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

Water Department

WATER COMMISSION

Regular Meeting

December 04, 2017

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

***Denotes written materials included in packet.

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.

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

Call to Order

Roll Call

Statements of Disqualification - *Section 607 of the City Charter states that ...All members present at any meeting must vote unless disqualified, in which case the disqualification shall be publicly declared and a record thereof made.The City of Santa Cruz has adopted a Conflict of Interest Code, and Section 8 of that Code states that no person shall make or participate in a governmental decision which he or she knows or has reason to know will have a reasonably foreseeable material financial effect distinguishable from its effect on the public generally.*

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

Announcements - No action shall be taken on this item.

Consent Agenda (Pages 1.1 – 2.8)
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.

1. City Council Actions Affecting the Water Department

   Accept the City Council items affecting the Water Department.

2. Approve the November 6, 2017 Water Commission Minutes

   Approve the November 6, 2017 Water Commission Minutes.

Items Removed from the Consent Agenda

General Business (Pages 3.1-6.2)
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.

3. Update on Watersheds Health and 2018 Sanitary Survey

   Receive a report on the conditions of the City's source water watersheds following the 2017 storm season and on the 2018 Watersheds Sanitary Survey Update.

4. Status Report on the Anadromous Habitat Conservation Plan and Water Rights Reliability Projects.

   Receive information on the status of these two projects and provide direction to staff.

5. Water Supply Augmentation Strategy, Quarterly Work Plan Update

   Receive information regarding the status of the various components of the Water Supply Augmentation Strategy and provide feedback.

6. Establish a Water Commission Ad Hoc Committee to participate in the development of the Water Supply Augmentation Strategy-Project Evaluation

Process

Receive information regarding the next steps for the Water Supply Augmentation Strategy and motion to form a temporary ad-hoc committee of no more than 3 Water Commissioners appointed by the Chair to assist staff in the development of a decision-making framework for the Water Supply Augmentation Strategy.

Subcommittee/Advisory Body Oral Reports - No action shall be taken on this item.

7. Santa Cruz Mid County Groundwater Agency

8. Santa Margarita Groundwater Agency

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

Adjournment

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WATER COMMISSION
INFORMATION REPORT

DATE: 11/29/2017

AGENDA OF: December 4, 2017

TO: Water Commission

FROM: Rosemary Menard, Water Director

SUBJECT: City Council Actions Affecting the Water Department

RECOMMENDATION: Accept the City Council items affecting the Water Department.

BACKGROUND/DISCUSSION:

November 14, 2017

Graham Hill Water Treatment Plant Tube Settler Replacement Project - Professional Services Contract Amendment No. 1 (WT)

Motion **carried** to approve Contract Amendment No. 1 for the Graham Hill Water Treatment Plant Tube Settler Replacement Project with Kennedy/Jenks Consultants in a form approved by the City Attorney.

November 28, 2017

Newell Creek Dam Inlet/Outlet Pipeline Project: Professional Service Contract for Environmental Review and Permitting – Budget Adjustment (WT)

Motion **carried** authorizing the City Manager to execute an agreement in a form to be approved by the City Attorney with Dudek (Santa Cruz, CA) in the amount of $457,100 to provide professional services related to environmental review and permitting for the Newell Creek Dam Inlet/Outlet Pipeline Project.

Resolution No. NS-29,332 was adopted appropriating funds and amending the FY2018 budget in the amount of $460,000 from the Water Operations Fund (711) to fund the environmental review and permitting for the Newell Creek Dam Inlet/Outlet Pipeline Project.

PROPOSED MOTION: Motion to accept the City Council items affecting the Water Department.

ATTACHMENTS: None.

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Water Commission
7:00 p.m. –November 6, 2017
Council Chambers
809 Center Street, Santa Cruz

MINUTES - Water Commission Meeting
Please note minutes are not final until approved by the Advisory Body

Call to Order Chair Wilshusen called the meeting to order at 7**:**04 p.m. in the City Council Chambers.

Roll Call

Present:	L. Wilshusen (Chair), D. Engfer (Vice-Chair), D. Baskin, J. Mekis, A. Schiffrin, D. Schwarm
Absent:	W. Wadlow (with notification)
Staff Present:	R. Menard, Water Director; H. Luckenbach, Deputy Director/Engineering Manager; N. Dennis, Principal Management Analyst; K. Crossley, Senior Professional Engineer; S. Easley Perez, Associate Planner II; K. Moore, Associate Planner II; T. Goddard, Conservation Manager; M. Kaping, Management Analyst
Consultants:	Ann Sansevero, Dudek; Todd Reynolds, Kennedy/Jenks Consultants.

Others: Several members from the general public.

Announcements –There were no announcements.

Statements of Disqualification – There were no statements of disqualification.

Oral Communications –There were no oral communications.

Consent Agenda

1. City Council actions affecting the Water Department
2. October 2, 2017 Water Commission Minutes
4. 2018 Water Commission Schedule
5. 4th Quarter FY 2017 Financial Report (continued from October 2, 2017 meeting)
6. 1st Quarter FY 2018 Financial Report

Items Removed from the Consent Agenda

3. Summary of Supply Modeling and Aquifer Storage and Recovery Information presented at the October 2, 2017 Water Commission Meeting
7. Update to the 2015 State of the Water System (continued from October 2, 2017 meeting)

Commissioner Schiffrin moved the consent agenda. Commissioner Baskin seconded.
VOICE VOTE: MOTION CARRIED
AYES: All.
NOES: None
ABSTAIN: Commissioner Schiffrin for item #2 due to an absence.

General Business

3. Summary of Supply Modeling and Aquifer Storage and Recovery Information presented at October 2, 2017 Water Commission Meeting

Attachment 1 to this item, Summary and Key Points, Confluence Model Presentation, states four assumptions to the model that will likely need to be further evaluated. One of these assumptions is how the model treats the city's surface storage (Loch Lomond Reservoir) and ASR/groundwater storage. Explain what is meant by risk tolerance as it relates to how the two storage reservoirs would be operated in reality.

- The Confluence model dispatches each water source based on a suite of criteria such as available water, water rights, water quality, etc. The model is currently set up to dispatch Aquifer Storage and Recovery (ASR) storage at the same time reservoir water is dispatched, assuming the relevant criteria are met. The model does not require that ASR storage be full before it being dispatched to meet demand. I.e., ASR storage may be only 40% full when a drought is experienced. The city will need to establish operational policy around when this new source is put into the portfolio of available supply. If it is drawn down prior to being full, it may not be available to meet full drought-demands or be available in subsequent drought years until it reaches a full condition. These are risk-based decisions that will be considered moving forward.

