Soquel Creek Water District - Community Water Plan - Frequently Asked Questions on Water Supply Options

Option	River/Surface Water Transfer		Recycled Water	Desalination	Stormwater Capture
Project Name	**North Coast Water Transfer/Purchase**	**In-Lieu Water Exchange with San Lorenzo River (WSAC, Element 1)**	**Pure Water Soquel**	**Deep Water Desal**	**Stormwater Capture**
What type of project is this?	Water Transfer/Purchase of Treated Surface Water	Water Transfer/In-Lieu Exchange of Treated Surface Water	Groundwater Recharge Using Purified Water	Purchase of Desalinated Water	Capturing available storm water may provide some water to aid in recharging the groundwater basin.
Is the District participating?	Yes. Formal agreement in place for Pilot Project, 5 year term, 2015-2020.	Yes. City of Santa Cruz is lead sponsor. District staff is working with City Staff on data sharing. No formal agreement in place. City is the lead sponsor and is performing feasibility evaluation. City anticipates seeking partners in late 2018 if the decision is made to further pursue this project as a key water supply option.	Yes. District is the lead sponsor. Working with City of Santa Cruz Public Works Department, City of Capitola Public Works Department, and Santa Cruz County Sanitation District.	Yes (limited). Deep Water Desal LLC (DWD - private firm) is the lead sponsor. The District entered into a memorandum of interest (non-binding, non-financial) with Deep Water Desal, for potential purchase of desalinated water.	Yes.
What is the estimated cost? (based on assumptions, each option is at different stages of concept and development).	To be determined. Costs will include the purchase of water, blending studies, system requirements by DDW, etc.[1]	Unknown. Per the City's Water Supply Advisory Committee report, costs could be $131 Million[2]. The cost split and price to purchase water is unknown.	$60-70[3] million for construction of purification facility, pipelines, recharge wells, and other appurtenances (based on District's feasibility study).	$33 million[4] for construction of 15-mile pipe plus $66M to purchase water (based on unit cost of water from DWD).	Unknown at this time.
Has environmental analysis been initiated and/or completed?	Completed in 2016.	Not initiated. Would require full CEQA analysis to be initiated by City.	District initiated full CEQA analysis in November 2016. Draft EIR anticipated in summer 2017.	DWD initiated full CEQA/National Environmental Protection Act (NEPA) analysis in summer 2015. Draft EIR anticipated summer 2017.	Not initiated.
Who owns the water rights?	City of Santa Cruz (City).	City of Santa Cruz, which would need to apply for modifying their water rights. Alternatively, the District would need to apply and acquire its own water rights.	District has received letters of intent from the City of Santa Cruz (treated secondary effluent) and Santa Cruz County Sanitation District (untreated wastewater).	District would need to enter into a fixed term, take-or-pay agreement to purchase water.	n/a
How long does it take to obtain water rights?	No modification to existing water rights needed. Santa Cruz can transfer and sell water to Soquel Creek Water District.	Unknown. Could be ~ 3 years up to 10+ years.	n/a	n/a	n/a
How much water will this project provide to Soquel Creek Water District?	Approximately 300 acre feet per year (AFY) between November-April. Could meet ~20% of District's water shortage needs.	City has expressed approximately 1,500 AFY. could be available to the District. Additional evaluation is needed. Could meet 100% of District's water shortage needs. This amount may be lower depending on how much water Santa Cruz would like the District to transfer back during drought years.	Approximately 1,500 AFY. Could meet 100% of District's water shortage needs.	Approximately 1,500 AFY. Could meet 100% of District's water shortage needs.	Approximately 50-100 acre feet per year could be captured.
What is the approximate timeframe?	**2015:** City and District enter into agreement. **2016:** California Environmental Quality Act (CEQA) complete and agreement modified. **2016:** Initiated evaluation of groundwater-surface water blending (Water Quality). **Fall 2017:** Purchase water from Santa Cruz. **2020:** Pilot Project term ends. City and District could extend agreement.	**2015:** City's WSAC recommends in-lieu and aquifer storage and recovery (ASR) as its preferred option. **2016–2018:** City to conduct feasibility studies. **2018–2020:** City to seek partners and District to decide whether to enter into formal agreement. Work on operational agreements, water rights modifications, begin infrastructure improvements; decide to proceed or not proceed with additional infrastructure improvements. **2020–2022:** Complete infrastructure improvements; in-lieu project on-line.	**2014:** District selects purified water as its preferred option to further evaluate. **2014–2016:** District receives state grant and completes feasibility study. **2016–2018:** District conducts environmental review to prepare Environmental Impact Report. **2018:** District to decide to conduct permitting, design, and construction. **2018–2022:** Permitting, design, construction, and on-line.	**2015:** District expressed interest in project and funds pipeline environmental analysis for Draft EIR. **2015–2018:** DWD conducts environmental review to prepare Environmental Impact Report. **2017:** DWD to seek partners. District to decide whether to enter into formal water purchase agreement. **2018–2022:** Conduct permitting, design, and construction.	**2016:** Stormwater Capture Identified to evaulaute **2017:** 6 potential sites are idenified to evaluate feasibility of recharge, determine cost, and schedule testing of water
What are issues to consider with this option?	• Short-term transfer project (5-year pilot project). • Limited amount of water (~20% of District's shortage). • Issues/concerns around blending of water need to be addressed. Does District need to add a corrosion inhibitor (such as orthophosphate) like City of Santa Cruz? • City's average total yield of North Coast sources is ~ 600 AFY. Are they willing to continue to sell 50% of this water source they rely on? • Would City be willing to extend contract after 2020 at this same cost rate? Cost may likely increase.	• Long-term transfer project. City is undergoing evaluations through 2018 • Project cost estimates are more than double those of Pure Water Soquel; however District's cost share is unknown at this time. • Modifying/acquiring water rights could be a lengthy process. City also still negotiating Habitat Conservation Plan which has been underway for ~10 years. • Issues/concerns around blending of water. (see left) • Unknown if quantity of water the City will request be sent back during drought conditions will have potential negative impact on groundwater replenishment. • Unknown how many ASR wells the Purisima Aquifer can support • Is this project timely enough to meet the Mandates for basin sustainability by 2040? • Does City want to partner with both Soquel Creek Water District and Scotts Valley Water District, or will they only need one partner agency? • Need to better understand differences between the City's WSAC recommended projects and those presented by others (City private citizens). • Would District Board and customers feel comfortable enough to partner with the City in 2018 before EIR is done and water rights are secured/modified? These steps could take several years before a project is defined.	• Acquiring source water agreement for treated effluent from the Santa Cruz Wastewater Treatment Facility. • Concerns of neighbors near the District's headquarters and the proposed purification facility, and proposed recharge well sites. • Evaluating and ensuring high-quality, reliable water quality of purified water and comparing to treated groundwater and treated surface water. • Re-evaluating potential purification facility sites. • Modeling to evaluate zone of groundwater recharge. • Modeling to evaluate adequate retention time; then, monitoring wells to ensure retention time.	• Project is currently the back-up to Cal Am's proposed desalination project. Unclear if DWD's project will be needed if Cal-Am's project is constructed. • Project costs are currently structured so that the proposed data center will shoulder some desal facility infrastructure costs. Unclear if the unit cost of water will go down when more data center clients are secured. • When DWD seeks formal water purchase agreements in 2017, will the District be ready to make a commitment with other options still being evaluated?	• Water quality • Permitting challenges • Landowners agreeing to participate

