

# Responses to the 2013-2014 Grand Jury Report

Every year, when the annual Santa Cruz County Grand Jury Report is published, designated agencies are requested to respond to the findings and recommendations of the report. These responses may agree, partially disagree, or disagree with the findings, and may indicate that recommendations have already been implemented, will be in the future, or will not be implemented, or that further analysis is required.

Comments may also be added to the responses. When a response agrees with a recommendation, further comments are optional. In case of complete or partial disagreement, or in response to recommendations for action, comments should be provided as part of the response.

For each report, the collected responses are published in a separate file on the [grand jury's section of the county's public website](#). Note: The responses are provided as received, and have not been edited, except for minimal formatting to make them appear correctly on this web page.

## Report: [Desalination and Alternatives: Water for a Thirsty County](#)

This report requested responses from the following:

1. Board of Directors, Soquel Creek Water District: Findings 1-15; Recommendations 2, 3, 6
2. City of Santa Cruz Water Commission: Findings 1-6, 10-15; Recommendations 1, 3, 6
3. Santa Cruz City Council: Findings 1-6; Recommendations 1, 3-6
4. Basin Implementation Group, Purisima Groundwater Basin: Findings 14, 15; Recommendations 7, 8

### Findings

- **Finding 1: Both SCWD and SqCWD urgently need a supplemental water source.**
  - Response from Board of Directors, Soquel Water District: **Agree**
  - Response from City of Santa Cruz County Water Commission: **See response submitted by Santa Cruz City Council.**
  - Response from Santa Cruz City Council (Martin Bernal): **Partially Disagree**

The City of Santa Cruz requires a sustainable and reliable water system to support current and future needs, which may include a supplemental source along with other strategies.

- **Finding 2: The longer SqCWD and SCWD wait to secure a viable alternative to the overdraft problem, the greater the danger of degradation and possible permanent loss of aquifers.**

- Response from Board of Directors, Soquel Water District: **Agree**
- Response from City of Santa Cruz County Water Commission: **See response submitted by Santa Cruz City Council.**
- Response from Santa Cruz City Council (Martin Bernal): **Agree**

The Santa Cruz water supply consists of 95% surface water and 5% groundwater. Although Santa Cruz plays a smaller role in addressing the state of the aquifer than those utilities that rely strictly upon groundwater, as responsible resource managers, the aquifer's unsustainable condition is a concern to us.

- **Finding 3: The decision by the City of Santa Cruz to suspend participation in the scwd<sup>2</sup> desalination project forced SqCWD to restart the planning process without a regional partner.**

- Response from Board of Directors, Soquel Water District: **Agree**
- Response from City of Santa Cruz County Water Commission: **See response submitted by Santa Cruz City Council.**
- Response from Santa Cruz City Council (Martin Bernal): **Disagree**

Any partnership must meet the needs of both parties throughout the process. Issues raised in the City of Santa Cruz needed to be addressed and required the City to make a decision about how to proceed to best meet the needs of its citizens and the City's decision makers. The decision to suspend the decision process on desalination was not a decision to abandon the partnership. It was a decision to engage Santa Cruz citizens in reviewing alternative approaches, including desalination, with a goal of building a community consensus around a strategy for improving the reliability of Santa Cruz's water system.

- **Finding 4: The City of Santa Cruz did not adequately communicate the urgent need for a supplemental water source to its ratepayers.**

- Response from Board of Directors, Soquel Water District: **Partially Disagree**

While we agree that the City did not do an adequate job of communicating need, the City and the District tried to communicate the need for the desal

project in several public meetings, published fact sheets, maintained a website, hired outreach consultants and responded to inquiries about the project. However, some ratepayers did not agree that a supplemental water source is the only solution to weathering a drought. It is likely that an assessment of the ratepayer's understanding of the water supply problem and possible solutions (through polling) would have been helpful in determining how many felt this way and designing and carrying out an education effort.