Commissioner Schiffrin moved to accept the Summary of Supply Modeling and Aquifer Storage and Recovery Information presented at October 2, 2017 Water Commission. Commissioner Baskin seconded.
VOICE VOTE: MOTION CARRIED
AYES: All.
NOES: None

7. Update to the 2015 State of the Water System (continued from October 2, 2017 meeting)

Staff will include additional information on the relationship of the following three projects described in the State of the Water System Update to the WSAS work.

1) North Coast system as it relates to the as-designed capacity of that line.
2) North Coast diversion to understand how, once the HCP is in place, it may become part of the WSAS system.

3) Newell Creek Dam Inlet/Outlet Pipeline Project input and the ability to fill and extract from Loch Lomond in the future.

Commissioner Schiffrin moved to accept the Update to the 2015 State of the Water System (continued from October 2, 2017 meeting) Commissioner Baskin seconded.
VOICE VOTE: MOTION CARRIED
AYES: All.
NOES: None

8. Presentation by Dudek on Updating the Water Supply Augmentation Strategy, Local Desalination Option

Has a radial collector well system ever been implemented for subsurface, ocean collection?

- While this type of subsurface collector system, which is similar to a Ranney collector well that was extensively discussed during the WSAC process, has not been implemented elsewhere in the marine environment, experts consulted with during the scwd^2 project were of the opinion that, based on the available information of the hydrogeology and available space, this type of well system may work. However, given our ocean environment, and the nature of the subsurface material, there are concerns about the volume of water such a system will be able to reliably produce. More study is needed related to requirements of the Ocean Plan Amendment (OPA) for use of subsurface intakes, particularly on their effectiveness and feasibility.

How do you go about determining the cost of construction of a radial collector well in a marine environment?

- Staff consulted with the Ranney collector manufacturer, and offshore marine engineers and contractors to better understand the potential requirements of this approach. Construction would be similar to that used to build the caissons for the new San Francisco Bay Bridge and this example was used to build a base cost. In addition, a higher than normal contingency was built into the cost as this approach would be a first of its kind solution in the marine environment.

Would it be helpful to go back and revise the base cost estimates from 2012 and is it possible that improvement in technology may bring costs down?

- The costs from the 10% design of the 2013 scwd^{2}desalination project were used and then inflated to reflect more recent experiences such as the bid results from the Monterey Pure Water project. These numbers could be further refined and should be if this alternative is pursued further.

Since the Commission will be asked to compare the costs between the desalination and recycled water options, would it improve our decision making if we had the most current cost estimates for all projects?

- Yes, it is our intention, once the ASR and In Lieu studies are completed, to return to all the proposals and re-evaluate the assumptions and basis for the cost estimates to ensure an apples to apples comparison.

With a subsurface, radial collector well never being employed in a marine environment, how do we know if it would be successful?

- Consultants and vendors have indicated that a full scale unit would need to be installed as a type of pilot test of this technology in order to be able to confirm its efficacy. This is a costly endeavor that may prove the technology is not suitable to this location or does not yield the volumes needed to fill the water supply gap. Additional sampling of the subsurface materials could be performed along with groundwater modeling prior to pilot testing to increase the understanding of this technology prior to excessive capital investments. That being said, it remains unclear how the Regional Water Quality Control Board (RWQCB) will interpret a feasibility study on this technology. To this end staff recommends early consultation with the RWQCB to flesh out the details of this regulation as it relates to this location.

What is the timeline for making decisions and how will needing to decide on the subsurface options affect the decision making for the project overall? What backup alternative will also be considered?

- To be clear, we are not making a decision to move forward with desal at this point. We are exploring our backup alternatives as recommended by the Water Supply Advisory Committee (WSAC). The analysis is needed to make an apples to apples comparison with recycled water as the other backup alternative. The decision on the preferred backup alternative will not be made for another year, plus or minus, following consultations with the RWQCB and additional information is needed to compare the cost of the two backup alternatives.

Seeing that the cost of a desalination project without a subsurface intake is significantly less than a desalination project with a subsurface intake, will we be able to engage in a process with the RWQCB to better understand what the analysis of subsurface intakes would need to include in order to inform an ultimate decision on backup alternatives?

- We have a significant amount of information on the subsurface intake alternatives from the work done on the scwd^2 desalination project making it fairly straightforward to make a presentation to the Regional Board on subsurface intakes, specifically the collector well alternative. We could work with them to negotiate requirements for any additional work that needed to be done to demonstrate feasibility, or infeasibility.

Is the Deep Water Desal (DWD) project pursuing similar subsurface intakes?

- The proposed open ocean intake for the DWD project is an abandoned structure that would pull ocean water from a depth at which marine life is supposedly significantly lower than at shallower depths. The OPA seeks to reduce impacts to marine life and a deep intake would presumably do this. That said, the project is also currently looking at the feasibility of subsurface intakes as required by the Ocean Plan Amendment.

What is meant by the reference to energy recovery as a design parameter as described on page 8.12 in the report?

- Energy recovery devices are frequently installed along with seawater reverse osmosis (RO) units to recoup a portion of the energy required in the RO process. Water pressures must be raised to approximately 1,000 PSI to force water through RO membranes. The

remaining brine retains approximately 900 PSI which can be used to power a reverse turbine thus lowering the overall energy use of the facility. Again, this is standard practice in modern facilities.

Page 8.16 of the Dudek report states that the Integrated Water Plan (circa 2003) considered Olympia Quarry as a groundwater storage location. Is this site a viable opportunity for Aquifer Storage and Recovery (ASR)?

- San Lorenzo Valley Water District operates wells at the Olympia Quarry and in the ASR discussion held at the October Water Commission meeting, no potential sites were identified in that location. This location may still be feasible; no sites have been ruled out at this point in time.

The DWD design includes a data center which would provide the benefit of warming the seawater as it acts as a cooling system to the data center. This would improve efficiency and is discussed on page 8.23. Would the discharge water back to the ocean be warmer and would this need to be mitigated? Is the data center included in the project?

- The temperature increase resulting from the RO process is negligible and, as demonstrated at other facilities, we assume would not be an issue requiring mitigation.
- The DWD project has been described as including a data center. However, the description of the project and associated costs provided by DWD staff at the time of this analysis do not include the data center. Staff received no indication that this decision was final and assumes that a data center would in fact be included in a final project, likely having the effect of reducing the unit cost.

If the Pure Water Soquel project is pursued, will there be enough treated wastewater to perform the dilution necessary for a desalination project and will the brine dilution math pencil out? How much wastewater do we have available for this backup alternative?

