

Regional Recycled Water Feasibility Study

NOVEMBER 2017



Table 4 Predicted CEC Removal Rates and Concentrations Through MF, RO, UV AOP from SCWWTF Secondary Effluent

Analyte	Predicted Removal (%) ⁽¹⁾	Units	Predicted Finished Water Concentration	Health Screening Level	MRL
4-nonylphenol	>89.1%	ng/L	<130.7	500,000 ⁽²⁾	100
Acetaminophen	99.7%	ng/L	ND	350,000 ⁽²⁾	5
Atenolol	>99.6%	ng/L	<4.1	70,000 ⁽²⁾	5
Caffeine ⁽⁶⁾	96.1%	ng/L	ND	350 ^(2,3)	5
Carbamazepine	>95.6%	ng/L	<24.2	1,000 ⁽²⁾	5
DEET	98.6%	ng/L	ND	2,500 ⁽²⁾	10
Estradiol - 17Beta	NA ⁽⁶⁾	ng/L	ND	0.9 ⁽²⁾	0.4
Estrone	98.8%	ng/L	ND	350 ⁽²⁾	1
Ethinylestradiol -17Alpha	NA ⁽⁶⁾	ng/L	ND	280 ⁽²⁾	5
Fluoxetine	97.3%	ng/L	ND	10,000 ⁽²⁾	10
Gemfibrozil	>97.2%	ng/L	<22.0	45,000 ⁽²⁾	5
Ibuprofen	>83.3%	ng/L	<272.4	40,000 ⁽²⁾	10
Meprobamate	98.3%	ng/L	ND	260,000 ⁽²⁾	5
Naproxen	94.6%	ng/L	22.2	220,000 ⁽²⁾	10
NDMA	* >84.2%	ng/L	<2	10 ⁽⁸⁾	2
PFOA	97.2%	ng/L	ND	400 ⁽²⁾	2.5
PFOS	94.9%	ng/L	ND	200 ⁽²⁾	2.5
Primidone	99.5%	ng/L	ND	840 ⁽²⁾	5
Progesterone	NA ⁽⁶⁾	ng/L	ND	110,000 ⁽²⁾	5
Sucralose ^(5,6)	>99.6%	ug/L	<0.4	150,000 ⁽⁴⁾	1000
Sulfamethoxazole	>95.8%	ng/L	<118.2	35,000 ⁽²⁾	5
TCEP	99.5%	ng/L	ND	2,500 ⁽²⁾	10
Testosterone	NA ⁽⁶⁾	ng/L	ND	7,000 ⁽²⁾	5
Triclocarban	99.7%	ng/L	ND		10
Triclosan	99.6%	ng/L	ND	350 ^(2,3)	2
Trimethoprim	99.8%	ng/L	ND	70,000 ⁽²⁾	5

MRL = Method Reporting Limit; ND = Non Detect; Blank = Not Defined; <MRL = Lower than the Method Reporting Limit
 NA = CEC was ND in All Studies

Notes:

- (1) Removal rates calculated by averaging the removal across all three treatment facilities where contaminant was detected above MRL.
- (2) 2013 Amended Recycled Water Policy for both surface spreading and groundwater injection projects.
- (3) Additional health-based screening levels from 2010 SWRCB Recycled Water CEC Science Advisory Panel Final Report, Anderson et al (2010) that includes references from the 2008 Australian Water Recycling Guidelines.
- (4) FDA threshold identified as a health screening level in WE&RF project 11-02.
- (5) For the three reference facilities, there was no data for this particular chemical, thus no ability to predict removal.
- (6) Sucralose and caffeine are surrogates for water-soluble uncharged chemicals of moderate molecular weight and not a CEC for its own health impacts, but rather for occurrence.
- (7) DWQ SWRCB – Updated May 2017. If both PFOA and PFOS are detected in drinking water, then a total concentration for both PFOA and PFOS must be less than or equal to 70 ng/L.
- (8) NDMA is a regulated contaminant with a Notification Level of 10 ng/L.

From: [Becky Steinbruner](#)
To: [bod](#)
Cc: [Shelley Flock](#); [Emma Western](#); [Melanie Mow Schumacher](#); [Becky Steinbruner](#)
Subject: Please Pull Consent Agenda Item 4.6 on November 19, 2024 District Board Meeting Agenda
Date: Monday, November 18, 2024 10:37:41 PM

Dear Board of Directors for Soquel Creek Water District,
Please pull Consent Agenda Item #4.6 for better discussion as a regular agenda item on the November 19, 2024 District Board meeting agenda.

I feel this is a critical contract that merits more thorough consideration than a consent agenda item receives.

Questions that need public discussion are:

1) It is unclear whether Eurofins will sample and monitor bacterial contaminants responsible for bio-fouling of the reverse osmosis membranes. Please clarify. This problem was significant at the Orange County IPR Fountain Valley) facilities.

2) Will Eurofins test for Extra-cellular Polymeric Substances known to be indicators of biofouling and and irreversible bacterial adhesion / scaling of reverse osmosis membranes?

<https://www.nature.com/articles/s41545-022-00183-0>

1) It is unclear in the RFP how the information provided by the analyses would be posted on the District website for public information and District transparency.

2) Is MBAS an accredited lab that will contract with Eurofins?

3) What is meant by: "Reporting of results in format compatible with SqCWD's Laboratory LIMS"?

4) The Eurofins lab is in Pomona, so how would samples be transported to reliably meet legally-required holding times?

Eurofins Eaton Analytical
941 Corporate Center Drive
Pomona, CA 91768
800-566-5227

5) How will Eurofins staff coordinate with CH2M Hill/Jacobs Engineering for sampling procedures and potential operational malfunction emergency sampling? The Scheduled Project pre-operational meetings only mention conferring with Soquel Creek Water District personnel, but not CH2M Hill or Jacobs Engineering staff who will be the certified operators of the Advanced Water Treatment Facility (AWTF) at Chanticleer.

6) Will Eurofins sample analyses report the levels of the seven known chemicals Carollo Engineering reported would not be able to be removed in the AWTF process?

7) Will Eurofins sample endocrine disruptor contaminants in finished water before injection in the aquifer? Dr. Judd Todd warned your Board of the health dangers of these chemicals in water in her comments submitted on the Project EIR and during the 2017 Recycled Water Expert Panel.

8) The Project Final Anti-Degradation Analysis reported the finished water will include 3.67mg/L nitrate; this could significantly encourage bio-fouling. Will Eurofins regularly monitor nitrate levels in finished water effluent?

9) Will Eurofins sample the brine contaminant concentrate before it is released into the Monterey Bay National Marine Sanctuary to comply with the NPDES permit R-23-0001 issued the City of Santa Cruz?

10) Eurofins only guarantees turnaround time of two weeks. What about quicker turnaround times in the event of system operational failures or malfunctions?

11) Please clarify the following:

Methods for Unregulated Contaminants

EPA approved drinking water analytical methods, i.e. EPA 500 series, will be used when possible, for the measurement of unregulated contaminants.

For unregulated contaminants where there is no EPA 500 series or other EPA approved drinking water method, alternative performance-based in-house methods will be performed. Eurofins routinely measures unregulated contaminants for Notification Level testing, where there may not be published drinking water methods. This applies to the following constituents:

Ethylene Glycol
HMX, RDX, TNT
Tertiary butyl Alcohol (TBA)
Pharmaceuticals and Personal Care Products (PPCPs)

12) Please clarify if the RFP includes the cost of the following:

Available to all customers of Eurofins Environment Testing America's TALS laboratories at no additional cost, MyEOL® offers clients the following time and cost saving benefits:

Immediate access to the most current data and documents for real-time decision making

Rapid access to historical data for sample point comparisons.

Customize data presentations for a personalized view of job-based data, with the ability to save those preferences for future use.

Adjust the non-detect reporting convention applied to results, and export that newly created format.

Mitigate risk and reduce costs by creating custom crosstab/pivot EDD tables from a single job or multiple jobs/SDGs.

Ensure compliance to regulatory and site-specific reporting levels utilizing our expanded regulatory limit comparison tool, allowing comparison of data against up to 15 different state, federal, or custom limit sets.

Download multiple job documents at once as a convenient ZIP format.

Secure storage of lab deliverables on our servers, reducing your risk and data storage requirements.

Mobile friendly design: access MyEOL from a smart phone or tablet for on-the-go and on-demand data and document access.

13) Who at CH2M Hill / Jacobs Engineering will interface with Eurofins for lab data results evaluation to identify potential problems in the AWTF process?

14) The RFP states Eurofins will sample at the two treatment facilities and the monitoring wells, but no mention is made of the injection wells being sampled. Would it not be prudent to sample water at the injection wells to identify any contamination problems that could have occurred in the conveyance system?

I have many concerns about this contract. Please pull this item from the Consent Agenda.

Please respond.

Thank you.

Sincerely,

Becky Steinbruner

RECEIVED
NOV 7 REC'D
S.C.W.D.

3441 Redwood Drive
Aptos, CA 95003
November 7, 2024

CORRESPONDENCE AND ATTACHMENTS HAND DELIVERED

SOQUEL CREEK WATER DISTRICT BOARD OF DIRECTORS

5180 Soquel Drive

Soquel, CA 95073

Dear Board of Directors,

I could not attend your October 15, 2024 meeting but watched the video recording of it on Community Television "Government on Demand".

I was amazed to see the robust discussion your Board conducted in Item 7.4 regarding the aesthetic component of the PureWater Soquel Project Chanticleer Treatment Facility [*Provide Direction and Select Committee for Pure Water Soquel Concrete Tank Architectural Screenings*].

It was news to me that the infrastructure screens have decorative images of a surfer, octopus and sea otter, and that, according to General Manager Mow-Schumacher, those designs cost the District \$140,000.

It seemed to also come as a surprise to your Board, judging by Director LaHue's response of "Horse feathers!" regarding the contractor's explanation that the difficult-to-see designs are "meant to be self-exploratory". Director Christensen

also stated that she did not remember any of this coming before the Board previously.

The information was news to the public as well.

