CITY OF SANTA CRUZ
City Hall
809 Center Street
Santa Cruz, California 95060

# WATER COMMISSION

## Regular Meeting

## February 5, 2024
**Updated February 5, 2024 – Item 2**

## 7:00 P.M. GENERAL BUSINESS AND MATTERS OF PUBLIC INTEREST, COUNCIL CHAMBERS

**Please note: As of March 1, 2023, participation in meetings for City Advisory Bodies is in-person only. Members of the public can continue to stream the audio for the meetings from the City's website, however public comment will no longer be taken virtually and those wishing to address the board must be in attendance at the location provided on the agenda.**

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 public 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 arrangements can be made. The Cal-Relay system number: 1-800-735-2922.

**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. 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.

**Agenda and Agenda Packet Materials**: The Water Commission agenda and the complete agenda packet containing public records, which are not exempt from disclosure pursuant to the California Public Records Act, are available for review on the City's website: https://www.cityofsantacruz.com/government/city-departments/water/city-water-commission and at the Water Department located at 212 Locust Street, STE A, Santa Cruz, California, during normal business hours.

**Agenda Materials Submitted after Publication of the Agenda Packet**: Pursuant to Government Code §54957.5, public records related to an open session agenda item submitted after distribution of the agenda packet are available at the same time they are distributed or made available to the legislative body on the City's website at: https://www.cityofsantacruz.com/government/city-departments/water/city-water-commission and are also available for public inspection at the Water Department, 212 Locust Street, STE A, Santa Cruz, California, during normal business hours, and at the Council meeting.

Need more information? Contact the Water Department at 831-420-5200.

## Call to Order

**Roll Call**

1. Election of Officers (Pages 1.1 – 1.3)

**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**

**Announcements**

**Consent Agenda (Pages 2.1 – 4.7) 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. Routine items that will be found on the consent agenda are City Council Items Affecting Water, Water Commission Minutes, Information Items, Documents for Future Meetings, and Items initiated by members for Future Agendas. If one of these categories is not listed on the Consent Agenda then those items are not available for action.**

2. City Council Actions Affecting the Water Department (Pages 2.1 – 2.3)

   That the Water Commission accept the City Council actions affecting the Water Department.

3. Water Commission Minutes from January 11, 2024 (Pages 3.1 – 3.8)

   That the Water Commission approve the January 11, 2024 Water Commission Minutes.

4. 1st Quarter 2024 Financial Report (Pages 4.1 – 4.7)

   That the Water Commission accept the Fiscal Year 2024 1st Quarter Unaudited Financial Report.

**Items Removed from the Consent Agenda**

**General Business (Pages 5.1 – 6.15) 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.**

5. Initial Water Supply Forecast for 2024 (Pages 5.1 – 5.20)

   That the Water Commission receive information on the initial water supply outlook for Water Year 2024.

6. Presentation of 2024 Capital Investment Projects (Pages 6.1 – 6.15)

   That the Water Commission accept the information and presentation of Fiscal Year 2024 capital investment projects.

**Subcommittee/Advisory Body Oral Reports**

7. Santa Cruz Mid-County Groundwater Agency

8. Santa Margarita Groundwater Agency

**Director's Oral Report**

**Information Items**

**Adjournment**

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WATER COMMISSION
INFORMATION REPORT

**DATE:** 01/31/2024

**AGENDA OF:** 02/05/2024

**TO:** Water Commission

**FROM:** Heidi Luckenbach, Water Director

**SUBJECT:** Election of Water Commission Officers for 2024

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**RECOMMENDATION:** That the Water Commission elects a Chair and Vice-chair for 2024.

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**BACKGROUND:** Water Commission Bylaws, Article VI – Officers and Elections provided for review.

**DISCUSSION:** None.

**FISCAL IMPACT:** None.

**PROPOSED MOTION:** Motion to elect a Chair and Vice-chair for 2024.

**ATTACHMENTS:**
1. Water Commission Bylaws, Article VI - Officers and Elections

## ARTICLE VI – OFFICERS AND ELECTIONS

### Section 1. Officers

Officers of the Advisory Body shall consist of a Chair and Vice Chair.

### Section 2. Election of Officers

As soon as is practicable following the first day of February of every year, there shall be elected from among the membership of the Advisory Body a Chair and Vice Chair.

### Section 3. Term of Office

The term of office for the Chair and Vice Chair is one calendar year. Officers may not serve in the same position for more than two consecutive years.

### Section 4. Nominations

The Chair will open the floor to nominations. Any member may nominate a candidate from the membership for the position of Chair or Vice Chair; nominations need not be seconded.

A member may withdraw his/her name if placed in nomination, announcing that, if elected, s/he would not be able to serve; but s/he shall not withdraw in favor of another member.

Once the nominations are complete, the Chair will ask for a motion to close the nominations; a second of, and vote on, the motion is required.

The Chair then declares that it has been moved and seconded that the nominations be closed, and the members proceed to the election.

### Section 5. Voting

Voting may be by voice vote or by roll call vote.

The candidate who receives a majority of the votes is then declared to be legally elected to fill the office of Chair, and will immediately chair the remainder of the meeting.

The same procedure is followed for the election of Vice Chair.

### Section 6. Vacancy of an Officer

Should a vacancy occur, for any reason, in the office of Chair or Vice Chair prior to the next annual election, a special election shall be held to fill the vacant office from among the membership. That member shall serve until a new appointment has been made.

### Section 7. Removal of Elected Officers

The Chair or Vice Chair may be removed by a majority vote of the full Advisory Body at a regularly scheduled meeting of the Advisory Body, when all appointed members are present, or at a special meeting convened for that purpose at which a quorum is present. Any officer removed ceases to hold the office once the vote has been tallied and announced. If the Chair is removed, the Vice Chair shall become the new Chair. An election for the Vice Chair shall then be agendized for the next meeting.

Section 8. Duties of the Chair

The Chair shall preside at all regular meetings and may call special meetings. The Chair shall decide upon all points of order and procedure during the meeting; his/her decision shall be final unless overruled by a vote of the Advisory Body, in compliance with Article IX, Section 2, "General Conduct of Meetings." The Chair may not make motions, but may second motions on the floor. The Chair acts as primary contact for staff and shall represent the Advisory Body before City Council whenever the Advisory Body or Council considers it necessary unless another member(s) is (are) appointed by the Advisory Body. The Chair and staff shall jointly set the meeting agenda.

Section 9. Duties of the Vice Chair

The Vice Chair shall assume all duties of the Chair in the absence or disability of the Chair.

Section 10. Duties of the Acting Chair

In case of absence of both the Chair and the Vice Chair from any meeting, an Acting Chair shall be elected from among the members present, to serve only during the absence of the Chair and Vice Chair.

## ARTICLE VII – STAFF SUPPORT

Section 1. Staff

Staff support and assistance is provided, but advisory bodies do not have supervisory authority over City employees. While they may work closely with advisory bodies, staff members remain responsible to their immediate supervisors and ultimately to the City Manager and Council.

The Director of the Water Department shall designate appropriate staff to act as staff person(s) to assist and support the Advisory Body. Staff shall attend all regular and special Advisory Body meetings. Staff shall be responsible for coordination of such reports, studies, and recommendations as are necessary to assist the Advisory Body in the conduct of its business according to City Council policy and the Brown Act. Staff may enlist the assistance of other departments as required. Staff shall be responsible for all public notification regarding all regular and special Advisory Body meetings.

Staff shall record the minutes of the meetings in accordance with these bylaws. t Staff shall supervise volunteers and interns, shall work closely with the Chair between meetings, shall make recommendations, prepare reports and proposals to the Advisory Body, may represent the Advisory Body at other meetings, presentations, and other public functions as requested, and shall perform administrative tasks.

Staff shall be responsible for the maintenance of proper records and files pertaining to Advisory Body business. Staff shall receive and record all exhibits, petitions, documents, or other materials presented to the Advisory Body in support of, or in opposition to, any question before the Advisory Body. Staff shall sign all notices prepared in connection with Advisory Body business, shall attest to all records of actions, transmittals, and referrals as may be necessary or required by law, and shall be responsible for compliance with all Brown Act postings and noticing requirements.

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WATER COMMISSION
INFORMATION REPORT

**DATE:** 01/312024

**AGENDA OF:** 02/05/2024

**TO:** Water Commission

**FROM:** Heidi Luckenbach, Water Director

**SUBJECT:** City Council Actions Affecting the Water Department

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**RECOMMENDATION:** That the Water Commission accept the City Council actions affecting the Water Department.

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**BACKGROUND/DISCUSSION:**

**January 9, 2024**

Purchase of Real Property Necessary for Brackney Landslide Area Pipeline Risk Reduction Project: Multiple Properties, Assessor's Parcel Numbers 071-081-24, 072-152-07, and 072-174-02, Owned by Lynn Weissbart, Hai & Nga Nau, and Hien Nguyen, and Nelson Chen, Respectively (WT)

Motion **carried** to:

1) Adopt **Resolution No. NS-30,267** authorizing and directing the City Manager or his designee to execute a purchase sale agreement between the City of Santa Cruz and Lynn Weissbart for the easement located in Felton, CA. near Highway 9 between Brackney Road and San Lorenzo Way for a permanent easement on APN 071-081-24 for the Brackney Landslide Area Pipeline Risk Reduction Project,

2) Adopt **Resolution No. NS-30,268** authorizing and directing the City Manager or his designee to execute a purchase sale agreement between the City of Santa Cruz and Hai & Nga Nau, and Hien Nguyen for the easement located in Felton, CA. near Highway 9 between Brackney Road and San Lorenzo Way for a permanent easement on APN 072-152-07 for the Brackney Landslide Area Pipeline Risk Reduction Project, and

3) Adopt **Resolution No. NS-30,269** authorizing and directing the City Manager or his designee to execute a purchase sale agreement between the City of Santa Cruz and Nelson Chen for the easement located in Felton, CA. near Highway 9 between Glen Arbor Road and Brackney Road

for a temporary easement on APN 072-174-02 for the Brackney Landslide Area Pipeline Risk Reduction Project.

Award of Agreement to Thatcher Company of California Inc. for Liquid Aluminum Sulfate (WT)

Motion **carried** to accept the bid of Thatcher Company of California Inc. (Salt Lake City, UT) for Liquid Aluminum Sulfate, reject all other bids, and authorize the City Manager to execute an agreement in a form approved by the City Attorney.

**January 23, 2024**

Anadromous Salmonid Habitat Conservation Plan – Adoption of a Final Mitigated Negative Declaration and a Mitigation Monitoring and Reporting Program (WT)

**Resolution No. NS-30,279 was adopted** adopting the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Anadromous Salmonid Habitat Conservation Plan.

Purchase of Real Property Necessary for Newell Creek Pipeline Replacement-Felton to Graham Hill Water Treatment Plant Project: Multiple Properties, Assessor's Parcel Numbers 066-211-09, 066-211-10, 066-212-04 Owned by Wood VMS Family Limited Partnership and DK Felton Management, LLC (WT)

Motion **carried** to:

- Adopt **Resolution No. NS-30,280** authorizing and directing the City Manager or his designee to execute a purchase sale agreement between the City of Santa Cruz and David Wood for a permanent easement on APN 066-211-09 located in Felton, CA near Graham Hill Road and Zayante Road for the Newell Creek Pipeline Replacement-Felton to Graham Hill Water Treatment Plant Project;

- Adopt **Resolution No. NS-30,281** authorizing and directing the City Manager or his designee to execute a purchase sale agreement between the City of Santa Cruz and David Wood for a permanent easement on APN 066-211-10 located in Felton, CA near Graham Hill Road and Zayante Road for the Newell Creek Pipeline Replacement-Felton to Graham Hill Water Treatment Plant Project; and

- Adopt **Resolution No. NS-30,282** authorizing and directing the City Manager or his designee to execute a purchase sale agreement between the City of Santa Cruz and David Wood for a permanent easement on APN 066-212-04 located in Felton, CA near Graham Hill Road and Zayante Road for the Newell Creek Pipeline Replacement-Felton to Graham Hill Water Treatment Plant Project.

Felton Diversion Pipeline Emergency Repair Project (e702301) – Notice of Completion (WT)

Motion **carried** to accept the work of Anderson Pacific Engineering Construction, Inc. (Santa Clara, CA) as complete per the Agreement, authorize the filing of a Notice of Completion for the

Felton Diversion Pipeline Emergency Repair Project (e702301), and authorize the Water Director to sign the Notice of Completion as the Owner's Authorized Agent.

**PROPOSED MOTION:** Accept the City Council actions affecting the Water Department.

**ATTACHMENTS:** None.

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CITY OF SANTA CRUZ
Water Department

# Water Commission
## 7:00 p.m. – January 11, 2024
## Council Chambers
## 809 Center Street, Santa Cruz

## Summary of a Water Commission Meeting

**Call to Order**: Chair Burks called the meeting to order at 7:00 PM in the Council Chambers.

**Roll Call**

**Present**: J. Burks (Chair); T. Burns; D. Engfer (Vice Chair); M. Goddard, J. Lear, and S. Ryan.

**Absent**: None

**Staff**: R. Menard, Water Director; D. Baum, Deputy Director/Chief Financial Officer; Z. Bean, Associate Planner II; C. Berry, Watershed Compliance Manager; H. Cagliero, Administrative Assistant III; C. Coburn, Deputy Director/Operations Manager; H. Luckenbach, Deputy Director/Engineering Manager; M. Kaping, Principal Management Analyst; and S. Perez, Principal Planner.

**Others**: A. Sansevero, Consultant at Dudek and C. Wade, Consultant at Dudek.

**Statements of Disqualification**: None.

**Oral Communications**:

At 7:01 p.m. Chair Burks opened Oral Communications for members of the public who wished to speak regarding items not listed on the Water Commission agenda. There were not any speakers, so Chair Burks closed Oral Communications at 7:01 p.m.

**Announcements**:

Water Director Menard announced that Vice-Chair Engfer has completed his term, and this will be his last meeting with the Water Commission. She noted that at the January 9, 2024 City Council Meeting, a proclamation was made that January 11th will be Doug Engfer Day, and presented Commissioner Engfer with a photographic memento of Loch Lomond Reservoir in recognition of his service.

At 7:03 p.m., Chair Burks announced a brief recess for refreshments in celebration of Doug Engfer's term on the Commission and the recording was paused. At 7:14 p.m., Chair Burks ended the recess, and the recording was resumed.

Chair Burks announced that this will be Water Director Menard's last meeting before her retirement and the Commission thanked her for her leadership and years of service.

**Consent Agenda:**

1. City Council Items Affecting the Water Department

2. Water Commission Minutes from November 27, 2023

3. Fiscal Year 2023 4th Quarter Unaudited Financial Report

What was the reason that the cost of electricity was under budget for Fiscal Year 2023?

- Much of the electricity cost for the Water Department is from operation of the Coast Pump Station pumps getting water to the Graham Hill Water Treatment Plant. During Fiscal Year 2023, a number the pumps were out of service due to damage from the 2023 winter storms or were in the process of being replaced. During this time, water was being fed to the plant by the Loch Lomond Reservoir instead of pumps from the San Lorenzo River, which resulted in lower electricity costs than projected in the 2023 budget. Also, for much of Fiscal Year 2023, groundwater treatment plant production was reduced.

The rate stabilization fund ended the year below target, is there a plan in place to get that fund to target?

- It is important to understand that the rate stabilization fund doesn't have a financial target that needs to be met. Rather, it has a financial goal. The way it was described in the 2016 Long-Range Financial Plan is that when the fund reached the goal of $10 million dollars there is opportunity for considering either discontinuing collecting further amounts into the fund or redeploying those resources into the Capital Investment Program (CIP) or elsewhere. The fact that this fund isn't at its goal isn't the same situation as a reserve fund that has a target that it is not meeting.

  The purpose of the rate stabilization fund is to be available to provide support for the other funds when projected revenue targets aren't met due to lower consumption, for example. The water-use reductions associated with the COVID pandemic are a great example of how the fund was used to make up for revenues not generated due to lower consumption.

Chair Burks opened public comment and there were no speakers.

Chair Burks closed public comment.

Commissioner Burns moved approval of the Consent Agenda as amended. Commissioner Ryan seconded.

VOICE VOTE: MOTION CARRIED
AYES: All
NOES: None
DISQUALIFIED: None

**Items removed from the Consent Agenda:** None.

**General Business**

4. Take Action to Support Staff's Recommendation to City Council to Adopt the Anadromous Salmonid Habitat Conservation Plan Final Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program

Water Director R. Menard introduced Z. Bean, Associate Planner II, who presented on the Anadromous Salmonid Habitat Conservation Plan (ASHCP or HCP) Final Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program.

When is action on the water rights expected from the California State Water Resources Control Board?

- The information we have on the action by the State Board on the water rights is that they are working on an order which can be issued administratively and won't require a State Board hearing and action. We don't currently have any information on a timeframe to expect that action to be finalized.

Work on the ASHCP has been ongoing since about 2001, has it always been tied to the water rights Environmental Impact Report (EIR)?

- Yes, the ASHCP has always been tied to the water rights because the water rights are the way to create the additional flexibility and extension of time on the Felton permits that allow us to be able to meet the flow agreements that we have made.

Have our partners at National Oceanic and Atmospheric Administration (NOAA) and California Department of Fish and Wildlife (CDFW) been asked to petition to the California State Water Resources Control Board on our behalf to help the action on the water rights to be completed sooner?

