



Water Department

**Water Commission Agenda**  
**Regular Meeting**  
**7:00 p.m. – Monday, March 3, 2014**  
**Council Chambers**  
**809 Center Street, Santa Cruz**

**Agenda**

**Call to Order**

**Roll Call**

**Presentation** *Organized groups may make presentations to the Water Commission. Presentations that require more than three minutes should be scheduled in advance with Water Department staff.*

**Statements of Disqualification** *Section 607 of the City Charter states that “...All members present at any meeting must vote unless disqualified, in which case the disqualification shall be publicly declared and a record thereof made.”*

*The City of Santa Cruz has adopted a Conflict of Interest Code, and Section 8 of that Code states that no person shall make or participate in a governmental decision which he or she knows or has reason to know will have a reasonably foreseeable material financial effect distinguishable from its effect on the public generally.*

**Oral Communications** No action shall be taken on this item.

**Announcements** No action shall be taken on this item.

**Approval of Minutes** ☆ (Pages 5-12)

Recommendation: Motion to approve the February 3, 2014 Water Commission Minutes.

**Consent Agenda** (Pages 13-24)

*Items on the consent agenda are considered to be routine in nature and will be acted upon in one motion. Specific items may be removed by members of the advisory body or public for separate consideration and discussion.*

1. City Council Items Affecting Water ☆ (accept info) (Page 13)
2. Communications Plan Update ☆ (accept info) (Pages 15-16)
3. WSAC Update ☆ (accept info) (Pages 17-20)
4. Correspondence from N. Sundermeyer date 2/11/2014 ☆ (accept info) (Page 21)
5. Correspondence from S. Holt date 2/25/2014 ☆ (accept info) (Pages 23-24)

**Items Removed from the Consent Agenda**

**General Business** (Pages 25-44)

*Any document related to an agenda item for the General Business of this meeting distributed to the Water Commission less than 72 hours before this meeting is available for inspection at the Water Administration Office, 212 Locust Street, Suite A, Santa Cruz, California. These documents will also be available for review at the Water Commission meeting with the display copy at the rear of the Council Chambers.*

1. Long Term Conservation Master Plan Workshop I – Development of Program Goals and Decision Criteria ☆ (Pages 25-38)

Recommendation: That the Water Commission participates in a work session to consider and adopt program goals and decision criteria to be used in identifying recommended conservation programs to include in the program it recommends to the Santa Cruz City Council.

2. Report on Water Transfer/Water Exchange Project by John Ricker, County of Santa Cruz Water Resources Division Director ☆ (Pages 39-42)

Recommendation: That the Water Commission receives a presentation on the water transfer/water exchange project; discuss the preliminary findings; and, provide feedback on recommended next steps.

3. Agenda Strategy ☆ (Pages 43-44)

Recommendation: That the Water Commission receive and take action to adopt or modify a strategy for items to be included on the Water Commission agenda over the next several months.

**Subcommittee/Advisory Body Oral Reports** No items.

**Director's Oral Report** No action shall be taken on this item.

1. Monthly Status of Water Supply

**Information Item** (Pages - None) No action shall be taken on this item.

**Media Articles** (Pages 45-58) No action shall be taken on this item.

1. News Article – Santa Cruz Sentinel 2/4/2014 ☆ (Pages 45-47)
2. News Article – Santa Cruz Sentinel 2/10/2014 ☆ (Pages 48-50)
3. News Article – Good Times 2/12/2014 ☆ (Pages 51-53)
4. News Article – Santa Cruz Sentinel 2/20/2014 ☆ (Pages 54-55)
5. News Article – Santa Cruz Sentinel 2/22/2014 ☆ (Page 56)
6. News Article – Santa Cruz Sentinel 2/23/2014 ☆ (Pages 57-58)

**Documents for Future Meetings** No action shall be taken on this item.

*The following document is being included in this agenda packet in order to provide ample review time. It will be an item of business and will include a staff report at a future meeting.*

### **Items Initiated by Members for Future Agendas**

**Adjournment**     The next meeting of the Water Commission is scheduled for April 3, 2014 at 7:00 p.m. in Council Chambers.

☆Denotes written materials included in packet

**APPEALS** - Any person who believes that a final action of this advisory body has been taken in error may appeal that decision to the City Council. Appeals must be in writing, setting forth the nature of the action and the basis upon which the action is considered to be in error, and addressed to the City Council in care of the City Clerk.

Other - Appeals must be received by the City Clerk within ten (10) calendar days following the date of the action from which such appeal is being taken. An appeal must be accompanied by a fifty dollar (\$50) filing fee.

The City of Santa Cruz does not discriminate against persons with disabilities. Out of consideration for people with chemical sensitivities, please attend the meeting fragrance free. Upon request, the agenda can be provided in a format to accommodate special needs. Additionally, if you wish to attend this meeting and will require assistance such as an interpreter for American Sign Language, Spanish, or other special equipment, please call Water Administration at 831-420-5200 at least five days in advance so that arrangement can be made. The Cal-Relay system number: 1-800-735-2922.

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Water Department

**Water Commission**  
**DRAFT**  
**7:00 p.m. – Monday, February 3, 2014**  
**Council Chambers**  
**809 Center Street, Santa Cruz**

### **Minutes of a Water Commission Meeting**

**Call to Order** – Chair A. Schiffrin called the meeting to order at 7:01p.m. in the City Council Chambers.

#### **Roll Call**

**Present:** D. Baskin, G. Mead, A. Schiffrin (Chair), D. Schwarm, D. Stearns, W. Wadlow, and L. Wilshusen.

**Absent:** None.

**Staff:** R. Menard, Water Director; L. Almond, Interim Water Director; T. Goddard, Administrative Services Manager; N. Dennis Principal Management Analyst; G. Rudometkin, Administrative Assistant III, C. Berry, Watershed Compliance Manager.

**Others:** Approximately 52 members of the public.

**Presentation** There were no presentations.

**Statements of Disqualification** There were no statements of disqualification.

#### **Oral Communications**

Oral written and communications were made by R. Longinotti, P. Gratz and G. Pepping. Oral communications were made by R. Baker and F. Geiger.

**Announcements** – A. Schiffrin welcomed new Water Commissioner Douglas Schwarm. L. Almond, Interim Water Director introduced new Water Director Rosemary Menard.

#### **Approval of Minutes**

Commissioner L. Wilshusen would like to add the following five words “in light of its mission” on page 6, bullet point 7 at the end of the sentence.

Commissioner W. Wadlow moved approval of January 3, 2013 Water Commission minutes. Commissioner G. Mead seconded.

VOICE VOTE:MOTION CARRIED

**AYES:** D. Baskin, G. Mead, A. Schiffrin, D. Stearns, W. Wadlow, and L. Wilshusen.

**NOES:** None.

**ABSTAINED:** D. Schwarm, due to absence from the January 6th meeting.

**Consent Agenda**

1. Three-month Calendar
2. City Council Items Affecting Water
3. Loch Lomond West Side Feasibility Analysis – Feasibility Criteria
4. Correspondence from R. Longinotti dated 1/7/2014
5. Correspondence from P. Gratz dated 1/27/2014

Commissioner G. Mead pulled Item 1 - Three-month Calendar. Commissioner A. Schiffrin pulled Item 4 - Correspondence from R. Longinotti dated 1/7/2014.

Commissioner D. Baskin moved the Consent Agenda. Commissioner L. Wilshusen seconded.

VOICE VOTE: MOTION CARRIED

AYES: D. Baskin, G. Mead, A. Schiffrin, D. Schwarm, D. Stearns, W. Wadlow, and L. Wilshusen.

NOES: None

ABSTAINED: None

**Items Removed from the Consent Agenda**

Item 1 - Three-month Calendar

Interim Water Director, L. Almond and Principal Management Analyst, N. Dennis responded to Commission questions.

Oral comments made by S. McGilvray.

Commissioner D. Baskin moved the Consent Agenda. Commissioner G. Mead seconded.

VOICE VOTE: MOTION CARRIED

AYES: D. Baskin, G. Mead, A. Schiffrin, D. Schwarm, D. Stearns, W. Wadlow, and L. Wilshusen.

NOES: None

ABSTAINED: None

Item 2 - Correspondence from R. Longinotti dated 1/7/2014

A. Schiffrin orally responded to the letter.

Oral communications made by R. Longinotti.

Commissioner W. Wadlow moved the Consent Agenda. Commissioner D. Baskin seconded.

VOICE VOTE: MOTION CARRIED

AYES: D. Baskin, G. Mead, A. Schiffrin, D. Schwarm, D. Stearns, W. Wadlow,  
and L. Wilshusen.

NOES: None

ABSTAINED: None

## **General Business**

### **1. Initial Water Supply Outlook**

R. Menard, Water Director introduced the presentation. T. Goddard, Administrative Services Manager provided the report and responded to commission questions.

#### Public Comments:

Oral communications made by R. Longinotti, B. Malone, S. Mcgilvray, L. Blanchard, D. Bolger, E. Silver and C. Scott.

#### Summary of Commission Questions:

- Clarification asked regarding Stage 1, if indeed the goal was to reduce consumption is 5% and at Stage 2 the goal is to reduce consumption is 15%?
- Questioned if a Stage ordinance can be initiated by the Water Director alone.
- Inquiry made that if there has been sufficient data based on low rainfall and the low levels in the streams warrants the need for the Stage 2 ordinance.
- Concern expressed on why the Water Department does not go further than the Stage 2 ordinance and go directly into Stage 3.
- Concern expressed over the confusion that may arise due to the City Council asking for 20% voluntary conservation and the measures associated with Stage 2 measure asking for 5-15% conservation.
- Inquiry was made as to if the Water Department will address the difference between what it has requested and what would come about as a result of the mandate?
- Inquiry was made, if the stabilization fund is 2.4 million how far that will take us in regards to the various stage levels?
- Concern was expressed, in light of how dire things are and potentially could be, if we were ready to go to stage 3, when and who will issue recommendation.
- Question was asked that if there isn't any more rain or limited rain, do we know what the reservoir will look like at the end of the year?
- Concern expressed over the staffing needs of Stage 2.
- Question was asked due to results in 1977 when the stream flow in the San Lorenzo river was below 12 CFFs pumping had to be scaled back to avoid damaging the pumps, has this issue been resolved?
- Comment was made that the critical issue from the staff report is that the Water Department is at a point when we can no longer take water from flowing sources and has to start to pulling water from the lake.

- Comment was made that the Water Commission should recommend to City Council that at the earliest possible time they approve a Stage 3 water shortage decision to go into effect no later than April 1<sup>st</sup> with the understanding that if the weather conditions change the matter would be brought back to the Commission or to the City Council for the deliberation.
- Comment was made if it is possible for the City Council to approve Stage 3 with the directions that the public carry it out but with the understanding that staff is not going to be able to enforce it effectively it until May 1<sup>st</sup>.
- Comment was made that the key thing of Stage 3 is when water rationing begins, so there would be designated amounts of water that could be used without financial penalty.
- Inquiry was made as to whether it would be possible to present to our community what their ration would look like prior to May 1<sup>st</sup>.
- Concern over the Commission being the bottleneck that prevents for more stringent measures to be implemented and the need of a resolution that carries a recommendation to City Council that essentially gives the Water Director the authority to do what is necessary as the water information develops.
- Concern over creating a sense of urgency and also the sense of flexibility in terms of the power of the Water Director, with a recommendation that allows the Water Director to go forward to do what is both necessary and feasible.
- Comment was made that Water Commission would like to see a more aggressive approach and back off, rather than see an approach that comes in late.
- Concern expressed over including a public education aspect such as mailer information, how to read a water bill, etc.
- Comment was made that the Chair should attend the Feb 11<sup>th</sup> meeting of the City Council to present the Water Commission perspective of the Initial Water Supply outlook.
- Concern expressed that a future study should be conducted to generate new sources of water such as installing new ground water wells, examining water recycling, potential cutbacks in stream flow under HCP process, the importance of completing the EIR for the Desal project because that gives us a potential avenue to go down should we choose to do so and even exploring a temporary Desal plan as some communities have done.