For public benefit and that of the Board, I have researched the aesthetic analysis of the PureWater Soquel Project Chanticleer Treatment Facility and am including the following as attachments here:

- 1) 2018 PureWater Soquel Project Environmental Impact Report excerpts regarding aesthetic impact analysis and mitigation;
- 2) 2020 PureWater Soquel Project Addendum excerpts regarding aesthetic impact analysis and mitigation;
- 3) 2021 PureWater Soquel Project Addendum excerpts regarding aesthetic impact analysis and mitigation.

I copied these documents from the links on the Soquel Creek Water District website. There are no hard copies of any of these documents in public libraries for the public benefit.

I. 2018 Project EIR

Please look at Figure 3-6 that showed the green buffer with trees adjacent to Soquel Avenue. Page 4.2-1 claims that public comments submitted on the Draft EIR regarding concerns that *“whether Project site would be landscaped and screened from public view, compatibility of proposed development with surrounding aesthetic character, obstruction of views, and tree removal”* were addressed in the Final EIR your Board adopted on December 18, 2018.

Table 4.2-1 on page 4.2-12 states the Chanticleer site would have *“low visual sensitivity”*, with *“limited exposure to numerous motorists, bicyclists and pedestrians traveling along Chanticleer Avenue, Soquel*

Avenue, and Highway 1 with exposure for brief periods, within an existing commercial and light industrial area.”

Page 4.2-13 stated:

*“Affected Viewers and Exposure Conditions. Public views of the Chanticleer Site are limited by the existing fence surrounding much of the site, as well as the placement of commercial properties along Chanticleer Avenue that abut western and southern site boundaries. Currently, the only portion of the site that is highly visible from public areas is the area at the corner of Soquel and Chanticleer Avenues currently used for parking (see Photo 4, foreground). The site has low viewer exposure and would be seen only briefly as viewers pass by. Visual Sensitivity. **Because the site has low visual quality and low exposure, it is considered to have low visual sensitivity.**”*

Page 4.2-21 Impact Discussion of the Chanticleer Site discusses mostly visual construction impacts but refers to Figure 4.2-7 showing plantings modeled at 10-year maturity. “The upper portion of facility structures would be visible; however, proposed building structural design and finishes would be similar to existing commercial residential structures in the vicinity. **Visual character and quality impact associated with this Project site would be less than significant.**”

- II. 2020 PureWater Soquel Project Addendum Aesthetics Analysis
As your Board is aware, you approved the 2020 Project Addendum on November 18, 2020 with Resolution 20-25 upon District purchase of the commercial property adjacent to the Chanticleer Treatment Facility for \$1.3 Million.

The Addendum made no mention of changes to visual impacts (**“Same Impact as Previously Approved Project [Less than Significant]”** See page 3-3 of 2020 Project Addendum.

Your Board approved this determination even though there were several significant modifications in Project design (page 2-6:

“The original proposed chemical storage area would be revised to include four above ground tanks; one 5,800-gallon tank for sodium hypochlorite, one 1,500-gallon tank for sodium hydroxide, one 3,500-gallon tank for sodium bisulfite, one 1,500-gallon tank for Liquid Ammonium Sulfate, and one 16,000-gallon tank for calcium hydroxide. In addition, the chemical storage area would include numerous storage totes, including two 330-gallon totes for citric acid, two 330-gallon totes for sulfuric acid, two 330 gallon totes for threshold inhibitor storage, and two 330 gallon totes of hydrogen peroxide. In addition, a carbon dioxide feed system would also be located adjacent to the chemical storage area. The chemicals are hazardous and would be stored in an area with secondary containment”

Figure 2 shows the inclusion of the approved AWPf at Chanticleer Site and Parcel at 2455 Chanticleer Avenue and again shows landscaping shielding the Facility from Soquel Avenue. Page 2-9 states “minor revisions to the new parcel” would include “Adding some new landscaping consistent with other District facilities to the exterior portions of the parcel.”

Figure 3 shows the landscaping and new chemical storage tanks on the site, in addition to the new commercial property acquired for the educational center and office.

- III. 2021 PureWater Soquel Project Addendum Aesthetics Analysis
On October 5, 2021, your Board approve the PureWater Soquel 2021 Addendum that still largely relied on the 2018 EIR, and again cited no significant impacts for aesthetics. Figure 3 showed the same landscaping patterns, but never included the new information that the County of Santa Cruz and Regional Transportation Commission were negotiating rights with the District for the Chanticleer Overcrossing.

See Attachment showing the RTC approved the Agreement with your District for the property on April 27, 2021.

"NOW THEREFORE BE IT RESOLVED AND ORDERED that the Board does hereby accept the terms of the easement acquisition contract in the amount of \$554,800.00 as compensation for 8,847 square feet of permanent easement for pedestrian and bikeway purposes and 1,389 square feet of temporary construction easement over a portion of APN 029-013-54, which is owned by Soquel Creek Water District and authorizes the Deputy CAO/Director of Public Works to execute the contract on behalf of the Board. Further, the Board does hereby authorize the Chair of the Board to execute the Certificate of Acceptance of the associated deed.

On March 9, 2021, the Board approved a Resolution of Necessity authorizing County Counsel to institute eminent domain proceedings to obtain possession of the required real property interests over APN 029-013-54 to support the Project. The Resolution of Necessity was required to meet the strict funding and construction deadlines associated with the Project; after lengthy negotiation efforts failed to procure an agreement between the County and SCWD. Notwithstanding the Resolution of Necessity, the County still intended to continue good faith negotiations with SCWD to avoid the necessity of an eminent domain action.

County and SCWD have now negotiated the final acquisition agreement to acquire the necessary permanent and temporary rights over APN 029-013-54 and avoid the lengthy and costly litigation process associated with the eminent domain action."

I provided this information to your Board in e-mail Correspondence dated April 26, 2021. It was included in your May 4, 2021 Board agenda Correspondence. (see attached Correspondence).

In that correspondence to you, I asked how the Project would accommodate new environmental issues related to the Chanticleer Overcrossing, *"with the aerial public passageway directly adjacent to and overlooking the hazardous chemical storage tanks shown to be above ground..."*

Although I requested a response, no one from the District ever did respond.

Also, the Chanticleer Overcrossing was not shown in the PureWater Soquel Project 2021 Addendum documents. Figures 4 and 5 do not show any pedestrian / bicyclist overcrossing adjacent to the PureWater Soquel Project Chanticleer Treatment site.

Figure 4 shows for the first time the addition of the massive screens that were intended to screen the Project infrastructure adjacent to Soquel Avenue viewshed. Figure 5 shows a sidewalk adjacent to the Project, completely eliminating the Chanticleer Overcrossing that District staff and your Board were aware was pending.

Page 10 of the 2021 PureWater Soquel Project Addendum discusses that photo simulations in Figures 4 and 5 were *“based on Project designs and landscape plantings at maturity (approximately 10 years after planting) with updates to the landscaping palette, paint and fencing colors, and adjustment of building layouts.”*

There was no public discussion of designs on the massive screened areas. After an additional but brief mention of a new radio communication pole in the Project envelope, the 2021 Addendum concluded: **“Implementation of the Project would not result in a substantial aesthetic resources effect. (Same Impact as Previously Approved Project [Less than Significant])** (See page 13)

There was no public discussion of designs on the screens covering the large tanks and infrastructure. There was no discussion of vague images the District would pay the contractor \$140,000 to install.

The PureWater Soquel Project is a significant project that only now your Board seems to realize is indeed very visible from Highway One. The infrastructure will be very visible from the Chanticleer Overcrossing when it is open for the public, and thereby may become quite vulnerable to vandalism.

6/8

I suppose that is what led staff to approve spending \$35,000 for a taller fence on the Chanticleer Overcrossing:

"The Commission also approved an amendment to the cooperative agreement with Caltrans to add Soquel Creek Water District funds to the construction capital component of the project for the modification of the fence and railing along the approach to the Chanticleer bicycle and pedestrian overcrossing to provide a taller fence along the Soquel Creek Water District property. The water district has offered to pay for the change to construct the taller fence."

<https://www.sccrtc.org/wp-content/uploads/2024/06/6-6-2024-RTC-Meeting-Highlights.pdf>

(see Correspondence in August 20, 2024 Board meeting packet attached)

I am encouraged that your Board now intends to do something to address the visual blight that the PureWater Soquel Project Chanticleer Treatment Facility imposes on the disadvantaged Live Oak Community. However, I respectfully request that the two ad-hoc Committee members chosen to develop aesthetic remedy for this problem include those in the Live Oak neighborhood affected, and make a public survey available, following the good practice of the RTC.

I further remind you that the District must comply with CEQA requirements for project modifications to the PureWater Soquel Project, and therefore should release the draft aesthetic modifications to the public for noticed public comment of at least 30 days.

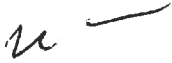
Your Board has now recognized that the PureWater Soquel Project does indeed impose significant impacts on the Highway One and Soquel Avenue viewshed, and will significantly impact the views from the Chanticleer Overcrossing.

7/8

Please respect this impact on the public and be transparent as to your intentions for relief.

Please respond. Thank you.

Sincerely,



Becky Steinbruner

Attachments:

- 1) October 15, 2024 Item # 7.4
Aesthetics Review and action
- 2) Correspondence re: Pure Water Soquel
Project aesthetics
- 3) 2018 Pure Water Soquel Project EIR
- 4) 2020 Pure Water Soquel Project Aesthetics
analysis
- 5) 2021 Pure Water Soquel Project
aesthetics analysis

OCTOBER 15, 2024 BOARD MEETING

AGENDA ITEM 7.4

AESTHETICS REVIEW AND ACTION

October 15, 2024

MEMO TO THE BOARD OF DIRECTORS

Subject: Agenda Item No. 74

Title: Provide Direction and Select Committee for Pure Water Soquel Concrete Tank Architectural Screenings

Attachment(s): None

Purpose

This agenda item provides an opportunity for the Board to confirm that modifications to the architectural screening panels at the Chanticleer Advanced Water Purification Facility (AWPF) are desired and to select two board members to meet with Staff and generate conceptual options for the Design Builder to consider improving the visual aesthetics of the blue perforated screens.

