R. Bonderson Building  
901 P Street, Sacramento

Questions regarding this agenda call Maureen Marché (916) 657-0990 or fax 657-0932. This notice and associated staff reports can be accessed electronically through our Internet address: <http://www.swrcb.ca.gov>. (Note: agenda items should be available electronically on May 26, 1999.)

Workshop includes informal discussion of items to be presented for action at a future business meeting. People who are interested in items on the agenda are urged to attend workshops as they may miss valuable discussion that will not be repeated at the Board meeting. NOTE: There is no voting at workshops. Items requiring Board action must come to a Board meeting.

**Please note time limitations on presentations may be imposed.**  
**The State Board requests that oral testimony be summarized.**  
**Submittal of written comments is encouraged to ensure**  
**that all comments will be included in the**  
**record before the Board.\***

ITEMS 1-13 WILL BE DISCUSSED STARTING AT 9:00 A.M., WEDNESDAY, JUNE 2, 1999.

### **PUBLIC FORUM**

Any member of the public may address and ask questions of the Board relating to any matter within the Board's jurisdiction, provided the matter is not on the Board's agenda or pending before the Board or a Regional Board. Note: Presentations at the Public Forum will be limited to 5 minutes or otherwise at the discretion of the Chairman.

### **CLEAN WATER PROGRAMS**

**1. Hearing to Consider Adoption of the State Fiscal Year (SFY) 1999/2000 State Revolving Fund Project Priority List.** (The Board will consider, at a Board meeting, whether to adopt the proposed resolution to update the SFY 1999/2000 SRF Project Priority List.)

**2. Progress Report by the Pajaro Valley Water Management Agency Regarding Seawater intrusion.**  
[Information Item Only]

**"3. Consideration of Approval of a Grant for the City of Corona From the Water Recycling Facilities Planning Grant Program.** (The Board will consider, at a Board meeting, whether to adopt the proposed resolution approving the grant.)

**• \*4. Consideration of Approval of a State Revolving Fund (SRF) Loan to the City of Alameda for Construction of Phase 7 of the I/I project, SRF Project # C-064007-510.** (The Board will consider, at a Board meeting, whether to adopt the proposed resolution approving the preliminary loan commitment.)

**● \*5. Consideration of Authorization to Execute an Agreement with the Regents of the University of California or U. S. Department of Energy to Conduct Field-Based Research to Determine Probability and Environmental Significance of Releases from New and Upgraded Underground Storage Tanks.** (The Board will consider, at a Board meeting, whether to adopt the proposed resolution authorizing execution of the agreement.)

**\*\*6. Consideration of Authorization to Execute an Agreement With the Regents of the University of California and/or U. S. Department of Energy to Conduct Environmental Fate and Transport Analysis of Ethanol in Surface Water and Groundwater.** (The Board will consider, at a Board meeting, whether to adopt the proposed resolution authorizing execution of the agreement.)

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**\*\*7. Consideration of Authorization to Execute an Agreement with the Regents of the University of California or U.S. Department of Energy to Assess the Vulnerability of Groundwater Resources to Pollution by MTBE Through Establishment of a Geographical information System.** (The Board will consider, at a Board meeting, whether to adopt the proposed resolution authorizing execution of the agreement.)

#### **WATER QUALITY**

**8. Consistency Determination for the Proposed Sacramento Valley Water Management Program Project "Butte County Water Inventory" With the State Water Resources Control Board's Water Quality Control Plan for the San Francisco Bay/ Sacramento-San Joaquin Delta Estuary.** (The Board will consider, at a Board meeting, whether to approve the proposed resolution.)

● **\*9. Consideration of a Resolution Authorizing the Development of an interagency Agreement Between the State Water Resources Control Board and the University of California to Conduct Work in Support of TMDL Development.** (The Board will consider, at a Board meeting, whether to adopt the proposed resolution.)

#### **WATER RIGHTS**

**\*\*10. Proposed Decision Approving Water Right Application 30300 to Appropriate Water to Storage From Smoke Creek in Lassen County (Holland Livestock Ranch, Applicant).** (The Board will consider, at a Board meeting, whether to adopt the proposed decision approving Water Right Application 30300.)

#### **WATER QUALITY PETITION**

**\*\*11. In the Matter of the Petition of Environmental Health Coalition for Review of Waste Discharge Requirements Order No. 96-03, NPDES Permit No. CAS0108740, Issued by the California Regional Water Quality Control Board, San Diego Region. SWRCB File A-1041.** (The Board will consider, at a Board meeting, whether to adopt the proposed order revising State Water Board Order WQ 98-01.)

#### **ADMINISTRATION**

● **\*12. Consideration of a Proposed Resolution Updating the Delegation of Authority to the Executive Director, the Deputy Director, or the Chief of the Division of Administrative Services to Authorize Execution of Contracts and Amendments Pursuant to the Safe, Clean, and Reliable Water Supply Act of 1996.** (The Board will consider, at a Board meeting, whether to adopt the proposed resolution.)

**"13. Consideration of a Proposed Resolution Authorizing the Executive Director or his Designee to Negotiate and Amend an Interagency Agreement With the Department of Water Resources (CALFED) to Evaluate the San Joaquin River Salt, Selenium and Boron Loading.** (The Board will consider, at a Board meeting, whether to adopt the proposed resolution.)

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\*In order to be considered at the meeting, all written comments must be received by 5:00 p.m., June 1, 1999. Mailing address: PO Box 100, Sacramento, CA 95812-0100; FAX 916-657-0932.

**\*\*These** items are expected to be routine and noncontroversial and there will be no discussion unless requested by a Board Member, staff or interested party. If such a request is made, the item will be considered separately.

STATE WATER RESOURCES CONTROL BOARD  
WORKSHOP SESSION -- DIVISION OF CLEAN WATER PROGRAMS  
JUNE 2, 1999

ITEM: 2

SUBJECT: PROGRESS REPORT BY THE PAJARO VALLEY WATER MANAGEMENT AGENCY REGARDING **SEAWATER** INTRUSION (INFORMATION ITEM)

DIS-  
CUSSION: The Seawater Intrusion Control Loan Program Guidelines were adopted by the State Water Resources Control Board (SWRCB) on October 23, 1997. The adopting resolution (No. 97-097) reserved \$5 million for the Pajaro Valley Water Management Agency (Pajaro Valley) until January 1, 2000. The resolution requested that Pajaro Valley submit a progress report every six months and appear annually before the SWRCB to present their report. Pajaro Valley was subsequently requested to appear before the SWRCB for their May 1999 progress report and to provide a water balance for the basin. A delay of one month was approved at the request of Pajaro Valley.


Resolution No. 97-097 allows the SWRCB to reduce the \$5 million reserved for Pajaro Valley if insufficient progress is being made.

POLICY:  
ISSUE: Is sufficient progress being made by Pajaro Valley to stop seawater intrusion?

FISCAL  
IMPACT: If the SWRCB decides that insufficient progress is being made and reduces their loan commitment to Pajaro Valley, those **funds** would be available for other agencies' projects. No other agencies have applied for a Seawater Intrusion Control Program loan.

REGIONAL  
BOARD  
IMPACT: Central Coast Regional Water Quality Control Board.

STAFF  
RECOMMEN-  
DATION: None. [This is an information item only.]

Policy Review   
Legal Review N/A  
Fiscal Review N/A