The Water Commission recommends to the City Council that they approve Stage 3: Water Shortage Emergency as early as legally possible and determine those pieces which can be implemented immediately and do so; including implementing water rationing as soon as feasible by an average of 20%; Direct the Water Department and the Water Commission to return to the City Council with amended recommendations either to modify stages as the water conditions merit; and, The Water Department and City staff engage in a consistent and coordinated messaging and public education campaign with the public. The Commission acknowledges the City Council and Department's need to be responsive to a changing drought picture. The Commission encourages quick action be taken to address these needs even though this may require action ahead of the Water Commission's next scheduled meeting.



Commissioner Stearns moved the motion. Commissioner Wilshusen seconded.

VOICE VOTE: MOTION CARRIED

AYES: D. Baskin, G. Mead, A. Schiffrin, D. Schwarm, D. Stearns, W. Wadlow,  
and L. Wilshusen.

NOES: None

ABSTAINED: None

## **2. Water Supply Community Engagement**

Oral report provided by T. Schull.

- First, discussed comments made by the Commission about the interplay between the Water Commission and the Water Supply Advisory Committee.
- Second, update on the Committee, the application period closed on January 15<sup>th</sup>, received 61 applications. The nominating committee from the City Council is composed of Mayor Robinson, Vice Mayor Lane, and council member Posner now has a preliminary list of members.
- Third discussed the facilitator, which is an important piece of the Committee process, making sure that the team is sophisticated enough in terms of group dynamics, setting a reasonable work plan and having enough technical information to access to experts that really can be used, infused with the appropriate level of expertise in response to our RFP, 7 proposals were received and narrowed down to two very strong candidates.

## **2. Habitat Conservation Plan Negotiations Update**

Introduction provided by R. Menard, Water Director and staff report provided by C. Berry, Watershed Compliance Manager.

Oral communications made by R. Longinotti, P. Gratz, C. Scott and S. Mcgilvray.

Summary of Commission Comments/Question:

- Comment was made; Laguna Creek does not have sufficient flow to provide for any level of diversion and also meet our current flow goals downstream to provide to any level of diversion.
- Question was asked, is this another year where we are not going to be able to take out water of Laguna Creek?
- Requested an updated HCP presentation so that the numbers and tier system reflect the current issues and what is currently the proposed conservation strategy.
- Comment was made that we are going to have to make some judgment calls on how much we can actually conserve for the streams and how much we are willing to pay overtime.
- Requested that in a future presentation it would be helpful if it could be quantified as to how much is being cut back from the streams and the San Lorenzo River, in other words water that we could be using for drinking as opposed to saving for the fish.

- Questioned was asked if we are leaving less water or more water for the fish at this point?
- Comment was made in regards that the HCP is in progress but not yet available.
- Question was made if the state is expecting a NCCP (Natural Community Conservation Planning). There is a California comparable document, the NCCP and sometimes you use the federal HCP of section 10, sometimes you use the State, the reason for this question is because it influences process, duration, engagement, of the California resources agencies as well as Federal.

#### **4. Water Conservation Master Plan - Evaluation of Measures**

T. Goddard, Administrative Services Manager, Consultants Lisa Maddaus and Bill Maddaus of Maddaus Water Management Inc. provided the staff report and responded to Commission questions.

Oral communications provided by B. Van Allen, R. Pommeranz, D. Speke, S. Holt.  
Oral and written communication provided by R. Longinotti and S. McGilvray.

Summary of Commission Questions/Comments:

- Commissioner D. Baskin moved that due to the late hour that the discussion be tabled to a later meeting so that Water Commission can have a more extensive discussion and consider if there should be any kind of public workshop in the interim and also discuss how this is going to be integrated with the Water Supply Advisory Committee and the timing of how we are going to be moving forward. Seconded by W. Wadlow.
- Concern expressed that the formation of the Water Supply Advisory Committee (WSAC) is precisely what this Water Conservation Plan is all about and WSAC should see this in terms of feedback.
- Concern expressed that the public isn't engaged in the details of the Water Conservation Master Plan due to the remaining 5 people present in the audience
- Requested to submit written questions to consultants.
- Discussed holding a special meeting for this topic.

Commissioner A. Schiffrin moved to continue the discussion to the March 3<sup>rd</sup> meeting, Water Commissioners are to submit there comments/questions to staff within the next two weeks and a decision will be made at the next meeting whether to continue the discussion further or hold a special meeting.

Commissioner L. Wilshusen moved the motion. Commissioner W. Wadlow seconded.  
 AYES: D. Baskin, G. Mead, A. Schiffrin, D. Schwarm, D. Stearns, W. Wadlow, and L. Wilshusen.  
 NOES: None  
 ABSTAINED: None

## 5. Election of Officers

Chair A. Schiffrin opened the floor for nominations for Chair.

Commissioner W. Wadlow nominated D. Baskin.

Commissioner L. Wilshusen moved close nominations and by acclamation elect Commissioner D. Baskin as Water Commission Chair for 2014. Commissioner G. Mead seconded.

VOICE VOTE: MOTION CARRIED

AYES: D. Baskin, G. Mead, A. Schiffrin, D. Schwarm, D. Stearns, W. Wadlow, and L. Wilshusen.

NOES: None

ABSTAINED: None

At this point Commissioner D. Baskin took over duties of the chair.

Commissioner D. Baskin opened the floor for nominations for Water Commission Vice-chair.

Commissioner A. Schiffrin nominated W. Wadlow for Vice-Chair. Commissioner A. Schiffrin moved to close nominations and by acclamation elect Commissioner W. Wadlow as Water Commission Vice-chair for 2014. Commissioner L. Wilshusen seconded.

VOICE VOTE: MOTION CARRIED

AYES: D. Baskin, G. Mead, A. Schiffrin, D. Schwarm, D. Stearns, W. Wadlow, and L. Wilshusen.

NOES: None.

ABSTAINED: None

**Subcommittee/Advisory Body Oral Reports** No items.

**Director's Oral Report** No action shall be taken on this item.

1. Oral report on the status of existing contracts related to the Commission's work program.
- R. Menard, Water Director suggested emailing the status of the work plan in light of the late hour and offered that Water Commissioners can call her if questions should arise.

**Information Item** (Pages 114-135) No action shall be taken on this item.

1. Water Resources Report ☆ (Pages 114-134) (be on next Agenda)
2. Water Shortage Contingency Plan ☆ (Pages 135 -See Attached Report: Water Shortage Contingency Plan)

## Media Articles

1. News Article – Santa Cruz Sentinel 12-29-13 ☆ (Pages 136-138)
2. News Article – Santa Cruz Sentinel 1-03-14 ☆ (Page 139-141)
3. News Article – Santa Cruz Sentinel 1-06-14 ☆ (Pages 142-143)
4. News Article – Santa Cruz Sentinel 1-10-14 ☆ (Pages 144-146)
5. News Article – Santa Cruz.com 1-14-14 ☆ (Pages 147-148)
6. News Article – Santa Cruz Sentinel 1-14-14 ☆ (Pages 149-150)
7. News Article – Good Times 1-15-14 ☆ (Pages 151-153)
8. News Article – Santa Cruz Sentinel 1-16-14 ☆ (Pages 154-155)
9. News Article – Santa Cruz Sentinel 1-17-14 ☆ (Pages 156-157)
10. News Article – Santa Cruz Sentinel 1-26-14 ☆ (Pages 158-160)
11. News Article – Santa Cruz Sentinel 1-28-14 ☆ (Pages 161-162)

**Documents for Future Meetings** No action shall be taken on this item.

1. None

## Items Initiated by Members for Future Agendas

- Commissioner G. Mead requested to see an update on the status of the recycled water transfer with Scotts Valley and the Pasatiempo Golf Course at a future meeting
- Commissioner A. Schiffrin requested that the Information item - Water Resources Report be on the next agenda and that a presentation is made by John Ricker at a future meeting.

**Adjournment** Meeting adjourned at **11:02pm**, the next meeting of the Water Commission is scheduled for March 3, 2014 at 7:00 p.m. in Council Chambers.

Respectfully submitted,

**Gloria  
Rudometkin**

Digitally signed by Gloria Rudometkin  
DN: cn=Gloria Rudometkin, o=City of  
Santa Cruz, ou=Water,  
email=grudometkin@cityofsantacruz.  
com, c=US  
Date: 2014.02.10 09:12:05 -08'00'

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Staff



**WATER COMMISSION  
REPORT**

DATE: February 20, 2014  
TO: Water Commission  
FROM: Water Director  
SUBJECT: City Council Items Affecting Water

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**City Council Meeting of February 11, 2014:**

Beltz Monitoring Wells Project, Cory Street Monitoring Well No. 4 – Notice of Completion (WT)

**Motion to** accept the work of Maggiora Brothers Drilling, Inc. (Watsonville, CA) as complete per the plans and specifications and authorize the filing of a Notice of Completion for the Beltz Monitoring Wells Project, Cory Street Monitoring Well No.4

2014 Drought Response Actions (WT)

That the Santa Cruz City Council: 1) receive information from staff in the form of an oral presentation on current water supply conditions and on recommended actions for reducing water use in 2014; 2) discuss possible actions to respond to the water supply situation and direct staff, as appropriate; and, 3) by motion, schedule a public hearing for either February 18, or February 25, 2014 to consider adopting a resolution declaring a Stage 3 Water Shortage Emergency.

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## WATER COMMISSION REPORT

DATE: February 24, 2014  
TO: Water Commission  
FROM: Eileen Cross, Community Relations Specialist  
SUBJECT: Stage 3 Water Shortage Emergency Communications Plan

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**RECOMMENDATION:** Review communications strategy for Stage 3 Water Shortage Emergency restrictions.

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**BACKGROUND:** The City Council is expected to approve moving to Stage 3 Water Shortage Emergency restrictions at its February 25<sup>th</sup> meeting. Restrictions, which include rationing, will go into effect either April 1 or May 1. Because rationing will have different goals for different user groups, it's important that all communication to the community be clear, concise and simple, and that the community is provided the tools and resources they need to identify their rationing goals and potential penalties.

The communications strategy for Stage 3 restrictions will be implemented in three phases: 1) provide a foundation, 2) reinforce messaging, 3) recognize success.

To provide a foundation of information, proven communication channels are being used to communicate conservation messages, as well as more complicated rationing program information:

- Daily spots on KUSP
- Newspaper ads
- Postcard fliers sent to every residence prior to, and in conjunction with, rationing implementation
- Bill inserts to all account holders
- Ads on City vehicles
- A drought-dedicated webpage
- Facebook
- Event tabling
- The SCMU Review
- Community open houses/town hall style meetings
- Signage at key city entry points

To reinforce messaging, broader and more creative communication channels will be used, such as public art, video, workshops, events.

Finally, community success will be recognized through both traditional means like earned and print media, as well as nontraditional means, as-yet-to-be-determined.





**WATER DEPARTMENT  
MEMORANDUM**

DATE: February 25, 2014  
TO: Water Commission  
FROM: Water Director  
SUBJECT: Water Supply Advisory Committee – Proposed Membership (CN)

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RECOMMENDATION: Item went to City Council on 2/11/2014, receive information.

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## CITY COUNCIL AGENDA REPORT

DATE: February 4, 2014

AGENDA OF: February 11, 2014

DEPARTMENT: City Council

SUBJECT: Water Supply Advisory Committee – Proposed Membership (CN)

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RECOMMENDATION: Motion to approve the membership for the Water Supply Advisory Committee, as recommended.

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BACKGROUND: On November 26, 2013, the City Council authorized the formation of an ad hoc committee, the *Water Supply Advisory Committee (WSAC)*, to “explore, through an iterative, fact-based process, the City’s water profile, including supply, demand and future threats, and analyze potential solutions to deliver a safe, adequate, reliable and environmentally sustainable water supply, and develop strategy recommendations for City Council consideration.”