- No, we have not asked either of those agencies directly to assist in this way.

Why are we moving forward with ASHCP at this time when the action on the water rights has not been completed yet?

- We are holding off on overall project approval but are moving forward with the California Environmental Quality Act (CEQA) compliance portion of the ASHCP at this time so that the CDFW can start the incidental take permit (ITP) process. The ITP application requires another waiting period while they are processed, so it is better to apply for those permits now and have them approved and available to sign if the action on the water rights is favorable than to wait and add another delay down the road when the action on the water rights is completed.

  We will bring the HCP back to City Council for final approval once the State and Federal ITPs are ready to sign and the water rights are approved.

Would it be helpful to include additional commentary in the staff report when this item goes to City Council to provide context and help them understand the interrelationships between the water rights and ASHCP?

- This is a consent item on the agenda for City Council and this item has already been submitted but we could ask about adding additional information on that for the Council members.

It was mentioned that many other projects are waiting for approval with the State Water Resources Control Board. Are there other municipalities or water districts who are experiencing this situation?

- Yes, other municipalities and water districts are experiencing similar delays, including some areas in the Monterey Peninsula. For almost two years, the State of California has had severe droughts followed by severe floods and the California State Water Resources Control Board is having to juggle priorities to prioritize crisis response, which, coupled with staffing shortages, is causing delays and makes it difficult for our department to move forward with regulatory certainty.

What are some of the relationship implications regarding members of the public whose interactions with the watershed could affect our ability to comply with the ASHCP?

- Not all of the relationship implications are clear at this time, but one aspect that will change is that when an upstream water purveyor has their own project with a CEQA review, the CEQA document for their project will need to acknowledge the City of Santa Cruz (City)'s project and indicated whether their proposed project conflicts with an existing HCP. This will support watershed protection upstream and present more opportunities for watershed improvement, including collaborations with other parties with similar interests.

When you developed the mitigation measures listed in the ASHCP, how did you determine the amounts and the time period required?

- That information and related details came from the studies that were done for the HCP. Those numbers were generated from best-available data as well as from estimates given by operations staff who regularly perform that work.

Has an increase in salmonid abundance been observed from any mitigation or restoration efforts that fed into the ASCHP?

- Yes, we began seeing wild coho reproduction in Laguna Creek during the drought and they have been observed ever since. They have also been observed in Majors Creek.

How can the City work with Native Californians and tribal networks to find synergy between the mitigation actions outlined in the ASHCP and their cultural practices?

- The records for our local indigenous people are pretty sparse regarding the cultural practices around fisheries in this area. There are certainly regulatory mechanisms through CEQA regarding the finding of artifacts and remains, but how we incorporate indigenous practices into our restoration work is an open question. We are primarily working with the Resource Conservation District (RCD) on this for the restoration work and hopefully the tribes will be engaged in this process. We have worked with local tribal representatives in the past when doing projects in areas with known resources and will continue to do so on future projects.

Chair Burks opened public comment and there were no speakers.

Chair Burks closed public comment.

Vice Chair Engfer moved approval of this item. Chair Burks seconded.

VOICE VOTE: MOTION CARRIED

AYES: All
NOES: None
DISQUALIFIED: None

5. Water Supply Augmentation Implementation Plan (WSAIP): Summary of the November Water Commission Deep Dive Discussion Including Modified Presentation Slides, General Response to Comments and Questions, Additional Findings, and Calendar Year 2024 Work Plan

Water Director R. Menard introduced H. Luckenbach, Deputy Water Director/Engineering Manager, who provided updates on the WSAIP: Summary of the November Water Commission Deep Dive Discussion Including Modified Presentation Slides, General Response to Comments and Questions, Additional Findings, and Calendar Year 2024 Work Plan.

It was mentioned that, once constructed, there is an opportunity to move up to one million gallons per day (mgd) back and forth between Scotts Valley using Intertie 1, but there are some constraints due to how our system is currently operated and the availability of water from Scotts Valley. Is there data available on the cost estimates associated with modifications to our system to increase the amount from 0.4 mgd up to closer to one mgd?

The intertie will connect to the City's Pasatiempo pressure zone, which has a limited demand of approximately 0.4 mgd; this zone would need to be expanded to be able to use more than this daily volume. In Scotts Valley, additional well capacity is needed to be able to reliably transfer more than 0.4mgd. Both issues are being evaluated at this time.

What is the reason the limit of roughly one billion gallons of water per year that can be drawn from Loch Lomond Reservoir is static and not changeable?

- The 1.042 billion gallons is the licensed water right amount set in 1971 and it is not a changeable amount. To clarify, this volume is similar to the billion gallons of carryover or reserve storage we typically aim to leave in the lake, but that carry-over storage volume is not the same as the licensed water right volume. The carryover storage is potentially subject to being revised if/when additional supply is online because it will be less risky to draw down the reservoir when alternate supply is available as well as Loch Lomond supply.

Is San Lorenzo Valley's contractual right to 100 million gallons per year from Loch Lomond included within our limit of 1.042 billion gallons per year from the lake or is in in addition to our water rights allotment?

- San Lorenzo Valley's contractual right to 100 million gallons per year is included within our total water rights license volume of 1.042 billion gallons per year.

Is it worth the potential confusion it may create when we begin public outreach on water supply augmentation to include the information regarding the multiple climate models, and are the differences between the various models large enough to be of note?

- Every local water agency using models for supply and sustainability planning used different approaches to develop the climate scenario they use in their work. Additionally, it isn't a trivial effort to modify groundwater models to use different climate model data, so it is important to ensure that using different climate assumptions results in **materially** different outcomes. So far, we're not seeing that. The work of creating the inputs to use in groundwater models that are different from the models used in the Groundwater Sustainability Plans also requires significant effort.

From some recent work that's been done using realization 1270, we see that the worst case is the five-year drought for this scenario is actually worse and results in larger deficits, than those resulting when the Climate Catalog scenario is used in the same analysis. Interestingly, however, the difference is limited to just that one five-year window. Comparing the remaining years from both scenarios, they aren't materially different.

As we establish our goals and the projects to meet them, it is important that we recognize that having the robust series of assessments we used in the vulnerability assessment provides us with a really important tool and our ability to reuse that tool and update that information is extremely important because it helps us to understand the sensitivity of results based on different inputs.

How do the parameters that characterize the realization of model 1270 that was used interact with the timescale of the time period we are modeling? For example, does the model take on the perturbation of 2º increase in temperature, no change in precipitation, and 10% increase in variability within the first year, or is it a total change over the time period modeled?

- This question seems to be about how the precipitation and temperature determined by the weather generator portion of the model interact with the water balance model. The flow sets were developed by Dr. Shawn Chartrand based on his long history of working with and developing projections for stream flows in the City's source waters.

  We can look at versions of 1270 with no temperature increase or no precipitation increase, 1º temperature increase, no increase in mean precipitation, and compare these with the model we used that has a 2º increase in temperature and no change in mean precipitation, all with and the 10% increase in variability, and see how the hydrologies for the three scenarios differ, if at all. (Note: In the versions with 1º and 2º increase in temperature, the 5-year, worst-case scenarios are virtually identical – a dry year followed by 4 critically dry years at the same level of intensity. The version with no temperature change has a dry, a critically dry, a dry, and then 2 critically dry years during the identified worst 5-year sequence. These results indicate that the significant change in the 5-year, worst-case sequence occurs between no temperature increase and 1º of temperature increase. While there will be uncertainty about the degree of temperature increases, increasing temperatures seem to be the most certain of the parameters that have been used in modeling.)

Have staff had the opportunity to digest the new direct potable reuse (DPR) regulations and assess how they may impact the work being done for the WSAIP?

- Staff are in the process of reviewing the new DPR regulations and how they may impact the work being done for the WSAIP together with the new guidance on permitting for desalination, and there will be an item on the agenda for the March Water Commission meeting to discuss this topic. The new DPR regulations have certainly changed how we are thinking about using the wastewater available to us.

What is the feeling in the department about what has been reviewed in the new regulations for DPR so far?

- While these regulations create new opportunities for the use of recycled water, the regulations are really strict as this is venturing into a very different water source. DPR

would require a very extensive treatment, monitoring, and reporting project which will come at a cost to be compared with other resources. But again, it is an opportunity that we didn't have last year.

Are the new regulations in California for DPR unique to our state or are they similar to regulations seen elsewhere in the country or world?

- The State of California specifically, and the United States generally, tend to be very strict and conservative with respect to public health and the protection of the environment, which can cause the release of regulations for new technology to lag behind and also be potentially more restrictive than other places. The treatment technology is very similar across the board, but source water protection is approached very differently by different nations.

Has the Community Relations Specialist vacancy been filled, and will that person be introduced to the Water Commission?

- Yes, that vacancy has been filled. The new Community Relations Specialist, Amanda Rodriguez, works under the communications team in the City Manager's Office but has been assigned specifically to our department. She can definitely be introduced to the Commission at a future meeting.

Chair Burks opened public comment and there were no speakers.

Chair Burks closed public comment.

No motion was required for this item as it was informational only.

**Subcommittee/Advisory Body Oral Reports**

6. Santa Cruz Mid-County Groundwater Agency (MGA)

The MGA met on December 15th and the agenda included a presentation with updates on the periodic review of the Groundwater Sustainability Plan (GSP) that is due to the State in January of 2025.

The mayoral appointments have been made for the City representatives to the MGA; David Baskin and Mayor Keeley have been reappointed and Doug Engfer has been reappointed as the alternate.

7. Santa Margarita Groundwater Agency (SMGWA)

The SMGWA has not met since their last meeting on October 26th, 2023, and is scheduled to meet next on February 29th, 2024.

The mayoral appointments for the City representatives to the SMGWA; Doug Engfer has been reappointed and David Baskin has been reappointed to be the alternate for the SMGWA.

**Director's Oral Report:**

Water Director Menard announced that there will be a ceremony for her retirement on February 1, 2024, at 2:30 pm at the Civic Auditorium.

**Information Items**:

Information items included in the agenda packet were not discussed.

**Adjournment:** The meeting was adjourned at 8:40 PM.

WATER COMMISSION
INFORMATION REPORT

**DATE:** 02/01/2024

**AGENDA OF:** 2/5/2024

**TO:** Water Commission

**FROM:** David Baum, Chief Financial Officer, and
Malissa Kaping, Principal Management Analyst

**SUBJECT:** Fiscal Year 2024 1st Quarter Unaudited Financial Report

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**RECOMMENDATION:** That the Water Commission accept the Fiscal Year 2024 1st Quarter Unaudited Financial Report.

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**BACKGROUND**: On June 6, 2016, the Water Commission approved the Water Department's Long-Range Financial Plan (LRFP) which created a framework to ensure financial stability and maintain the credit rating needed to debt finance major capital investments planned for the utility. The Water Commission reviewed an updated LRFP during the summer of 2021 and recommended to the City Council that it approve the plan at their meeting on August 23, 2021. The updated LRFP maintains the 2016 recommended financial targets for debt service coverage ratio (1.5x), a combined 180-days cash on hand, $3 million in an Emergency Reserve, and a $10 million Rate Stabilization Reserve.

**DISCUSSION:** The attached financial report presents the Water Department's unaudited fiscal outlook through the first quarter of Fiscal Year (FY) 2024 and is a snapshot of the transactions posted during the time period of July 1, 2023, through September 30, 2023. Page 1 of the attached Financial Report is focused on the Operating budget and Page 2 reflects the Capital budget. Noteworthy items are discussed on the following pages.

Operating Revenues

Water sales are recovering from the impacts of the COVID-19 pandemic and recent drought. They are 10% below budgeted amounts for FY 2024 but 15% higher than the same quarter last year. This increase corresponds to the 16.4% increase in water rates at the start of the quarter. Residential consumption is up 9%, and overall consumption is up 4%. The budgeted revenue for FY 2024 will be revised downward when the next budget proposal is released in May 2024.

Operating Expenses

Operating expenses are trending 14% below the Adopted Budget. Personnel costs are down 23%, primarily due to the 17 vacant positions during the first quarter. The vacancy rate is approximately 14% of budgeted positions; the budgeted cost for personnel assumes a 10% vacancy rate. Approximately $572,000 in personnel expenses are charged to capital projects; the budgeted amount is $249,000, which also drove down the operating expenditures. Staff are encouraged to track hours spent on project-related work in order to accurately reflect the true cost of constructing capital projects in accordance with generally accepted accounting principles.

Significant operating expenses which trended lower than the budget during this quarter are as follows:

- Maintenance for water systems was under budget by $319,000. Funding in this account is primarily spent on water quality monitoring and regulatory compliance, including fisheries biology support, juvenile salmonid and stream habitat support, and the Anadromous Salmonid Habitat Conservation Plan implementation. The total budget of $1,606,000 is expected to be spent during this fiscal year.

- Other professional services were $384,000 below budget. This category includes the Badger meter-reading software licensing cost, which is paid monthly and is the largest encumbrance for the year at $196,800. Other expenses in this category pertain to outside laboratory water monitoring, water resource management, landscape management, communications, and graphics. The largest expense paid in this category last quarter totaled $45,000 and was for a job classification study for City of Santa Cruz Water Department (SCWD)'s customer service team.

- Electricity costs for the quarter were $395,000, which is in-line with the Adopted Budget.

These highlighted operating expenses are paid from the Services, Supplies and Other line items.

Capital Investment Program (CIP) Highlights

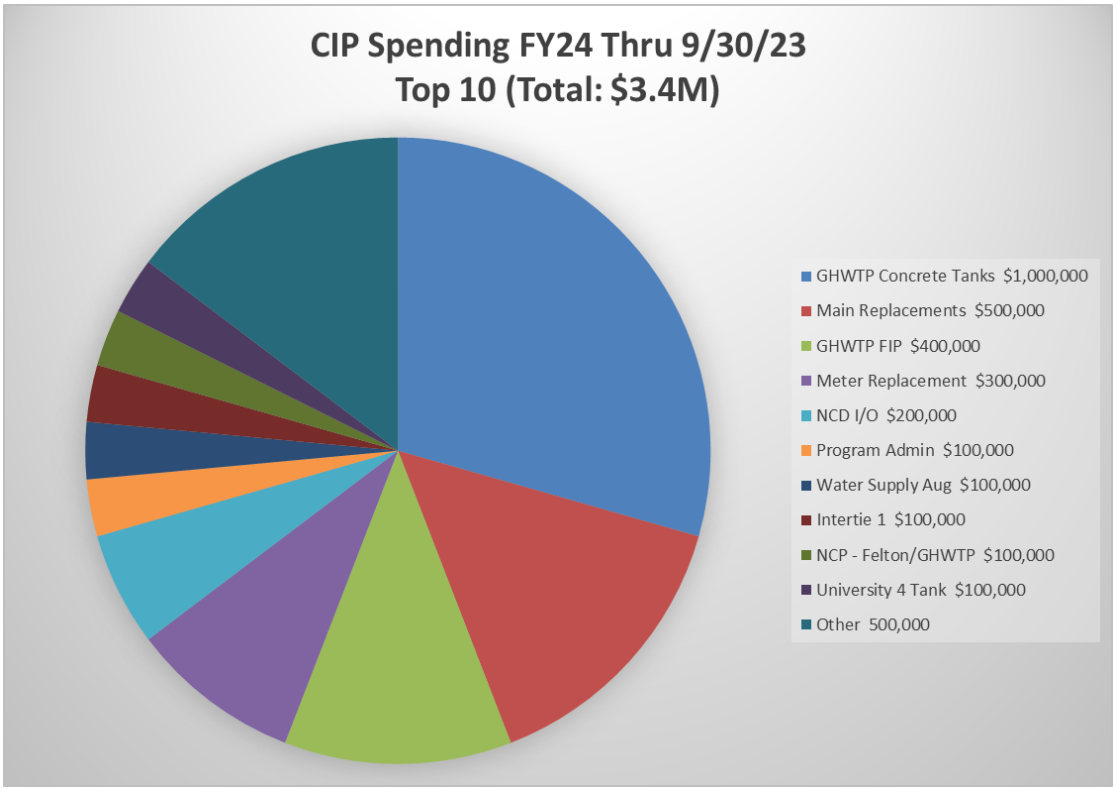
Capital Investment expenses during the first quarter of FY 2024 were nearly $3,400,000, which is significantly less than the $10,000,000 spent in the first quarter of FY 2023. The drop in expenses was primarily due to reaching substantial completion of Phase 1 of both the Newell Creek Dam Inlet/Outlet Replacement Project (NCD I/O) and the Meter Replacement Project. The current NCD I/O (Phase 2) work in progress is being billed as time and materials and those invoices take longer to verify and approve for payment. In the first quarter of FY 2023, the NCD I/O Project had $4,800,000 in bid work completed and in the first quarter of FY 2024, only $200,000 of bid work was paid. The Meter Replacement Project is also substantially complete with only $300,000 spent during the first quarter of FY 2024 compared to the $2,300,000 spent during the same period of FY 2023 when parts where being ordered for the installation kick-off in August of 2022. Despite the relatively low expenditures in the first quarter, we are expecting

an acceleration of spending through the rest of the fiscal year for a projected capital investment of $48.6 million.

The Graham Hill Water Treatment Plant (GHWTP) Concrete Tanks project saw a drop of $800,000 in spending during the first quarter of FY 2024 when compared to the same period in the previous fiscal year. The first quarter of last fiscal year included large, expensive equipment deliveries and large concrete pours while the current work in process includes startup, testing, and commissioning testing with no new physical construction.