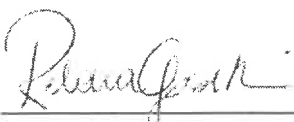
Background and Discussion


During oral communications at the July 16, 2024 Board meeting, President Jaffe and Directors LaHue and Christensen expressed desires to make improvements to the existing architectural screening panels mounted to the three concrete tanks at the AWPF. The existing blue perforated panels were intended to have more prominent graphics but have not met expectations nor matched the renderings and examples presented during design.

Staff is requesting that the Board confirm modifications to the panels are desired and to select two board members to meet with Staff and generate conceptual options for the Design Builder to consider improving the visual aesthetics of the blue perforated screens. Staff will present some concepts for the Board to consider at the Board meeting.

POSSIBLE BOARD ACTION(S):

1. By MOTION, provide Board consensus that modifications to the blue perforated architectural screening panels at the Chanticleer AWPF are warranted; and
2. By MOTION, appoint two Directors to work with Staff and finalize conceptual options to augment the architectural screens; or
3. Take no action.

By 
Rebecca Rubin
Public Outreach Coordinator

By 
Taj Dufour, P.E.
Engineering Manager/Chief Engineer

CORRESPONDENCE RE:
PUREWATER SOQUEL PROJECT

CORRESPONDENCE - 05/04/21
ITEM 5.0 - ORAL AND WRITTEN COMMUNICATIONS

From: [Becky Steinbruner](#)
To: [bod](#); [Emma Olin](#)
Cc: [Becky Steinbruner](#)
Subject: Board of Supervisors Approves Purchase of Soquel Creek Water District Easement at Chanticleer Avenue
Date: Monday, April 26, 2021 10:55:35 PM

Dear Soquel Creek Water District Board,

I see that the Santa Cruz County Board of Supervisors will approve purchase of the easement from your District in Item #56 on the April 27, 2021 Consent Agenda. This agreement will provide the District with \$554,800 in unanticipated revenue. Your District has, until recently, shown the Chanticleer Pedestrian / Bicycle Overpass on the site renderings for the PureWater Soquel Project Advanced Treatment Facility.

http://santacruzcountyca.igam2.com/Citizens/Detail_LegiFile.aspx?Frame=&MeetingID=1866&MediaPosition=&ID=10517&CssClass=

*"NOW THEREFORE BE IT RESOLVED AND ORDERED that the Board does hereby accept the terms of the easement acquisition contract in the amount of **\$554,800.00 as compensation** for 8,847 square feet of permanent easement for pedestrian and bikeway purposes and 1,389 square feet of temporary construction easement over a portion of APN 029-013-54, which is owned by Soquel Creek Water District and authorizes the Deputy CAO/Director of Public Works to execute the contract on behalf of the Board. Further, the Board does hereby authorize the Chair of the Board to execute the Certificate of Acceptance of the associated deed.*

*On March 9, 2021, the Board approved a Resolution of Necessity authorizing County Counsel to **institute eminent domain proceedings to obtain possession of the required real property interests over APN 029-013-54** to support the Project. The Resolution of Necessity was required to meet the strict funding and construction deadlines associated with the Project; **after lengthy negotiation efforts failed to procure an agreement between the County and SCWD**. Notwithstanding the Resolution of Necessity, the County still intended to continue good faith negotiations with SCWD to avoid the necessity of an eminent domain action.*

*County and SCWD have now negotiated the final acquisition agreement to **acquire the necessary permanent and temporary rights over APN 029-013-54 and avoid the lengthy and costly litigation process associated with the eminent domain action**. The property rights have been professionally appraised by a certified appraiser and reviewed by two (2) additional third-party appraisers. The acquisition agreement offers just and reasonable compensation. As such, Real Property now recommends the Board approve the acquisition agreement and associated documents."*

I am glad you were able to avoid litigation with the County by doing the right thing and accepting the fair market value offered.

How would the Modified PureWater Soquel Project now accommodate the additional

ITEM 5.0 - ORAL AND WRITTEN COMMUNICATIONS

CORRESPONDENCE - 05/04/21

ITEM 5.0 - ORAL AND WRITTEN COMMUNICATIONS

environmental issues associated with the aerial public passageway directly adjacent to and overlooking the hazardous chemical storage tanks shown to be above ground and therefore vulnerable to vandalism from the Overpass?

How would the loud noise of the multiple Reverse Osmosis pumps that are now unhoused in the Modified PureWater Soquel Project and operating 24/7 be mitigated for those who are using the Chanticleer Pedestrian / Bicycle Overpass adjacent to and above the PureWater Soquel Project?

Please respond. Thank you.


Sincerely,

Becky Steinbruner

Melanie Mow Schumacher

From: Becky Steinbruner <ki6tkb@yahoo.com>
Sent: Sunday, July 28, 2024 11:13 PM
To: bod; Mackenzi Morris
Cc: Becky Steinbruner
Subject: Soquel Creek Water District Paying \$35,000 for Taller Fence at Chanticleer Pedestrian Overcrossing

Dear Soquel Creek Water District Board of Directors,
I note in the June meeting of the Santa Cruz County Regional Transportation Commission that the Soquel Creek Water District is contributing \$35,000 to the Chanticleer Pedestrian / Bicyclist Overcrossing, adjacent to the PureWater Soquel Project.

When did the Board consider this expense and when did the Project analysis include such a need for a taller fence?

"The Commission also approved an amendment to the cooperative agreement with Caltrans to add Soquel Creek Water District funds to the construction capital component of the project for the modification of the fence and railing along the approach to the Chanticleer bicycle and pedestrian overcrossing to provide a taller fence along the Soquel Creek Water District property. The water district has offered to pay for the change to construct the taller fence."

<https://www.sccrtc.org/wp-content/uploads/2024/06/6-6-2024-RTC-Meeting-Highlights.pdf>

Please respond in writing. Thank you.


Sincerely,
Becky Steinbruner

CORRESPONDENCE - 08/20/24

From: [Bryan Kienow](#)
To: [bod](#)
Cc: [Olivia Martinez](#)
Subject: Agenda Item 7.3 for 8/20/24 meeting
Date: Tuesday, August 20, 2024 4:44:41 PM

Hello Board Members,

As the SEIU shop steward I wanted to write a note to let the board know that their front line workers are seeing the writing on the wall. We have been negotiating with management over organizational changes through the meet and confer process since the end of April. During our negotiations we have repeatedly discussed our intention to ask for a salary increase due to the expanding roles and responsibilities members are taking on to ensure the success of the Pure Water Project. What a surprise it was for us to see our HR manager and finance manager state in front of the board on June 4th that all financial negotiations with our bargaining group were closed and any bargaining contingencies were reserved for the management MOU negotiations. At that point no proposals had been exchanged. Now we see that outside of management MOU bargaining, management is ready to give one of their own a pay raise. I have sat in bargaining sessions and whenever money was involved it was always "where will the money come from to pay for this?". Last year after our contract negotiations became drawn out, management held an all hands meeting to explain how the district finances were in poor shape. I was expecting district spending priorities to change after that. I know in the last few years with the rising costs my family has been changing the way we spend and doing everything we can to stretch our dollars. But the spending has remained the same. We are still remodeling and redecorating offices, hiring consultants when work can be performed in house, etc.

Our members will be taking additional health risks by working with secondary treated sewage water (the transmission line from Santa Cruz wastewater facility to Purification plant is NOT tertiary), learning new skills by becoming SWIP well operators, training new employees, etc. The effects of these changes will be felt by all frontline workers. During meet and confer sessions management has repeatedly claimed our jobs will not change and offered as proof they weren't updating/changing the distribution/operations job descriptions. They claim that their spreadsheets prove that by hiring an additional FTE each in distribution and operations groups all additional work being added to our plates will be taken care of. The thing is, we are the boots on the ground. We are the experts on what it takes to perform our current jobs and we have already been short-handed for years. How is adding 2 more inexperienced operators going to relieve the additional workload? I mention inexperienced because that is what we will hire. Ask management how many fully qualified and certified applicants they have received for operator openings in the last 4 years. If we cannot pull lateral FTE's from other agencies then there isn't much other proof needed to know our salary scale is too low.

CORRESPONDENCE - 08/20/24

Our members are frustrated and apprehensive about the changes coming their way. We recently had our Water Quality Program Coordinator tender his resignation due to the upcoming changes and feeling like his voice wasn't being heard. He spoke many times in the meet and confers about how these changes would affect his job and work conditions and he felt that while management was present and listening they had already set their course and were unwilling to change. I know of several other employees who are currently taking interviews. If the district truly believes it is in their best interest to retain employees I would like to ask board members increase the wages of all SEIU members involved with Pure Water construction, commissioning, and operations by 9% commensurate to the increase proposed for the finance manager. Section 8.0 of our MOU explicitly states that salary ranges are set by the BOD. Please step up and help retain our workforce.

Thank You,

Bryan Klenow | Lead Electrical Instrumentation Technician

Soquel Creek Water District | 5180 Soquel Dr., Soquel CA 95073 | www.soquelcreekwater.org
main 831-475-8500 | direct 831-475-8501 x127 | mobile 831-247-0660

 Please consider the environment before printing this e-mail.