The Council established the committee representation as follows:

- 3 At-large City of Santa Cruz Residents
- 1 Water Customer (Non-City Resident)
- 1 Santa Cruz Desal Alternatives Representative
- 1 Sustainable Water Coalition Representative
- 3 Environmental Group Representatives
- 3 Business Group Representatives
- 2 City Water Commission Representatives

The Council designated the authors of this report to serve on a Nominating Committee that would oversee the committee application process, review the applications and compile a list of recommended members that would be returned to the full City Council for discussion and action.

The WSAC application was released and publicized on December 18, 2013 with the application period running through January 15, 2014. Sixty-one applications were received.

DISCUSSION: The Nominating Committee met on three occasions to guide the application process, review applications and refine the proposed membership. While impressed with the overall quality of the applications, the Nominating Committee narrowed the recommended 14 members to promote the best balance of differing perspectives, stakeholder groups, technical experience, interests, dedication and ability to participate, qualifications and enthusiasm. The proposed members represent a diversity of backgrounds, experience and perspectives, but are

unified in their unqualified interest to serve the Santa Cruz community through a serious, open and systematic exploration of our long-term water options.

The Nominating Committee is pleased to present and endorse this proposed membership. The applications are available in the City Manager's Office for review.

FISCAL IMPACT: There is no fiscal impact.

Submitted by:

Lynn Robinson  
Mayor  
Nominating Committee  
Member

Don Lane  
Vice Mayor  
Nominating Committee  
Member

Micah Posner  
Councilmember  
Nominating Committee  
Member

Attachments:

Proposed Membership List



# Water Supply Advisory Committee *Proposed Membership*

**February 11, 2014**

<b>Proposed Members</b>	<b>Committee Seat</b>
Doug Engfer	City Resident
Dana Jacobson	City Resident
Charlie Keutmann	City Resident
Suzanne Holt	Non-City Resident (Water Customer)
Rick Longinotti	Santa Cruz Desal Alternatives Representative
Mike Rotkin	Sustainable Water Coalition Representative
Sarah Mansergh	Surfrider Foundation – Santa Cruz Chapter
Greg Pepping	Coastal Watershed Council
Erica Stanojevic	Sierra Club
Peter Beckmann	Think Local First – Santa Cruz County
Mark Mesiti-Miller	Santa Cruz Chamber of Commerce
Sid Slatter	Santa Cruz Business Council
David Green Baskin	Water Commissioner
David Stearns	Water Commissioner

## Gloria Rudometkin

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**From:** Niels Sundermeyer <nsundy@mac.com>  
**Sent:** Tuesday, February 11, 2014 9:10 PM  
**To:** Gloria Rudometkin  
**Subject:** Water Rationing

To Our City Water Commissioners:

As long-time city residents, we are especially concerned about the current drought and how it is impacting our water resources. In the past several months we have installed a gray watering system that pipes our washing machine discharge to water our backyard fruit trees, and have also taken out our entire front lawn and replaced it with pathways and drought-tolerant plantings served by drip irrigation, so as to reduce our overall water usage.

We understand and support the likely imposition of water rationing measures by the City of Santa Cruz, but hope that any strict across-the-board percentage reduction from previous year's water usage will make allowances for those of us (and there are probably many) who have already taken significant measures to reduce our water consumption, so are already using less water than in the past.

We wrote a letter about this topic to the editor of the Santa Cruz Sentinel that was published last month, and are copying the text below, since it conveys our thoughts about this important matter:

"To the Editor: We applaud Astrid Randall's recent letter "Make Rationing Fair" and want to join other local residents who believe that future water rationing limits based on a percent of prior water usage would be unfair to many of us who've already made major changes at home to significantly lower our water consumption, such as installing low-flow toilets and shower heads, replacing our lawns with drought-tolerant plantings, putting in drip systems and gray water systems to nourish our gardens, etc. We believe that rationing figures based on the average per capita usage by all your residential customers that would then be applied to the number of persons in each household is a much more equitable system than enforcing a "percentage of prior usage" equally on every household regardless of size. We implore our city water officials to take this into account as they consider possible future rationing measures."

Thank you for considering our views.

Sincerely,

Niels & Pat Sundermeyer  
313 Berkeley Way  
Santa Cruz, CA 95062

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February 25, 2014

TO: City of Santa Cruz Water Commissioners  
Rosemary Menard, Water Director  
Toby Goddard, Administrative Services Manager

FROM: Sue Holt, City water residential customer

I write in response to the January 29, 2014 report on the Water Conservation Master Plan. I appreciate the detailed consideration given to an extensive menu of conservation options. And I am grateful that Toby Goddard gave me copies of Table 7 and Appendix 1.

The following comments and questions, when addressed, are intended to increase the clarity and transparency of the planning process. Please add this letter to the Water Commission's agenda packet for March 3, 2014.

### Comments

1. The description of Figure 1, page 95, states that savings are "cumulative." Is this true? Are MGY (millions of gallons a year) added across all years to 2030? Or are the values "annual" rather than "cumulative"?
2. In Appendix 1 (the 11" x 17" sheets) each of 39 measures is numbered. It would be helpful if these same numbers were included in Table 1 and Figures 1-3 so that readers could easily jump back and forth between the appendix sheets and the main document.
3. The City is considering using the services of a non-profit such as WaterSmart Software to inform customers about their water-using behavior in a pilot study (Measure 5). Customers find out how their usage compares to their neighborhood average and to the efficient homes in their neighborhood. Many water agencies are considering this information service because of its successful use of social norms and "nudging." An analysis for EBMUD demonstrated that households responded to the web-based account information by conserving 4-6% annually. Soquel Creek Water District has a pilot project running and found that homes in the experiment conserved 4% quickly, over just two months. The District plans to apply WaterSmart to all 12,500 single-family households, expecting to save 125 AFY, at a cost of \$863/AF. I encourage the City to use this recent information to revise Measure 5 calculations and to do full-on implementation rather than just a pilot study.

### Questions

The findings in Figures 1-6 and Tables 2-7 depend on several assumptions which are not documented in the report. These assumptions can strongly influence the ranking and relative attractiveness of the different measures under consideration. (Typically an economist doing a benefit-cost analysis will document all assumptions and provide spreadsheets that reveal the consequences of these assumptions. None of this is proprietary.) Assumptions should be "daylighted." Otherwise we are making important decisions with blinders on.

1. Over what time period was each measure assumed to be implemented? And how did the rates of implementation vary? Measures that are assumed to be implemented sooner and faster may generate a higher Benefit-Cost ratio, and vice versa. To what extent does timing influence the B-C ratios?
2. What rate was used to discount future benefits and costs to the present? A lower discount makes delayed measures more attractive, while a higher discount favors only those measures that can be implemented quickly.
3. How are the costs of different measures distributed over time and across funding sources? Eventually these costs will all be paid in rate increases, even if funded initially by the current budget or new bond issues. To what extent have these eventual rate increases been incorporated into the cost side of the B-C ratio calculations? To what extent do such rate increases influence consumer response – the additional water savings that accrue when people choose to use less to reduce their water bills? Ignoring these costs and their consequences can bias the B-C ratio calculations.

4. Table 7 lists two Benefit-Cost ratios – for the Utility and the Community. And the Utility B-C ratio is larger than the Community B-C ratio. Why is this so? What assumptions were made about the types of benefits and costs included in the different numbers?
5. The Utility B-C ratio shouldn't be a matter of consideration. Usually the Utility's benefits are restricted to revenue increases from higher rates, and these higher rates are designed to cover its additional costs from these new programs. The Utility's B-C ratio would then be near 1 (differing only by the timing of revenue flows vs. cost flows). Conservation decisions are being made, not for the benefit of the Water Department but for the community it serves. Thus the Utility B-C ratio can be omitted.
6. The Community's benefits include not just savings on water bills but also the benefits of species protection and reduced drought impacts. These benefits should be added to the calculations if not already included.
7. Table 7 identifies indoor vs. outdoor water savings. The outdoor savings are only a small portion of total savings, around 10%. Yet peer-reviewed studies show that outdoor use is much more discretionary and flexible than indoor use, and that households commonly overwater their landscapes by 50%. So why are outdoor savings projected to be so low? What assumptions were made that led to these results?

Thank you for the opportunity to comment on the Water Conservation Master Plan.





**WATER DEPARTMENT  
MEMORANDUM**

DATE: February 26, 2014  
TO: Water Commission  
FROM: Toby Goddard, Administrative Services manager  
SUBJECT: Water Conservation Master Plan

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**RECOMMENDATION:** That the Water Commission discuss a “Shared Vision Planning Process” for moving the Water Conservation Master Plan forward, and provide input on program goals, decision criteria, and metrics to use in evaluating and recommending a preferred program.

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**BACKGROUND:** At the meeting last month, the Water Commission received an update on the Water Conservation Master Plan, including modeling results of various measures and programs produced by the project consultant, Maddaus Water Management, Inc. Because the item began so late in the evening, the Water Commission did not really get the opportunity to have a thorough discussion of the material contained in the agenda packet.

**DISCUSSION:** Since that meeting, staff has had discussions with the consultant about how best to move this project to completion in a collaborative manner. They proposed undertaking a “Shared Vision Planning Process that more directly engages Water Commission members in the review and selection of a preferred program. It will involve three more public meetings, including the March meeting to get to that point.

Attached is background material including 2 case studies, about the process and proposed agenda for the first meeting. This meeting will focus on clarifying goals, and the decision criteria for evaluating the choices for a preferred conservation program. Commission members are encouraged to think in advance about the decision criteria (please refer to the list on page 2) that would inform the way programs will be presented and evaluated at a future meeting.

The material contained in last months’ agenda pack is also available for reference online at: <http://www.cityofsantacruz.com/Modules/ShowDocument.aspx?documentid=36443>

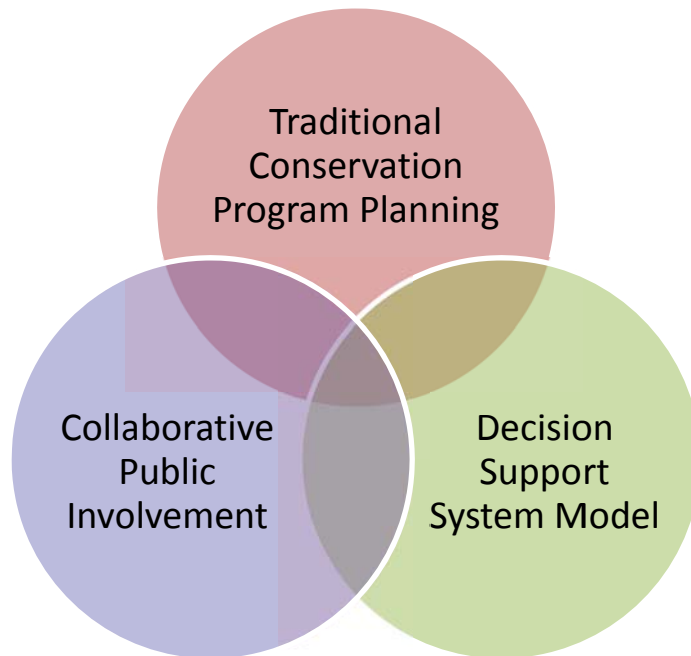
## Summary of the Shared Vision Planning Process for Water Conservation Master Planning Updated February 24, 2014

A Shared Vision Planning approach is being recommended by City for moving the Water Commission decisions forward on selecting the preferred suite of conservation measures to be included a program that will define the Water Conservation Master Plan. This Shared Vision approach is being adapted and streamlined to suit the needs of this project from water resources management decision making process that was created back in the early 1990s to bring everyone to the table to resolve contentious water rights disputes. More information is available online at: <http://sharedvisionplanning.us/>

The Shared Vision Planning process necessitates transparency and collaboration to have a successful conclusion. The approach includes the essential elements presented in Figure 1 below and described as follows:

- (a) Traditional planning which follows the American Water Works Association Manual of Practice, M52 – Water Conservation Programs – A Planning Manual;
- (b) Collaborative and transparent relationships among public stakeholders to support inclusion of community values; and
- (c) Computer added negotiation tool that enables developing “what if” scenarios, which is supported by the Decision Support System Model.