- The Dilution Analysis conducted for the $scwd^2$ project would need to be updated with current conditions including assumptions about the Pure Water Soquel project. The previous analysis concluded that dilution requirements could be met although brine storage tanks were needed as part of the $scwd^2$ project to store brine at night, when treated wastewater discharges were low. However, modifications to the existing outfall could be made to meet dilution requirements in lieu of or in addition to using dilution water.

There is discussion on page 8.47 of the report of discontinuing the use of the Beltz Well system. Is this a component of this desalination backup alternative?

- A number of scenarios were evaluated using the water system's hydraulic model to understand any impacts resulting from the introduction of desalinated water into the system. The modeling identifies areas in the system where pressures, velocities, water age, etc. exceed operational recommendations and would need further analysis and potentially infrastructure improvements. To perform the hydraulic modeling assumptions were made about the operation of the Beltz wells and whether or not, during a drought when a desalination project were online, the city would continue to pump groundwater. For the majority of the scenarios presented in the report the Beltz well system was assumed to be off during operation of the desalination plant in order to preserve

groundwater levels and reduce the risk of seawater intrusion. Additional analysis may be warranted and is easily done with the use of the department's in-house model.

Public comment was received following this item and the relevant points have been included in the summary above.

9. Briefing and Refresher on WSAC Change Management/Adaptive Management Framework

Can you provide some clarification on adopting a plan versus adopting an approach? Is it possible to include WSAC preferences and values in the "Level Playing Field Evaluation Results?

- Yes, WSAC's preferences and values will be included in the evaluation tool.

Will it be possible to further quantify the criteria of "timeliness" to reflect that projects may have differing implementation dates?

- The "timeliness" criterion is related to whether the project can be completed and online by 2025. To simplify the chart, a pass/fail criterion was indicated however, in reality, at the point the evaluation is completed, all the projects would be developed enough to include project completion dates.

During the WSAC process, the group was not able to consider every criterion that should be used to evaluate water supply projects. Will criteria such as: robustness, redundancy, resiliency, adaptiveness and flexibility to reduce our dependency on the San Lorenzo River and increase our raw water source portfolio be included in the analysis?

- One of the lessons of the 2017 winter storms was that a major transmission pipeline failed, not our raw water sources. While it is not a bad idea to diversify our source water portfolio, we need to also focus on reliability of the existing system as one of the first topics WSAC explored.

What impact will delaying a decision on Element 3 have on our work because we do not have information on Elements 1 & 2 and the recycled water portion of element 3?

- The timeline calls for a decision point in 3 years so we have time to wait for better information on the feasibility of injecting water into local aquifers before we make any decision on which of the two options for Element 3 would make more sense to use to compare with winter water harvest options.

Is it true that the City would need to initiate the CEQA process with all four of the WSAC alternatives prior to making a final decision?

- CEQA would need to proceed on the selected project, or suite of projects or actions. If a recommendation was made to include all four WSAC alternatives (presumably in lieu, ASR, desalination and some form of recycled water) CEQA could proceed on all four alternatives as part of a program approach to water supply reliability. However, without a recommendation of this kind, proceeding with CEQA would be premature as the project would not be defined and therefore speculative.

Public comment was received following this item and the relevant points have been included in the summary above.

Subcommittee/Advisory Body Oral Reports

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

Commissioner Baskin gave an update on the Groundwater Sustainability Plan (GSP) Advisory Committee orientation and chartering process. Two of the planned four orientation sessions have occurred with the last two scheduled for November 13th and December 7th. The Advisory Committee has also completed the first of two planned chartering sessions, with the second scheduled on November 13th.

At the MGA Board meeting on November 16th, Russ McGlothlin an attorney involved in drafting the Sustainable Groundwater Management Act in 2014 will present an overview of SGMA's statutory governance framework and the authorized tools that Groundwater Sustainability Agencies will have at their disposal and the constraints that will guide their operations and decision-making.

Additional details are available at the MGA's website: www.midcountygroundwater.org .

11. Santa Margarita Groundwater Agency

Commissioner Engfer provided an update on the newly formed SMGA and its work on developing by-laws. They expect to finalize this work at the next meeting at 7:00 pm on Wednesday, December 13th. Since this basin is not critically over-drafted, the GSP is not due until the end of January, 2022. As a result the SMGWA will have the opportunity to benefit from the efforts of the MGA. A big focus of the SMGWA in the coming months will be on bridge building between the participating water agencies which will come as they work together to develop the GSP.

Additional details are available at the SMGWA's website at www.smgwa.org.

Director's Oral Report

Ms. Menard announced presentations next meeting will focus on the natural resources and environmental side of the house. We will be reviewing the sanitary survey, the health of the watershed related to sedimentation issues, status of Habitat Conservation Plan, and the Water Rights Conformance project work.

In January there will be a presentation and review of the current CIP projects in the Department projects.

Adjournment Meeting adjourned at 9:22 pm.

Respectfully submitted,

Nicole B. Dennis
Principal Management Analyst

WATER COMMISSION
INFORMATION REPORT

DATE: 11/29/17

AGENDA OF: December 4, 2017

TO: Water Commission

FROM: Zeke Bean, Water Resources Supervisor

SUBJECT: Update on Watersheds Health and 2018 Sanitary Survey

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RECOMMENDATION: Receive a report on the conditions of the City's source water watersheds following the 2017 storm season and on the 2018 Watershed Sanitary Survey Update.

BACKGROUND:

This report is intended to provide an overview of the conditions of the City's source water watersheds following the 2017 storm season and of the 2018 Watershed Sanitary Survey. The City's source water watersheds are comprised of several variations of the three major rock types, with the east side of the San Lorenzo watershed generally comprised of sedimentary formations (shale, mudstone, sandstone), and the west side of the San Lorenzo watershed and north coast watersheds (Liddell, Laguna, and Majors) generally comprised of igneous (granite, quartz) and metamorphic (marble) formations. The strong winter storms of early 2017 caused significant damage to the City's water system and extensive erosion and slope failures within the Newell Creek watershed (Loch Lomond) and throughout the relatively unstable east side of the San Lorenzo watershed, contrary to the north coast and west side of the San Lorenzo watersheds.

The City is presently working with Kennedy/Jenks Consultants to complete an update to the City's surface water watersheds sanitary survey. The San Lorenzo River and North Coast Watersheds Sanitary Survey provides an overview of the previous 5-years of source water quality data and discusses watershed management practices and controls to maintain and improve source water quality. The City partnered with San Lorenzo Valley Water District (SLVWD merged with Lompico County Water District in 2016) on this update as the San Lorenzo River watershed supports both City and SLVWD source waters.