Spending will ramp up into the second quarter of FY 2024. During the second quarter of FY 2024, the $3,000,000 Felton Diversion Pipeline Emergency Repair was completed, Distribution completed a main replacement, and a few NCD I/O invoices are anticipated for payment projected to total more than $500,000. Second quarter spending through mid-December was already over $8,000,000.

The figure below shows the top ten expense totals by project during the first quarter:




The current FY 2024 amended CIP budget is $82,278,239. When approved in June 2023, City Council also approved preliminary numbers for FY 2025-2028 in the amount of $340,924,832.

The current estimate for FY 2024 actuals is nearly $51 million leaving over $31 million in carry-forward appropriations which will reduce the FY 2025 recommended budget which is currently being drafted.

The following chart shows the amount approved by City Council to date:

| Prior Year Actuals (Active Projects) | FY24 Adopted Budget | FY24 Adjustments / Carry-forward | FY24 Amended Budget | FY24 Actuals as of 9/30/23 | FY25-28 Council Approved |
|---|---|---|---|---|---|
| $ 184,001,352 | $ 31,910,865 | $ 50,367,374 | $ 82,278,239 | $ 3,398,697 | $ 340,924,832 |

The Total Project Cost Estimate (PCE) used in the quarterly reports is updated in the first quarter report using October estimates. Some notable PCE changes include the following:

| **Project** | **Amount of Change** | **Reason** |
|---|---|---|
| Water Supply Augmentation Strategy – Multiple Projects | $64,000,000 | Aquifer Storage and Recovery and Water Supply Augmentation project cost estimates revised to recognize current understanding and definition of possible projects. |
| GHWTP Improvements | $9,000,000 | Increased construction costs, increased risk contingencies due to uncertain bid conditions, and increased construction related services. |
| Newell Creek Pipeline Relpacement Project (NCP) – Felton/GHWTP | $8,800,000 | Increased construction costs, increased risk contingencies due to uncertain bid conditions, and added inspections for drilling operations and cathodic protection system. |
| NCP – Felton/Loch Lomond | $8,100,000 | Budget planning period increased by one year and inflation was recalculated. |
| Facility & Infrastructure Improvements | $3,600,000 | This project is for small-scale capital work that is not included in the scope of larger projects. Typically, these projects are led by Water Production. The planning period was extended by 6 years with $500K /year plus escalation. |

| | | |
|---|---|---|
| Felton Diversion Pipeline Emergency Repair | $3,400,000 | Added new project. |
| Water Program Administration | ($3,400,000) | Reduced various contracted tasks. |
| NCD I/O Replacement | ($4,200,000) | Mitigation projects cost savings recognized and contingency reduced after tunnel construction. |
| Beltz Water Treatment Plant Filter Rehab, NCP-Planning, NCP-Grant Managementt, North Coast Pipeline-Planning, GHWTP Flocculator & Tube Settlers, GHWTP Chlorination Station Improvements | (7,100,000) | Completed and closed projects removed from the report and no longer included in active project cost estimate totals. |
| Main Replacements | ($8,200,000) | Reduced budget for Engineering-led main replacements that are contracted out. |
| Management Reserve | ($22,100,000) | Reserve used to recognize inflation in various projects and to provide temporary funding to the Felton Diversion Pipeline Emergency Repair Project. |

As mentioned above, Management Reserve was reduced and the escalation factor for future work was increased from 3.3% to 4.0% across all projects. In addition, $3.1 million was moved from the reserve to the Felton Diversion Pipeline Emergency Repair which will receive funding from Federal Emergency Management Agency (FEMA) for damage from the 2023 winter storms. FEMA funding is reimbursement-based so the funds will be returned to the reserve once funds are received within the next year or two.

**FISCAL IMPACT:** None.

**PROPOSED MOTION:** Motion to accept the FY 2024 1st Quarter Financial Report.

**ATTACHMENTS:**
1. Santa Cruz Water Department Financial Report

# SANTA CRUZ WATER DEPARTMENT FINANCIAL REPORT

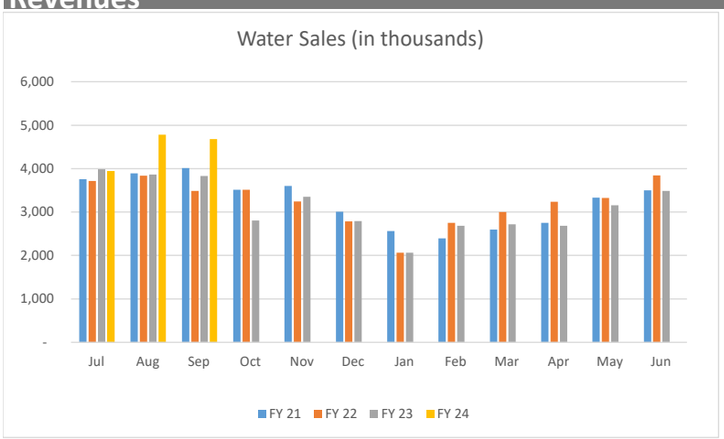
Fiscal Year 2023-24 through September 30, 2023

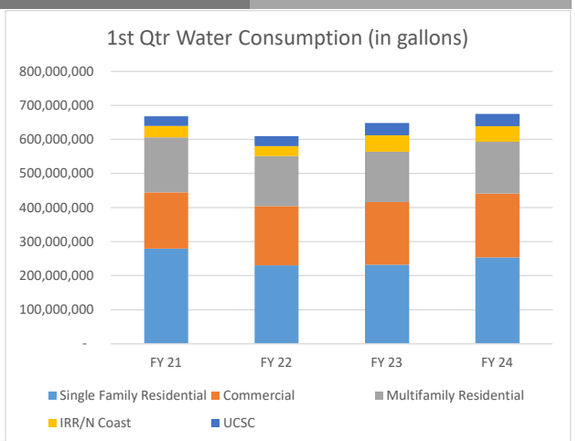
(Unaudited)

## Financial Summary

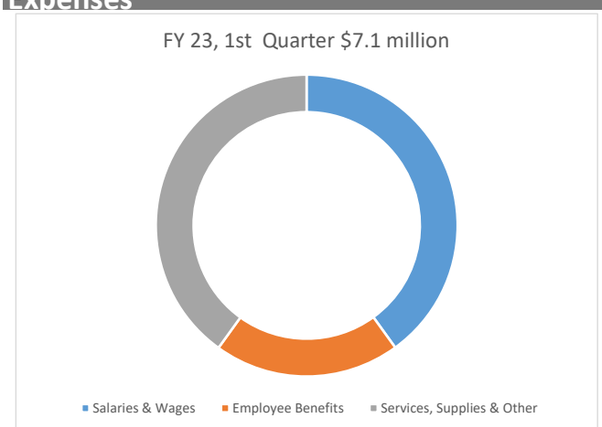
| | FY 2024 Adjusted Budget | YTD Budget | Actual | Actual vs. YTD Budget Variance $ +/(-) | Actual vs. YTD Budget Variance % +/(-) |
|---|---|---|---|---|---|
| Operating Revenues | | | | | |
| Water Sales | 47,691,935 | 11,922,984 | 10,767,662 | (1,155,321) | (10%) |
| Other Charges for Services | 2,615,686 | 653,922 | 66,250 | (587,672) | (90%) |
| Other Revenues | 496,635 | 124,159 | 164,674 | 40,515 | 33% |
| Grants | 19,123,995 | 4,780,999 | - | (4,780,999) | (100%) |
| Investment Earnings | 226,899 | 56,725 | 335,620 | 278,895 | 492% |
| Total Operating Revenues | 70,155,150 | 17,538,788 | 11,334,206 | (6,204,581) | (35%) |
| | | | | | |
| Operating Expenses | | | | | |
| Salaries & Wages | 10,796,171 | 2,699,043 | 1,915,892 | (783,151) | (29%) |
| Employee Benefits | 7,188,159 | 1,797,040 | 1,562,265 | (234,775) | (13%) |
| Services, Supplies & Other | 18,615,343 | 4,653,836 | 4,034,080 | (619,755) | (13%) |
| Capital Outlay | 576,816 | 144,204 | 58,636 | (85,568) | (59%) |
| Debt Service - Principal & Interest | 5,875,838 | 2,860,166 | 2,860,166 | - | 0% |
| Total Operating Expenses | 43,052,326 | 12,154,288 | 10,431,038 | (1,723,250) | (14%) |
| | | | | | |
| Net Operating Revenue (Loss) | 27,102,824 | 5,384,500 | 903,168 | (4,481,331) | (83%) |
| | | | | | |
| Debt Service Coverage (Target >= 1.50x) | 5.61x | 2.88x | 1.32x | | |

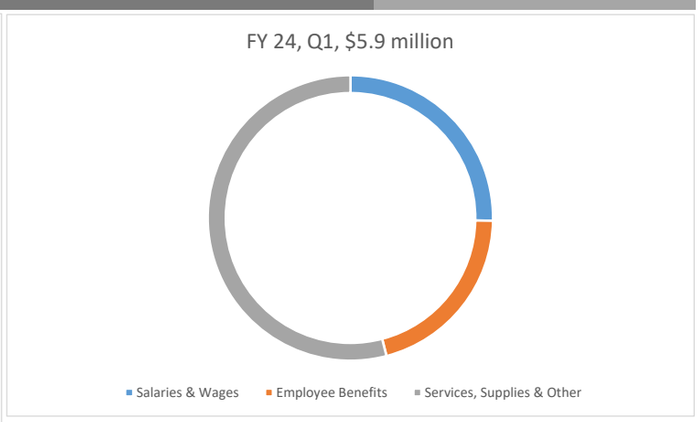
## Revenues




## Expenses




## Cash

| Fund Balances | YTD Balance | Year End Target Balance |
|---|---|---|
| 711 - Enterprise Operations | 13,317,082 | 9,166,805 |
| 713 - Rate Stabilization | 5,500,162 | 10,000,000 |
| 715 - System Development Charges | 6,757,537 | N/A |
| 716 - 90 Day Operating Reserve | 8,968,008 | 9,166,805 |
| 717 - Emergency Reserve | 3,068,949 | 3,000,000 |
| 718 - Mount Hermon June Beetle Endowment | 146,151 | 144,000 |
| 719 - Equipment Replacement | 598,679 | 700,000 |
| Total-all funds | 38,356,567 | |
| | | |
| Days' Cash (Includes only Funds 711 & 716) | 219 | 180 |

| CIP Summary: Fiscal Year 2024, 1st Quarter<br>Project Titles | Prior Year Actuals | FY24 Actuals thru 9/30/23 | Total Project Cost Estimate [1]<br>*(escalated dollars)* | Project Schedule |
|---|---|---|---|---|
| **WATER SUPPLY RESILIENCY & CLIMATE ADAPTATION PROJECTS** | | | | |
| ***Water Supply Augmentation Strategy*** | | | | |
| **Beltz Wellfield Aquifer Storage and Recovery** | | | | |
| ASR Planning | 3,468,584 | 43,201 | 5,997,248 | 2019-2024 |
| ASR Mid County Existing Infrastructure | 727,865 | 37,474 | 11,239,422 | 2020-2031 |
| ASR Mid County New Wells | - | - | 700,610 | 2021-2027 |
| **Santa Margarita Aquifer Storage and Recovery and In Lieu Water Transfers and Exchanges** | | | | |
| ASR Santa Margarita Groundwater | 23,382 | - | 343,243 | 2020-2027 |
| ASR New Pipelines | - | - | - | 2022-2027 |
| In Lieu Transfers and Exchanges | - | - | - | |
| **Studies, Recycled Water, Climate Change, Aquifer Storage and Recovery** | | | | |
| Water Supply Augmentation | 3,019,306 | 116,381 | 176,132,721 | 2019-2033 |
| Recycled Water Feasibility Study | 915,675 | - | 2,564,411 | 2018-2023 |
| ***Subtotal Water Supply Augmentation Strategy*** | **8,154,812** | **197,056** | **196,977,655** | |
| ***Subtotal Water Supply Resiliency and Climate Adaptation Projects*** | **8,154,812** | **197,056** | **196,977,655** | |
| **INFRASTRUCTURE RESILIENCY AND CLIMATE ADAPTATION** | | | | |
| ***Raw Water Storage Projects*** | | | | |
| NCD I/O Replacement Project | 90,947,902 | 189,701 | 101,190,939 | 2018-2024 |
| Aerators at Loch Lomond | 646,897 | 53,522 | 712,897 | |
| ***Subtotal Raw Water Storage Projects*** | **91,594,799** | **243,223** | **101,903,836** | |
| ***Raw Water Diversion and Groundwater System Projects*** | | | | |
| Laguna Creek Diversion Retrofit | 2,970,354 | 4,121 | 2,953,021 | 2018-2023 |
| Tait Diversion Retrofit | 575,373 | 4,696 | 10,294,485 | 2018-2030 |
| Coast Pump Station Rehab/Replacement | - | - | 11,894,222 | 2029-2033 |
| Felton Diversion Pump Station Improvements | 353,539 | - | 4,260,054 | 2020-2029 |
| Beltz 12 Ammonia Removal | 757,370 | 43,600 | 2,528,353 | 2021-2025 |
| Beltz WTP Upgrades | 304,628 | 57,541 | 18,281,125 | 2022-2028 |
| ***Subtotal Raw Water Diversion and Groundwater System Projects*** | **4,961,264** | **109,958** | **50,211,260** | |
| ***Raw Water Transmission*** | | | | |
| Newell Creek Pipeline Felton/GHWTP | 3,386,004 | 84,486 | 41,982,557 | 2019-2027 |
| Newell Creek Pipeline Felton/Loch Lomond | - | - | 46,549,340 | 2027-2033 |
| Brackney Landslide Area Pipeline Risk Reduction [2] | 2,099,659 | 34,246 | 14,439,908 | 2020-2026 |
| North Coast Pipeline Repair/Replacement - Ph 4 | - | - | 89,691,553 | 2026-2032 |
| Felton Diversion Pipeline Emergency Repair [2] | 181,357 | 25,437 | 3,356,736 | 2023 |
| ***Subtotal Raw Water Transmission*** | **5,667,020** | **144,169** | **196,020,094** | |
| ***Surface Water Treatment*** | | | | |
| GHWTP Concrete Tanks Replacement | 26,962,064 | 1,020,482 | 45,714,566 | 2018-2026 |
| GHWTP Facilities Improvement Project | 16,516,166 | 440,299 | 160,520,528 | 2018-2030 |
| River Bank Filtration Study | 1,003,775 | - | 7,225,332 | 2018-2028 |
| GHWTP SCADA Radio System Replacement | 2,520 | - | 247,344 | On-going |
| GHWTP SCADA IO Hardware & Wiring Upgrade | - | - | 244,688 | 2022-TBD |
| ***Subtotal Surface Water Treatment*** | **44,484,525** | **1,460,781** | **213,952,458** | |
| ***Distribution System Storage, Water Main and Pressure Regulation, and Metering Projects*** | | | | |
| University Tank No. 4 Rehab/Replacement | 787,109 | 74,732 | 6,714,841 | 2018-2027 |
| Meter Replacement Project | 12,557,629 | 296,235 | 14,016,438 | 2018-2023 |
| Engineering and Distribution Main Replacement Projects [3] | 13,312,479 | 525,448 | 28,923,622 | On-going |
| Distribution System Water Quality Improvements | 41,760 | - | 119,139 | 2021-TBD |
| Facility & Infrastructure Improvements | 10,359 | 50,262 | 8,617,604 | On-going |
| Intertie 1: Santa Cruz - Scotts Valley [2] | 788,086 | 93,353 | 10,260,483 | 2022-2026 |
| ***Subtotal Distribution Storage, Wmain Pressure Reg, and Metering*** | **27,497,421** | **1,040,030** | **68,652,127** | |
| ***Subtotal Infrastructure Resiliency and Climate Adaptation*** | **174,205,029** | **2,998,161** | **630,739,775** | |
| **OTHER RISK MANAGEMENT AND RISK REDUCTION PROJECTS** | | | | |
| ***Site Safety and Security*** | | | | |
| Security Camera & Building Access Upgrades | 325,479 | - | 741,497 | On-going |
| GHWTP Gate Entrance Upgrades | 899,901 | 663 | 1,111,803 | 2020-2023 |
| CMMS Software Replacement - Water Share | 316,956 | 45,428 | 569,505 | 2022-2023 |
| ***Subtotal Site Safety and Security*** | **1,542,335** | **46,091** | **2,422,805** | |
| ***Staff Augmentation*** | | | | |
| Water Program Administration [4] | 2 | 144,575 | 13,574,444 | On-going |
| ***Subtotal Staff Augmentation*** | **2** | **144,575** | **13,574,444** | |
| ***Contingency*** | | | | |
| Management Reserve [5] | - | - | 11,369,962 | On-going |
| ***Subtotal Contingency*** | **-** | **-** | **11,369,962** | |
| ***Storage for Emergency Facility and System Repair Tools and Equipment*** | | | | |
| Union/Locust Admin Building Back Up Power Generator | 12,549 | 2,193 | 100,000 | TBD |
| ***Subtotal Storage for Emergency and System Repair*** | **12,549** | **2,193** | **100,000** | |
| ***Other Projects*** | | | | |
| Branciforte Streambank Restoration | 86,625 | 10,621 | 815,583 | TBD |
| ***Subtotal Other Projects*** | **86,625** | **10,621** | **815,583** | |
| ***Subtotal Other Risk Management and Risk Reduction Projects*** | **1,641,511** | **203,481** | **28,282,794** | |
| ***GRAND TOTAL*** | **184,001,352** | **3,398,697** | **856,000,224** | |

*[1] Project Cost Estimates are FY24 adopted budget plus FY24 adjustments/carry-forwards plus FY25-38 projections from Oct 2023.*

*[2] Expenses are not adjusted for grant funding.*

*[3] Prior year actuals for Main Replacements start in FY19.*

*[4] Staff augmentation budget appropriations and actual expenses are transferred to specific projects during fiscal year-end process.*

*[5] Management Reserve budget appropriations are transferred to specific projects upon Change Management approval.*

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WATER COMMISSION
INFORMATION REPORT

**DATE:** 02/01/2024

**AGENDA OF:** 02/05/2024

**TO:** Water Commission

**FROM:** Sarah Easley Perez, Principal Planner

**SUBJECT:** Initial Water Supply Outlook for Water Year 2024

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**RECOMMENDATION:** That the Water Commission receive information on the initial water supply outlook for Water Year 2024.