PUREWATER SOQUEL PROJECT
2018 ENVIRONMENTAL IMPACT REPORT
EXCERPTS RE: AESTHETICS

**PURE WATER SOQUEL: GROUNDWATER
REPLENISHMENT AND SEAWATER INTRUSION
PREVENTION PROJECT**

Draft Environmental Impact Report

State Clearinghouse No.: 2016112045

Prepared for
Soquel Creek Water District

June 2018



PURE WATER SOQUEL: GROUNDWATER REPLENISHMENT AND SEAWATER INTRUSION PREVENTION PROJECT

Draft Environmental Impact Report

Prepared for
Soquel Creek Water District

June 2018

Important Dates:

Draft EIR Publication Date: June 29, 2018
Draft EIR Public Comment
Period: June 29, 2018 to August 13, 2018
Draft EIR Public Hearing Date: July 31, 2018

550 Kearny Street
Suite 800
San Francisco, CA 94108
415.896.5900
www.esassoc.com



Bend	Oakland	San Francisco
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Delray Beach	Pasadena	Sarasota
Destin	Petaluma	Seattle
Irvine	Portland	Sunrise
Los Angeles	Sacramento	Tampa
Miami	San Diego	

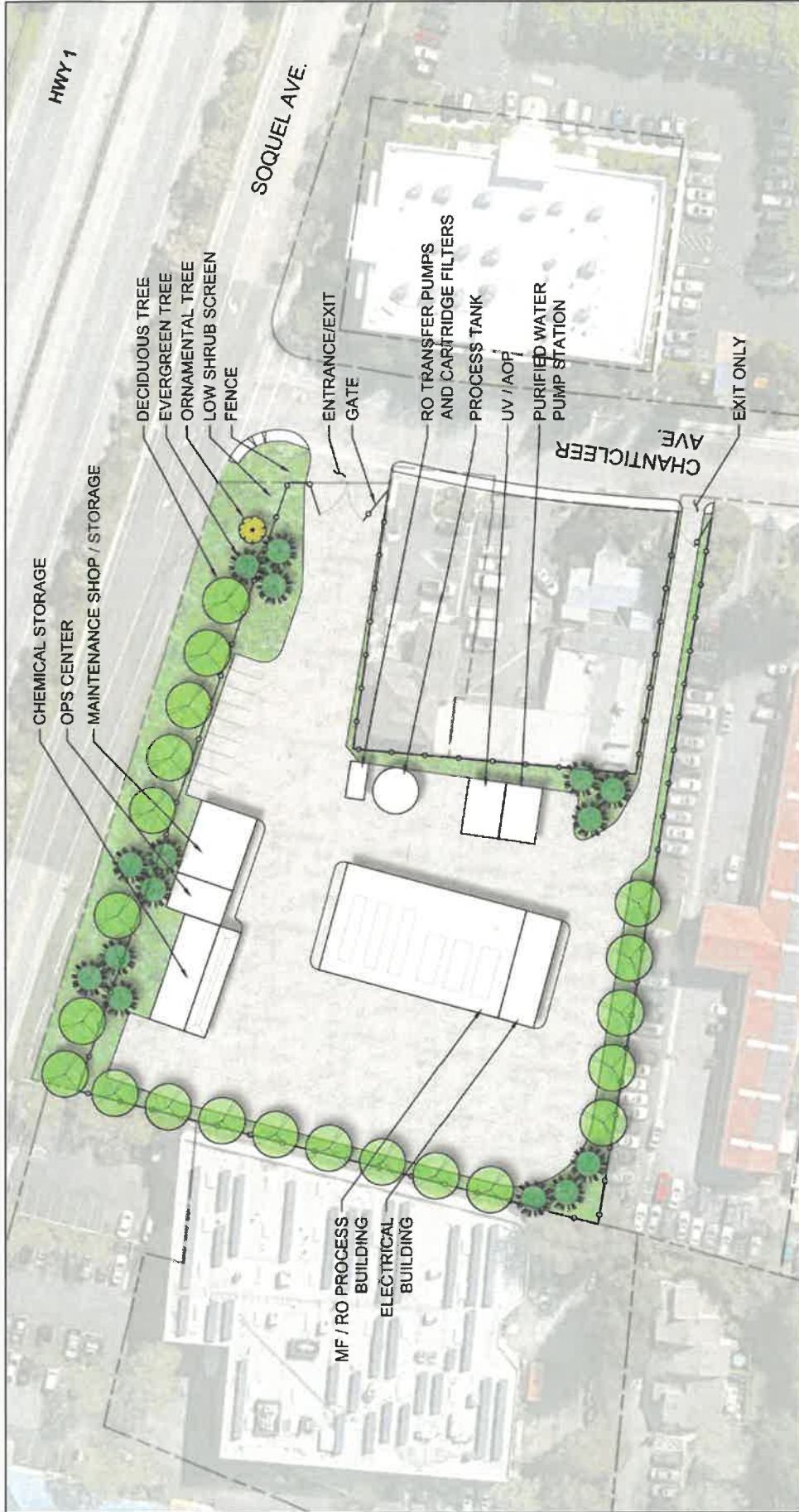
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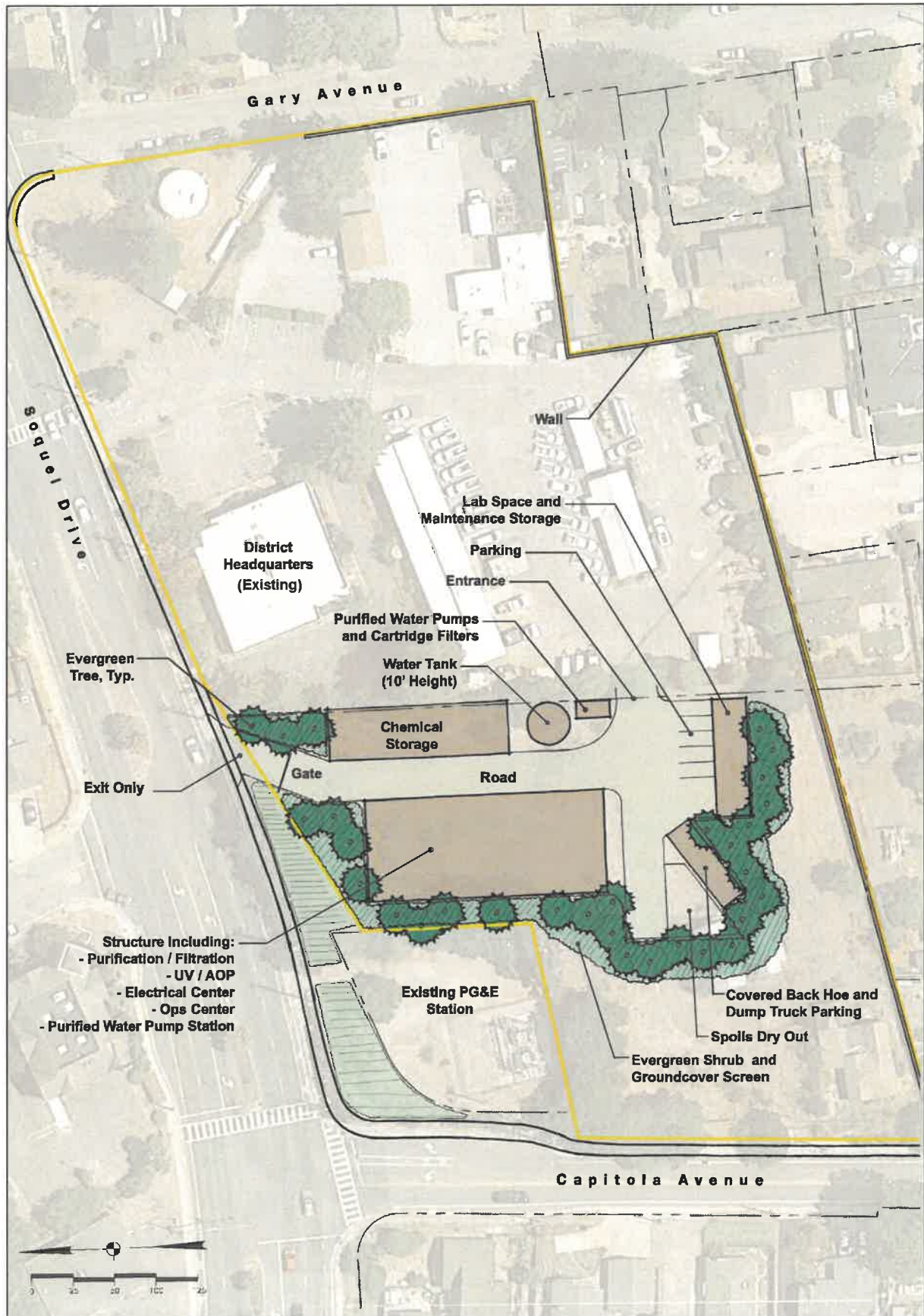
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 Figure 3-6
 AWPF at Chanticleer Site

SOURCE: Brown and Caldwell; SqCWD, 2017



Pure Water Soquel: Groundwater Replenishment and Seawater Intrusion Prevention. 160164

Figure 3-7
AWPF at Headquarters-West Annex Site

4.2 Aesthetics

4.2.1 Introduction

This section provides an assessment of the visual character and quality of the Project area, identifies potentially affected views from public vantage points, and evaluates the potential visual impacts that could result from construction and operation of the Project. Mitigation measures to reduce significant impacts to less-than-significant levels are also identified.

Comments received during Project scoping relative to Aesthetics generally pertain to requests for facility dimensions and site renderings, potential changes in lighting conditions, whether Project site would be landscaped and screened from public view, compatibility of proposed development with surrounding aesthetic character, obstruction of views, and tree removal. These comments have been considered in the preparation of this analysis.

4.2.2 Environmental Setting

Concepts and Terminology

Visual or aesthetic resources are generally defined as both the natural and built features of the landscape that contribute to the public viewer's experience and appreciation of the environment. Depending on the extent to which a project's presence would alter the perceived visual character and quality of the environment, a visual or aesthetic impact may occur. Familiarity with the following terms and concepts will aid the reader in understanding the content of this section.

Visual Character is a general description of the visual attributes of a particular land use setting. The purpose of defining the visual character of an area is to provide the context within which the visual quality of a particular site or locale is most likely to be perceived by the viewing public. For urban areas, visual character is typically described on the neighborhood level or in terms of areas with common land use; intensity of development; socioeconomic conditions; and/or landscaping and urban design features. For natural and open space settings, visual character is most commonly described in terms of areas with common landscape attributes (such as landform, vegetation, water features, etc.).