DISCUSSION:

2017 Watersheds Health

After a nearly 5-year drought, precipitation in the Santa Cruz mountains neared 100 inches between October 2016 and September 2017 (Water Year 2017). A series of strong atmospheric rivers that moved over the region resulted in rainfall and subsequent stream flows that were 2 to 3 times above average, Water Year 2017 the wettest year on record in terms of total annual runoff, surpassing 1983, and second wettest in terms of annual rainfall total. These series of storm systems that delivered repetitive rainfall events to Santa Cruz resulted in the replenishment of soil moisture after years of drought, recruitment of large woody material into the stream system, and the sorting of stream bed substrate, multiple landslides and other geomorphic changes in the San Lorenzo River and north coast stream systems. Overall, these impacts to the watershed systems likely resulted in a net improvement of watershed functions in terms of both source water quantity and fisheries habitat.

The availability of sustained year-round base flow in Santa Cruz county stream systems is dependent on the saturation of soils by rainfall during the fall, winter and spring months. Summer 2017 base flows for the San Lorenzo River and north coast streams were 1.5 to 2 times greater than average, resulting in increased flexibility to meet our water production needs while meeting instream flow goals for maintaining adequate habitat for fisheries. Sustained flows in Laguna Creek resulted in the ability to divert water for more of the summer than is typical, which improved the overall quality of the raw water blend. Additionally, down cutting of the lower San Lorenzo River below the Tait Street intake resulted in increased water velocity at the intake, which likely improved the raw water blend. Increased base flows result in improved rearing conditions, the most critical life stage for local anadromous fish, as there is greater movement of food throughout the systems, increased opportunity for anadromous salmonid species to take cover from predators, and an overall greater abundance of wetted habitat than during lower flow conditions.

The over-saturated soils also led to numerous bank and hillslope failures within source water watersheds during and after storm events including on City watershed properties. Increased sedimentation of the stream systems due to bank and hillslope failures resulted in more frequent turbidity spikes in subsequent storms, as there were more fine sediments available to be transported in the stream systems. However, the higher flows did appear to result in improved sorting of the sands, gravels, cobbles and boulders that comprise the stream substrates, which results in the increased availability of adequate spawning habitat. Additionally, the high flows were sufficient to transport decades of accumulated sediment out of the lower San Lorenzo River / flood control channel. While this increased flood capacity in the flood control channel, it also resulted in lowering the habitat value of the flood channel reach of the river for fish due to the formation of a new, wider channel with increased solar exposure and shallower pools. These conditions will likely improve as riparian vegetation grows and the new channel alignment becomes established.

The large storm events also likely resulted in the recruitment of large woody material into the stream system. Large woody material is a crucial element in a healthy stream system in that it helps with the sorting and distribution of sediment, which can help to limit the frequency and duration of turbidity events, retard flashiness of runoff, create scour pools for fish and form banks on which riparian vegetation can grow. While the results of the County's annual riparian corridor wood survey have not yet been published, anecdotal observations of woody material in the lower river and along Seabright Beach subsequent to the winter storms is a strong sign that a large amount of wood was distributed throughout the source watersheds.

2018 San Lorenzo Valley and North Coast Watersheds Sanitary Survey Update

Sanitary surveys are required by the State Water Resources Control Board, Division of Drinking Water (DDW) to be completed for each watershed that is a drinking water source. Updates are required every five years per the State of California Surface Water Treatment Regulations (CCR §64665). State regulations incorporate the provisions of the federal Surface Water Treatment Rules mandated by the US Environmental Protection Agency (EPA) and enforced by DDW as a primacy agency for federal regulations.

A watershed sanitary survey is a detailed evaluation of surface water sources and an assessment of vulnerability to contamination. To meet the requirements of the federal and state regulations, the sanitary survey is required to include physical and hydrological description of the watershed, a summary of source water quality monitoring data, a description of activities and sources of contamination, a description of any significant changes that have occurred since the last survey which could affect the quality of the source water, a description of watershed control and management practices, an evaluation of the system's ability to meet requirements of the Surface Water Treatment Regulations, and recommendations for corrective actions.

A primary objective of the Update is to identify any changes in the watershed with the potential to cause contamination of the source water bodies. While management programs for the City's source watersheds are well-established and take a comprehensive approach to watershed protection, changes in land use or concentration of certain types of activities can raise new issues or require modification to existing programs.

After identifying potential sources of contamination, the analysis then shifts to determining those sources that can be categorized as significant to the watershed. In looking at the San Lorenzo River and North Coast watersheds, four groups of contaminant types are recognized: sediment, nutrients, inorganic chemicals, and pathogens. Seven significant sources for those contaminants were also recorded: wastewater including discharge from septic systems, urban runoff, confined animal facilities/stables, unauthorized/illegal activities, cannabis cultivation, timber harvest, and landslides/geologic hazards.

Watershed management and control practices for the San Lorenzo River and North Coast watersheds already include public education, surveillance, road improvements, riparian protection, emergency planning, and coordinated outreach. The Update suggests enhancement of the current programming due to shifts in land use with new cannabis regulations, prioritization of karst protection zones, and a long-term trend of declining funding for programs supported by non-profits and special programs.

Evaluation of the water quality data collected in the watersheds resulted in a finding of compliance with the current Surface Water Treatment Rules and no corrective actions are required to meet regulatory standards. The recommended actions described in the Update are presented as activities to maintain the water quality of surface water sources and potentially to improve the overall health of the watershed lands.

The San Lorenzo River and North Coast watersheds present a management challenge as multiple parties of governmental, non-governmental, and private stakeholders carry responsibility and interest in the management programs. As part of the 2018 Update, the City is developing a worksheet that can serve as a reporting checklist for identified programs and activities that benefit from coordination with

other watershed stakeholders such as San Lorenzo Valley Water District, County of Santa Cruz, Cal Fire, and Resource Conservation District of Santa Cruz County.

FISCAL IMPACT: None

PROPOSED MOTION: Motion to accept the report on the conditions of the City's source water watersheds following the 2017 storm season and on the 2018 Watershed Sanitary Survey Update.

ATTACHMENTS: None

WATER COMMISSION
INFORMATION REPORT

DATE: 11/27/2017

AGENDA OF:	December 4, 2017
TO:	Water Commission
FROM:	Chris Berry, Watershed Compliance Manager
SUBJECT:	Status report on the Anadromous Salmonids Habitat Conservation Plan and Water Rights Reliability projects

RECOMMENDATION: Receive information on the status of these two projects and provide direction to staff.

BACKGROUND:

Anadromous Salmonid Habitat Conservation Plan –
Because the Water Department's operations have the potential to affect special status anadromous fish species we are required to obtain Federal Endangered Species Act (FESA) Section 10 and California Endangered Species Act (CESA) 2081 permits. The anadromous salmonids (coho and steelhead) Habitat Conservation Plan (HCP) is the foundation of both of these permits and describes, among other things, how we will avoid and minimize our effects on these species and mitigate remaining effects which cannot be avoided or otherwise minimized while operating the water system in an otherwise lawful fashion.