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**BACKGROUND:** California's water year is measured from October 1st to September 30th each year, corresponding with the hydrologic cycle. The water year is designated by the calendar year in which it ends; for example, on October 1, 2023, we entered into Water Year 2024 which will extend through September 30, 2024.

Throughout each water year, the Water Department closely monitors local rainfall, runoff, and reservoir storage levels because the City of Santa Cruz (City)'s water supply status can vary widely from year to year. The City's system depends primarily on surface water sources for the majority of its water supply, and the yield of our sources in the dry summer period is strongly influenced by the amount of rainfall as well as how rainfall is distributed over the winter season. Furthermore, with a single surface water storage reservoir, Loch Lomond Reservoir, the system is vulnerable to summer dry season supply shortages, particularly during multi-year droughts.

The Water Department characterizes the City's overall annual water supply condition using a four-tiered water year classification system. Under this classification system, the water year beginning October 1st is designated as one of four types – Wet, Normal, Dry, or Critically Dry – depending on the total annual discharge of the San Lorenzo River, measured at the Big Trees Stream Gage in Felton, and expressed in acre-feet[1] (see Attachment 1).

Every year at the end of January, which represents the mid-point of the winter wet season, staff prepare an Initial Water Supply Outlook that describes current water conditions and discusses the preliminary water supply outlook for the water year ahead. This initial assessment is presented to the Water Commission in February to allow sufficient time for staff to begin preliminary

[1] Discharge refers to the accumulated volume of runoff. One acre-foot of water is equal to 325,851 gallons and 3.07 acre-feet equals one million gallons.

planning for any anticipated water supply shortages. This is also an opportunity to provide an early indication to the public of a possible water shortage during the upcoming dry season.

Near the end of the winter rainy season, usually toward the end of March, a final assessment of the water supply outlook is subsequently prepared for presentation to the Water Commission and City Council in April. The final assessment provides a comprehensive look at current conditions, forecasts reservoir storage through the end of the water year, predicts any potential summer dry season water supply shortages, and, if needed, provides recommendations for proposed actions to alleviate any shortages. Since 2022, state law additionally requires that all urban water suppliers prepare this type of assessment and submit it to the California Department of Water Resources on an annual basis by July 1st.

In the event that a water supply shortage is predicted, the Water Commission would be asked to confirm the staff recommendation to City Council on actions to address the projected shortage. Such action would typically involve implementing the demand reduction measures from the City's adopted Water Shortage Contingency Plan contained within its 2020 Urban Water Management Plan. City Council would normally consider such action in late April; however, during significant drought years, such recommendations have been made earlier. The Water Shortage Contingency Plan relies on a system of customer allocations to reduce demand during anticipated shortages. Water used in exceedance of the allocations can result in excess use penalty fees applied to the customer bill. Implementation of demand reduction measures involves significant planning, time, and resources for activities such as updating the billing system and bringing on temporary staff.

**DISCUSSION:** This initial water supply outlook includes a review of the previous water year (Water Year 2023), a review of current water year conditions (Water Year 2024), and a preliminary water supply outlook for the upcoming dry season.

Water Year 2023: Total annual rainfall in the City for Water Year 2023 ending on September 30, 2023, measured 51.03 inches at the DeLavega Rain Gauge, or 162 percent of normal. Based on the cumulative discharge from the San Lorenzo River, Water Year 2023 was classified as Wet, coming in as the fourth highest annual discharge in the river's historic record dating back to 1911 (see Attachment 1). The end of water year reservoir storage in Loch Lomond was 2.68 billion gallons, or 94 percent of capacity. Statewide, precipitation for Water Year 2023 was 141% of average, and reservoir storage throughout the state ended well above average. By every measure, 2023 was a very wet year.

In 2023, total annual production of the City of Santa Cruz Water Department measured 2.49 billion gallons, similar to levels experienced since 2016. Water demand system-wide remains consistently low, still showing almost no rebound since the drought that ended in 2017.

Water Year 2024: Observations for Water Year 2024 are displayed in the presentation included as Attachment 2.

Water Year 2024 began with good carryover reservoir storage and river baseflows from the previous year. After a slow start to the wet season in October and November, rainfall amounts during December and January were above average, and the reservoir is expected to fill to spilling within a week. While cumulative rainfall in the City is currently just above average, cumulative

runoff in the San Lorenzo River has trended below average to date. Short-term projections indicate above-average precipitation for our area in the coming weeks. With the watershed now saturated, this will likely lead to increased baseflows and runoff in the San Lorenzo River. Additionally, long-term projections, while less reliable, also forecast above-average precipitation for our area in the coming months.

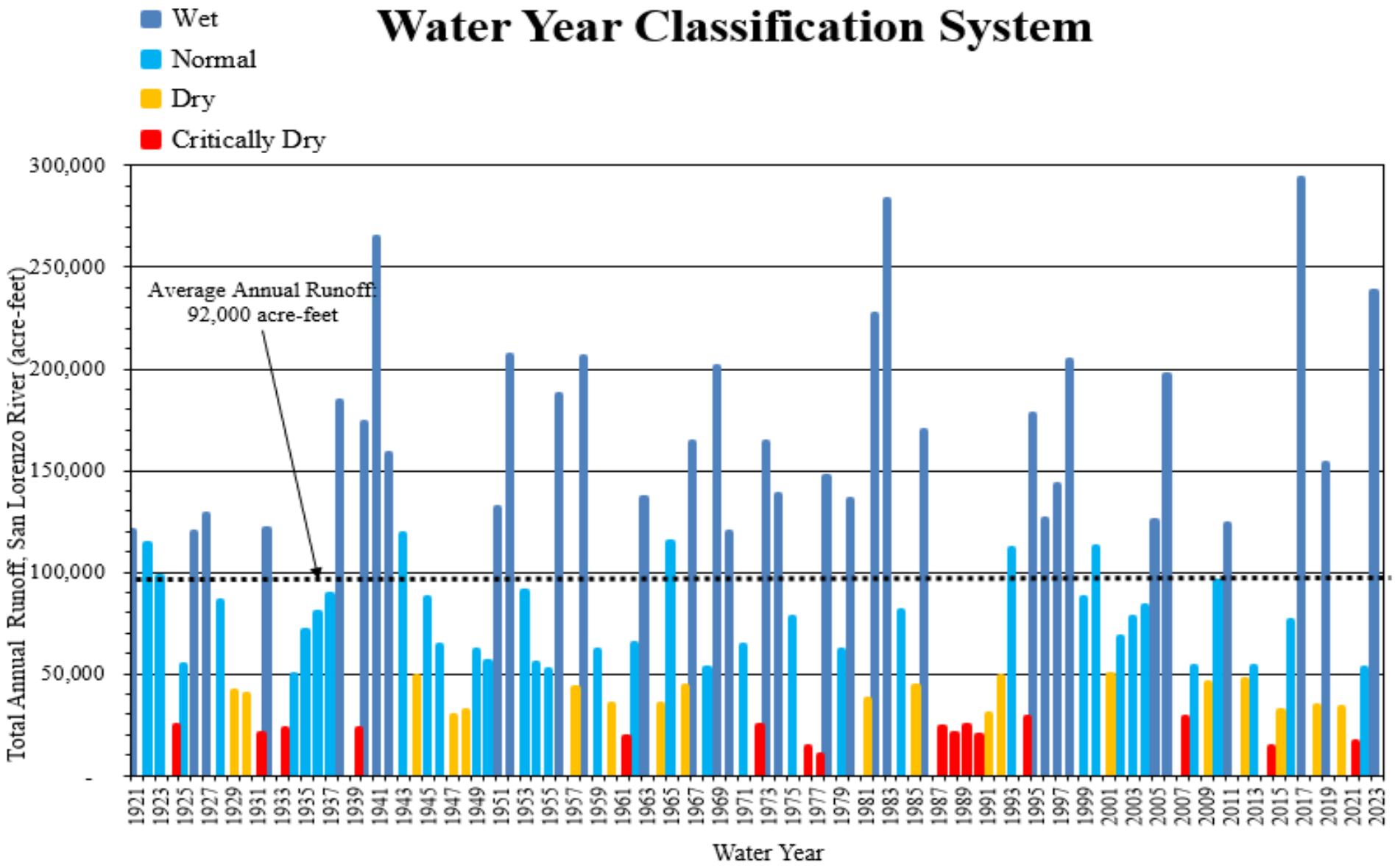
Initial Water Supply Outlook: While it is too early in the wet season to know for certain the water year classification, based on information available to date, staff expect a low likelihood of water shortage in the upcoming summer dry season. At the current level of demand, water treatment plant operators would typically be able to meet daily demands in the dry season from flowing supplies, supplemented by groundwater pumping and modest withdrawals from Loch Lomond Reservoir. As a result, it appears unlikely that the reservoir will be drawn down significantly this water year. Without significant drawdown, we would expect good carryover reservoir storage for another year.

The Water Department will continue to monitor water supply conditions, reevaluate the water supply outlook, and prepare the final assessment of the water outlook at the end of March for presentation to the Water Commission and City Council in April.

**FISCAL IMPACT:** None.

**PROPOSED MOTION:** This item is informational only; no motion is required.

**ATTACHMENTS:**
1. City of Santa Cruz Water Department Water Classification System: 1921 – 2023
2. Water Year 2023 Initial Water Supply Outlook Presentation Slides




**Attachment 1: City of Santa Cruz Water Department Water Year Classification System 1921 - 2023**

# Water Year 2024
# Initial Water Supply Outlook
## Santa Cruz Water Department

Santa Cruz Water Commission
February 5, 2024

CITY OF SANTA CRUZ

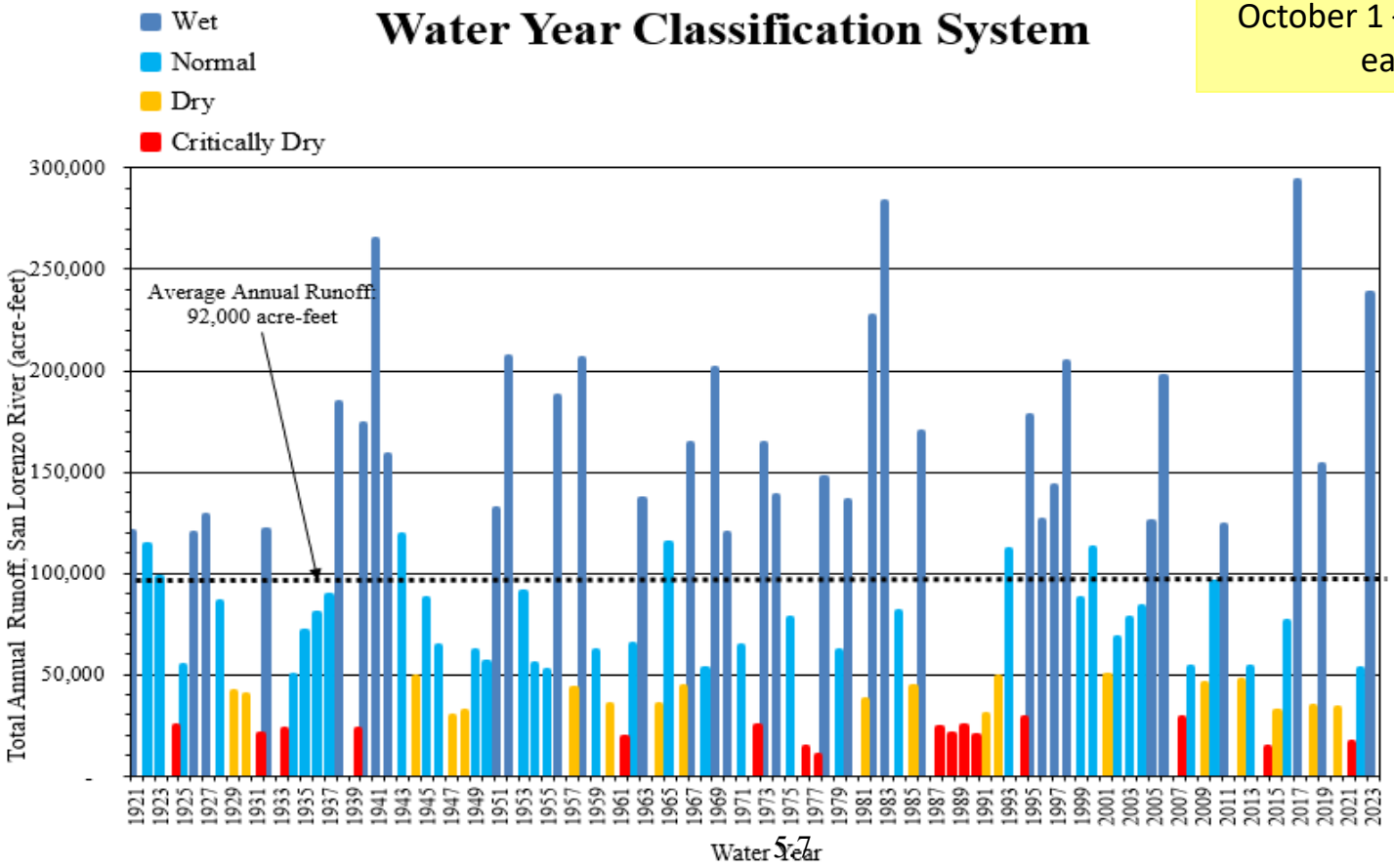
# Mid-point of Winter Wet Season

- End of January represents the mid-point of our winter wet season
- Preliminary evaluation of four factors relevant to water supply reliability:
  - Rainfall
  - Stream Flow
  - Cumulative Discharge and Water Year Classification
  - Reservoir Storage
- Update the outlook for April Meeting
  - Forecast End of Dry Season Reservoir Storage
  - Provide Any Recommendations on Potential Actions