- Response from City of Santa Cruz County Water Commission: **See response submitted by Santa Cruz City Council.**
- Response from Santa Cruz City Council (Martin Bernal): **Disagree**

Through over a decade of water supply planning and project identification and evaluation efforts, the City of Santa Cruz has worked to engage citizen interests in water supply reliability issues. The Santa Cruz Water Department and its customers have invested significant effort into water use efficiency and long-term conservation programs over the last few years that has resulted in a substantial reduction in per capita water demand. This has occurred, in part, due to the community's awareness of water supply reliability issues in the City. Finally, the recently convened Water Supply Advisory Committee has been specifically tasked with building a citizen-based consensus on strategies and approaches to improve water supply reliability. The Water Supply Advisory Committee has agreed to an open public process for considering a broad range of options for achieving this outcome.

- **Finding 5: The scwd<sup>2</sup> desalination plant is the only available single alternative that can address in a timely manner all of the supplemental water needs of SCWD and SqCWD, while at the same time being immune to climate change.**

- Response from Board of Directors, Soquel Water District: **Partially Disagree**

Due to the City's decision to stop progressing with the public environmental review process for the joint desalination project and the current lengthy public advisory committee process, it is unlikely that any project with the City could proceed in a timely manner. The planning for the SCWD<sup>2</sup> project is farther along than alternatives that are now being reviewed, but due to the city's lengthy public advisory process it is hard to know which alternative would be more timely.

- Response from City of Santa Cruz County Water Commission: **See response submitted by Santa Cruz City Council.**

- Response from Santa Cruz City Council (Martin Bernal): **Disagree**

In just one example of an alternative, new proposed State regulations that have been in development for some time, make the potential development of recycled water an option with a substantially shorter time horizon than was the case even a year ago. The current drought is further accelerating this trend making timely solutions to the potable water shortage, using existing technology, a feasible alternative to desalination.

- **Finding 6: The draft EIR must be finalized before the environmental studies and alternative projects included in it can be implemented.**

- Response from Board of Directors, Soquel Water District: **Partially Disagree**

Some studies in the current EIR could be used even if an identified alternative project is selected. It may require some additional information either amending the EIR or tiered on top of it. An entire new EIR would not be necessary for any of the alternative projects if the current EIR is adopted. In the absence of adoption, many of the scientific studies can be repurposed for a new EIR.

- Response from City of Santa Cruz County Water Commission: **See response submitted by Santa Cruz City Council.**
- Response from Santa Cruz City Council (Martin Bernal): **Disagree**

The draft EIR was prepared to identify the potential environmental impacts of the Soquel Creek Water District/Santa Cruz Water Department Regional Seawater Desalination Project. The draft EIR also analyzes mitigation measures and alternatives to the project that could lessen any potential environmental impacts identified.

A CEQA process would need to be completed prior to any approval by the City Council of any water supply project or program. Should the City choose in the future to pursue the Soquel Creek Water District/Santa Cruz Water Department Regional Seawater Desalination Project, then a final EIR would need to be prepared and approved before the project could be considered for approval.

The draft EIR for the Regional Seawater Desalination Project also contains environmental studies and information that could potentially be used to complete the CEQA process for other water supply options as well. The exact nature of the required CEQA process and what specific documents would be needed greatly depends on the project(s) that the City Council chooses to pursue. As previously stated, the City is currently in the process of considering several water

supply options and has formed a Water Supply Advisory Committee to explore the issue.

- **Finding 7: DeepWater and District-only desalination projects will face many obstacles, including completion of EIRs and securing local approval.**

- Response from Board of Directors, Soquel Water District: **Agree**

- **Finding 8: The private company Central Coast Regional Water Project will have inordinate control over the water rates of the DeepWater Desalination project since it will control the intake pipe.**

- Response from Board of Directors, Soquel Water District: **Partially Disagree**

The DeepWater Desalination project is structured so a group of government agencies partner to fund, build and own the desalination plant. Rates would be based on their representative share of the capital and operational expenses. The ownership of the intake and outfall is purposely left out of the cost per acre foot that DeepWater Desalination has projected in order to keep it low. But since without an intake or outfall, there is no functional desalination plant, the joint owners would have to assure contractual means to guarantee control should something happen to the owner infrastructure, as well as plan for the financial impact of a purchase.