Staff has been working with California Department of Fish and Wildlife (DFW) and the National Marine Fisheries Service (NMFS) staff on CESA and FESA compliance, respectively, for Water Department operations since 2001. The process has been a lengthy due to the nature of the data required for long term permitting, the inherent challenges of balancing water supply with environmental water demands, agency staff changes, the drought and related factors.

Subsequent to the completion of the Water Supply Advisory Committee (WSAC) process, staff reinitiated negotiations with DFW and NMFS on the flow proposal and other related items which comprise the foundation of the HCP. Work on the HCP completed since the conclusion of the WSAC process includes:

- Reconvened the "technical team" and "principals" work groups,
- Updated covered activities (including Public Works activities),

- Revisited fish passage analysis,
- Identified additional flow goals beyond the original DFW 5 proposal,
- Conducted supply and biological effects modeling including climate change scenarios,
- Assembled the draft monitoring plan,
- Developed the non-flow mitigation program, and
- Convened the San Lorenzo River 2025 program.

Presently the Department is working with staff at both DFW and NMFS who was not involved in the HCP or water rights work prior to the WSAC process. Upon becoming familiar with the project, staff requested several changes to the flow proposal which included improvements to adult migration during the month of April, adult migration and spawning during the month of December and to adult migration and spawning between Felton and Santa Cruz for the duration of the migration and spawning season. As discussed during the October Commission meeting, most of these new flow goals can be accommodated within the context of the existing supply planning. Biological effects which cannot be offset with additional instream flow will be offset with non-flow mitigation projects such as riparian conservation, large instream wood and other habitat and watershed restoration projects.

The Water Department is nearly ready to make a final proposal to DFW and NMFS regarding instream flows, however there are several elements of the associated permits which must also be completed. These include:

- Refine biological effects analysis to incorporate updated climate change scenarios,
- Initiate program financial analysis,
- Finalize conservation strategy,
- Complete the non-flow mitigation program,
- Refine monitoring program,
- Compile remaining HCP chapters,
- HCP environmental review, and
- Section 10/2081 permitting.

Water Rights Reliability Project –

The Water Rights Reliability Project (also known as the Water Rights Conformance Project) is fundamentally important to the City's ability to not only implement instream flows for these special status salmonids but also to the implementation of regional supply planning solutions like aquifer storage and recovery (ASR). Improvement of instream flows through deferred diversion in the lower San Lorenzo River and north coast streams will result in more reliance on the Felton/Newell water system to meet system demand, thereby resulting in higher annual diversion volumes from Felton/Newell in the future and increased conflicts with the current "diversion to storage" water rights requirements for these sources. Furthermore, existing "place of

use" designations do not allow water diverted under these rights to be used in the mid-county area for groundwater basin storage and recovery or other purposes.

Specifically, the water rights project's major elements include:

- Adding rights of direct diversion to the Newell Creek and Felton water rights
- Obtaining an extension of time to perfect the Felton water rights
- Making the designated place of use consistent on all San Lorenzo River watershed water rights and inclusive of Santa Margarita and Mid-County utility service areas and groundwater recharge areas.

In 2006, the Water Department developed and submitted filings to the State Water Resources Control Board (SWRCB), with noticing in 2008, to address a historical oversight in the language of the Water Department's water rights documents for Newell Creek and the San Lorenzo River at Felton and to request a time extension for the full development of use of water the City diverts from the San Lorenzo River at Felton. In addition, the Water Department is now considering filing additional or amended petitions to the SWRCB that, if approved, would expand the place of use under the City's water right documents. Finally, the Water Department is considering recommending to the City Council a water rights action under which the City Council would approve changes to the City's pre -1914 appropriative water rights on the north coast streams to state certain minimum streamflow requirements.

The historical oversight addressed in the 2006 filings is that the Newell Creek license and San Lorenzo River permits to divert water were originally granted as "diversion to storage," rather than as "direct diversion" rights. A diversion to storage is used when the water diverted is put into storage, such as at the Loch Lomond Reservoir, and is retained in storage for some time prior to being treated and distributed to customers. The Water Department's interest in petitioning for the previously filed changes and any additional filings to the existing water rights (permits and licenses) is to eliminate technical constraints for the operations of its water supply resources.

Recently completed water supply planning work done by the City's WSAC identified water from the San Lorenzo River as potentially being critical to meeting the Water Department's projected future demand. Among the key approaches being pursued by the Department is an approach that would divert available flows from the San Lorenzo River during the wet season, typically November through April, to storage in regional groundwater aquifers. Water storage in the aquifer is achieved by using either or both passive recharge through in lieu service to regional water supply agencies using groundwater resources or active recharge through aquifer storage and recovery. This winter water harvest strategy will result in greater use of water from the San Lorenzo River during the coming decades. In addition, water from Felton diversion plays a vital role in meeting demands during operational outages and in allowing the Water Department to make changes in operations in response to environmental concerns, and is a significant component in the Water Department's response to dry year conditions. The pending, and potentially additional or

amended, water rights petitions under consideration would provide greater operational flexibility to the City to meet these future challenges.

The filed petitions have been pending while the Water Department worked with NMFS and DFW to obtain the aforementioned federal and state incidental take authorization relating to the effects of the water system on steelhead trout and coho salmon. Although this work is not finalized, considerable agreement has been reached on the flow release element of the ultimate HCP. Therefore, the Water Department believes that it is now reasonable to proceed with CEQA compliance for the water rights proposal in parallel with the final stages of work on the HCP.

The Water Rights Reliability Project would include the pending petitions, possible amended or additional petitions and City Council actions. These all would take into consideration the agreements reached during consultation with resources agencies for the HCP. The Project boundaries are yet to be defined and additional components may be added to address the water supply planning goals during the development of the detailed project description. The Request for Qualifications for CEQA compliance has recently been released and qualifications were due on November 30th, 2017. Contracting will follow early in calendar year 2018 and it is currently anticipated that the Project will gain definition during the first quarter of 2018. The Water Department is on a schedule to complete the CEQA compliance and water rights petition process by the end of 2020. SWRCB filings will also be prepared in parallel with the CEQA process and submitted subsequent to completion of the CEQA process in late 2020.

DFW and NMFS staff indicate that they are cautiously optimistic about this process and have indicated their willingness to move forward in partnership with the City so long as relevant instream flow goals are preserved within the project. It is anticipated that the HCP conservation strategy (including relevant instream flow goals) will be completed within a timeframe and include standards that align well with the Water Rights Reliability Project. Project approval by the SWRCB is contingent upon provision of adequate instream flows for anadromous salmonids through the HCP, therefore these projects are directly contingent upon one another.