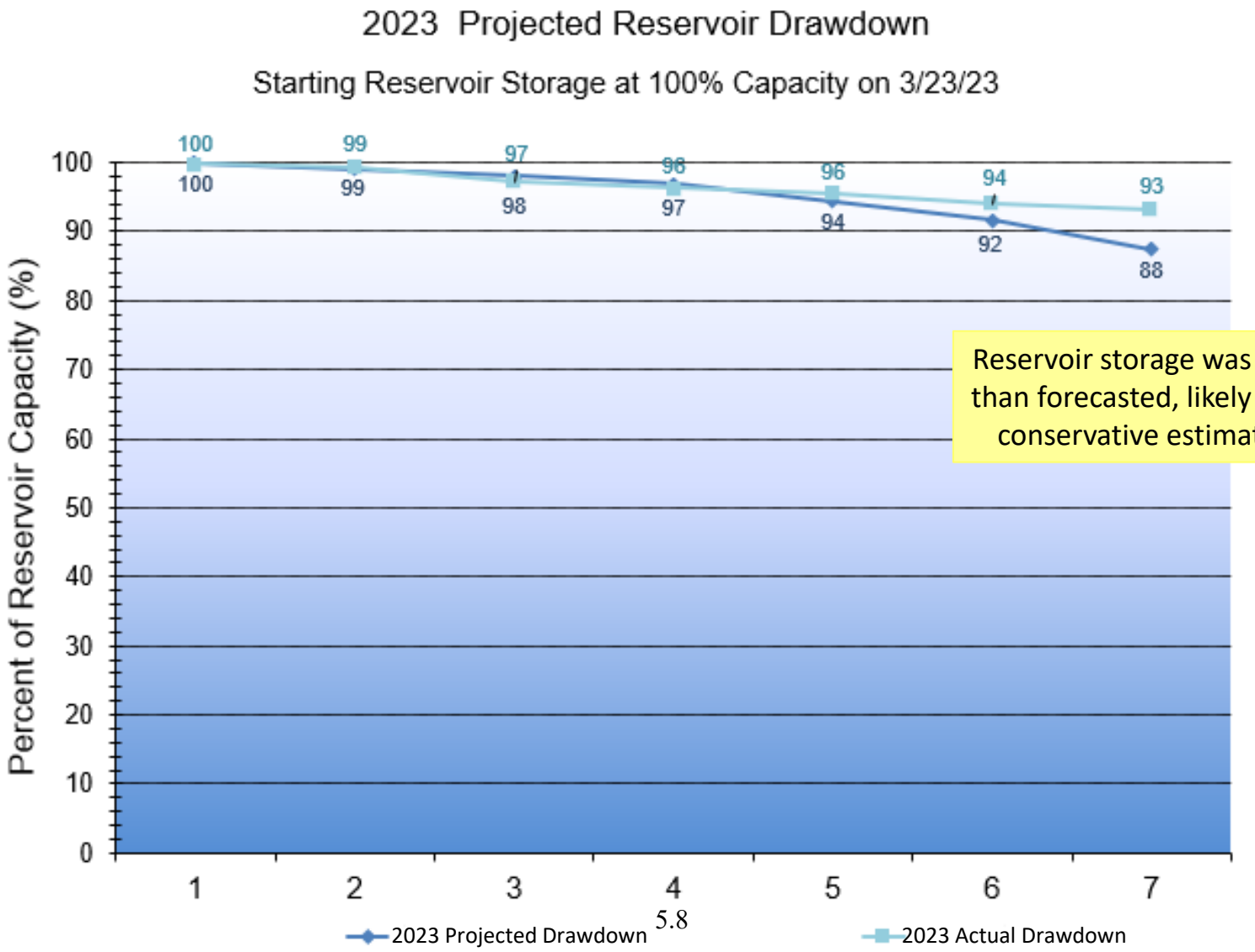
# Water Year 2023

- Water Year 2023 was very wet
- Good reservoir storage, strong flows

A Water Year extends from October 1 – September 30 each year

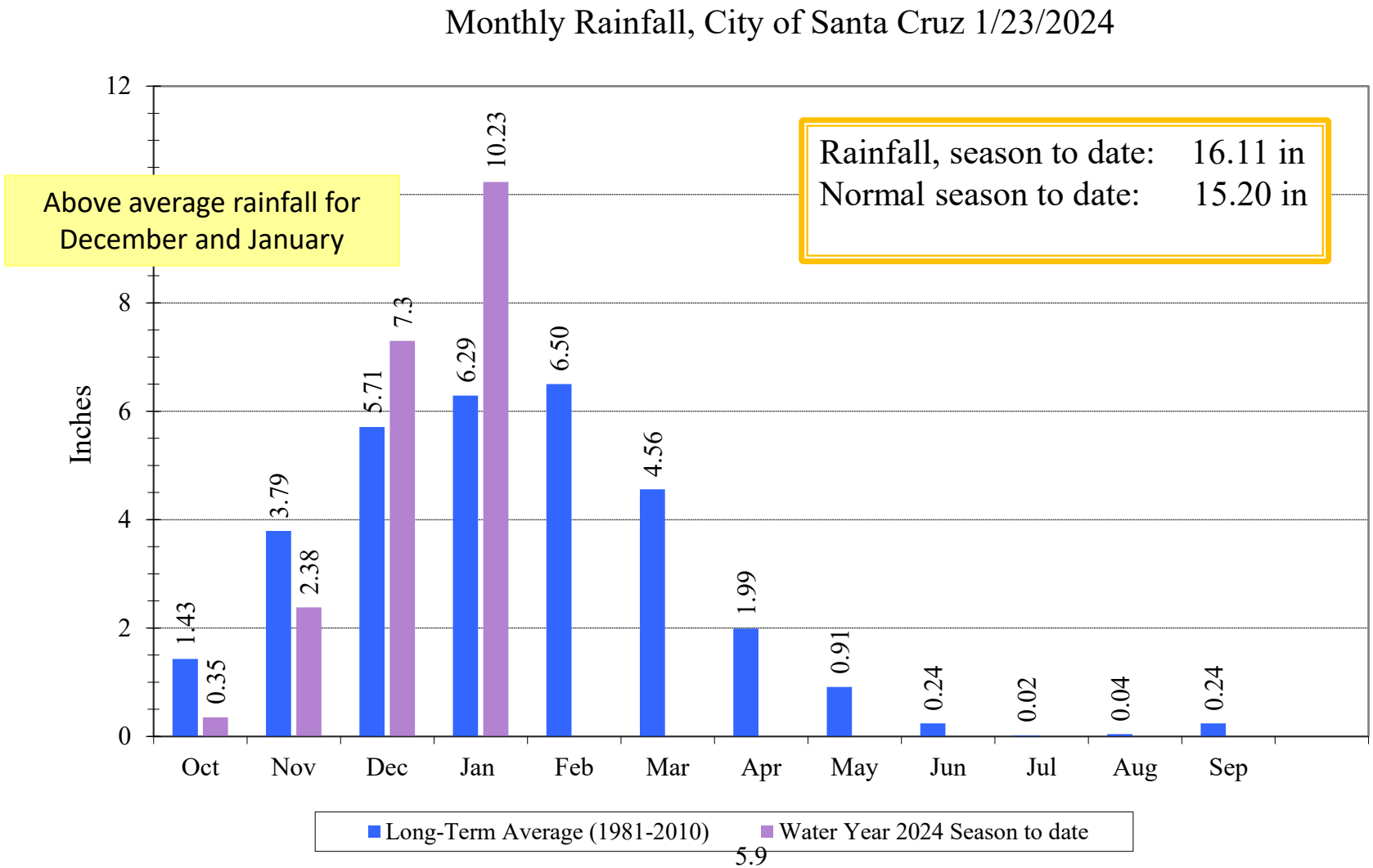


# WY 2023 - Reservoir Storage

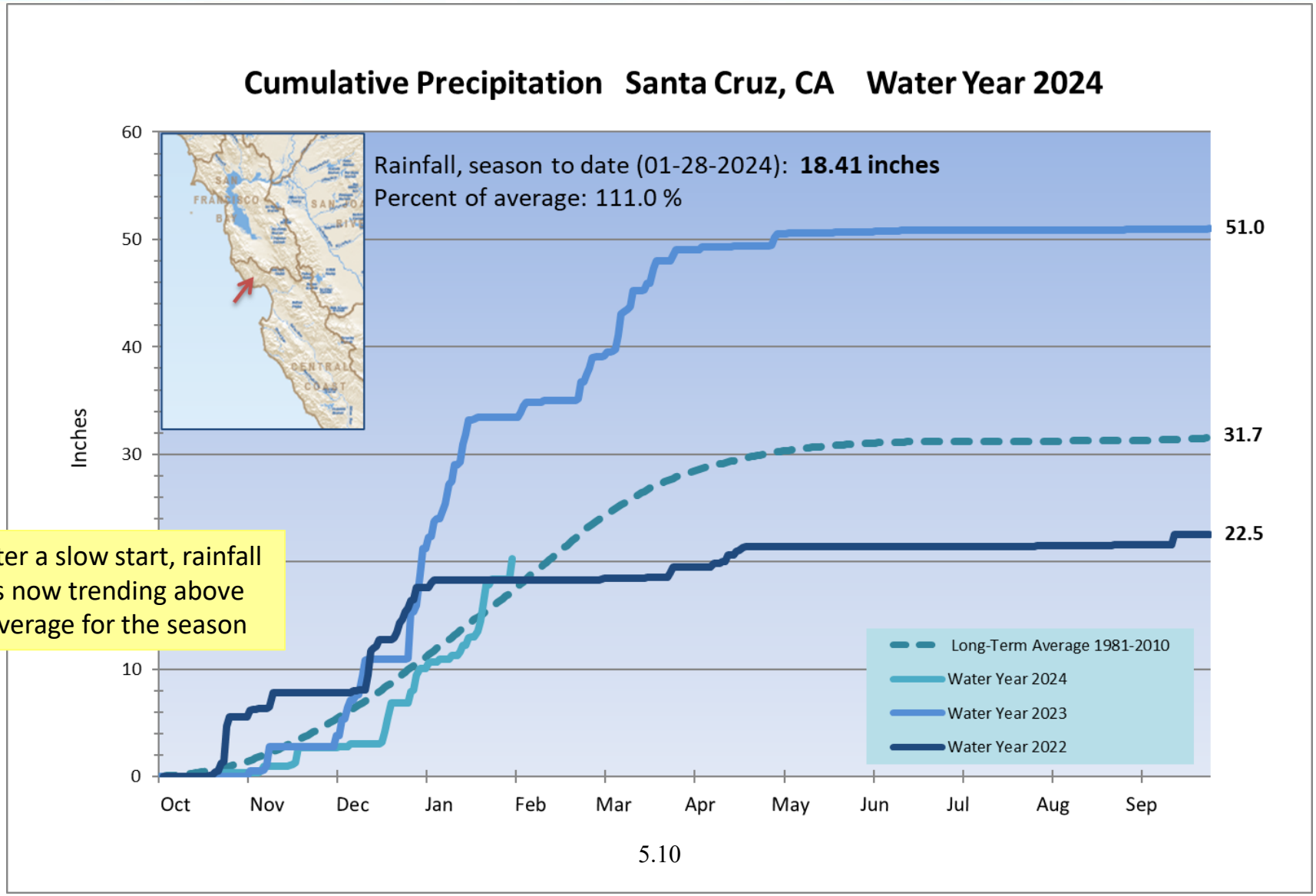



Reservoir storage was higher than forecasted, likely due to conservative estimations