Visual Quality is defined as the overall visual impression or attractiveness of a site or locale as determined by its aesthetic qualities (such as color, variety, vividness, coherence, uniqueness, harmony, and pattern). For this analysis, the visual quality of a site or locale is defined according to three levels:

- **Low.** The location is lacking in natural or cultural visual resource amenities typical of the region. A site with low visual quality will have aesthetic elements that are relatively unappealing and perceptibly uncharacteristic of the surrounding area.
- **Moderate.** The location is typical or characteristic of the region's natural or cultural visual amenities. A site with moderate visual quality maintains the visual character of the surrounding area, with aesthetic elements that do not stand out as either contributing to or detracting from the visual character of an area.

- **High.** The location has visual resources that are unique or exemplary of the region's natural or cultural scenic amenities. A site with high visual quality is likely to stand out as particularly appealing and makes a notable positive contribution to the visual character of an area.

The identification of *viewer types* and *volumes* describes the type and quantity of potentially affected viewers within the visual study area (defined below). Land uses that derive value from the quality of their settings are considered potentially sensitive to changes in visual conditions. *Sensitive viewers* are those who have a strong stake or interest in the quality of the landscape and have a greater sensitivity to changes that degrade or detract from the visual character of an area. Examples of sensitive viewers include travelers on designated scenic routes, park visitors, bikers, pedestrians, and tourists.

Viewer Exposure addresses the variables that affect the viewing conditions of a site. Viewer exposure considers some or all of the following factors: landscape visibility (the ability to see the landscape); viewing distance (i.e., the proximity of viewers to the project); viewing angle (whether the project would be viewed from a superior, inferior, or level line of sight); extent of visibility (whether the line of sight is open and panoramic to the project area or restricted by terrain, vegetation, and/or structures); and duration of view.

Visual Sensitivity is the overall measure of a site's susceptibility to adverse visual changes. Visual sensitivity is rated as high, moderate, or low and is determined based on the combined factors of visual quality, viewer types and volumes, and viewer exposure to the project.

Visual Study Area

The visual study area for the Project is the area from which either treatment facility, recharge and monitoring well facilities, or pipeline locations (during visible construction activities) would come into view. Because the Project area is in both urban and heavily vegetated open space settings, trees, shrubs, and buildings quickly restrict or block views of Project components as viewers move away from Project sites; consequently, these elements limit the visual study area in most places to publicly accessible locations immediately surrounding Project components. In some locations, however, favorable topographic relationships or the lack of intervening features extends the distance from which a viewer would be able to observe features of the Project. While the exact boundaries of the visual study area depend on site conditions (i.e., viewshed,¹ structures, and vegetation) and are highly site-specific, performing an assessment of the visual study area is important in identifying potentially affected viewers and describing the visual quality and character of relevant locations.

Site reconnaissance of the Project facility areas were performed in 2016 and 2017 to identify the visual study area and take representative photographs of existing visual conditions. A set of photographs is included in this section to document the existing visual conditions of the Project sites and adjacent areas. **Figure 4.2-1** provides an overview of photo locations; **Figures 4.2-2** through **4.2-6** depict views of Project sites and surrounding locations.

¹ A viewshed is an area of land, water, or other urban or environmental element that is visible to the human eye from a fixed vantage point.



Pure Water Soquel: Groundwater Replenishment and Seawater Intrusion Prevention. 160164
 Figure 4.2-1
 Photo Location Map

SOURCE: S&CWD, 2017; ESA, 2018

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4.Environmental Setting, Impacts, and Mitigation Measures

4.2 Aesthetics

Visual Sensitivity

The overall visual sensitivity of each Project site is described in terms of its visual quality, potentially affected viewers, and exposure conditions. **Table 4.2-1** summarizes these attributes, which are described in more detail in the remainder of this section.

TABLE 4.2-1
SUMMARY OF VISUAL SENSITIVITY FINDINGS

Project Site	Visual Quality	Affected Viewers and Exposure Conditions	Visual Sensitivity
Santa Cruz WWTF Site (pump station, tertiary, advanced water purification facility)	Low	Poorly exposed. Site is within an existing treatment facility complex that is inaccessible to the public and largely screened from public areas. Some direct/open views of the existing facility may be available from the Lagoon trail system.	Low
Chanticleer Site (advanced water purification facility)	Low	Limited exposure to numerous motorists, bicyclists and pedestrians traveling along Chanticleer Avenue, Soquel Avenue, and Highway 1; with exposure for brief periods, within an existing commercial and light industrial area.	Low
Headquarters-West Annex Site (advanced water purification facility)	Moderate	Limited and brief exposure to passing motorists, bicyclists, and pedestrians due to intervening vegetation and topography. Exposure is limited by existing adjacent PG&E substation.	Low to Moderate
Monterey Avenue (recharge and monitoring wells)	Low	Poorly exposed. Inaccessible to the public.	Low
Willowbrook Lane (recharge and monitoring wells)	Moderate	Exposed for brief periods to small numbers of passing motorists; highly visible from the adjacent Willowbrook Park.	Moderate
Twin Lakes Church (recharge and monitoring wells)	Low to Moderate	Poorly exposed site screened from public views	Low
Cabrillo College (recharge and monitoring wells)	Low to Moderate	Poorly exposed site screened from public views; with the exception of the northernmost portion of the site adjacent to Cabrillo College Drive; adjacent to large parking lot.	Low
Pipeline Locations		Visual sensitivity, visual quality, and viewing conditions are highly variable and site-specific. Generally, in-road areas along city streets are well exposed, moderately sensitive to visual change, and representative of the surrounding visual character. Generally, segments within commercial areas have lower visual sensitivity than segments within residential areas; however, exceptions occur where commercial areas are within a more naturalistic background, such as in the vicinity of creek crossings or other undeveloped areas.	

Santa Cruz WWTF Site

Figure 4.2-2 provides photographs of the existing SC WWTF Site from public areas along Bay Road, La Barranca Park, and Neary Lagoon Park. Photos 1 and 2 provide views towards the site from publicly accessible vantage points (Bay Road and La Barranca Park). However, the treatment facility is surrounded by mature vegetation on most sides, and is at a lower elevation than Bay Street; thus, the existing treatment facility is minimally visible to not visible from these viewpoints. From the court and playground areas of Neary Lagoon Park, only the entrance road to the treatment facility are available (Photo 3). Direct, short-term views of the existing treatment facility are available from the lagoon trail, as trail users pass directly along the northern boundary

of the facility. Note that the Project facilities would be within the existing WWTF developed areas.

Visual Quality. The SC WWTF Site, which is restricted from public use and access, is characterized by the presence of vehicles and equipment, and the existing wastewater treatment facility complex. The Project site is within the existing WWTF developed area, along the northern edge of the site (see Figures 3-3 and 3-4). The SC WWTF facility is surrounded by mature landscaping and Neary Lagoon Park. Because the appearance of the SC WWTF Site is relatively unappealing and perceptibly uncharacteristic of the surrounding open space and residential areas, the existing visual quality is considered low.

Affected Viewers and Exposure Conditions. Numerous factors limit public views of the SC WWTF Site. The site is at a lower elevation than Bay Street and La Barranca Park, and is surrounded by a security gate and mature trees/landscaping. Therefore, views of the Project site are screened or blocked by topography, vegetation, and the existing WWTF elements for most motorists and pedestrians traveling along Bay Road. Views of the Project site by Neary Lagoon Park users in the area of the tennis courts and playground are blocked by the WWTF security fencing and existing facilities between the Park and Project site. Direct views of the Project site from the Lagoon Park trail are available for brief periods, with the existing WWTF facilities in the background of such views. Users of the trail would likely expect a high-quality environment, given the undeveloped nature of the lagoon trail system; thus, trail users are considered sensitive users. Nevertheless, the site has low viewer exposure, is within the existing WWTF facility setting, and would be seen only briefly as viewers pass by.

Visual Sensitivity. Because the site has low visual quality and low exposure, it is considered to have low visual sensitivity.

Chanticleer Site

Figure 4.2-3 provides photos of the Chanticleer Site and vicinity. Photos 4 and 5 provide views of the site from Soquel Avenue, which are limited by fencing surrounding the site, as well as the sites topographic position at the top of a rise (from eastbound Soquel Avenue). Photo 6 displays views of the existing site entrance along Chanticleer Avenue, with adjacent commercial and institutional land uses in the middleground view, and extending to residential uses in the background. Photo 7 provides an example of the scale and massing of land uses in the immediate vicinity of the Project site.

Visual Quality. The Chanticleer Site, which is restricted from public use and access, is characterized by the presence of vehicles and equipment near the site entrance at the Chanticleer Avenue/Soquel Avenue entrance, green fencing surrounding the majority of the site, and a boarded up structure in poor condition. Views of the interior of the site are blocked by the existing fencing, with the exception of the two-story structure adjacent to Soquel Avenue. Views of the site are in the foreground and middleground of views dominated by commercial developments along Soquel and Chanticleer Avenues. Because the appearance of the site is relatively unappealing and within the context of other commercial developments, the visual quality is considered low.

Affected Viewers and Exposure Conditions. Public views of the Chanticleer Site are limited by the existing fence surrounding much of the site, as well as the placement of commercial properties along Chanticleer Avenue that abut western and southern site boundaries. Currently, the only portion of the site that is highly visible from public areas is the area at the corner of Soquel and Chanticleer Avenues currently used for parking (see Photo 4, foreground). The site has low viewer exposure and would be seen only briefly as viewers pass by.

Visual Sensitivity. Because the site has low visual quality and low exposure, it is considered to have low visual sensitivity.

Headquarters-West Annex Site

Figure 4.2-4 provides views of the Headquarters-West Annex Site and vicinity. Photo 8 displays views of the Project site from Aguazul Drive, with Soquel Drive in the foreground. Photo 9 provides a view of the west side of the site from Capitola Avenue.

Visual Quality. The West Annex portion of the Project site is an undeveloped site bordered by green fencing, which currently blocks views of the site from adjacent areas. The Headquarters area of the Project site includes a single-story warehouse, portable trailers, and other structures used for District maintenance activities. Both areas are restricted from public use and access. The northern portion of the site is set back from public areas, with intervening vegetation and a PG&E substation dominating views. Views of the Headquarters portion of the Project site are mostly blocked by landscaping along Soquel Drive and the Headquarters office and parking areas, just off Soquel Drive. While most of the Project site is not highly visible from public areas, the undeveloped portions of the site and surrounding mature screening vegetation are representative of the naturalistic amenities that exist in the neighborhood. Thus, the visual quality of the site is considered moderate.