- **Finding 9: Agencies that wait to buy into the DeepWater plant may be excluded because the limited amount of water produced may already be allocated.**

- Response from Board of Directors, Soquel Water District: **Agree**

- **Finding 10: State water rights evaluations will delay the prospective start date of the Regional Water Transfer Project.**

- Response from Board of Directors, Soquel Water District: **Agree**

- Response from City of Santa Cruz County Water Commission (Martin Bernal): **Agree**

Response submitted by Santa Cruz City Council.

- **Finding 11: Without modification, the SCWD Tait Street treatment facility is not large enough to accommodate the needs of the Regional Water Transfer Project.**

- Response from Board of Directors, Soquel Water District: **Agree**

Several different scenarios for water transfers have been presented. Transfers can be accomplished with no plant upgrades. Those transfers would provide 120 acre-feet per year which is approximately 8% of the District's need. Much less than the full amount could be returned to the city in times of drought, otherwise there would be no net improvement in the basin.

- Response from City of Santa Cruz County Water Commission (Martin Bernal): **Disagree**

Response submitted by Santa Cruz City Council.

The treatment plant referred to in this finding is not at the City's Tait Street facilities. Rather, the City's only surface water treatment plant is located on Graham Hill Road and is called the Graham Hill Water Treatment Plant (GHWTP).

Discussions to date on the concept of a regional water transfer project are not limited by the size (flow capacity) of the GHWTP, but by the plant's ability to process high or very high turbidity water and dispose of solids produced in the processing high or very high turbidity water. To get the most potential supply out of a regional water transfer project, water with higher turbidities must be regularly treated at the GHWTP. To accomplish this, upgrades to the GHWTP would be needed to deal with solids, higher color water, and water with higher levels of total organic carbon.

- **Finding 12: Officials in SCWD and SqCWD have not given sufficient consideration to a regional recycling plant.**

- Response from Board of Directors, Soquel Water District: **Partially Disagree**

Initially, use of recycled water for groundwater injection was not practical, but with recent changes in California Department of Public Health standards for transit time to the nearest drinking water wells, it may be more feasible. A regional recycling project was one of the first projects to be studied by the District, following the City's withdrawal of support for the scwd<sup>2</sup> project. It was chosen as a priority project for study of supplemental supply options.

- Response from City of Santa Cruz County Water Commission (Martin Bernal): **Partially Disagree**

Response submitted by Santa Cruz City Council.

As reflected in the draft EIR for the proposed desalination project, recycled water has been actively considered as a supplemental water supply option. Unfortunately, State regulations rendered it infeasible as a significant solution.

Ongoing experience with recycled water technology and an increasing number of applications of various strategies for using recycled water have encouraged State regulators to consider and develop new proposed regulations that change this picture. Among the most critical proposed changes is halving the required transit time for recycled water from the site of the injection well to water intake well from twelve months to six months. Reducing this regulatory requirement changes the feasibility of recycled water for the region. In July, the City Council authorized the Water Department to proceed with a grant application to study regional recycled water projects, in conjunction with the Soquel Creek Water District. Further, the Water Supply Advisory Committee will review recycled water as a potential option.

- **Finding 13: A water recycling facility would allow for injection wells to either help recharge the aquifer or to build a barrier against seawater intrusion.**

- Response from Board of Directors, Soquel Water District: **Agree**
- Response from City of Santa Cruz County Water Commission (Martin Bernal): **Agree**

Response submitted by Santa Cruz City Council.