# Monthly Rainfall

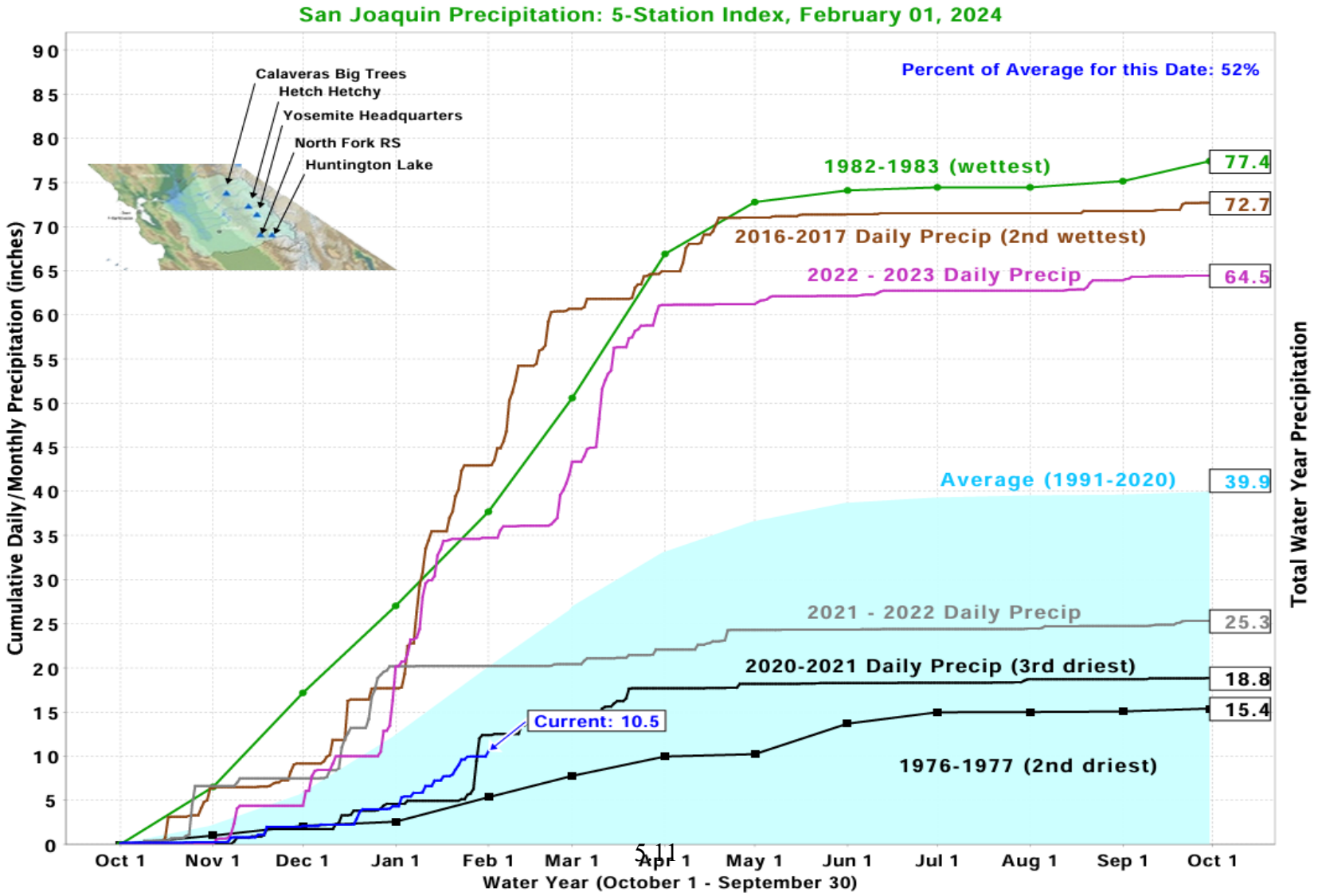


# Cumulative Rainfall

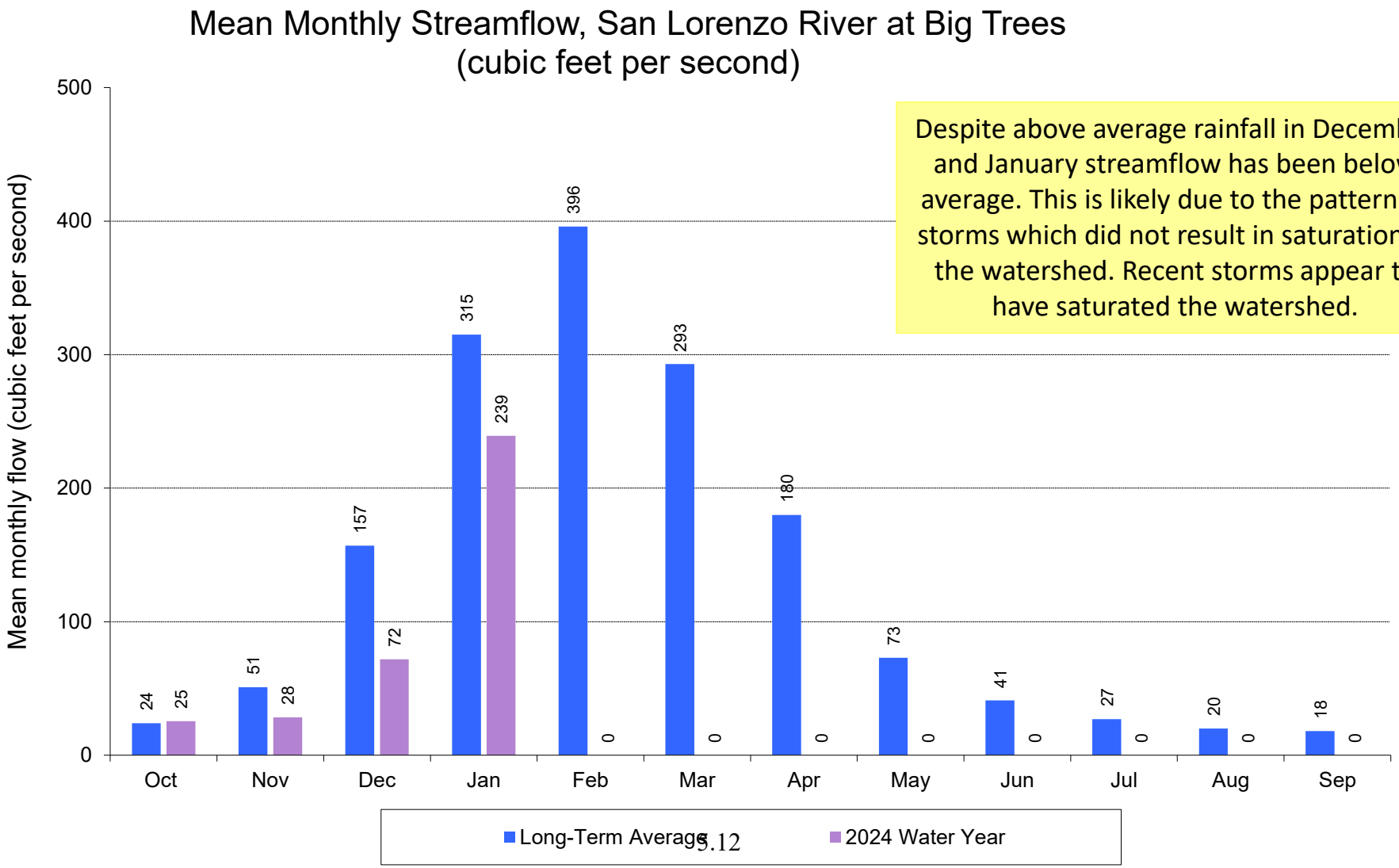



After a slow start, rainfall is now trending above average for the season

# Precipitation Across California

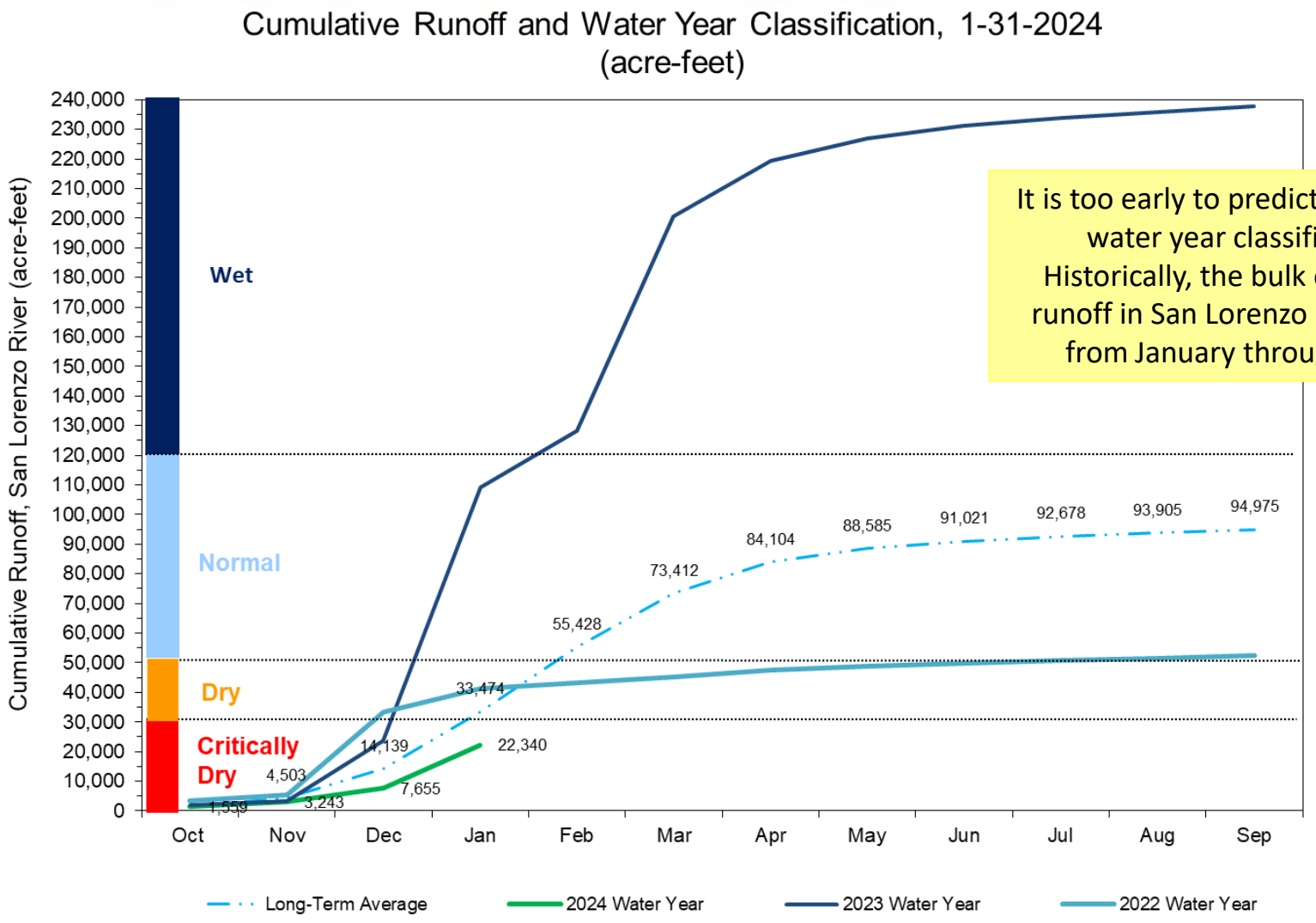


# Monthly Stream Flow



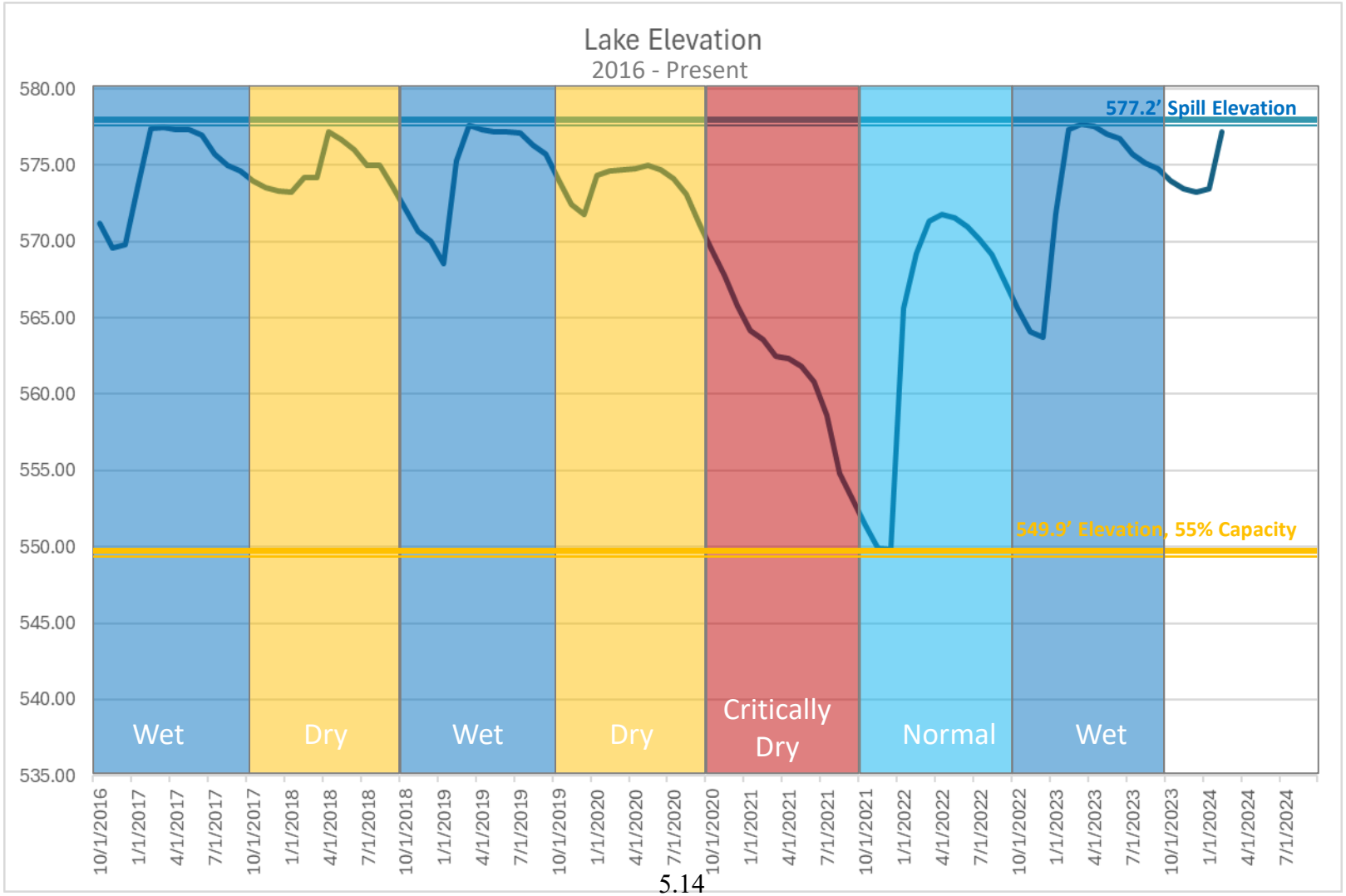

Despite above average rainfall in December and January streamflow has been below average. This is likely due to the pattern of storms which did not result in saturation in the watershed. Recent storms appear to have saturated the watershed.

# Cumulative Runoff (Acre-feet)




It is too early to predict the ultimate water year classification - Historically, the bulk of seasonal runoff in San Lorenzo River occurs from January through March

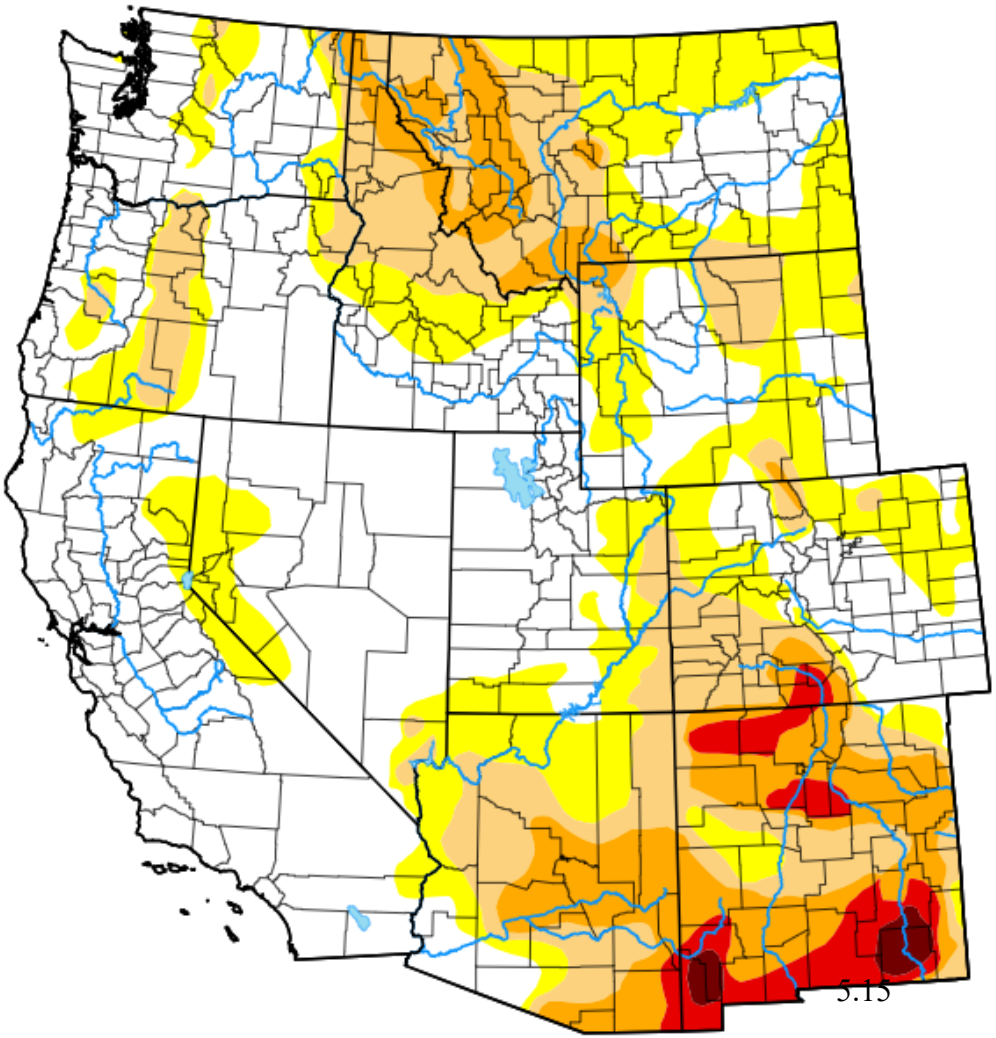
# Reservoir Storage



# U.S. Drought Monitor

## West





**Map released: Thurs. February 1, 2024**

Data valid: January 30, 2024 at 7 a.m. EST

### Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

### Authors

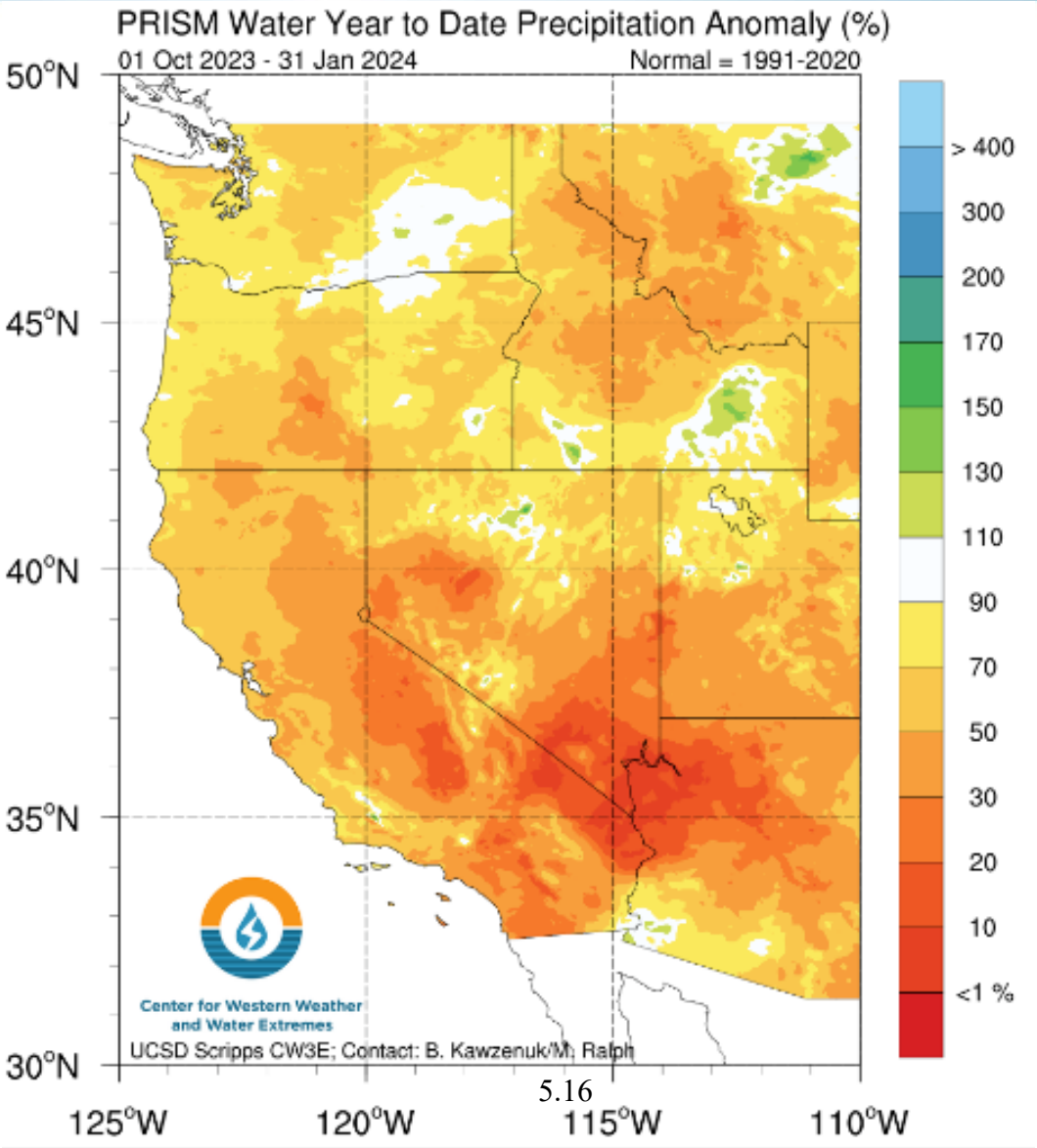
United States and Puerto Rico Author(s):

Brian Fuchs, National Drought Mitigation Center

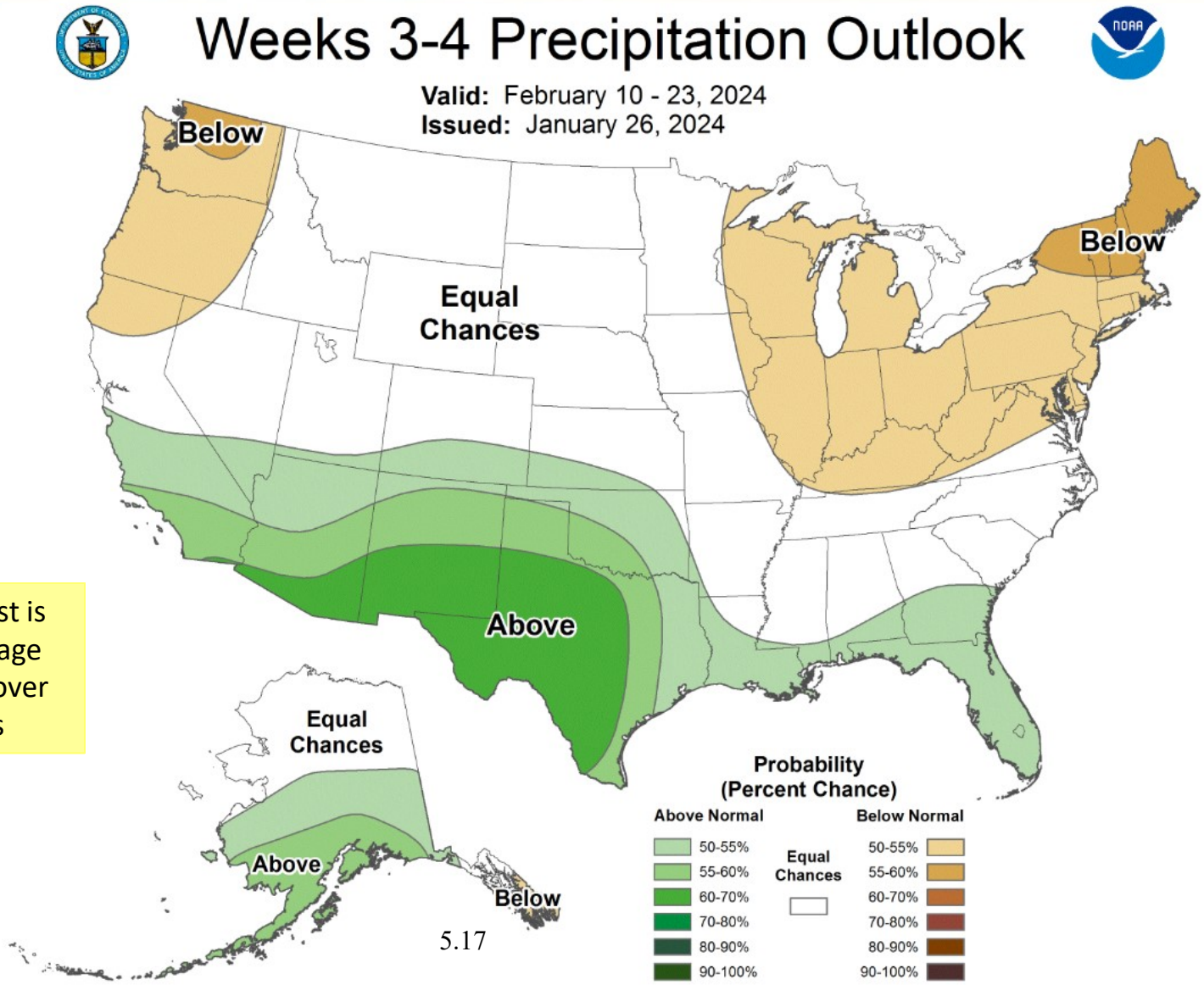
Pacific Islands and Virgin Islands Author(s):