Affected Viewers and Exposure Conditions. The site is at a higher elevation than the street level along Soquel Drive. Affected viewers include motorists and pedestrians in close proximity to the site, who would only briefly see the site as they walk or drive by. Views from Soquel Drive and Aguazul Drive are limited by mature trees and vegetation along Soquel Drive (and not within the Project site); while views from Capitola Drive are limited by mature trees and the PG&E substation adjacent to Capitola Drive. In addition, existing site fencing blocks views of the West Annex portion of the site.

Visual Sensitivity. The visual sensitivity of the Headquarters-West Annex Site is considered to be low to moderate because, while the site has a moderate visual quality, most of the site is not visible from public viewpoints and affected viewers are only exposed briefly.

Monterey Avenue Site

Figure 4.2-5, Photo 10 shows the general location of the Monterey Avenue site from Monterey Avenue. The site is between the yellow home and private driveway in the middleground of this viewpoint, but is blocked by the surrounding properties and structures.

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4.Environmental Setting, Impacts, and Mitigation Measures

4.2 Aesthetics

obscure views of aesthetically pleasing landscape elements. Visual changes are also evaluated in terms of potential damage to or removal of features of the natural or built environment that contribute to a scenic public setting. The magnitude of visual change that would result in a significant impact (i.e., substantial degradation) is influenced by its degree of permanence, and is inversely related to the visual sensitivity of a site.

- ***Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area:*** This criterion is applicable to projects that require nighttime lighting (either during construction or operation), or that involve structures or finishes that could create substantial glare.

Areas of No Project Impact

Due to the nature of the Project, this EIR does not analyze the following criteria for the reasons described below:

- ***Have a substantial adverse effect on a scenic vista or substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.*** Caltrans designates Highway 1 within Santa Cruz County as an Eligible State Scenic Highway – Not officially Designated and the County of Santa Cruz General Plan identifies Highway 1 as a valued public vista. Project pipelines and the Chanticleer Site along Soquel Avenue and Auto Plaza Drive would be adjacent to Highway 1, and alignments cross under Highway 1 in three locations. However, views of these Project areas from Highway 1 is mostly screened by landscaping adjacent to the highway (see Figure 4.2-6, Photo 15). Where gaps in vegetation occur, views of Project construction areas or the aboveground structures at the Chanticleer Site would be brief as motorists move past Project areas. Aside from Highway 1, there are no state or locally designated scenic vistas in the Project area. Further, given the developed nature of the overall Project area, long-range views of mountain peaks, the ocean, or other features that may be considered a scenic vista are not available in the vicinity of Project locations.

Impact Summary

A summary of the impact conclusions is presented in **Table 4.2-2, Summary of Impacts – Aesthetics**. The detailed impact discussion follows.

**TABLE 4.2-2
SUMMARY OF IMPACTS – AESTHETICS**

Impacts	Significance Determinations
Impact 4.2-1: The Project would not substantially degrade the existing visual character or quality of the site and its surroundings.	LS
Impact 4.2-2: The Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	LS

NOTES:

LS = Less than Significant impact, no mitigation required
LSM = Less than Significant impact with Mitigation

Impact Discussion

Impact 4.2-1: The Project would not substantially degrade the existing visual character or quality of the site and its surroundings. (*Less than Significant*)

Santa Cruz WWTF Site

As discussed in Section 4.2.2, *Environmental Setting*, although the site is located adjacent to Neary Lagoon Park, the Project site itself has low visual quality and is poorly exposed, and is thus considered to have a low visual sensitivity. Construction at this site would last approximately 12 (pump station only) to 36 months (treatment facility), and would involve clearing and grubbing, and facility installation. Construction vehicles, materials, and equipment would temporarily add to the existing WWTF activities, and the additional construction activities may be noticeable and unappealing visual features, as seen by Neary Lagoon Park trail users passing the site. Project construction activities would not be visually noticeable from other areas of Neary Lagoon Park, La Barranca Park, or Bay Street due to trees/vegetation, fencing, and other existing WWTF facilities that block views of the Project site.

Once complete, the Project facility would include a small pump station structure and tank, and could also include a two-story treatment facility located along the north edge of the WWTF site (see Figures 3-3 and 3-4), near the adjacent Neary Lagoon Park Trail. The type and scale of the Project facilities would be similar to existing structures at the WWTF. Thus, the Project facility would be visually consistent with and indistinguishable from the backdrop of existing WWTF facilities. The Project facilities would not be visible from other vantage points in Neary Lagoon Park or La Barranca Park, or from Bay Street. Given that the site has low visual quality, exposure, and visual sensitivity and that the type and scale of Project facilities would be consistent with the existing WWTF facilities, the Project would not have a substantial adverse effect on the visual character or quality of the site and its surroundings. The visual character and quality impact associated with this Project site would be **less than significant**.

Chanticleer Site

As discussed in Section 4.2.2, the Project site itself has low visual quality and is poorly exposed, and is thus considered to have a low visual sensitivity. Views of the existing site are limited by adjacent structures, and an existing fence. Current site use includes parking and construction staging activities. The visual changes associated with construction of this facility would be similar to that described above for the SC WWTF Project site (e.g., vehicles, materials, and equipment). Construction activities would occur over an approximately 24-month period. While the work area would be fenced during construction, construction vehicles, materials, and equipment would temporarily add to the existing commercial and light industrial activities that occur in the vicinity, and the additional construction activities may be noticeable and unappealing visual features, as seen by motorists, bicyclists, and pedestrians traveling along Soquel and Chanticleer avenues. However, these areas are not scenic in nature and, as noted, is an area of low visual sensitivity.

Following construction, the Chanticleer Site would include a process building, canopy covered chemical storage and feed systems, an operations building, pump station, access and parking areas, and other treatment support facilities within a fenced area, with privacy slats included on fencing. A visual simulation, depicting existing site conditions and simulated Project conditions,

is presented on **Figure 4.2-7**. The simulated Project conditions are based on preliminary Project designs and landscape plantings at maturity (approximately 10 years after planting); and could be adjusted during final Project design, including details such as landscape planting palette, paint and fencing colors, and some adjustment of building layouts. As shown in the upper photo, views of the Project site are dominated by the existing vacant structure, surrounding fence line, and existing commercial structures along Chanticleer Avenue adjacent to the Project site. Under the Project (lower photo, simulation), landscaping along Soquel Avenue would be installed between the roadway and site fencing. The upper portion of facility structures would be visible; however, proposed building structural design and finishes would be similar to existing commercial residential structures in the vicinity. Thus, the visual character of the Project site, as seen from public vantage points to the north of the site, would be consistent with the existing visual character of the area.

The visual character and quality impact associated with this Project site would be **less than significant**.

Headquarters-West Annex Site

As discussed in Section 4.2.2, the Project site itself has moderate visual quality, with limited and brief exposure, and is thus considered to have a low to moderate visual sensitivity. Views of the existing site are limited by topography and mature trees and landscaping adjacent to the site. Further, the PG&E substation and adjacent Headquarters office structure and parking area provides commercial/light-industrial character as well as substantially blocks views of the site from public vantage points along Soquel Drive. Direct views of the site from public areas are limited to the southern portion of the site, as seen from Capitola Avenue. The site is currently vacant, consisting of grass/groundcover planting and some existing trees, and surrounded by fencing. The visual changes associated with construction of this facility would be similar to that described above for the SC WWTF Project site (e.g., vehicles, materials, and equipment). While the construction area would be fenced, construction activities would occur over an approximately 24-month period. Construction vehicles, materials, and equipment may be noticeable and unappealing visual features, as seen by motorists, bicyclists, and pedestrians traveling along Soquel Drive and Capitola Avenue. However, these areas are not scenic in nature and, as noted, is an area of limited visual exposure.

Following construction, the Headquarters-West Annex Site would include a process building, chemical storage and feed systems, an operations building, pump station, maintenance shop and storage, lab space, access and parking areas, and other treatment support facilities within a fenced area. Visual simulations, depicting existing site conditions and simulated Project conditions, are presented on **Figures 4.2-8** and **4.2-9**. **Figure 4.2-8** depicts views of the Project site from Aguazul Drive, facing Soquel Drive with the West Annex portion of the site in the background. The simulated Project conditions are based on preliminary Project designs and landscape plantings at maturity (approximately 10 years after planting); and could be adjusted during final Project design, including details such as landscape planting palette, paint and fencing colors, and some adjustment of building layouts. As shown in the upper photo, there is an existing low retaining wall and sloped landscape strip with grasses and mature trees. The upper portion of the Project site is fenced and includes heavy green materials that block views of the interior portion of the

is presented on **Figure 4.2-7**. The simulated Project conditions are based on preliminary Project designs and landscape plantings at maturity (approximately 10 years after planting); and could be adjusted during final Project design, including details such as landscape planting palette, paint and fencing colors, and some adjustment of building layouts. As shown in the upper photo, views of the Project site are dominated by the existing vacant structure, surrounding fence line, and existing commercial structures along Chanticleer Avenue adjacent to the Project site. Under the Project (lower photo, simulation), landscaping along Soquel Avenue would be installed between the roadway and site fencing. The upper portion of facility structures would be visible; however, proposed building structural design and finishes would be similar to existing commercial residential structures in the vicinity. Thus, the visual character of the Project site, as seen from public vantage points to the north of the site, would be consistent with the existing visual character of the area.

The visual character and quality impact associated with this Project site would be **less than significant**.