DISCUSSION: None

FISCAL IMPACT: None

PROPOSED MOTION: Accept information on the status of these two projects and provide direction to staff.

ATTACHMENTS: None

WATER COMMISSION
INFORMATION REPORT

DATE: 11/27/17

AGENDA OF December 4, 2017

TO: Water Commission

FROM: Heidi Luckenbach, Deputy Director/Engineering Manager

SUBJECT: Water Supply Augmentation Strategy, Quarterly Work Plan Update

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RECOMMENDATION: Receive information regarding the status of the various components of the Water Supply Augmentation Strategy and provide feedback.

BACKGROUND: As per the Final Agreements and Recommendations of the Water Supply Advisory Committee (WSAC), the Water Commission shall receive quarterly updates on the status of the various elements of the recommended plan. This is the eighth quarterly update. Elements of the Water Supply Augmentation Strategy (WSAS) include In Lieu water transfers with neighboring agencies, Aquifer Storage and Recovery, Recycled Water, and Seawater Desalination. Demand management, via implementation of the Long Term Water Conservation Master Plan, is foundational to the WSAS. Also included herein are updates on other studies and projects that have or may have a nexus with the WSAS work. These are included in the section at the end of this report under "Other." The following report provides an update on the various efforts recommended by the Water Supply Advisory Committee (WSAC), accepted by the City Council in late 2015 and incorporated into the approved 2015 Urban Water Management Plan as directed by the Council.

DISCUSSION: Progress and status of the various WSAS-related work is described in detail below as well as that of other projects related to but not specifically articulated in the WSAS.

Demand Management

Status of Measures in the Water Conservation Plan

No. 2 Advanced Metering Infrastructure (AMI). Progress continues with the second phase of the AMI pilot project, which involves both installation of Badger Beacon cellular endpoints and meter replacement at selected large irrigation accounts. There are now 304 endpoints installed thus far, out of a total of 354 accounts. The majority of the remaining 50 endpoints are associated with large 1.5 and 2 inch meters, which are being replaced by Distribution crews as time permits. Of the 251 meters being swapped out - meters that are more than 10 years old – all are undergoing flow testing to determine meter accuracy. Test results will help inform an assessment of current revenue losses associated with existing meter stock and the benefits of future full

AMI/Meter Replacement program. The Department is in the process of developing a contract for a formal evaluation of the pilot project next fall, focusing on 1) reliability and accuracy of reads, 2) ease of installation and IT integration, 3) customer engagement, and 4) overall effectiveness of the technology for water efficiency, leak detection, and leak alerts. Staff is working concurrently with Waterfluence, with whom the City contracts to provide large landscape water budgets, to show hourly and daily water use charts from data collected via the Badger Beacon endpoints.

No 5. Home Water Use Report. The Water Conservation Master Plan identifies a number of new recommended programs for future development by the Water Conservation Office. Recommended program No. 5 is a "home water use report" engagement program. This type of program involves the sending of customized water use reports (via mail or email or a combination of the two), typically targeting high water-using customers. The intent of these reports is to engage customers with their water use and with programs available from the utility to reduce their usage. The program employs social marketing techniques of comparing the customer's water usage to other similar households (based on lot size, occupancy and other factors). In addition to the reports themselves, this program may offer other features such as a customer web portal, a utility portal and analytics software, various notification and messaging tools, and the ability to view water usage in a variety of ways including incorporating AMI data if available. The Water Conservation Office is currently evaluating the offerings from several vendors in this field. We have received demonstrations and information from two firms and are exploring their offerings and features. The timeline for program development according to the Master Plan is to have a program Request for Proposals issued in the first quarter of 2018 in order to select and hire a vendor for a program deployment in the summer of 2018. Program design considerations include whether or not to send reports only in the peak season, what size the target customer base will be (i.e. send only to top 20% of customers), and whether print or email will be utilized.

No 31. Residential Dishwasher Rebate. The Conservation Plan also calls for development of a residential dishwater rebate program in FY 2018. Staff has performed research on appliance standards and equipment available and prepared a conceptual description of the program. We are working on implementation scheduled to begin in January 2018. Like the clothes washer rebate program, ENERGY STAR certification will be a key criterion for rebate eligibility.

Other

The first of three rain barrel distribution events for this winter was held November 18, 2017. Two more are planned in January and February 2018. Water Conservation representatives have also been active at various public information and outreach events, including the County fair in September, the "Imagine a Day Without Water" art contest, and the Sustainability Plan kickoff event at UCSC in October.

Finally, Water Conservation Office has been participating in a national study sponsored by the Alliance for Water Efficiency as part of its outdoor water savings research initiative. The study is looking into the use and effectiveness of municipal irrigation restrictions during drought. It will examine the drought response approaches implemented by different water providers and the different savings achieved. There are six regional water authorities and eight cities serving as case studies. The City of Santa Cruz is the only provider among these participants to have

implemented rationing in the 2014-2015 drought experience, and is sharing a wealth of data in support of furthering the industry research.

In Lieu Water Transfers (Winter Water Strategy)
In August 2017 Black and Veatch was selected to study the compatibility of the City's surface water with Soquel Creek Water District's (District or SqCWD) distribution system and customer plumbing. Council approved a contract in the amount of $668,000. The cost will be shared equally between the District and City.

As reported previously, the study is organized in two phases as follows.

Phase 1, Bench Top Analysis. In this phase, pipe and water samples are collected and sent to a lab for analysis. The bench top analysis allows for a large number of water and pipe combinations to be screened and tested relatively quickly and economically by cutting small "coupons" of pipe and submerging them for a period of time in beakers of water samples. Two types of pipe were collected from the Soquel Creek system, asbestos cement and galvanized iron. Copper pipe with lead solder is also being tested to evaluate customer plumbing, but was not harvested from the system, rather a surrogate will be used. Approximately 10 feet of each pipe type are being tested. Water samples have been collected every two weeks since mid-October with 5 sampling events to date. Bench testing is expected to be complete in May 2018. Depending on the findings of the bench top work, the study may move directly into a full pipe loop study.

Phase 2, Pipe Loop Study. Once bench testing is complete, recommendations will be given about the need for the pipe loop study. If bench test results are deemed to be conclusive (in either direction) by the consultant team we will likely skip pipe loop testing. If questions remain, we will proceed with the full pipe-loop study. This phase is intended to simulate real world conditions; intact segments of pipe will be installed on racks and water will be circulated through them over a 9-month period. Water samples will be taken on a routine basis to monitor for corrosion, scale release, and color changes. After completion of one or both phases, a technical memorandum will summarize the findings and make recommendations on the potential for this strategy to be successful.