Curtis Riganti, National Drought Mitigation Center

# Trending Drier than Normal

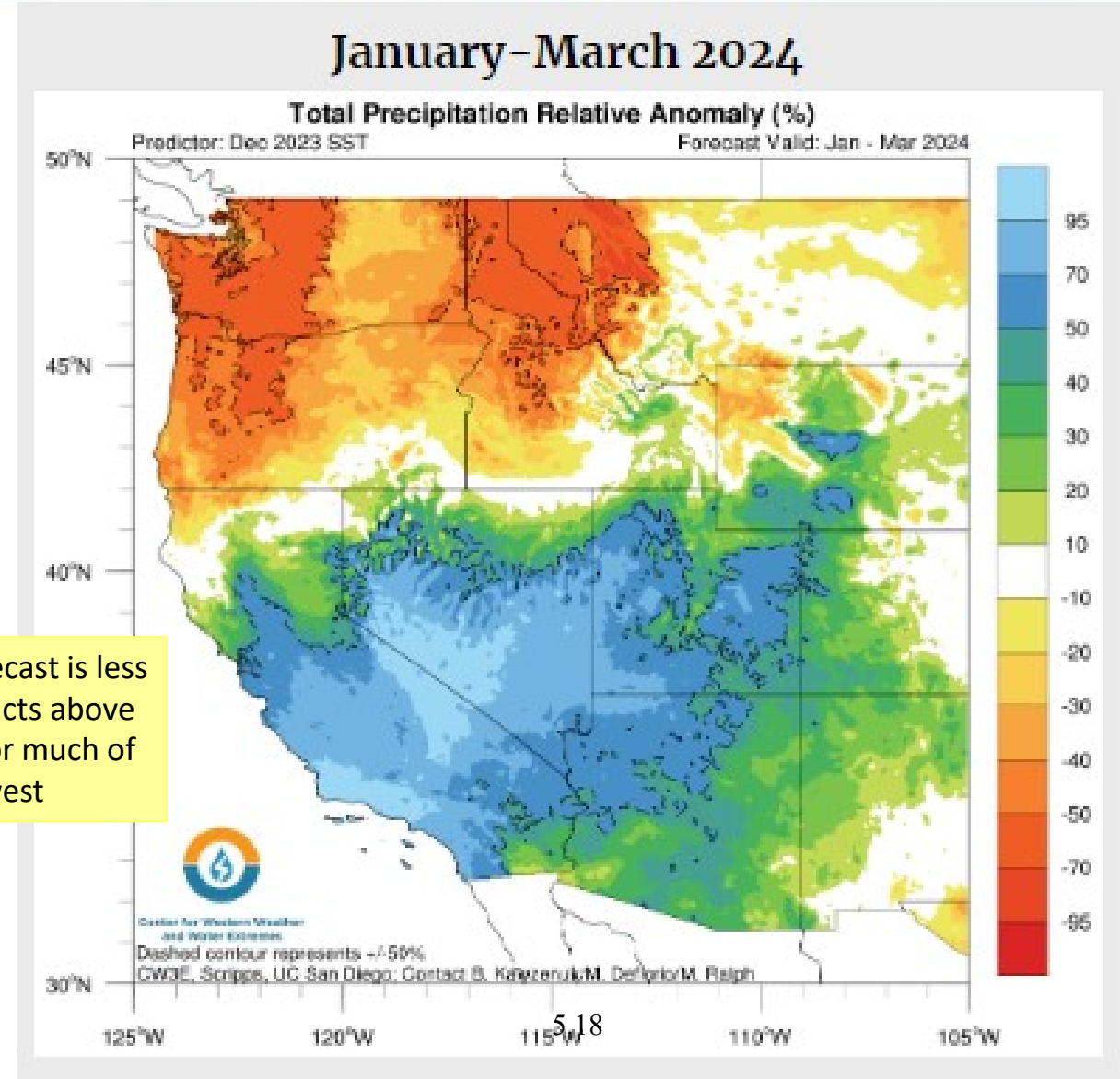


# Three Week Outlook: Precipitation




The short-term forecast is predicting above average rainfall for our region over the next few weeks

# Three Month Outlook: Precipitation




The long-term forecast is less reliable, but predicts above average rainfall for much of the southwest

# What's Next?

- February and March
  - Monitor water conditions and generate forecast
- April
  - Present to Water Commission estimated water supply availability and forecasted reservoir drawdown for 2024
  - Provide recommendation for City Council action if needed
  - If a water supply shortage is projected, City Council to take action on implementation of dry season customer allotments per the 2021 Water Shortage Contingency Plan
- July
  - Submit an Annual Water Supply and Demand Assessment to Department of Water Resources

# Water Year 2024
# Initial Water Supply Outlook
## Santa Cruz Water Department

Santa Cruz Water Commission
February 5, 2024

CITY OF SANTA CRUZ

WATER COMMISSION
INFORMATION REPORT

**DATE:** 01/26/2024

**AGENDA OF:** 02/05/2024

**TO:** Water Commission

**FROM:** Taylor Kihoi, Senior Professional Engineer

**SUBJECT:** Presentation of 2024 Capital Investment Projects

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**RECOMMENDATION:** That the Water Commission accept the information and presentation of Fiscal Year 2024 capital investment projects.

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**BACKGROUND:** The Water Department's Capital Investment Program (CIP) includes projects that improve water system reliability; provide resiliency to floods, droughts, and climate change; augment water supply; and address aging infrastructure. These projects include major investments in raw water transmission mains, surface water treatment upgrades, water supply augmentation, treated water storage, environmental enhancements, and other reliability improvements.

To engage the Water Commission (Commission) with the annual development of the capital budget for future fiscal years, it's been a tradition of the Water Department to begin by reviewing with the Commission the capital projects currently in construction as well as those anticipated to begin construction within the next 2-5 years. This summary of current work is followed, as shown below, by several other budget reviews with the Water Commission and final recommendations to City Council in June.

- February:
  - Annual Projects in Review
  - 1st Quarter 2024 Financials
- March:
  - 2nd Quarter 2024 Financial Report
- May:
  - Proposed Fiscal Year 2025 Operating and Fiscal Year 2025-2029 Capital Investment Program – First Look
- June:
  - Proposed Fiscal Year 2025 Operating and Fiscal Year 2025-2029 Capital Investment Program – Final
  - 3rd Quarter 2024 Financial Report

This agenda item, the annual review of projects or "Parade of Projects", is intended to provide initial background and context to the capital projects, celebrate accomplishments, and review upcoming work. An overview of projects to be reviewed at the meeting is below with more detailed information provided in Attachment 1, Project Fact Sheets.

Information about the entire CIP including Project Fact Sheets, map, and schedule is available on the Department's webpage at the link below as Attachment 2.

**DISCUSSION:**

**PROJECTS NEARING COMPLETION OR IN CONSTRUCTION**

Newell Creek Dam Inlet/Outlet Replacement Project
Isidro Rivera, Senior Professional Engineer

The Newell Creek Dam Inlet/Outlet Replacement Project initiated construction in May 2020 and completed construction in December 2023. The scope of the project included construction of approximately 1500 feet of inlet/outlet conduit piping installed within a now backfilled tunnel that went around the dam and under the reservoir, three vertical intake shafts, new controls and valves, a new control building, and replacement of approximately 2,000 feet of pipeline downstream of the dam. With the replacement of these critical facility components, the Water Department has reliable access to a crucial water supply as well as having the infrastructure that meets current emergency draw-down and other safety regulations.

The presentation for this project will focus on providing an update on construction activities since the last status report given to the Water Commission in October 2023.

Graham Hill Water Treatment Plant Concrete Tanks
Matt Zeman, Engineering Associate

The Graham Hill Water Treatment Plant (GHWTP) was originally commissioned in 1960. The concrete basins and tanks are original and condition assessments concluded that three key process tanks were at the end of their service life and ready for replacement. The Concrete Tanks Project started construction in May of 2021 and will install two new 750,000-gallon process tanks and a new 1,400,000-gallon treated tank, several new pump stations, and a new electrical building. The project will improve the seismic resiliency of the treatment plant as well as enhance water quality.

Since construction started, the project has constructed three retaining walls and grading to enlarge the tank pad and demolished all three existing tanks. Two new tanks, as well as their pump stations and piping are complete and in service. The project necessitates extremely close coordination with internal project stakeholders in Operations as the project is creating complex interim operating conditions which require creative workarounds and accommodations. Communication and outreach are key success factors to the project. The project team provides neighborhood meetings, weekly email updates, regular website postings, and other notifications to the neighborhood.

The presentation for this project will focus on providing an update on construction activities since the last status report given to the Water Commission in October 2023.

Beltz 12 Ammonia Removal Project
Matt Zeman, Engineering Associate

The Beltz 12 facility was constructed in 2015 and includes a municipal water well and a water treatment plant for the removal of iron and manganese. After Beltz 12 was placed into service, naturally occurring ammonia and hydrogen sulfide were found in the water produced from this well. While the current treatment process can remove low concentrations of ammonia, the facility must be turned off when ammonia levels increase to avoid any potential water quality issues in the water distribution system. Improvements to the facility are needed for the removal of ammonia in order to support current production levels from the well and maintain water quality and reliability goals.

The Beltz 12 Ammonia Removal Project was split into two phases to facilitate design, manufacturing, and construction of the improvements; phase one of the project includes installation of a new contact tank and piping, while phase two will replace the chlorine generation and injection system to allow the facility to treat higher ammonia concentrations and restore the reliable operation of the treatment plant throughout the dry season. Phase one construction is nearly complete; the presentation will focus on current activities and the schedule for phase two.

## PROJECTS NEARING CONSTRUCTION

Newell Creek Pipeline
Lewis Kay, Engineering Associate

The Newell Creek Pipeline (NCP) conveys raw water from Loch Lomond Reservoir to the Graham Hill Water Treatment Plant. The approximately 10-mile-long pipeline is a critical piece of infrastructure, particularly during the dry season, major storm events, and other unplanned emergencies. NCP, *circa* 1960, was constructed through mountainous terrain and is reaching the end of its useful life as evident by increased frequency of breaks caused by ongoing corrosion and land movement along its alignment, which is in an active geologic region of the Santa Cruz Mountains.

The NCP project has been split into three segments to facilitate design and construction: Newell Creek Dam to Felton, Felton to GHWTP, and the Brackney landslide area. The presentation will focus on the replacement of the Felton to GHWTP and the Brackney segments. The Felton to GHWTP segment includes replacement and re-alignment of approximately 4.5 miles of Newell Creek Pipeline from Felton to the Graham Hill Water Treatment along Graham Hill Road. The Brackney segment replaces and re-aligns approximately 2,700-linear feet of pipe between Brackney Road and Glen Arbor Road.

This replacement project seeks to avoid risk-prone geology, environmentally-sensitive areas, and the existing narrow construction corridor through Henry Cowell State Park known as “Pipeline Road.”

Intertie 1: Santa Cruz - Scotts Valley
Taylor Kihoi, Senior Professional Engineer

The Intertie 1: Santa Cruz-Scotts Valley Intertie Project will link the City of Santa Cruz and Scotts Valley Water District (SVWD) water systems by constructing a two-mile-long, 12-inch-diameter pipeline and pumpstation. Linking the two water systems will create conjunctive use opportunities through exchanges of groundwater and surface water. The new pipeline will be installed along La Madrona Drive, from the City's Kite Hill Tank in Pasatiempo to the new intertie pump station in Scotts Valley. The project was initiated soon after the Department of Water Resources issued a grant award notice in early 2022. The design of the project continues and is expected to be completed in the spring of this year. Construction activities are anticipated to start in the summer of 2024 and are expected to take 12-14 months; the intertie could be operational in 2025. The presentation will provide an update on key activities and discuss accomplishments to date as well as upcoming milestones.

## WATER SUPPLY AUGMENTATION

Aquifer Storage and Recovery
Isidro Rivera, Senior Professional Engineer

Efforts related to Aquifer Storage and Recovery (ASR) continued to be primarily focused within the Santa Cruz Mid-County Groundwater Basin (MCGB) over the last year. Major milestones and accomplishments for the ASR Project in 2023 include: Year 2 implementation of the ASR Demonstration Study at Beltz Wells 8 and 12, initiating design for the conversion of existing wells to permanent ASR facilities at Beltz Wells 8 & 12, construction of a monitoring well at Beltz 9, beginning ASR pilot test at Beltz 9, and advancement toward selection of the 4th ASR well through analysis of other existing Beltz Wells and development of criteria for a Business Case Evaluation.

Work planned for 2024 includes completion of the design for the conversion of existing wells to permanent ASR facilities at Beltz Wells 8 & 12 and the start of construction at those facilities, completion of Beltz 9 ASR pilot test, and continued planning efforts for advancement of a feasible ASR project in the MCGB.

**FISCAL IMPACT:** None.

**PROPOSED MOTION:** This item is informational only; no motion is required.

**ATTACHMENTS:**
1. Project Fact Sheets
2. Link to all CIP Project Fact Sheets, Water Program Map, and Water Program Project Schedule:
3. https://www.cityofsantacruz.com/government/city-departments/water/engineering/santa-cruz-water-program


# Newell Creek Dam Inlet/ Outlet Replacement Project

**Current Status: Construction**

**Project Description**

The Newell Creek Dam was constructed in the 1960's. A pipeline runs through the base of the dam to deliver water to the reservoir from Felton Diversion and from the reservoir to the Graham Hill Water Treatment Plant. The pipeline will be replaced along with related infrastructure. This project is being implemented with oversight by the Division of Safety of Dams and, having demonstrated compliance with existing seismic regulations, is an upgrade to improve day to day operations and emergency drawdown rate. This project is being financed with a low-interest loans through the State Revolving Fund (SRF) Loan Program.

**Project Benefit**

This project protects the City's water supply system by addressing existing deficiencies, establishes long-term reliable water supply storage, meets DSOD drawdown requirements, improves operational efficiency and system performance, as well as inspection and maintenance access.

**Operating Budget Impact**

No changes to operating costs are expected.

**Project Location**

Loch Lomond Reservoir, Felton, CA

**Project Contact Email**

irivera@santacruzca.gov

**Escalated Estimate**

| | |
|---|---|
| **Construction** | $ 73,093,669 |
| **Other Costs*** | $ 28,796,586 |
| **Total Project** | $101,890,255 |

* Other costs may include design, engineering services during construction, construction management, construction contingency, environmental, permitting, legal, land transaction, city administration, and management costs.

**Potential Funding Source**

DWSRF Loan and Pay as you go

**Current Schedule Start-Finish Dates**

| Planning | Design | Construction | Post Construction |
|---|---|---|---|
| JUL 2018<br>SEP 2018 | JUL 2018<br>JAN 2020 | APR 2020<br>JUL 2023 | JUL 2023<br>JUL 2024 |

Revised: 6/30/23

# City of Santa Cruz
# Proposed Capital Investment Program Budget (by department)
**Fiscal Years 2024- 2028**

**Water** — **711- Water & Water System Development Enterprise Fund**

## GHWTP CC Tanks Replacement

**Project Description:** **Project # c701501**

Infrastructure improvements to the Graham Hill Water Treatment Plant are necessary to meet regulatory requirements, improve operations and increase overall reliability. This project will improve the seismic resiliency of key process tanks, improve water quality, and enhance treatment residuals management. Construction for the replacement of the Filtered Water Tank, Wash Water Reclamation Tank, and Solids Storage Tank began in 2021. This project is financed with low-interest loans through the State Revolving Fund (SRF) Loan Program.

**Project Benefit:**
This project will replace existing tanks and pumps with new equipment which will extend the useful life of the treatment plant and allow more efficient handling of treatment residuals, as well as lower byproducts from the disinfection stage of the treatment process.

**Operating Budget Impact:**
Maintenance costs are expected to decrease due to a robust design with redundant features. Energy costs are expected to increase due to additional capabilities of the new facilities.