A commitment to being focused on consensus building and transparent will be required of each Water Commissioner, City staff and involved stakeholders to get to final decision on the preferred conservation program measures for inclusion in the Plan.



**Figure 1. Key Elements in Shared Vision Planning Paradigm**

The completed milestones for the project to date are presented in Figure 2. A conceptual outline of the process going forward is presented in Figure 3 for a series of meetings to lead to the final suite of measures packaged together in a program to be agreed upon. After the program is decided, the Plan documentation is prepared for the completion of the Draft and Final Water Conservation Master Plan for adoption by the City Council.

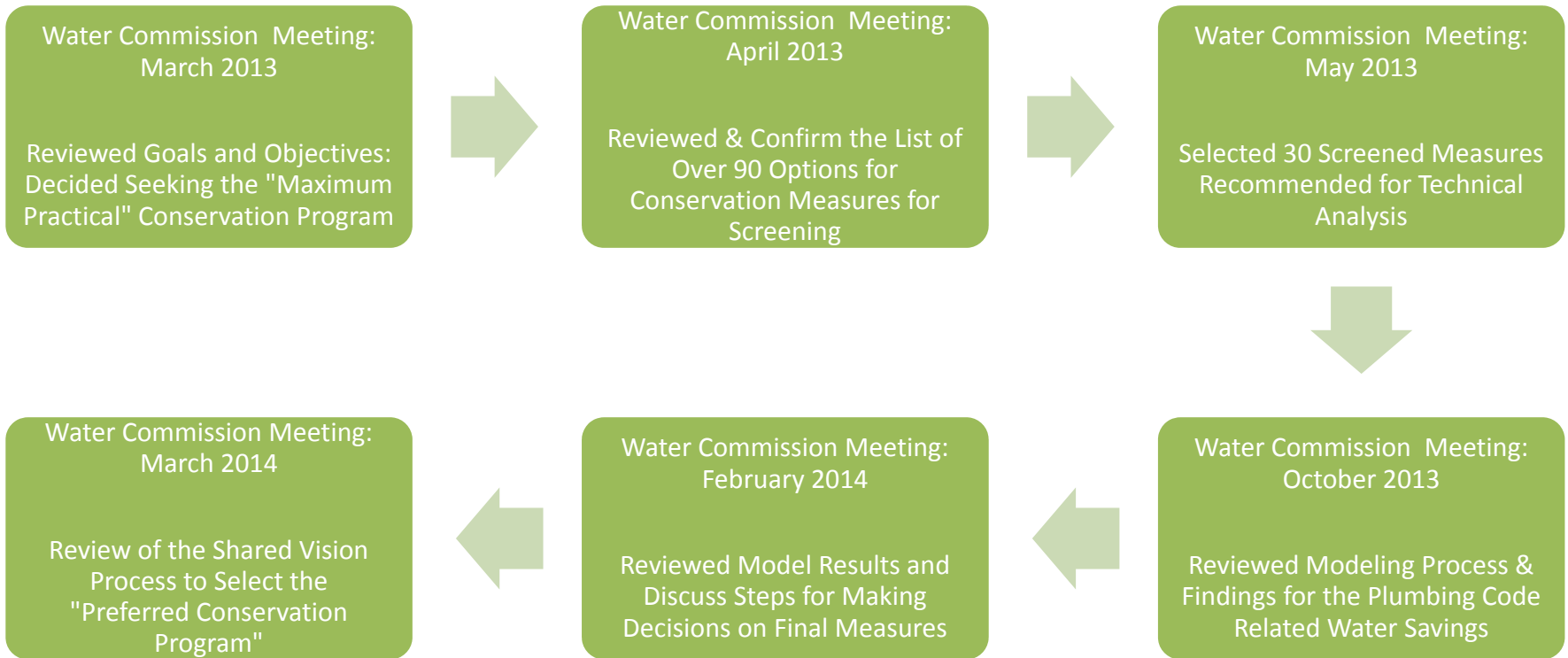
In order to begin with the end in mind, Maddaus Water Management provided in their proposal and presented again below the draft outline for the Water Conservation Master Plan.

**The Water Commissioners are being requested to come to the March 3<sup>rd</sup> meeting with prepared comments about 2-3 minutes in length for the following three topics:**

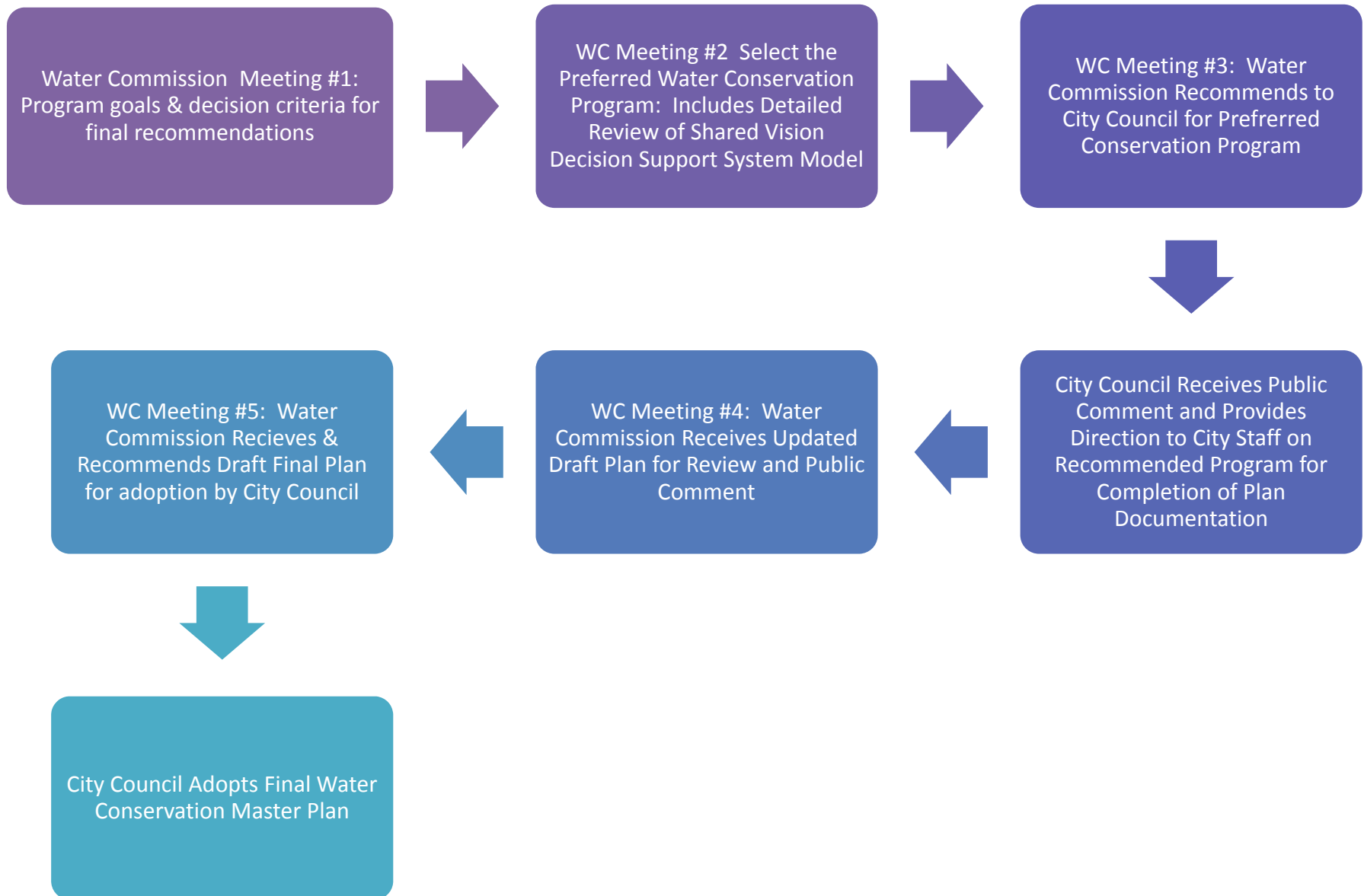
- 1. Overarching future conservation program goals in the next 10 years and again 20 years including sample “mission statements” for the program. (Note: March 4, 2013 Water Commission decided that the City was striving for the “maximum practical level of water conservation implementation)**
- 2. List of most important decision criteria that would inform/confirm the Commission’s review of the Shared Vision DSS Model and the Draft and Final Plans. Example decision criteria may include:**
  - **Market Transformation (only fund leading edge incentive programs)**
  - **Provide customer service (organizational sustainability)**
  - **Maximize cost effectiveness (economic sustainability)**
  - **Budget or Staffing Constraints (economic sustainability)**
  - **Maximize water savings as much as possible (water resource sustainability)**
  - **Sustainable City staffing support for Water Conservation Department (organizational sustainability)**
  - **Environmental stewardship (resource sustainability)**
- 3. Future ideas on metrics to help chart or analyze data to help answer questions coming up in the decision making process (to the extent any come to mind at this stage).**

Attached is the outline for guiding the Shared Vision Discussion Meeting No. 1 on March 3, 2014.

**Figure 2. Completed Water Conservation Master Plan Milestones**



**Figure 3. Conceptual Next Steps in the Shared Vision Planning Process Paradigm**



## Water Commission Meeting: Shared Vision for the Future of Santa Cruz Water Conservation Program

### AGENDA: Shared Vision Planning (SVP) Meeting Discussion No.1

**Meeting Objective:** *To collectively imagine the needs and challenges for the City that the Conservation Program can help solve. Set the Guidelines or Criteria that will assist in deciding on the final program design.*

Estimated Time (mins)	Item	Lead
5	<b>Opening Remarks:</b> Perspectives on Plan Needs from City’s Perspective, Recap of Steps Taken	Rosemary Menard Toby Goddard
10	<b>Tour of the Shared Vision Tool: Decision Support System Model</b> Basis of the Measure Design, “What If” Scenarios Already Analyzed: <i>Program A: Stay with Current Program</i> <i>Program B: Focus on Cost Effectiveness &amp; Customer Service</i> <i>Program C: Focus on Maximizing Water Savings</i> <i>Program D: Implement All Measures (without double counting)</i>	Bill Maddaus Lisa Maddaus
10	<b>Overview of the Shared Vision Process &amp; Outline for Future Steps</b> Two case studies: Honolulu Board of Water Supply and City of Sacramento	Bill Maddaus Lisa Maddaus
10	<b>Discussion of How Best to Complete the Planning Process</b> <b>Open discussion:</b> Can we make a conditional agreement to work together? How and who decides how we get to “yes”	Rosemary Menard Toby Goddard
20	<b>Brainstorming Session</b> 1. <b>Confirm Program Goals &amp; Objectives</b> What does success look like for the Conservation Program in another ten years 2025? What about another twenty years in 2035? What challenges will the Program face? What might go wrong? Recall past conservation program success... what can we improve on? 2. <b>Decision Criteria on “Preferred Program Measures”</b> What are the key guidelines or decision criteria that will focus the decisions ahead? Be specific so like checking the boxes that when the plan is approved, each us knows it’s the best plan possible that meets the most (or all) the criteria?	Toby Goddard, Rosemary Menard, Bill Maddaus, Lisa Maddaus
15	<b>Public comment</b>	Water Commission Chair
10	<b>Open Discussion.</b> What new information is needed to answer questions that came up tonight? Metrics, charts, summary of information that goes with the criteria selected. Initial thoughts on adjusting any of the “What If” Scenarios	Bill Maddaus, Toby Goddard
10	<b>Meeting Recap, Next steps.</b>  Proposed SVP Meeting #2 Objective: Review Conservation Measure Design, Adjust the “What If” Scenarios to Fit Key Criteria	Toby Goddard, Lisa Maddaus

***CASE STUDY A: EXAMPLE PLAN OBJECTIVES FROM CITY OF SACRAMENTO  
EXCERPT OF WATER CONSERVATION MASTER PLAN ADOPTED OCTOBER 29, 2013***

## 1.2 Objective of Plan

The City's stated objective is to develop a Water Conservation Plan to attain the water efficiency goals in the most cost-effective manner for implementation by City staff. Key components of the WCP include:

- Updating and further examining the water savings already committed to by the City of Sacramento to identify the best path towards achieving those savings and the means for monitoring those commitments to the California Urban Water Conservation Council (CUWCC) Memorandum of Understanding Regarding Urban Water Conservation (MOU); and
- Developing a long-term plan for complying with SB X7-7 and meeting the gallons per capita per day (GPCD) target by 2020.