Over

ACRONYMS:
AFY = Acre Feet per Year
ASR = Aquifer Storage Recovery
CEQA = California Environmental Quality Act
DWD = Deep Water Desal
EIR = Environmental Impact Report

In-Lieu Exchange and ASR Wells= Excess winter, surface water is transferred to neighoring water agencies and then returned to City of Santa Cruz when needed in future dry year. Using ASR, treated excess surface water would be injected into the ground to be extracted by the City of SC, when needed.

WSAC = City of Santa Cruz's Water Supply Advisory Committee

1. *http://www.soquelcreekwater.org/sites/default/files/documents/Back_Up_Options/Cooperative%20Water%20Transfer%20Pilot%20Project_Water%20Purchase_7-22-16_signed.pdf*
2. *City of Santa Cruz Water Supply Advisory Committee Final Report/Reccomendations & Appendices. Appendix 8. http://www.santacruzwatersupply.com/meeting/wsac-final-reportrecommendation-appendices*
3. *http://www.soquelcreekwater.org/sites/default/files/images/COMBINED_FINAL_DRAFT_PDF.pdf*
4. *http://www.soquelcreekwater.org/sites/default/files/documents/Back_Up_Options/July15_Staff_Memo_KJ_Tech_Memos.pdf, page 811*

NOTE: For more information on the District's other Community Water Plan programs including Water Conservation, Groundwater Management, and more — visit www.soquelcreekwater.org/our-water/community-water-plan