Headquarters-West Annex Site

As discussed in Section 4.2.2, the Project site itself has moderate visual quality, with limited and brief exposure, and is thus considered to have a low to moderate visual sensitivity. Views of the existing site are limited by topography and mature trees and landscaping adjacent to the site. Further, the PG&E substation and adjacent Headquarters office structure and parking area provides commercial/light-industrial character as well as substantially blocks views of the site from public vantage points along Soquel Drive. Direct views of the site from public areas are limited to the southern portion of the site, as seen from Capitola Avenue. The site is currently vacant, consisting of grass/groundcover planting and some existing trees, and surrounded by fencing. The visual changes associated with construction of this facility would be similar to that described above for the SC WWTF Project site (e.g., vehicles, materials, and equipment). While the construction area would be fenced, construction activities would occur over an approximately 24-month period. Construction vehicles, materials, and equipment may be noticeable and unappealing visual features, as seen by motorists, bicyclists, and pedestrians traveling along Soquel Drive and Capitola Avenue. However, these areas are not scenic in nature and, as noted, is an area of limited visual exposure.

Following construction, the Headquarters-West Annex Site would include a process building, chemical storage and feed systems, an operations building, pump station, maintenance shop and storage, lab space, access and parking areas, and other treatment support facilities within a fenced area. Visual simulations, depicting existing site conditions and simulated Project conditions, are presented on **Figures 4.2-8** and **4.2-9**. **Figure 4.2-8** depicts views of the Project site from Aguazul Drive, facing Soquel Drive with the West Annex portion of the site in the background. The simulated Project conditions are based on preliminary Project designs and landscape plantings at maturity (approximately 10 years after planting); and could be adjusted during final Project design, including details such as landscape planting palette, paint and fencing colors, and some adjustment of building layouts. As shown in the upper photo, there is an existing low retaining wall and sloped landscape strip with grasses and mature trees. The upper portion of the Project site is fenced and includes heavy green materials that block views of the interior portion of the



Photo 1 - Northeast-facing View along Bay Street



Photo 2 - North-facing View along Pedestrian Path adjacent Bay Street

SOURCE: ESA, 2018



Photo 3 - View of SC WWTF Entrance Gate

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Public View of the Santa Cruz Wastewater Treatment Facility
Figure 4.2-2



Photo 4 – West-facing View along Soquel Avenue



Photo 5 – East-facing View along Soquel Avenue



Photo 6 – South-facing View along Chanticleer Avenue



Photo 7 – East-facing View of Sheriff's Offices along Chanticleer Avenue

SOURCE: ESA, 2018

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Figure 4.2-3

Public Views of the Chanticleer Site



Photo 8 -- West-facing View towards Soquel Drive



Photo 9 -- East-facing View along Capitola Avenue



Photo 10 – North-facing View along Monterey Avenue



Photo 11 – East-facing View on Pedestrian Path on Willowbrook Lane



Photo 12 – South-facing View of Twin Lakes Church Recharge Well Site

SOURCE: ESA, 2018

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Figure 4.2-5a
Public Views of the Recharge Well Site Options



Photo 13 -- South-facing View along Cabrillo College Drive, at Cabrillo College North Recharge Well Site



Photo 14 -- East-facing View on Cabrillo College Recreational Field, adjacent to Cabrillo College South Recharge Well Site

SOURCE: ESA, 2018

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Figure 4.2-5b
Public Views of the Recharge Well Site Options



Photo 15 – North-facing View on Pedestrian Path towards Riverside Ave Bridge

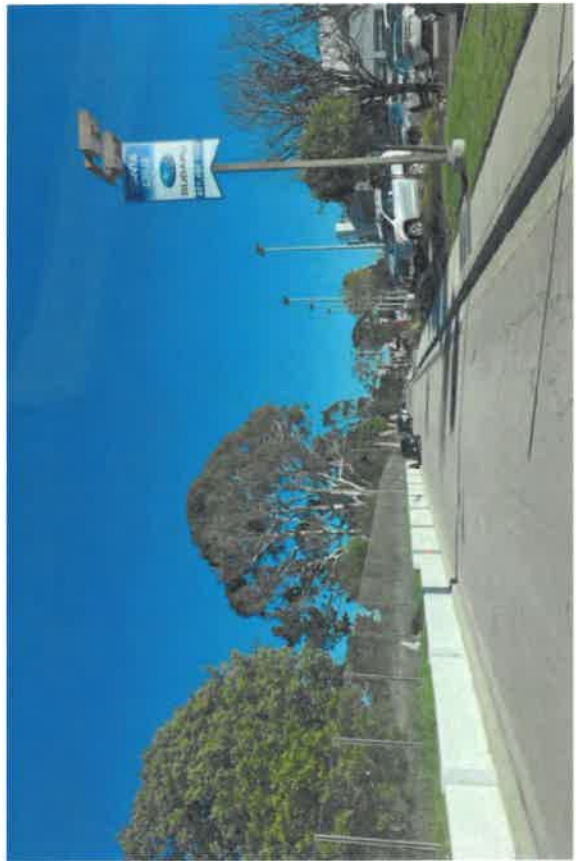


Photo 16 – East-facing View along Auto Plaza Drive



Photo 17 – East-facing View along Capitola Road at 47th Avenue

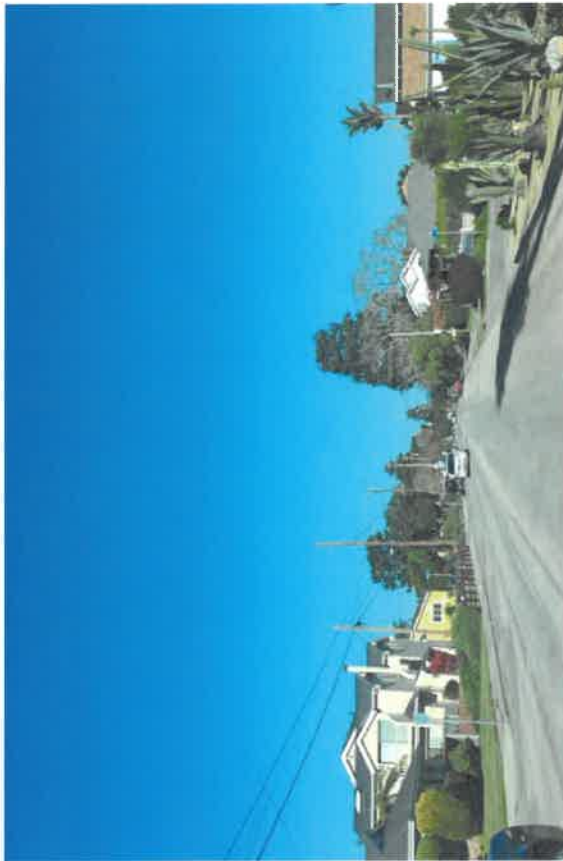


Photo 18 – North-facing View along 49th Avenue at Emerald Street

SOURCE: ESA, 2018

Pure Water Soquel: Groundwater Replenishment and Seawater Intrusion Prevention, 160164
Figure 4.2-6
Public Views of Potential Pipeline Routes



Existing view of Project Site



Simulated view of the Project Site



Existing view of Project Site



Simulated view of the Project Site



Existing view of Project Site



Simulated view of the Project Site

SOURCE: ESA, 2018

Pure Water Soquel: Groundwater Replenishment and Seawater Intrusion Prevention. 160164

Figure 4.2-9
Headquarters-West Annex Site Simulation,
from Capitola Avenue

site. Existing mature trees located between the Headquarters parking lot and the West Annex site can be seen beyond the site fencing. Under Project conditions (lower photo, simulation), landscaping along Soquel Drive and the site entrance road would be replaced to include taller shrubs and grasses than currently exists, and planted trees that are intended, at maturity, to be denser and more consistent with existing trees at the Headquarters area. The treatment facility layout includes placement treatment functions that can be fully enclosed in structures towards the northern, Soquel Drive, portion of the West Annex site. Proposed building structural design and finishes would be similar to existing commercial and residential structures in the vicinity. Thus, the visual character of the Project site, as seen from public vantage points to the north of the site, would be consistent with the existing visual character of the area.

As shown on Figure 4.2-9, the West Annex portion of the site, as seen from Capitola Drive, consists of a scattering of mature trees and shrubs near the roadway and sidewalk. The northernmost portion of the site, as seen from Capitola Avenue, are blocked by the PG&E substation. Immediate views of the southernmost portion of the site is blocked by the existing green fencing, with limited views of mature trees located along the border between the Headquarters and West Annex portions of the site available in background views. Under the Project, mature trees and an approximately 100-foot-wide section of site adjacent to Capitola Avenue would be retained as undeveloped open space. A row of trees and shrubs would separate the developed facility portion of the site from the undeveloped open space portion. An 8- to 9-foot tall concrete block wall would be added along the southern boundary of the site (replacing an existing 6-foot wood fence). Similar to the northern portion of site, the facility layout primarily includes enclosed structures along the western portion of the site. As noted, these structures are similar in structural design and finishes to existing commercial and residential structures in the vicinity. Thus, the visual character of the Project site, as seen from public vantage points to the west of the site, would be consistent with the existing visual character of the area. Thus, the visual character and quality impact associated with this Project site would be **less than significant**.

Monterey Avenue Site

As discussed in Section 4.2.2, the Monterey Avenue site has low visual quality and is poorly exposed, and is thus considered to have a low visual sensitivity. As noted, the site is located off a narrow private road, and is not visible from public vantage points. The visual changes associated with construction of this facility would be similar to that described above for the SC WWTF Project site (e.g., vehicles, materials, and equipment). Construction activities would occur over an approximately 18-month period and following construction and site restoration, the recharge well facilities would be similar in scale and type as the existing (decommissioned) groundwater production well currently located at this site. Existing fencing would be retained or replaced. Given that the site has low visual quality, exposure, and visual sensitivity and that the type and scale type of Project facilities would be consistent with the existing groundwater facilities, the Project would not have a substantial adverse effect on the visual character or quality of the site and its surroundings. The visual character and quality impact associated with this Project site would be **less than significant**.

area (rather than moving through a pipeline alignment reach) for up to approximately 10 to 30 working days per crossing. Following construction activities, all construction debris and waste would be removed from sites and disturbed areas would be returned to their approximate pre-construction conditions (see Section 3.6.5, *Excavation, Stockpiling of Soils, and Spoils Disposal*). Once construction is complete, pipelines would be buried or substantially within the annular space of bridges, and would not be visible; or could be slightly visible where attached to bridges. Given that construction activities would be temporary and fairly typical of the urban setting, and that pipelines would not be visible following completion of construction, impacts on visual character and quality would **less than significant**.