Aquifer Storage and Recovery (ASR) (Winter Water Strategy) - Phase I Work
Status

- Consultant: Pueblo Water Resources
- Contract Signed: February 2016
- Project Partners: NA
- Engaged Stakeholders: SqCWD, County of Santa Cruz, Scotts Valley Water District
- Amount Spent: $379,484
- Amount Remaining: $444,501
- Contract Amendment No. 1: $377,615
- Status: Delayed approximately 2 months.

Key meetings (Meetings of note in the reporting quarter include the following.)

A number of conference calls have been held in conjunction with the team to coordinate efforts as they relate to hydrology, habitat effects resulting from water department operations, and climate change. Of note is the recent series of discussions around the use of different climate change data. The Water Supply Advisory Committee (WSAC) used the best available data at the time, as recommended by the State of California for climate change planning. The WSAC focused on the worst case projected climate change for the central coast of California: regionally downscaled CMIP3 GFDL2.1 model, run with the A2 emissions scenario. For the HCP, and possibly additional water supply planning, we are using contemporary best available data now recommended by the State of California for climate change planning. Ten total climate change projections run as part of CMIP5 are recommended by the State run using RCP 4.5 and 8.5 (RCP stands for the representative concentration pathway and replaces the older emissions scenarios). Our efforts will focus on the RCP 8.5 results as it is presently most likely that human driven conditions will push things along the 8.5 pathway which results in more severe climate change. Both groundwater models (in the Purisima and Santa Margarita) use the GFDL2.1A2 scenario. Hydrometrics is now comparing these results to those using of additional downscaled models sampled from the CMIP3 and CMIP5 data sets. Nomenclature aside, the point to be made is that these datasets are different. It remains unclear how different assumptions about climate change will impact the modeling efforts.

Pueblo is currently under contract for Phase 1 of a potentially three phase evaluation process.

- Phase 1 – Paper study/modeling/siting study
- Phase 2 – Pilot study
- Phase 3 – Full Scale Implementation

Task 1.1 Existing Well Screening
This task is ongoing with no new report.

Task 1.2 Site Specific Injection Capacity Analyses
No new report.

Task 1.3 Geochemical Interaction Analysis
No new report. Tech memo has not been finalized.

Task 1.4 Pilot ASR Testing Program Development
This is an iterative task that relies on the groundwater models for the Mid-County and Santa Margarita Groundwater Basins to finalize recommendations of pilot ASR sites. This task is delayed slightly due to the ongoing delays with calibration of the Mid-County model. The current schedule has this task delivered to the city in February 2018.

Task 1.5.1 Well Siting Study
This work is ongoing and on a schedule similar to that of Tasks 1.4 (above), and 1.5.2 - Groundwater Model Coordination. ASR testing work plans for the Mid-County and Santa Margarita areas should be ready January/February 2018.

Task 1.5.2 Groundwater Modeling Coordination
This effort is ongoing and delayed by approximately 2 months.

Issue(s)
The issue being dealt with at this time is related to climate change dataset selection as described above and how the use of different datasets in the various models may impact modeling results and observations about the feasibility of the projects. Staff and consultants are in discussions with other experts in this field, and together with sensitivity analyses on the results are seeking to resolve this issue in the next few weeks.

Advanced Treated Recycled Water
Recycled Water Feasibility Planning Study (RWFPS) Status

- Consultant: Kennedy/Jenks Consultants
- Contract Signed: February 2016
- Project Partners: Water and Public Works Departments, State Water Resources Control Board (SWRCB)
- Engaged Stakeholders: City Parks and Recreation Department, County of Santa Cruz – Water Resources Division, Santa Cruz County Sanitation District, Scotts Valley Water District, Soquel Creek Water District, University of California Santa Cruz
- Contract Amount: $587,308
- Funding: State of California $75,000*; City Public Works, $35,000; Water, remainder
- Amount Spent: $508,168
- Amount Remaining: $79,140
- Contract Amendment No. 1: $26,357
- Contract Amendment No. 2: $74,951
- Schedule: On schedule, Final Report in Winter 2017
- Report: Administrative Draft submitted for review.

*Pending award of State Water Resources Control Board grant

Key meetings; in addition to monthly project status meetings, meetings of note include the following:

- August 2017, Outreach Meeting; staff met with Kennedy/Jenks along with sub-consultant Data Instincts and discussed possible approaches, challenges and opportunities related to outreach and education for recycled water in the community.
- September 2017, National Water Research Institute Expert Panel for Pure Water Soquel Public Meeting; staff attended neighboring agency Soquel Creek Water District's expert panel public meeting related to the use of advanced treated recycled water for groundwater replenishment in the Santa Cruz Mid-County Groundwater Basin.
- December 2017, UCSC Meeting; staff and UCSC to discuss the Projects in the RWFPS, high-level schedule and logistics, and network with UCSC staff.

Issue(s) and Next Steps

The final report identifies several projects that could be pursued. The projects that would function as water supply projects will continue to be analyzed along with the desalination project against identified criteria. The Commission will receive a work plan outlining this comparative analysis in early 2018.

The primary challenge associated with initiating the smaller, non-potable reuse (NPR) projects is budget and allocation of responsibility for projects that don't offer significant benefit from a water supply perspective. The budget is inclusive of many items such as capital cost, O&M cost, billing systems, customer training and staff training. Appropriating budget for initial capital cost is a crucial first step towards realizing recycled water for non-potable reuse. Yet in order for the project to be successful, the project ownership and responsibilities need to be allocated.

Another challenge is quantifying the outreach and education value for the Title 22 Upgrade project. NPR projects would be a first step for the City of Santa Cruz to showcase the safety and viability of recycled water to the community regardless of future end use. NPR water used for irrigation is largely accepted by the public whereas public acceptability for potable reuse is unknown and depends on a number of factors including understanding the process, confidence in supplier, and necessity. It is unknown at this point if investing in a small non-potable reuse project would aid in gaining public acceptance for all potential reuse applications.

Conversations continue between staff from the Water and Public Works Departments as well as UCSC.

Desalinated Water

- Consultant: DUDEK
- Contract Signed: May 2017
- Project Partners: NA
- Engaged Stakeholders: None at this time.
- Contract Amount: $139,669
- Amount Spent: $62,382
- Amount Remaining: $77,287
- Schedule: Currently on schedule.

The recommendations of the Water Supply Advisory Committee included desalination as a backup supply. DUDEK was hired in May 2017 to complete a "Desalination Feasibility Update Review." A draft report was submitted to the City for review and comment in October 2017 and DUDEK reported out on the study at the Water Commission's November meeting.