The Department of Utilities (DOU) and Sacramento Water Conservation Advisory Group (SWCAG)'s primary objectives used to develop the WCP include:

- i. Maximize opportunities to sustainably meet the future water needs of the City of Sacramento through cost-effective water conservation and water use efficiency;
- ii. Identify strategies to reduce ratepayer costs for the treatment and delivery of water and the treatment of wastewater, reduce water-related energy consumption, and offset the need to construct water production capacity in the future;
- iii. Maintain commitments to achieving 20 percent GPCD water use reduction statewide by 2020 and meet state and federal mandates;
- iv. Demonstrate environmental stewardship and foster wise, innovative, responsible and efficient practices;
- v. Expand the current Water Conservation Program that further helps support the health of rivers and groundwater integral to the region's quality of life.

***CASE STUDY B: WATER CONSERVATION PROGRAM PLAN BY HONOLULU BOARD OF WATER SUPPLY***

***EXCERPT FROM EXECUTIVE SUMMARY APPROVED FEBRUARY 2011***

## **Executive Summary**

The Honolulu Board of Water Supply (BWS) has teamed with Brown and Caldwell (BC) (Lisa Maddaus) to develop a comprehensive water conservation program that supports the BWS' mission of "Water for Life, Ka Wai Ola", providing a safe dependent water supply balancing the three interdependent components of sustainability: resource, economic and organizational sustainability as illustrated in Figure ES-1.



**Figure ES-1. Board of Water Supply "Water for Life, Ka Wai Ola" Program**

This Executive Summary includes an overview of the benefits from the BWS Water Conservation Program (WCP), including the overall benefits, summary of conservation measures selected for implementation and associated water and cost savings, organizational staffing needs and other key findings from the Water Conservation Program Study. The rest of this Report then provides more details on why and how the WCP Plan was specifically designed to help fulfill BWS' mission of Ka Wai Ola and what conservation activities are envisioned for BWS' program in the future.

Key features of the WCP includes:

- Use as a reference tool to guide decisions for the current BWS conservation program and to provide areas of opportunity for BWS to further invest in order to gain the benefits from program implementation.
- Integration and validation of current conservation programs with future potential programs.
- Providing a cost effectiveness rationale to focus on selected measures as a result of the modeling outcomes.
- Connecting each measure with an implementation and communication plan that will allow for adjustments and is designed for the current BWS staffing levels.
- Flexibility in the plan and model to make adjustments as needed.
- Provides a strategy for future staffing needs, budgeting, scheduling, etc. One of the goals of the WCP was to determine a staffing plan by defining first what are good



programs to invest in, what type of work and duties are required, and what level of staffing is needed to carry out these conservation projects.

- Developing planning and implementation services for both the BWS internal and external water conservation program.

## Overall Benefits from the BWS WCP

By strengthening conservation efforts into the future, the BWS will receive numerous benefits including the following:

### Resource Sustainability

**Maximize available freshwater sources:** Oahu has finite limits on pumping from the freshwater aquifer and limited ability to use surface water sources to meet growing demands. The more efficient the existing demands become with the WCP being implemented, the less additional pumping of freshwater to meet new demands is required.

**Minimize impacts of the next drought:** With leveraging water conservation to maintain the freshwater below the sustainable yield, BWS would be helping to recharge the aquifer. By banking more storage in the aquifer, BWS could mitigate the effects of future droughts when recharge is less plentiful and demands for higher withdrawals tend to increase. Overall strain on the aquifer in future droughts will depend on customer response to calls for curtailment due to dry conditions and how much storage is available to sustain Oahu's demand.

### Economic Sustainability

**Allow for accelerated investment in rehabilitation and replacement programs under the Plan of Capital and Operating Needs:** The costs for all utility services are projected to increase; however, the costs will be lower than otherwise with conservation due to lower demands and less wear and tear on infrastructure. BWS would also be better able to afford increasing fiscal demands to rehabilitate and replace aging infrastructure by avoiding adding more costly supplies to meet future demands or savings from debt service to the extent projects can be delayed. Any reductions in lower demand are offset by lower fiscal requirements from the cost-effective conservation program that has been selected for implementation.

**Utilize the least costly sources of supply:** Conservation is the cheapest source of water when offsetting the cost of pumping at \$552 per million gallons (MG) produced when compared to the cost of the recommend conservation program at \$78 per MG produced.

**Defer the need for desalination:** An option to produce water to meet potable demand from the planned 5 million gallons per day (MGD) desalination plant in 2022 is an alternative planned in the WCP, and the energy cost associated with operations of the facility can be deferred through water conservation. The WCP is estimated to meet future demands of more than 5 MGD through 2035.

### Social Sustainability

**Support the Governor's and Mayor's sustainability initiatives:** The national trend to minimize reliance on imported oil and use all resources more efficiently has been evolving and accelerating in recent years. Oahu has unique environmental resources and natural biodiversity that leads the island to flourish economically through tourism and other industry, and is wholly dependent on local residents and visitors respecting the need to live sustainably.

**Meet each neighborhood’s goals to protect watersheds:** The original “Ka Wai Ola - Water For Life” Summit goals and sustainability management principles are infused in the goals, objectives and planned projects in the first three water management plans completed thus far and will also be included in the remaining five watershed management plans.

**Strengthen the socioeconomic conditions of Oahu residents:** By maintaining more reasonable costs for water, energy, and sewer utility bills, local residents and businesses can better afford to reinvest in their community and have more dispensable income to support the local economy.

### **WCP Plan Supports BWS’ Leadership in Meeting Oahu’s Resource Sustainability Needs**

With a projected population growth from about 948,940 to 1,174,370 between 2010 and 2035, there will be increasing pressures on the freshwater aquifer. One of the most important ways to maintain resource sustainability and continue to meet growing demands is to use water more efficiently, which is achieved through successful implementation of this Water Conservation Program Plan.

BWS’ own planning initiatives are supported through this water conservation program plan including:

- Assessment of Capital Infrastructure Needs
- Watershed Management Plans for each of the Planned Development Areas

The need for sustainability is also being recognized at the state and local levels on Oahu including the following initiatives that are supported by BWS and its conservation program:

- Governor’s Administrative Directive 06-01
- Hawaii’s Green Business Program Initiative
- Water Conservation at State Facilities Initiative
- Mayor’s Sustainability Plan

### **WCP Plan Meets BWS’ Economic Sustainability Requirements using the Triple Bottomline Approach**

Triple bottom line accounting considers the economic, environmental, and social perspectives in the analysis of weighing benefits and costs. The economic aspect of program evaluation is traditionally the primary perspective. Many business decisions are made based on comparing the financial benefits and costs. However, in recent years, a movement has occurred to also consider the environmental and social aspects. The following Table ES-1 includes a short list of terms that are used in this Executive Summary. A more detailed glossary with more terms and definitions is provided in Table 5-2.

<b>Table ES-1. Glossary of Terms</b>	
<b>Term</b>	<b>Definition</b>
Business case	The evaluation to determine if a conservation measure is effective for BWS to implement solely based on economic analysis of that individual measure’s quantifiable water savings (avoided costs) compared to cost to implement the program. The business case is considered justified for a conservation measures when it is “cost effective”; in other words, having a benefit-cost ratio greater than 1.0. Measures without a means to estimate water savings are considered “non-quantifiable” and not included in business case analyses. A suite of measures analyzed together based on weight averaged savings and costs provide a “programmatic” business case or benefit-cost ratio.
Cost-effective	For purposes of this study, the definition of cost-effective is having a benefit-cost ratio greater than 1.0.

DSS model	Demand Side Management Least-Cost Planning DSS model; an end-use model used to develop water demand projections for this study. The end-use model approach uses growth in number of accounts and a complete breakdown of water uses by customer-billing category (“end uses”) to forecast water demands.
End use	The ultimate use of the water; can be a fixture, appliance, or other category of water use within an account.
Fixture	Any plumbing device in homes or businesses using water such as toilets, showers, or faucets.
Present value of water-utility costs	The present value of the total utility cost of implementing a measure over the 28-year analysis period
Water demand projections	Estimates of water demands for the future based on applying a projection (or growth forecast) to an established base-year value.
Water loss	The mathematical difference between amount of water produced in a system and water billed to customers (water consumed). This water is often referred to as “lost” water and includes water delivery system leaks and water not billed or tracked in the system (i.e., water used for flushing water system pipelines, fire fighting).

## Economic Analysis

In Phase 3 of the WCP development, the BWS chose to evaluate the cost effectiveness business case using the Demand Side Management Least Cost Planning Decision Support System (“DSS model”). The DSS model is an end-use model that builds the business case based on:

- Projected long-term demands (population and employment)
- End uses of water
- Current plumbing code and natural replacement of water-using fixtures
- Targeted measures to reduce demands
- Individual measure and overall program cost-effectiveness and water savings

The economic analysis includes use of the DSS model and specific inputs to the DSS model, including historical demand, demand forecast (future demand projections), capital improvement planning (CIP) projects, and utility costs.

The DSS model can project water production, demands and savings for a period of up to 30 years. The base year for the BWS Water Conservation Program’s DSS model is 2007. The DSS model uses the base year as the starting point for the water demand analysis and water usage conditions. BWS elected to use the year 2007 as the base year due to the completeness of supply, demand, and population data at the time the model was initially developed, and because 2007 is a recent year without extreme weather variations (e.g., drought restrictions). The year 2010 is referred to frequently throughout this Plan because it is the estimated starting year for BWS Water Conservation Program implementation. The DSS model analysis considered water production, demands and savings through the year 2035 (i.e., a 28-year period). The year 2035 was selected because it is a more standardized planning year (as opposed to the year 2037 for a 30-year plan). The DSS modeling approach is described further in Section 4.

## Approach to Developing Oahu-Specific Information for Planning

Tailoring the WCP to fit Oahu’s climate and culture is key to the future success of the conservation program. Phase 1 of the BWS WCP included selection, development, and testing of pilot projects, and Phase 2 involved development and execution of a market penetration study. By designing and implementing pilot projects, the BWS was able to test the success of programs on a small scale and to evaluate lessons learned from the experience. The purpose of the market penetration survey was to determine the extent that water conservation is currently being practiced by BWS customers, which allows the BWS to more easily and

accurately identify potential opportunities for increased water conservation. More details on outcomes of the pilot projects and market penetration survey are provided in Section 4.1.

### Conservation Measures Selection and Evaluation Process

BWS and BC staff screened a total of 49 individual measures that are widely used and accepted across the United States. Screened measures range from moderate to extensive market saturation levels covering retrofits of inefficient equipment, on-site surveys to be performed by BWS staff, and an expanded public outreach program.