- **Finding 14: Because there is no detailed groundwater model of the Purisima basin, it is difficult to do the studies and research needed to protect the aquifer.**

- Response from Board of Directors, Soquel Water District: **Partially Disagree**

The District's hydrologists have provided estimates of accumulated basin overdraft and protective groundwater levels to prevent seawater intrusion. In order to get even more accurate information, the District is moving forward with a groundwater model. But a key unknown is the present location of the saltwater/

freshwater interface. The position of this interface, together with estimates of how quickly the interface is moving inland, set the time-frame for when seawater intrusion will impact production wells. This information along with a groundwater model would be helpful for planning but the basin can still be protected without one.

- Response from City of Santa Cruz County Water Commission (Martin Bernal): **Partially Disagree**

Response submitted by Santa Cruz City Council.

A groundwater model is certainly an asset in planning for and conducting studies related to any strategy for the use, recharge, and protection of an aquifer. However, it is certainly not a given that such a model must be in place in order to protect the Purisima basin aquifer. Even without such a model, long-term monitoring efforts, including data collection and analyses, have helped the City of Santa Cruz and the Soquel Creek Water District take steps to set and agree upon usage levels under normal and drought conditions, and plan for and construct additional wells that are designed to reduce the threat of sea water intrusion.

- Response from Basin Implementation Group, Purisima Groundwater Basin: **Partially Disagree**

According to a recent Peer Review of our hydrology, the Soquel-Aptos basin displays a weakness in correlations between pumping, water levels and water quality. Data for those variables often does not exhibit the patterns expected from the physical laws governing groundwater flow. In spite of this, the Basin Implementation Group as well as the individual Districts have funded numerous studies that help us determine what is required to protect the basin. Examples are the recharge study, study of groundwater levels to protect against seawater intrusion and the Groundwater Management Plan.

A groundwater model will provide more overall basin management information if the location of the seawater interface can also be determined. It can also provide accurate information that will be useful for possible recharge projects. While it is possible to construct a plan for restoration of the basin without a groundwater model, a model will compliment our efforts.

- **Finding 15: Private pumpers have unregulated access to water and do not contribute financially to aquifer protection efforts.**

- Response from Board of Directors, Soquel Water District: **Agree**



- Response from City of Santa Cruz County Water Commission (Martin Bernal):  
**Agree**

Response submitted by Santa Cruz City Council.

- Response from Basin Implementation Group, Purisima Groundwater Basin:  
**Agree**

## Recommendations

- **Recommendation 1: City of Santa Cruz Water Department should secure a supplemental water supply. (F1, F2)**

- Response from City of Santa Cruz County Water Commission (Martin Bernal):  
**See response submitted by Santa Cruz City Council.**
- Response from Santa Cruz City Council (Martin Bernal): **Requires further analysis**

Clearly the City of Santa Cruz is interested and heavily invested in improving the reliability of its water supply as demonstrated by, at the very least, its appointment of the Water Supply Advisory Committee to consider this matter and report its findings to the City Council. Results from the Water Supply Advisory Committee process are anticipated to be available in the spring of 2015.

- **Recommendation 2: Soquel Creek Water District should secure a supplemental water supply. (F1, F2)**

- Response from Board of Directors, Soquel Water District: **Has not been implemented but will be implemented in the future**

A supplemental supply is essential; conservation alone may not suffice to protect the aquifers, and poses a hardship and financial burden on customers. The District started the process of systematically evaluating several options for a supplemental supply right after the City halted progress on the joint desalination project. We have had public meetings with detailed information on desalination, recycled water and regional water transfers. On August 26, 2014, we used a very detailed selection criteria matrix to identify recycled water and surface water transfers for further study.

- **Recommendation 3: The City of Santa Cruz should ensure that the scwd<sup>2</sup> draft EIR be finalized by the end of calendar year 2014. (F57)**

- Response from Board of Directors, Soquel Water District: **Will not be implemented**

It is highly unlikely that the City of Santa Cruz will ensure that the scwd<sup>2</sup> draft EIR be finalized by the end of calendar year 2014. The City's new supply review committee has just started work and will likely take at least a year to complete their evaluation process.