**Project Location:**
Graham Hill Water Treatment Plant, Santa Cruz

**Project Schedule:**

| | |
|---|---|
| Planning: | 12/2018 - 12/2018 |
| Design: | 01/2019 - -08/2020 |
| Environmental: | 01/2019 - 12/2020 |
| Construction: | 02/2021 - 02/2025 |
| Post-Construct: | 02/2025 - 02/2026 |

**Project contact email:** mzeman@santacruzca.gov

| | | Fiscal Year 2023 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Prior Year | Budget | Estimated Actuals | FY 2024 Proposed | FY 2025 Estimate | FY 2026 Estimate | FY 2027 Estimate | FY 2028 Estimate | Total 2024 - 2028 |
| **Account # 711-70-91-7152-57302** | | | | | | | | | |
| **Project Cost Estimate:** | 16,663,399 | 15,219,738 | 12,642,403 | 10,146,130 | 5,734,682 | 81,504 | - | - | 15,962,316 |
| **Net Project Cost Estimates:** | 16,663,399 | 15,219,738 | 12,642,403 | 10,146,130 | 5,734,682 | 81,504 | - | - | 15,962,316 |

**Total Project Estimated Cost (escalated):**

| | |
|---|---|
| Construction: | $28,856,693 |
| Other Costs: | $16,821,349 |
| Total Costs: | $45,678,042 |

Schedule & Costs as of May 2023

# City of Santa Cruz
# Proposed Capital Investment Program Budget (by department)
**Fiscal Years 2024- 2028**

**Water** — **711- Water & Water System Development Enterprise Fund**

## Beltz 12 Ammonia Removal

**Project Description:** **Project # c702203**

Ammonia and hydrogen sulfide were detected in raw groundwater at Beltz 12 well leading to a decrease in production to maintain water quality and reliability goals. This project will increase the capacity of the sodium hypochlorite generation system and install a contact vessel to remove ammonia and hydrogen sulfide at Beltz 12 well.

**Project Benefit:**
This project will add the ability to treat and remove ammonia and hydrogen sulfide from groundwater to restore the reliable operation of the treatment facility through dryer seasons.

**Project Location:**
2750 Research Park Drive, Santa Cruz

**Operating Budget Impact:**
Operating costs are expected to increase slightly due to increased chemical usage

**Project Schedule:**

| | |
|---|---|
| Planning: | 11/2021 - 11/2021 |
| Design: | 11/2021 - 11/2023 |
| Environmental: | 05/2022 - 11/2022 |
| Construction: | 03/2023 - 07/2024 |
| Post-Construct: | 11/2023 - 07/2025 |

**Project contact email:**
mzeman@santacruzca.gov

| | | Fiscal Year 2023 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Prior Year | Budget | Estimated Actuals | FY 2024 Proposed | FY 2025 Estimate | FY 2026 Estimate | FY 2027 Estimate | FY 2028 Estimate | Total 2024 - 2028 |
| **Account # 711-70-91-7152-57302** | | | | | | | | | |
| **Project Cost Estimate:** | 177,281 | 1,738,537 | 266,948 | 374,088 | - | - | - | - | 374,088 |
| **Net Project Cost Estimates:** | 177,281 | 1,738,537 | 266,948 | 374,088 | - | - | - | - | 374,088 |

**Total Project Cost Estimate (escalated):**

| | |
|---|---|
| Construction: | $1,364,317 |
| Other Costs: | $923,462 |
| Total Costs: | $2,287,779 |

Schedule & Costs as of May 2023

# Newell Creek Pipeline, Felton-Graham Hill Water Treatment Plant

**Current Status: Design**

| | |
|---|---|
| **Project Description** | This project includes approximately 4.5 miles of Newell Creek Pipeline from Felton to the Graham Hill Water Treatment Plant. This segment of the Newell Creek Pipeline was identified as the highest priority segment for replacement . The Project will relocate the pipeline out of Henry Cowell State Park and into Graham Hill Road, avoiding multiple geologic hazards that have caused past breaks. Project Design and Environmental review are complete. This project is intended to ensure continued reliability of this critical water supply transmission main. |
| **Project Benefit** | This project ensures continued reliability of this critical water supply transmission main. |
| **Operating Budget Impact** | Reduced costs for future repairs expected. |
| **Project Location** | Graham Hill Road between Felton Booster Pump Station and the Graham Hill Water Treatment Plant |

**Project Contact Email**

- dvalby@santacruzca.gov

**Escalated Estimate**

| | |
|---|---|
| **Construction** | $ 27,871,121 |
| **Other Costs*** | $ 13,242,193 |
| **Total Project** | $ 41,113,314 |

* Other costs may include design, engineering services during construction, construction management, construction contingency, environmental, permitting, legal, land transaction, city administration, and program management costs

**Potential Funding Source**

US EPA WIFIA and State Water Resources Control Board Drinking Water State Revolving Fund (DWSRF) loans and rate-revenue financing.

**Current Schedule Start-Finish Dates**

| Planning | Design | Construction | Post Construction |
|---|---|---|---|
| SEP 2019<br>MAY 2020 | DEC 2020<br>AUG 2023 | APR 2024<br>OCT 2026 | OCT 2026<br>OCT 2027 |

Revised: 6/30/2023

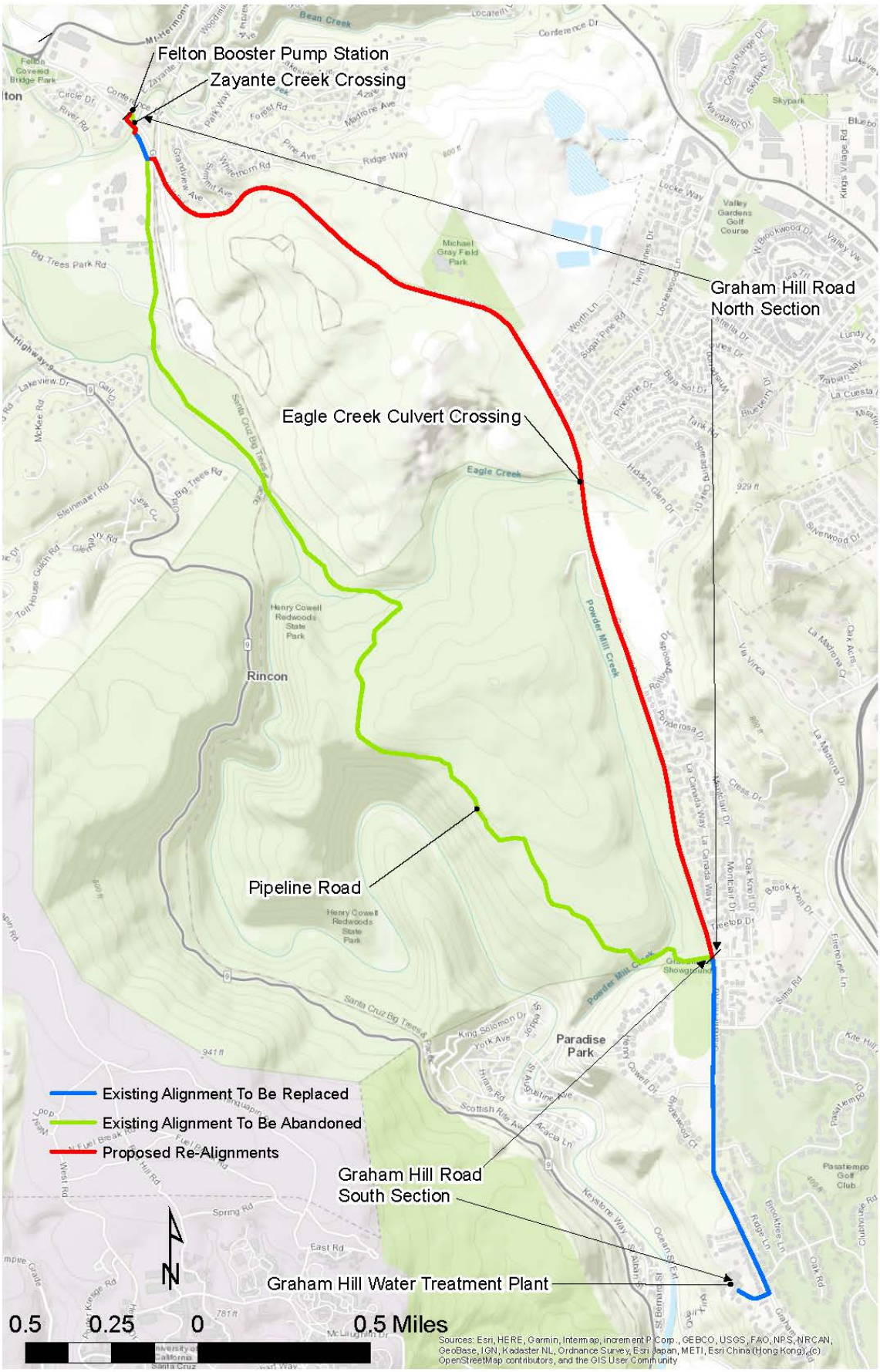


Figure: Existing Pipe Alignment (Blue); Proposed Pipe Alignment (Red)

# City of Santa Cruz
# Proposed Capital Investment Program Budget (by department)
**Fiscal Years 2024- 2028**

**Water** — **711- Water & Water System Development Enterprise Fund**

## Brackney Landslide Area Pipeline Risk Reduction

**Project Description:** **Project # c702002**

The Newell Creek Pipeline in the Brackney landslide area is susceptible to damage from repeated landslides. This project will relocate approximately 2,250 feet of the pipeline to increase pipeline resiliency and the reliability of supply from Loch Lomond. This project is a continuation of work and supersedes c701803-Brackney Landslide Risk Reduction.

**Project Benefit:**
This project improve resiliency of this critical water supply transmission pipeline.

**Project Location:**
Ben Lomond, CA

**Operating Budget Impact:**
Reduced costs for future repairs expected

**Project Schedule:**

| | |
|---|---|
| Planning: | 04/2020 - 05/2020 |
| Design: | 12/2020 - 09/2022 |
| Environmental: | 04/2020 - 06/2022 |
| Construction: | 03/2024 - 02/2025 |
| Post-Construct: | 02/2025 - 04/2026 |

**Project contact email:**
lkay@santacruzca.gov

| | | Fiscal Year 2023 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Prior Year | Budget | Estimated Actuals | FY 2024 Proposed | FY 2025 Estimate | FY 2026 Estimate | FY 2027 Estimate | FY 2028 Estimate | Total 2024 - 2028 |
| **Account # 711-70-91-7153-57302** | | | | | | | | | |
| **Project Cost Estimate:** | 1,604,376 | 2,185,801 | 572,367 | 2,115,516 | 8,404,931 | 53,276 | - | - | 10,573,723 |
| **Project Funding Estimates:** | | | | | | | | | |
| FEMA - HMGP | 543,002 | 60,664 | 530,076 | 1,308,995 | 2,549,084 | - | - | - | 3,858,079 |
| **Net Project Cost Estimates:** | 1,061,375 | 2,125,137 | 42,291 | 806,521 | 5,855,847 | 53,276 | - | - | 6,715,644 |

**Total Project Cost Estimate (escalated):**

| | |
|---|---|
| Construction: | $9,246,501 |
| Other Costs: | $5,193,045 |
| Total Costs: | $14,439,546 |

Schedule & Costs as of May 2023

# City of Santa Cruz
# Proposed Capital Investment Program Budget (by department)
**Fiscal Years 2024- 2028**

**Water** — **711- Water & Water System Development Enterprise Fund**

## ASR Planning

**Project Description:** **Project # c701609**

Evaluate the feasibility of Aquifer Storage and Recovery (ASR) in the Mid County Groundwater Basins per the recommendations of the Water Supply Advisory Committee. Project would potentially provide additional potable water to City and other agency customers, addressing part or all of water supply deficiencies. Project requires feasibility studies, design, permitting, and construction of infrastructure improvements. Funds in FY2024 will include ongoing groundwater modeling, hydraulic modeling and property investigations.

**Project Benefit:**
ASR would potentially provide additional potable water to City and other partners, potentially addressing part or all of water supply deficiencies.

**Project Location:**
City water service area, Santa Cruz Mid-County and Santa Margarita groundwater basins.

**Operating Budget Impact:**
Not applicable

**Project Schedule:**
Through December 2024

**Project contact email:** hluckenbach@santacruzca.gov

| | | Fiscal Year 2023 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Prior Year | Budget | Estimated Actuals | FY 2024 Proposed | FY 2025 Estimate | FY 2026 Estimate | FY 2027 Estimate | FY 2028 Estimate | Total 2024 - 2028 |
| **Account # 711-70-91-7153-57302** | | | | | | | | | |
| **Project Cost Estimate:** | 2,845,954 | 1,941,243 | 469,241 | 676,914 | - | - | - | - | 676,914 |
| **Net Project Cost Estimates:** | 2,845,954 | 1,941,243 | 469,241 | 676,914 | - | - | - | - | 676,914 |

**Total Project Cost Estimate (escalated):**
Other Costs: $4,797,712

Schedule & Costs as of May 2023

# City of Santa Cruz
# Proposed Capital Investment Program Budget (by department)
**Fiscal Years 2024- 2028**

**Water** — **711- Water & Water System Development Enterprise Fund**

## ASR - Mid County Existing Infrastructure

**Project Description:** **Project # c702101**

Implement Aquifer Storage and Recovery (ASR) in the Mid County Groundwater Basin per the recommendations of the Water Supply Advisory Committee. This project looks specifically at the use of existing infrastructure in the Mid County Basin. Work includes design, construction and conversion of existing wells to permanent ASR wells.

**Project Benefit:**
ASR will provide additional potable water to City and other partners, addressing part or all of water supply deficiencies.

**Project Location:**
City water service area and Santa Cruz Mid-County Groundwater Basin

**Operating Budget Impact:**
Costs will be associated with the ongoing operation of four ASR wells.

**Project Schedule:**

| | |
|---|---|
| Planning: | 06/2020 - 04/2023 |
| Design: | 05/2023 - 11/2023 |
| Environmental: | 06/2022 - 11/2023 |
| Construction: | 11/2023 - 06/2027 |
| Post-Construct: | 07/2027 - 11/2027 |

**Project contact email:** lvandermaaten@santacruzca.gov

| | | Fiscal Year 2023 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Prior Year | Budget | Estimated Actuals | FY 2024 Proposed | FY 2025 Estimate | FY 2026 Estimate | FY 2027 Estimate | FY 2028 Estimate | Total 2024 - 2028 |
| **Account # 711-70-91-7153-57302** | | | | | | | | | |
| **Project Cost Estimate:** | 383,887 | 2,283,452 | 488,445 | 3,760,000 | 6,773,007 | 52,644 | - | - | 10,585,651 |
| **Project Funding Estimates:** | | | | | | | | | |
| Local Operating Grants & Contrib | - | - | - | 330,000 | 660,000 | 660,000 | - | - | 1,650,000 |
| **Net Project Cost Estimates:** | 383,887 | 2,283,452 | 488,445 | 3,430,000 | 6,113,007 | (607,356) | - | - | 8,935,651 |

**Total Project Cost Estimate (escalated):**

| | |
|---|---|
| Construction: | $6,858,896 |
| Other Costs: | $4,225,572 |
| Total: | $11,084,468 |

Schedule & Costs as of May 2023

# City of Santa Cruz
# Proposed Capital Investment Program Budget (by department)
**Fiscal Years 2024- 2028**

**Water** — **711- Water & Water System Development Enterprise Fund**

## Intertie 1 - Santa Cruz-Scotts Valley

**Project Description:** **Project # c702205**

This project will link the City of Santa Cruz and Scotts Valley Water District through the construction of a nearly 2-mile intertie pipeline with SVWD. The Pipeline will be along La Madronna Drive, from Kite Hill Tank in Pasatiempo to the intertie pump station. The project has recieved a no-match grant from the Department of Water Resources.

**Project Benefit:**

This project provides opportunities for conjunctive use of surface water and groundwater resources.

**Project Location:**

La Madronna Drive, Santa Cruz

**Operating Budget Impact:**

Project is in design and operating costs are haven't been determined.

**Project Schedule:**

| | |
|---|---|
| Design: | 09/2022 - 11/2023 |
| Environmental: | 11/2022 - 08/2023 |
| Construction: | 03/2024 - 08/2025 |
| Post-Construct: | 08/2025 - 08/2026 |

**Project contact email:** nhaley@santacruzca.gov

| | | Fiscal Year 2023 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Prior Year | Budget | Estimated Actuals | FY 2024 Proposed | FY 2025 Estimate | FY 2026 Estimate | FY 2027 Estimate | FY 2028 Estimate | Total 2024 - 2028 |
| **Account # 711-70-91-7151-57302** | | | | | | | | | |
| **Project Cost Estimate:** | - | 1,000,000 | 786,045 | 1,552,231 | 5,667,767 | 484,419 | - | - | 7,704,417 |
| **Project Funding Estimates:** | | | | | | | | | |
| Local Operating Grants & Contrib | - | - | 786,045 | 1,930,000 | 4,280,000 | 370,000 | - | - | 6,580,000 |
| **Net Project Cost Estimates:** | - | 1,000,000 | - | (377,769) | 1,387,767 | 114,419 | - | - | 1,124,417 |

**Total Project Estimated Cost (escalated):**

| | |
|---|---|
| Construction: | $5,553,222 |
| Other Costs: | $3,615,219 |
| Total Costs: | $9,168,441 |

Schedule and costs as of May 2023