As described in further detail in Section 4.5, a subset of 30 measures was selected for further analysis. The analysis includes both non-quantifiable measures, for which water savings and costs are challenging to estimate, and quantifiable measures corresponding to best management practices implemented by many other utilities throughout the United States.

A screening process was conducted to reduce the number of measures and to eliminate overlapping measures (i.e., to avoid double counting) and to rule out measures that are not well-suited to the island and residents of Oahu. Each potential measure was screened based on 14 qualitative criteria, scored on a scale of 1 through 5 with five being the most favorable score and 70 being the maximum possible number of points for all criteria. This screening process follows the recommended procedure in the American Water Works Association (AWWA) Manual of Practice, Water Conservation Programs – A Planning Manual, M52 (AWWA, 2006). Based on further BWS staff review, some measures were added, and others were adjusted to reflect the BWS service area demographics. In the end, a total of 30 measures were selected, and 15 of the 30 measures were quantitatively evaluated using the DSS Model.

The quantifiable conservation measures were analyzed using the DSS model described in Section 4.4.1. The evaluation includes measures new to the BWS WCP to help make new residential and business customers more water efficient. These conservation measures were then organized into three programs showing costs and water savings. Each of the 30 individual measures and programs are discussed in detail in Sections 5 and 6.

### Selection of Quantifiable Measures for Programs

Various measures evaluated using the DSS model were selected to serve as components for three alternative WCP programs (Programs A, B, and C) based on each measure’s benefits (cost savings), water savings and estimated costs.

- Program A – new measures only
- Program B – all cost-effective measures
- Program C – all measures

Each of the programs was evaluated separately to determine the overall programmatic water savings and cost-effectiveness based on grouping specific measures together.

Table ES-2 provides a summary of which measures are included in each of the three alternative programs. The three packages are designed to illustrate an increasing level of water savings for BWS, with the third level (Program C) representing the maximum theoretical level of water savings, but also has the highest implementation cost. The decision of which measures were included in each program was made by BWS conservation staff. The DSS model also provides the capability to model new scenarios if required so that alternative programs with different selected measures can also be developed.

Table ES-2. Quantifiable Conservation Measures Selected for Programs from DSS Model Analysis				
DSS Model Measure	Measure Name	Program A New	Program B All Cost-	Program C All

Number		Measures Only	Effective Measures	Measures
1	Water Loss Control Program		X	X
2	Public Education/Awareness		X	X
3	Commercial Water Surveys (3a) Government Water Surveys (3b)	X	X	X
4	Hotel/Motel/Resorts Water Surveys (4a) Multi-Family Residential (MFR) Water Surveys (4b)	X	X	X
5	Large Landscape Conservation Surveys	X	X	X
6	Water Budgets	X	X	X
7	MFR Efficient Clothes Washer Rebate	X		X
8	Residential High Efficiency Toilet (HET) Rebate	X		X
9	Residential Rain Barrel Incentive Program	X	X	X
10	Financial Incentives for Irrigation Upgrades	X		X
11	Rain Barrels for Large/Commercial Properties	X	X	X
12	Cooling Tower Efficiency Incentives Program	X		X
13	Coin-Operated Laundries Incentives	X		X
14	Food Service Incentives	X	X	X
15	Weather-Based Controller Rebates	X	X	X
<b>Total Number of Measures</b>		<b>12</b>	<b>10</b>	<b>15</b>

## Results of Program Evaluation

Key evaluation statistics compiled from the DSS model include water savings and costs for the 15 quantifiable measures described in Section 5. A comparison of the results from the model and the final selection of conservation program measures to be included in the WCP are presented in Table ES-3.

The benefits of the National Plumbing Code (hereinafter also referred to as the plumbing code) passed in 1992 are fully described in Section 5.2.1. As an overview of the quantified benefits of savings that automatically have been and continue to lower water demands on Oahu from this regulation, Table ES-4 presents the water production projections developed by BC without and with the plumbing code water savings benefits from 2010 through 2035. The new water needed by new customers over the next 25 years is the difference between 2010 production of 154 million gallons per day (MGD) and 2035 production of 189 MGD without the plumbing code (or a 2035 production of 184 MGD when considering the effects of the plumbing code). The overall estimated savings is 5 MGD from the National Plumbing Code which controls the minimum water usage rate per fixture or appliance (e.g., 1.6 gallons per flush per Ultra Low Flow Toilet [ULFTs]). There are additional water savings available from plumbing fixtures and appliance as customers may elect to voluntary purchase more water efficient model above the minimum national standards. The U.S. Environmental Protection Agency (USEPA) launched a new labeling program “WaterSense” to encourage manufacturers to produce and customers to purchase more water efficient products and services (e.g., HETs). This WaterSense program is akin to the “EnergyStar” program promoted by both the Department of Energy (DOE) and USEPA, where the federal government (along with state and local water utilities) is looking to transform the market to increasing efficiency over time and raise the standards. Overall, the

demand projection for new potable water needed projected to be provided by BWS by 2035 is approximately 35 MGD without the plumbing code or 30 MGD with the plumbing code.

Table ES-5 includes a comparison of the long-term water conservation savings for each of the three programs from 2010 thru 2035. The total programmed water savings are expressed as a percentage of the added water production (i.e., 30 MGD) estimated for 2035 that each program could provide. The last two columns in Table ES-5 show the benefit cost ratios for the utility and community of moving to more aggressive conservation programs. Given the goal of the program is to save about 20 percent of total projected new water demand, Programs B and C both generally meet the savings goal.

Figure ES-2 graphically depicts the water savings benefits from the plumbing code and each of the three programs. The plumbing code benefits are at a no cost to BWS. The conservation measures that create Programs A, B, and C produce increasing present value of the costs for the amount of water savings gained. In the case of Program B compared to Program C, there are apparent diminishing returns in water savings for the added cost, when measures are added to Program C. Since both Program B and C generally meet a 20 percent savings goal by 2035, Program B is the recommended program due to its higher benefit/cost ratio.

Figure ES-3 presents the baseline demand forecast without the water savings from the plumbing code and then with the impact of the plumbing code. Additionally, Figure ES-3 presents the water demand projections for Programs A, B and C.



## WATER DEPARTMENT MEMORANDUM

DATE: March 3, 2014

TO: Water Commission

FROM: Water Director

SUBJECT: Report on the Water Transfer/Water Exchange Project by John Ricker, Water Resources Division Director, County of Santa Cruz.

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**RECOMMENDATION:** Receive a presentation from John Ricker, Water Resources Division Director, County of Santa Cruz, on the water exchange project; discuss the preliminary findings; and, provide feedback on recommended next steps.

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**Background:** In 2007, the Santa Cruz Region began to evaluate the potential conjunctive use of its water resources under a Proposition 50 Integrated Regional Water Management (IRWM) Implementation Grant from the State Water Resources Control Board. Conjunctive water use generally refers to the use of multiple water sources, usually both surface and groundwater, in a way that maximizes the beneficial use of the resources under different supply, demand and climatic conditions.

Under the IRWM program, County staff led this effort and worked with other agency partners (including the City of Santa Cruz, Scotts Valley Water District, and Soquel Creek Water District) to identify the best approaches for conjunctive use/water exchange and increased groundwater storage in the Lower San Lorenzo Watershed. Three preferred projects were identified in the conjunctive use study, one of which involved the delivery of excess winter flow in the San Lorenzo River to the Scotts Valley area in order to reduce groundwater pumping and recharge the basin. County staff further evaluated the potential yields of this project and included the Soquel Creek Water District as one of the potential beneficiaries of excess winter flows in the San Lorenzo River.

Most recently Proposition 84 funds have been utilized to analyze various water exchange scenarios and provide more detailed technical information of potential yields, infrastructure needs, costs, potential fishery impacts, and water rights issues. Some of the findings are shown in the table below.

**Discussion:** The water exchange concept is to divert excess surface water during the winter months from the City's existing diversions, treat at the City's Graham Hill Water Treatment Plant and transfer it to surrounding groundwater agencies to offset some of their demands and

allow them to reduce pumping of the overdrafted groundwater basins, thereby potentially helping those basins to begin to recover. This method of basin recovery is referred to as in-lieu or passive recharge.

Two other components could be studied at a future time but were not included in detail in this study.

1. After sufficient basin recovery occurs, water could potentially be provided back to the City of Santa Cruz to help meet their demands. This would meet the definition of a full water exchange project as initially contemplated in the scope of work.
2. Excess river water could be used to directly recharge the groundwater basins using injection wells. This method of basin recovery is referred to as active recharge. While not all aquifers are conducive to active recharge, it is known to accelerate basin recovery and could improve the viability of the water exchange as a supplemental drought supply for the City of Santa Cruz.

In the January 28, 2014 Water Resources Status Report to the County Board of Supervisors, the following issues were identified that would need further study in order to fully understand the feasibility of this project. (This item was provided to the Water Commission at their February 3, 2014 meeting as an informational item.)

Infrastructure Improvements: Because winter flow in the San Lorenzo River is frequently subject to high sediment load, higher turbidity, and increased organic loads, improvements to the City's surface water treatment plant would be required to provide adequate treatment. And, increased pumping capacity at the San Lorenzo River (Tait Street) diversion would be required to move this additional water to the treatment plant.

Operational Costs: Increased operational costs would be realized to treat water with higher levels of organic material.

Water Rights: The matters surrounding water rights have to do with the volume of water permitted for diversion, the entity permitted to do the diverting, and the place of use for the diverted water. Next steps with regards to this item may include better understanding of these matters, applying for new water rights, amending existing water rights, or a combination of the two.

Potential Next Steps: The final report is being developed by County staff and is expected to be released in several months. One issue that has been difficult to analyze and understand is the ability of the groundwater agencies (Scotts Valley and Soquel Creek Water Districts) to provide water back to the City. This is in part due to the complexities involved in understanding the timing associated with passive recharge of a groundwater basin. To better understand this, the City and Soquel Creek Water District are pursuing development of a groundwater model. Other issues include fully understanding the water rights, and potentially any environmental impacts associated with the various scenarios. Potential next steps to be considered include:

- Convene a working group of other agencies, to discuss cost sharing, potential framework for water exchange agreement, and preferred project to evaluate in further detail.



- Investigate the potential for groundwater exchange using Scotts Valley's Groundwater Model and the District's Model. (The former has already been developed; the latter has not yet been developed.)
- Update the previous Confluence modeling results using recent model modifications.

Fiscal Impact: There is no fiscal impact associated with this item at this time. However, funds will likely be required to further the efforts of the evaluation as described above.

Five Potential Water Transfer Scenarios

<b>Scenario</b>	<b>Source Water Turbidity (NTU)</b>	<b>Max. Tait Div. (mgd)</b>	<b>Max. GHWTP Winter Cap. (mgd)</b>	<b>Potential Yield to SqCWD (AFY)</b>	<b>Potential Total Yield (AFY)</b>	<b>Capital Cost</b>	<b>Life Cycle Unit Cost (\$/AF)</b>
<ul style="list-style-type: none"> <li>• Current Tait &amp; GHWTP Capacity</li> </ul>	<15	7.8	Up to 10	120	445	\$27M	\$4,260
<ul style="list-style-type: none"> <li>• Increase Treatment Capacity at GHWTP</li> </ul>	<15	7.8	Up to 16	292	623	\$78M	\$8,420
<ul style="list-style-type: none"> <li>• Increase Treatment Capacity at GHWTP</li> <li>• Increase Diversion Capacity at Tait</li> </ul>	<15	14	Up to 16	1,022	1,495	\$91M	\$4,280
<ul style="list-style-type: none"> <li>• Increase Treatment Capacity at GHWTP</li> <li>• Increase Turbidity Limits</li> </ul>	~200	7.8	Up to 16	417	798	\$86M	\$7,410
<ul style="list-style-type: none"> <li>• Increase Capacity at GHWTP</li> <li>• Increase Pumping Capacity at Tait</li> <li>• Increase Turbidity Treatment</li> </ul>	~200	14	Up to 16	1,178	1,712	\$92M	\$3,900

1 AF = 326,000 gallons



## WATER DEPARTMENT MEMORANDUM

DATE: February 26, 2014  
TO: Water Commission  
FROM: Water Director  
SUBJECT: Agenda Strategy

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**RECOMMENDATION:** That the Water Commission receive and take action to adopt or modify a strategy for items to be included on the Water Commission agenda over the next several months.