The report provides a review of feasibility, cost, timeliness, and approach for pursuing a seawater desalination facility for use by the City with the purpose of supporting the City's selection of a preferred Element 3. The report describes the water supply planning background and need for the report; provides an assessment of changed conditions that may affect the design, environmental review and permitting of a seawater desalination project; describes a City Seawater Desalination Project based on those changed conditions; provides a CEQA/NEPA compliance and permitting approach; assesses the timeliness of implementation; presents

opportunities for regional collaboration; and, provides conclusions about the ability of a City Seawater Desalination Project to meet current City objectives.

The following describes, at a high-level, the changed conditions.

Project Objectives: Filling the water supply gap with a project sized at 3.3mgd instead of 2.5mgd as analyzed in the scwd2 draft EIR.

Intake Pump Station Locations: Three intake alternatives evaluated instead of 8.

2016 Ocean Plan Amendment (OPA): OPA is the basis for Regional Water Quality Control Board (RWQCB) Water Code Section 13142.5(b) determinations. The OPA requires subsurface intake unless they are deemed infeasible. Additional study likely required assessing the feasibility of radial collector wells, and an update to the dilution analysis to is needed to estimate the degradation of all forms of marine life related to brine discharge

The study recommends pursuing early consultation with the RWQCB to confirm and clarify additional study needed to determine feasibility of subsurface intakes. Staff will pursue this recommendation and report back to the Commission.

Other (e.g., Source Water Monitoring, North Coast Diversions and Pipelines, Newell Creek Pipeline, Newell Creek Dam Inlet/Outlet Pipeline, Felton Diversion, Outreach and Education, Etc.)

Source Water Monitoring

- Consultant: Trussell Technologies
- Contract Signed: November 2016
- Project Partners: NA
- Engaged Stakeholders: None at this time
- 2017 Contract Amount: $98,924
- 2018 Contract Amount: $80,002
- Schedule: Currently on schedule.

Through the Source Water Monitoring project, the City hopes to learn more about water quality in the San Lorenzo River, especially during high-flow, winter months. This understanding will allow for treatment of more water during the winter, making in-lieu water transfer possible.

Trussell Technologies is under contract to conduct source water monitoring, data management and analysis for water year 2017 and 2018. Water year 2017 monitoring and analysis is complete, and the final report will be delivered in December 2017. Monitoring for water year 2018 has commenced with an anticipated report delivery date in November 2018.

Outreach and Communication

Our Water, Our Future progress reports were distributed by email in September, October and November following Water Commission meetings.

No new information is available on the other projects. However, staff is aware of the Commission's interest in obtaining additional information on the relationship of these projects to the WSAS work with will update the Commission as information becomes available.

FISCAL IMPACT: None.

PROPOSED MOTION: Motion to receive information regarding the status of the various components of the Water Supply Augmentation Strategy and provide feedback.

ATTACHMENTS: None.

WATER COMMISSION
INFORMATION REPORT

DATE: November 27, 2017

AGENDA OF December 4, 2017

TO: Water Commission

FROM: Heidi Luckenbach, Deputy Director/Engineering Manager

SUBJECT: Establish a Water Commission Ad Hoc Committee to participate in the development of the Water Supply Augmentation Strategy-Project Evaluation Process

RECOMMENDATION: Receive information regarding the next steps for the Water Supply Augmentation Strategy and motion to form a temporary ad-hoc committee of no more than 3 Water Commissioners appointed by the Chair to assist staff in the development of a decision-making framework for the Water Supply Augmentation Strategy.

BACKGROUND:
The Water Supply Advisory Committee Final Report on Agreements and Recommendations provides the various elements of the Water Supply Augmentation Strategy (WSAS) (i.e., Aquifer Storage and Recovery, In Lieu Water Transfers, etc.) as well as an adaptive management strategy that introduced the concepts of adjustments, thresholds and triggers to assist in the implementation of the WSAS. There was agreement that the planning-level information available during the WSAC process was only adequate in allowing the WSAC to make contingent recommendations and that the City would need to be able to adjust or adapt the plan as information became available. To this end, the WSAC developed a Change Management Strategy, with guidelines and principles that reflected their values and priorities.

As has been reported to the Water Commission a significant amount of analytical work has been accomplished in the past two years on all elements of the WSAS work plan. As per the Implementation Plan and Timeline, some fairly significant decisions will need to be made between now and 2020 in order to develop, recommend and implement a water supply augmentation plan. Staff has been developing a work plan for the next three years that includes the continuation of technical analyses as well as the criteria and guidelines developed by the WSAC against which the technical data will be compared and contrasted.

DISCUSSION:
Staff is recommending the formation of an ad hoc committee to work with staff to develop a decision-making framework that would include both criteria and a process for evaluating the

various water supply augmentation strategy elements. This framework, which will be based on the system developed by the WSAC, will also inform communications with Council and the public about the process followed to support decision-making and ultimate recommendation of a water supply augmentation strategy. That is, the goal of the committee's work will be to identify the criteria and process the Commission will employ as it considers the upcoming WSAS decisions that will also clearly communicate how the Commission's decisions meet the Community's (and WSAC's) goals and expectations.

Language from the Water Commission's By Laws is inserted below to clarify the committee's role. The committee will bring back to the Water Commission refined information for the process moving forward from which the Water Commission can "discuss, deliberate, and make final recommendations" to staff on the decision-making framework.

At this point staff envisions this process would include outside consultant assistance, and anticipates the committee's work could be completed in approximately three months.

"Section 1. Ad Hoc Committees
Ad hoc committees are established by an Advisory Body to gather information or deliberate on issues deemed necessary to carrying out the functions and purpose of the Advisory Body. Ad hoc committees generally serve only a limited or single purpose, are not perpetual, and are dissolved once their specific task is completed. An ad hoc committee shall be less than six months in term and shall have fewer members than a simple majority of the membership of the appointing Advisory Body. Ad hoc committees shall bring back information to the Advisory Body in either oral or written form.

Following ad hoc committee input, the Advisory Body shall then discuss, deliberate, and make recommendations on the designated issue, thereby providing the public with the opportunity to participate in the decision-making process. This shall take place in the presence of a quorum of the Advisory Body at a properly noticed public meeting.

Ad hoc committees shall not be subject to the Brown Act. City staff shall not be required to be present at ad hoc committee meetings. All ad hoc committees shall provide a final report to the Advisory Body in lieu of minutes. "

FISCAL IMPACT: None.

PROPOSED MOTION: Motion to form a temporary ad-hoc committee of no more than 3 Water Commissioners appointed by the Chair to assist staff in the development of a decision-making framework for the Water Supply Augmentation Strategy.