- Response from City of Santa Cruz County Water Commission (Martin Bernal): **See response submitted by Santa Cruz City Council.**
- Response from Santa Cruz City Council (Martin Bernal): **Will not be implemented**

Completion of the draft EIR in 2014 is not feasible.

- **Recommendation 4: The City of Santa Cruz should immediately convey to its citizens the urgency of the long term regional water situation. (F14)**

- Response from Santa Cruz City Council (Martin Bernal): **Has been implemented**

- **Recommendation 5: The City of Santa Cruz should strongly consider reviving the scwd<sup>2</sup> desalination plan prior to the next available General Election. (F17)**

- Response from Santa Cruz City Council (Martin Bernal): **Will not be implemented**

The next general election is November 4, 2014. It is not feasible to place any question related to desalination on the ballot for the November 2014 election.

There may be opportunities in 2015 or beyond to collaborate with the Soquel Creek Water District or others to propose a future water supply project (potential projects include but are not limited to desalination) for consideration in a future general election.

- **Recommendation 6: City of Santa Cruz Water Department and Soquel Creek Water District should continue to pursue a regional solution such as Desalination or Regional Water Transfers with Recycling. (F713)**

- Response from Board of Directors, Soquel Water District: **Requires further analysis**

A regional project is a good option, but may or may not involve the city depending on the City's schedule and future approach to droughts. The current state of seawater intrusion makes the District's situation currently more time critical. We must move forward with finding a supplemental supply and we are unable to wait for the City's current citizen advisory group to complete its evaluation process. This will not be implemented within a six month time frame.

- Response from City of Santa Cruz County Water Commission (Martin Bernal): **See response submitted by Santa Cruz City Council.**
- Response from Santa Cruz City Council (Martin Bernal): **Requires further analysis**

Following the completion of work by the City of Santa Cruz Water Supply Advisory Committee in the spring of 2015, it may be possible to approach the Soquel Creek Water District or other regional water providers to pursue one or more regional solutions to improve water supply reliability.

- **Recommendation 7: Members of the Basin Implementation Group should complete work on a groundwater model of the Purisima basin as soon as possible. (F14)**

- Response from Basin Implementation Group, Purisima Groundwater Basin: **Has not been implemented but will be implemented in the future**

Central Water District (CWD) has modeled the portion of the basin from which they draw water, as well as the portion of the Aromas that is shared with Soquel Creek Water District (SqCWD).

SqCWD will be considering a scope of work for modeling the remaining portion of the basin at their July 15, 2014 meeting. This work is already budgeted and could be done in a manner that allows CWD's modeling work to be integrated so we will have a full picture. The District is also undertaking projects with Stanford and USGS to locate the seawater interface both onshore and offshore respectively.

The modeling effort, along with identifying the probable location of the seawater interface so it can be included, will take 1-2 years for completion.

- **Recommendation 8: The Basin Implementation Group should establish a Replenishment District for the Purisima aquifer. (F15)**

- Response from Basin Implementation Group, Purisima Groundwater Basin:  
**Requires further analysis**

The BIG already has the statutory powers to impose the powers attributed to a replenishment district within the boundaries of the BIG agencies. Currently that means they would be restricted to the jurisdictional boundaries of SqCWD and CWD.

In preparation for possible implementation, the BIG Board has extended invitations to both the City of Santa Cruz and Santa Cruz County. The Board also recently approved extending an invitation to Pajaro Valley Water Management Agency as well. This will provide representation of other major basin pumpers. The city pumps approximately 500 acre feet per year and the county permits the private wells that are drilled in the shared basin.

In addition, the BIG has partnered with the county to reach out to private well owners in hope that we can establish a shared sense of need, as well as community buy in for any replenishment activities. We would rather take the time to do so cooperatively.

## **Commendations**

- **Commendation 1: We commend SqCWD for holding board meetings at Capitola City Hall to address supplemental supply and mandatory rationing. This allows for greater public participation and awareness of the discussions via local access television and the internet.**