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A proposed strategy for items to be included on future Water Commission agendas will be presented and discussed. The proposed strategy is designed to focus each meeting on one or two significant issues and to engage the Water Commission members in developing recommendations based on these discussions. This proposed strategy will necessarily mean that some items that the Water Commission has spent time on in the past will receive less attention this year.



## WATER COMMISSION REPORT

DATE: March 3, 2014  
TO: Water Commission  
FROM: Water Director  
SUBJECT: Water Commission Meeting Schedule and Upcoming Agenda Items (Subject to Change)

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### April 7, 2014

- Water Supply Outlook for 2014 Demand Season and Recommended Plan to Respond
- Long Term Conservation Master Plan Workshop II – Application of Decision Criteria to Conservation Program Options
- Draft Capital Improvement Program Budget
- WSAC Update
- Economic Analysis of No Project – Scope of Work

### May 5, 2014

- Long Term Conservation Master Plan Workshop II – Recommended Plan
- Work Session on Fish Flows
- Operating Budget Overview
- WSAC Update
- Update on Recycled Water Transfer with Scotts Valley District and Pasatiempo Golf Course – Status Update

### June 2, 2014

- To be determined

### Unscheduled Items

- Water Rate Study

## **Santa Cruz water panel urges rationing as city keeps reservoir closed**

*By J.M. Brown Santa Cruz Sentinel Santa Cruz Sentinel*  
Posted:

SantaCruzSentinel.com

SANTA CRUZ -- Facing conditions that mirror a record 1977 drought, the Santa Cruz City Council is expected Feb. 11 to consider an initial step toward approving water rationing.

"Getting a start on it right now makes absolute sense to me," Mayor Lynn Robinson said.

The city's Water Commission voted Monday to recommend increasing a Stage 1 Water Alert in effect for nine months to a Stage 3 Water Emergency resulting in customer water limits and steep financial penalties for exceeding them. Conservation will increase from a voluntary 5 percent to mandated levels up to 25 percent, with landscape and golf course irrigation seeing the greater reduction in water delivery.

In past dry years, water officials have waited until a trio of supply outlooks were completed in April to seek cutbacks. Water Department officials asked the commission to endorse a Stage 2 Water Warning with a 15 percent reduction, but the advisory panel unanimously urged skipping that step.

Andy Schiffrin, outgoing commission chairman, said he supported speeding up the timeline because of "the seriousness of the water situation, the uncertainty about whether it's going to get better or not, and the amount of time it will take to enforce Stage 3."

Water Director Rosemary Menard said it was ultimately the right call.

"It sends a really clear signal to the community what we are asking them to do and what they can expect," she said. "If the situation stabilizes and doesn't get any drier, we will have a 20-25 percent goal in place for a while. If conditions get worse and we don't have any more rain, this is the beginning of further cuts."

In another sign of the times, the city decided Tuesday the Loch Lomond Recreational Area, which typically reopens March 1 after a winter closure, will remain shuttered. The city's largest water storage facility is just 65 percent full with Newell Creek, which drains into the 175-acre reservoir, suffering from "historically low levels," the city reported.

Exposed tree stumps decorate the reservoir's steep banks and could be hazardous to recreational users and rental boats, the city warned. The drought, characteristic of a historic statewide dry spell, has increased the threat of wildfire around the lake and the marina won't be able to function if the water level falls an additional 6 feet.

The city has been drawing more from Loch Lomond than in previous dry years because of a reduction in diversions from North Coast streams as part of fish habitat conservation negotiations with state and federal regulators. Officials said a final proposal is expected by fall.

## WHY RATIONING?

Santa Cruz last declared a Stage 3 alert in 1990 and before that in 1977. A measure of monthly stream flows in the San Lorenzo River, the city's largest water source, was lower in October through January than during those same periods in 1977, the city reported Monday.

Typical rainfall at this point in the season is nearly 16.5 inches. Yet Santa Cruz has received just 1.3 inches, with none in January, which is usually the wettest month.

Because rationing leads to selling less water, the Water Department will adjust its budget to cover fixed infrastructure and operating costs, as well as increased expenses. The department can hire additional temporary staff to manage conservation, customer service and enforcement efforts.

Menard said there are sufficient funds to block short-term rate increases for customers who abide by consumption budgets and a \$2.4 million stabilization fund set aside to further reduce rate impacts. With action from the council, she said, the department also could re-direct funds earmarked for a stalled seawater desalination proposal or other programs.

Menard said she hopes by May to finalize penalty rates for exceeding water-use budgets, which are based primarily on whether customers are from single-family households, multifamily dwellings, businesses or other categories. City code allows for charging \$25 per unit of water that exceeds allotments by up to 10 percent and \$50 for each unit higher than 10 percent greater than the allotment.

Charlie Keutmann, co-owner of The Garden Company, isn't anticipating steep cuts in water delivery because his Mission Street business does not provide landscape irrigation. Still, the drought automatically changes the marketplace for plants and therefore the water use at the nursery.

"As people rightfully get concerned about household water consumption and landscape irrigation, there is a tendency to buy plants that require less water," he said. "They, too, require less water for us. There may be a reduction in business, but our inventory also would be reduced."

Keutmann said the Stage 3 alert is sensible.

"Why wait until things are absolutely dire to act?" he said.

Follow Sentinel reporter J.M. Brown at [Twitter.com/jmbrownreports](https://twitter.com/jmbrownreports)

At a glance

## STAGE 3 WATER REDUCTIONS

Under a Stage 3 Water Emergency, the Santa Cruz Water Department will reduce the delivery of water to customers based on their category. Here's how much water the categories will get compared to typical peak season demand:

Single-family residential: 73 percent  
Multifamily residential: 78 percent  
Businesses: 92 percent  
UC Santa Cruz: 76 percent  
Other industrial: 72 percent  
Municipal: 57 percent  
Irrigation: 34 percent  
Golf course irrigation: 51 percent

SOURCE: Santa Cruz Water Shortage Contingency Plan, March 2009

## Rain has little impact on Santa Cruz County's water

### woes

By Jason Hoppin Santa Cruz Sentinel Santa Cruz Sentinel

Posted:

SantaCruzSentinel.com

SANTA CRUZ -- Santa Cruz County's thirst is still unquenched.

More than nine inches of rain soaked some spots of the county during the weekend, downing trees, flooding roads and finally freeing endangered fish to swim upstream. But the drenching was more show than substance, barely making a dent in the county's scarce supplies of water.

"We're still a long way from no need to conserve," said Eileen Cross, spokesperson for the Santa Cruz Water Department, which will present a recommendation for mandatory water rationing at Tuesday's 7 p.m. City Council meeting.

Due to parched conditions, the earth essentially acted as a giant sponge, absorbing water before it had a chance to run into tributaries or trickle into underwater wells. The column of tropical moisture known as a Pineapple Express helped alleviate dangerous fire conditions, but did little to bolster local water supplies.

"We are continuing to move forward with programs that are in place that would reduce demand as we get into the summer, with the assumption that we're not going to see a return to normal rainfall totals over the next three months," said San Lorenzo Valley Water District Manager Jim Mueller, where customers have been asked for a 20 percent cut in water use.

Three-day rainfall amounts peaked at 9.58 inches at the top of Empire Grade. Most coastal areas saw between one and three inches, with more in higher elevations such as the San Lorenzo Valley, where the storm doubled the amount of rain seen since Oct. 1 to about eight inches.

Normal San Lorenzo Valley rainfall for this time of year is higher than 30 inches.

Historically low stream flows on the San Lorenzo River zoomed upward only to quickly return to well below normal. Loch Lomond Reservoir, which the city of Santa Cruz has determined will stay closed past its planned March 1 recreational opening, rose a mere three inches. And parched plants siphoned away water before it could reach aquifers.

"We still need our customers to continue to conserve," said Kim Adamson, general manager of the Soquel Creek Water District, where mandatory rationing has been approved but still being implemented.

Everywhere, there are signs of how far the state has to go.

King City has seen 0.78 inches of rain since July 1, barely half of Death Valley's total. And although the recent storm dumped 20 inches of new snow on Donner Summit, overall totals there are still among the five driest snow years on record.



## STORM'S IMPACTS

But the storm's impacts were felt here and there.

East Cliff Drive near Corcoran Lagoon was closed for much of Monday due to flooding. Several mountain roads, including Glenwood Drive, Alba Road and Upper Zayante Road, were closed for stretches, though they were reopened relatively quickly.

Terry Reynolds, a road superintendent for Santa Cruz County, said emergency crews spent the weekend responding to downed trees and lines, but the county escaped significant road damage. However, officials are eyeing the mouth of the Pajaro River, which is still closed as waters rise near Pajaro Dunes.

"We're just kind of keeping a close eye on that level," Reynolds said.

During the weekend, 2,889 county Pacific, Gas & Electric customers lost power, though nearly half were from a temporary outage that lasted mere minutes. Saturday evening, 799 Santa Cruz customers lost power for about two hours.

At a few drops above nine inches, Scott Creek saw the second-highest rainfall readings in the county, according to the National Weather Service.

The downpour was significant enough to break through a massive sandbar that kept endangered coho salmon from entering the creek to spawn. But the breach, while needed, is a potentially dangerous development being closely watched by state and federal fishery officials.

Officials at the National Weather Service in Monterey said no rain is in the forecast during the next few days, though that could change by the weekend if a developing system in the Pacific Northwest makes inroads on a high-pressure ridge sitting off the California coast.

"The ridge is starting to slowly build back up," forecaster Diana Henderson said. "Possibly by the end of the week we may have something."

Follow Sentinel reporter Jason Hoppin at [Twitter.com/scnewsdude](https://twitter.com/scnewsdude)

## WEATHER FORECAST

TUESDAY: High 61, low 41, patchy fog

WEDNESDAY: High 64, low 43, partly sunny

THURSDAY: High 67, low 44, mostly sunny

FRIDAY: High 63, low 43, mostly sunny

SATURDAY: High 61, low 43, partly sunny

SUNDAY: High 62, low 32, mostly sunny

SOURCE: National Weather Service



7 ° [| Print |](#)WEDNESDAY, 12 FEBRUARY 2014 00:00 | JESSICA M. PASKO [NEWS](#) - ENVIRONMENT

### Santa Cruz's new water director steps in at critical point

Rosemary Menard has her work cut out for her as she steps into the role of water director for the City of Santa Cruz.

Menard fills the vacancy left by Bill Kocher, a vocal proponent of desalination who had served as the city's water director since 1986. Kocher retired in September, passing the torch to deputy director Linette Almond to serve as interim director until her own retirement in January.

Menard comes to the city in the wake of contentious discussion over desalination as well as what meteorologists have declared to be the driest January in California on record. Gov. Jerry Brown declared a drought emergency for the state, and municipalities throughout California face looming water shortages.

Menard sat down with Good Times on a recent Monday afternoon in her still-being-unpacked office on Locust Street, just a week after she arrived in her new position. Coincidentally, it was just a day after the area saw some much-needed rain, though the 0.4 inches that fell then didn't make much of an impact on our significant watershed depletion, Menard says.

"We need about a foot of rain in order to get the watershed saturated," she explains, pushing a strand of shoulder-length hair from her face.

As of Feb. 5, roughly halfway through our winter wet season, the Santa Cruz area had received just 1.79 inches of rain. Normal rainfall for this time of year is about 18.6 inches, according to city water department officials. By comparison, during the 1976-77 drought—the city's worst on record—rainfall totals measured 8.6 inches at the end of January 1977. The water year runs from Oct. 1 to Sept. 30. The amount of rainfall since Feb. 5 was still being calculated as of press time.

Though optimistic, Menard doesn't mince words when it comes to the city's current water supply situation.

"We're currently critically dry," she says. "It's pretty bad."

Current per capita water use is 95 gallons per person per day in the Santa Cruz water district; put another way, it takes the district an average of nearly nine million gallons of water every day to serve its customers. Brown has called for all citizens to cut back their water use by 20 percent this year, meaning the city's water staff will need to take swift action.

A week after Menard started the job, the city's Water Commission voted to recommend increasing a Stage 1 Water Alert to a Stage 3 Water Alert. Should the city council vote for the increase at its Feb. 11 meeting, which takes place after this issue goes to press, customer water limits will be implemented and financial penalties will be meted out for exceeding them. The change would increase conservation from a voluntary 5 percent to a mandatory 25 percent. The city lists a number of ways residents can conserve on its website, [cityofsantacruz.com](http://cityofsantacruz.com).

As water director, Menard will oversee a department that serves 90,000 customers in the Santa Cruz and Live Oak areas, during a time when the city has ramped up efforts to include residents in water supply discussions. That includes the pending formation of a citizens' water supply advisory committee, among other outreach procedures.

The drought will be a major priority in the weeks and months to come.

"We need to ensure we are managing our resources effectively," Menard says. "I've been around enough and seen enough to know that having a fresh set of eyes is often an asset, but I've been very impressed by the quality of and the knowledge of the staff here."

City officials announced Menard's hiring on Jan. 16.

"We are very pleased to have Ms. Menard come aboard at a critical point in our water supply discussions," City Manager Martin Bernal said in a press release. "She brings a wealth of leadership and experience in water operations, conservation, administration, and policy to our organization."

Though new to Santa Cruz, Menard is no stranger to the greater San Francisco Bay Area, having grown up in San Leandro. Her parents still live there, in the house she grew up in. She is now adjusting to Santa Cruz after a stint in Reno, living in a furnished vacation rental in Seabright as she gets her bearings.

Most recently she served as director of community services and water resources for Washoe County in Nevada. Prior to that, she held similar positions in Seattle and Portland. She earned a bachelor's degree in zoology from the University of Washington and, years later, earned a master's degree in public administration from the same institution. Her move from biology to public policy is largely attributed to an internship she did with a Seattle city councilmember's office. As part of that position, she had to evaluate the budget for the Seattle water department and got to know many people within that division. That led to a position as the water conservation manager for the City of Seattle.

"From there, I've had a lot of opportunities to grow as a manager and develop my skills," as well as provide municipalities with leadership and her expertise in problem solving, she says.

Though the new gig brings numerous challenges, Menard says that is a big part of the appeal for her.

"Here is a really great opportunity to really use those skills," she says. "This is the kind of stuff I'm made to do."

Rick Longinotti, founder of Desal Alternatives, says he has a good impression of Menard so far and believes her hiring represents something of a sea change in the city's water policy management.

"I think we're already seeing it," he says. "On the sixth day on the job, she was at the Water Commission meeting and she handled some rough stuff."

He says he was pleased to see how she interacted with others at the meeting and seemed to diffuse some of the tensions. He plans to meet with her personally soon.

"I think she's fully behind the work of the water supply advisory committee," said Longinotti. "That's a great indicator that she is open to input."

Menard says education on water conservation and maintaining an informed populace will be key focal points of her work.

"Figuring out how to become partners with the community is one of the challenges we have to address," says Menard. "That's one of the things I'd really like to work on—I would expect to have a lot of interaction with the water supply committee—though I don't know entirely what it's going to look like [yet]."

Having been in the position as water director for a short time, Menard says she is still in the assessment process.

"It's extremely important to be data-driven and not jump to conclusions," she says, adding that she imagines the next couple of months to be something of a learning and listening tour.

She emphasizes that a major part of the messaging will be that everyone needs to do their part to conserve water.

She and department staff will be working with the current framework for water shortage planning and finding ways to adapt it to the current conditions. That will likely involve looking at ways to incentivize and encourage conservation, while also looking at possibilities of penalization.

"Everyone needs to be looking at whatever they can do," she says. "We have to be conservative, we have to be cautious and we have to ensure we don't find ourselves in a place where our community is out of water."

Menard's initial approach could prove key in garnering community support at a time when everyone needs to pitch in when it comes to conservation and finding solutions. Her predecessor, Kocher, was criticized by desalination opponents for his role as a founding member of CalDesal, a pro-desalination advocacy board comprised of numerous water agencies with a stated mission of advancing the use of desalination in California.

"I'm looking forward to getting to know the community and working really collaboratively to address the issues we have," Menard says. "I know there are big challenges, but I think if we work together, we can do what needs to be done."

[< Prev](#)

[Next >](#)

## Seabright event focuses on water conservation

By Calvin Men Santa Cruz Sentinel Santa Cruz Sentinel

Posted:

SantaCruzSentinel.com

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SEABRIGHT -- Rain dances, water-use reduction efforts and desalination discussions were all a part of Saturday's Water Wise Festival at the Pacific Cultural Center.

The event was put on by the Seabright Water Action Group, a coalition of residents in the area that have concerns with the desalination efforts by the city, mainly alternatives to desalination, said Paul Johnston, an organizer and member of the group.

The group began in the summer of 2013 and decided to put on the festival to help spread water conservation efforts in the shadow of the drought.

California is in the midst of one of the worse droughts in history. The dry weather has forced many local agencies to figure out solutions to water shortages. The Lompico Water District is considering treating water and turning on a backup well while the Soquel Creek Water District board approved mandatory water rationing in January.

"It's the same issue of conservation and (the drought) made it more urgent and more interesting," Johnston said.

Saturday's event had several tables for agencies that provided resources for residents to learn about water conservation strategies and other efforts to conserve water in the county. It also featured a rain dance at the end of the day performed in the hope of ending the drought.

While the event was more informational than anything, organizers called it a festival to lighten the mood.

"We call it a festival because we didn't want to be a downer," Johnston said. "Water is so precious and we want to celebrate the things we do to conserve water."

In addition to the tables, there were a number of discussions throughout the day to discuss water conservation issues.

Clara Cartwright, a water conservation representative from the City of Santa Cruz, was on hand to talk to attendees about water conservation efforts. She had various tools and gadgets at her table to help reduce water usage including low-flow shower heads and kits to determine leaks in toilets.

"I brought a ton of stuff and I'm almost out," Cartwright said.

She gave a presentation that included tips on how to reduce water usage, including the most important one: changing habits.

"Those kind of things can add up," she said to the crowd.

The entire aim of day's events was to give people ideas to take home, Johnston said.

"All of us are pretty water wise already," he said. "But we all realize there's more we can do and we can dig deeper."

Follow Sentinel reporter Calvin Men at [Twitter.com/calvinmenatwork](https://twitter.com/calvinmenatwork)

- ε Learn to read the water meter.
- ε Upgrade and change fixtures to be water efficient.
- ε Change habits to conserve water.

## Kim Adamson : California must solve own water problems

*By Kim Adamson Special to the Sentinel Santa Cruz Sentinel*  
Posted:

SantaCruzSentinel.com

Kim Adamson

Clearly the scarcity of water brings out the worst in people. In recent weeks I've read two different letters in the Sentinel that proposed piping Washington or Oregon water to California. My family settled in Washington state in 1887, and I lived there and was involved in state water issues until I came here six months ago to try and contribute to solving California's water issues. I can assure you that taking water from other states is not the answer.

Washington deals with its own water struggles with the highly agricultural east side of the state dealing with the same over-drafted basins and diminished stream flows we see here. Washington seems to be far ahead of California in fish-protection efforts and the result of that is felt on both sides of the state. Currently the high pressure ridge that is directing our rainfall north is also directing that rainfall past Washington resulting in snowpacks that are less than half of normal in some areas. In parts of Oregon they are seeing snowpacks less than 20 percent of normal. In a region that sees much of its hydropower sent south to power California cities there will already be resentment without Californians being presumptuous enough to think it's a great idea to take water as well.

California can and should solve our own water problems. It's possible if we break down barriers and work regionally. It requires acceptance of conservation as well as technology. Recycled water and desalination will be part of our future. And California's cherished "first in time, first in right" water law that provides no regulation to groundwater other than through the lengthy legal process of adjudication must be changed. I suspect as environmental groups start to see the very real connection between groundwater and stream flow there will be more pressure to do so.

Currently California communities choose not to develop new water supplies in order to keep people like myself from moving here from other states. To assume that those non-Californians would happily allow us to allow take their resources in spite of that is extremely misguided. It's possible there may be a collaborative West Coast solution to future water problems. But attitudes of people on all sides must change before this becomes a reality.

Kim Adamson lives in Santa Cruz. She is general manager of the Soquel Creek Water District.



## Ahead of Santa Cruz rationing vote, state allows more water to stay in reservoir

By J.M. Brown Santa Cruz Sentinel Santa Cruz Sentinel  
Posted:

SantaCruzSentinel.com

SANTA CRUZ -- To help Santa Cruz better cope with the ongoing drought, the state water board has approved an urgent request by the city to release less water from Loch Lomond Reservoir than regulators typically require for environmental reasons.

The state issued the temporary order with the requirement that Santa Cruz implement mandatory service cuts by May 1 and determined the move was exempt from California Environmental Quality Act review because of the drought emergency declared by Gov. Jerry Brown in mid-January. The city reported that fisheries regulators do not intend to oppose the order.

"It's very significant," conservation manager Toby Goddard said of the Feb. 14 decision from the State Water Resources Control Board. "Over the 2014 season, it will allow us to retain about 100 million gallons of water in the reservoir that could be budgeted for us this season."

That amount represents about 3.5 percent of the reservoir's overall capacity -- important considering the 75 million gallons that evaporate from the lake each year, largely during the summer. Fed by flows from Newell Creek, which are severely diminished due to the drought, Loch Lomond is the city's largest water storage facility and presently 65 percent full.

During normal winters, the city doesn't take water from the reservoir because it can divert water from the rain-fed San Lorenzo River, Santa Cruz's primary water source. But the city has drawn down the lake this year because the river is flowing at levels unseen since the historic 1977 drought and there are mandated cuts in coastal stream diversions to boost fish habitat.

With seasonal rainfall just 26 percent of normal during this second consecutive dry year, the City Council is poised Tuesday to declare a water shortage emergency designed to reduce overall use by up to 25 percent, or 3 million gallons per day through rationing. The city seeks a reduction of up to 10 percent in indoor use and a two-thirds cut for outdoor use.

The city will set monthly water budgets for single-family and multi-family residential accounts and significant restrictions for large irrigation accounts. Customers will not pay higher rates for water used within their allowance but will face penalty rates of up to \$50 for each unit of water -- equal to 748 gallons -- used above their limit each month.

Goddard said optimal use is 50-60 gallons per person per day for a single-family home. While that may not require a sharp cut in indoor use for some customers, the average consumption rate per household can grow substantially in the summer when residents water lawns and gardens.

Follow Sentinel reporter J.M. Brown at [Twitter.com/jmbrownreports](https://twitter.com/jmbrownreports)

## IF YOU GO

### SANTA CRUZ CITY COUNCIL

WHAT: Declaration of water shortage emergency and rationing plan

WHEN: 7 p.m. Tuesday

WHERE: Council Chamber, 809 Center St.

INFORMATION: [www.cityofsantacruz.com](http://www.cityofsantacruz.com)

### HOW TO REDUCE WATER USE

While the city of Santa Cruz recommends customers focus on reducing water used for irrigation during a drought period, the Water Department offers these tips for lower consumption inside the home to about 50 gallons per day per person:

1. Install high-efficiency toilets
2. Purchase an Energy Star clothes washer
3. Use a showerhead rated at 2 gallons per minute
4. Fix leaks

SOURCE: City of Santa Cruz