Mitigation: None required.

Impact 4.2-2: The Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. (*Less than Significant*)

As described in Section 3.6.7, *Construction Schedule*, the majority of construction activities would occur during normal working hours; weekdays between the hours of 8 a.m. and 5 p.m., and possible on Saturdays between the hours of 9 a.m. and 5 p.m. However, development of recharge wells would require 24-hour construction for a period of approximately 2 weeks. Accordingly, recharge well staging and drilling would require temporary nighttime lighting for safety and security. Standard construction lighting includes shielding and the ability to focus light downwards towards the work area and away from adjacent areas. Therefore, use of nighttime lighting over a two-week period would not constitute a new source of substantial light or glare. Periodic repairs of recharge well pumps and equipment could also require occasional nighttime work. However, similar to well drilling, the use of nighttime lighting would be for short periods of time, and would include the ability to shield and direct lighting towards the work area and away from adjacent areas.

Construction equipment, building materials, and building finishes would consist of dull, non-reflective surfaces, and would not have large glass windows or other reflective materials facing affected viewers. Such building finishes are not substantial sources of glare, such as mirrors, polished metallic surfaces, or windows.

The only permanent light source used during operation of the Project would be exterior security lights at the Chanticleer or Headquarters-West Annex sites; and motion-sensor activated securing lighting at recharge well sites. The area requiring lighting would be at building entrances and along parking and pathways, which would not be in close vicinity to residences or other land uses that would be sensitive to light and glare. In particular, for the treatment sites, the entrances of structures that could require lighting are oriented towards the center of each site; rather than exterior areas that are closer to other land uses. Further, the security lighting would be in keeping with existing lighting at other nearby commercial and institutional light uses, in addition to roadway lighting. For these reasons, construction and operation of the Project would not constitute a new source of substantial light or glare.

Mitigation: None required.

4.2.5 References – Aesthetics

California State Department of Transportation (Caltrans), *Map of Officially Designated Scenic Highways for Santa Cruz County*. Updated November 7, 2011. Available at http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/. Accessed on February 13, 2018).

County of Santa Cruz, 1994. Santa Cruz County General Plan and Local Coastal Program, May 24, 1994.

PUREWATER SOQUEL PROJECT

2020 ADDENDUM

EXCERPTS RE: AESTHETICS

2. Project Description

Operation

The SC WWTF UV-disinfected secondary effluent would flow into the Project's Secondary Effluent Pump Station and then to the nBAF tertiary treatment facility. The nBAF process includes alkalinity adjustment using sodium hydroxide, prior to nBAF filtration which utilizes a biologically active medium for nitrification, aeration to support ammonia removal, and backwash. Water treated by the nBAF tertiary system would be discharged to the tertiary effluent pump station and from there would be split, with a majority of the water being pumped from the Tertiary Effluent Pump Station through the tertiary pipeline to the Chanticleer Site; and a small portion of the water being diverted to the SC WWTF non-potable reuse facilities. To maintain the nBAF effluent quality during conveyance, liquid ammonium sulfate and sodium hypochlorite would be dosed into the pipeline after the tertiary effluent pump station.

As noted above, the sodium hydroxide, liquid ammonium sulfate, and sodium hypochlorite tanks would be stored in an area with secondary containment. The flow from the nBAF to the non-potable reuse facilities would be further treated by the SC WWTF to meet the Title 22 requirements for disinfected tertiary recycled water, and would replace the current WWTF recycled water treatment facilities system.

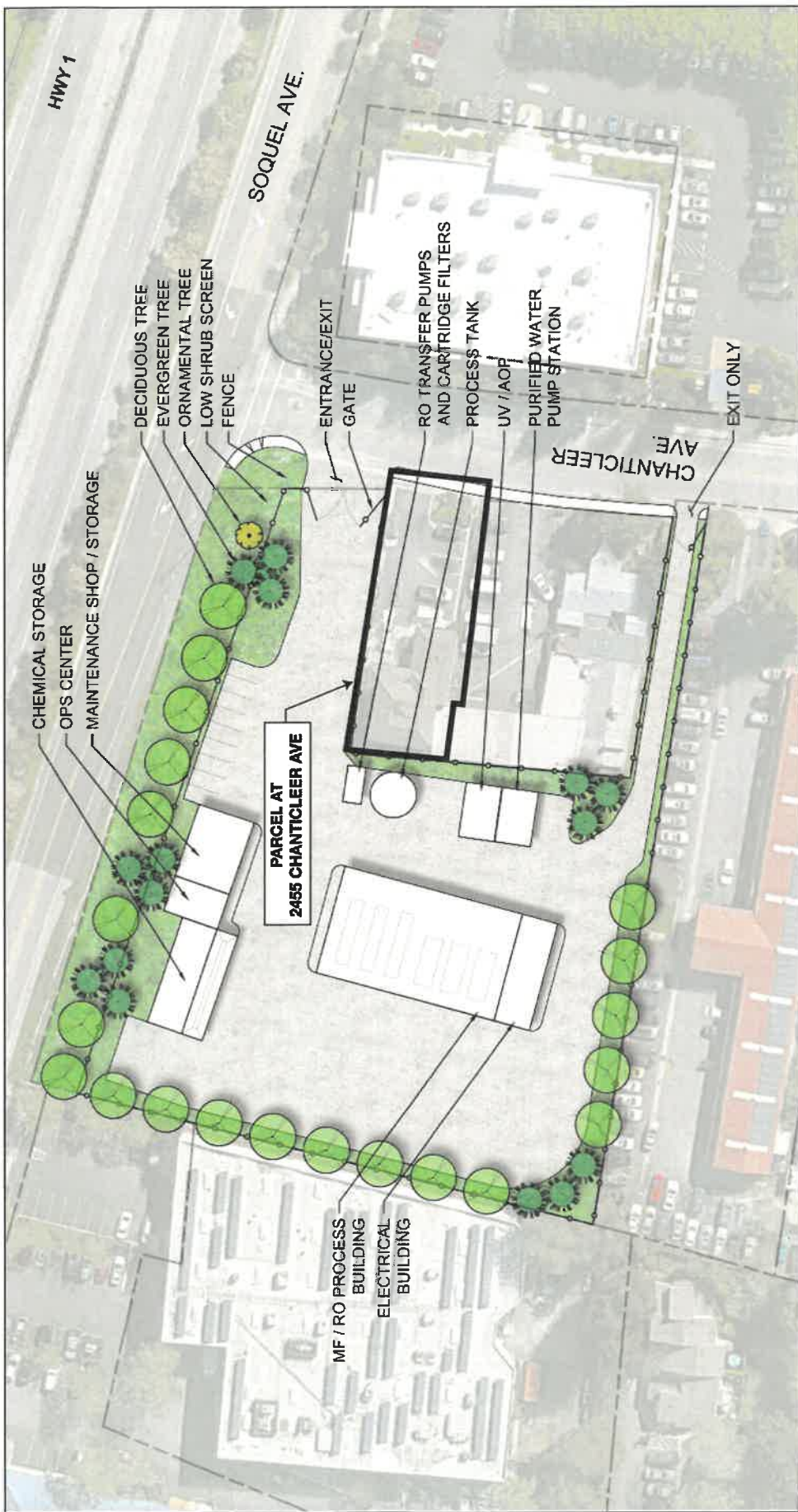
The total annual operational power usage under the Modified Project (including both the TTS and AWPf) would increase to 6,200 megawatt-hour (MWh), which is an increase of 2,600 MWh per year compared to the approved Project. The power usage increased due to the addition of the nBAF process, which requires additional pumps and air blowers. The operational water use would remain the same as described in the certified EIR.

Chanticleer Site

Under the Modified Project, the District would acquire the parcel adjacent to the Chanticleer Site. The parcel is at 2455 Chanticleer Avenue and includes an approximately 2,200 square foot building with a six-space parking area that is currently operated as Provision Glass (referred to throughout this addendum as the "New Parcel"). Refer to **Figure 2** for the location of the New Parcel relative to the approved AWPf at the Chanticleer Site.

The Chanticleer AWPf treatment process would be similar to that described in the EIR, with the purified water treatment being initiated with an MF system and followed by the treatment process of RO, UV-AOP as identified for the approved Project.

The original proposed chemical storage area would be revised to include four above ground tanks; one 5,800-gallon tank for sodium hypochlorite, one 1,500-gallon tank for sodium hydroxide, one 3,500-gallon tank for sodium bisulfite, one 1,500-gallon tank for Liquid Ammonium Sulfate, and one 16,000-gallon tank for calcium hydroxide. In addition, the chemical storage area would include numerous storage totes, including two 330-gallon totes for citric acid, two 330-gallon totes for sulfuric acid, two 330 gallon totes for threshold inhibitor storage, and two 330 gallon totes of hydrogen peroxide. In addition, a carbon dioxide feed system would also be located adjacent to the chemical storage area. The chemicals are hazardous and would be stored in an area with secondary containment.



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Figure 2
 Approved AWWP at Chanticleer Site and Parcel at 2455 Chanticleer Ave

SOURCE: Brown and Caldwell; SqCWD, 2017

2. Project Description

The project description evaluated in the EIR assumed that the facility wastewater stream would be connected to the County sewer main on Chanticleer Avenue, immediately adjacent to the Chanticleer site. However, as facility design has progressed, the point of connection to the sewer main has been revised to Soquel Avenue and 17th Avenue, approximately 200 feet to the west of the site. The Modified Project includes a lift station and equalization tank at the northwest end of the site (see Figure 3) to store and pump the facility waste stream to the sewer main, and an extension of a 4-inch wastewater pipeline to Soquel Avenue and 17th Avenue. The lift station would include two submersible pumps (one active, one standby), that would be between 2- and 5-horsepower each.

Table 2-2 lists the AWPf requirements at the Chanticleer Site under the Modified Project compared to the AWPf requirements at the Chanticleer Site evaluated in the EIR for the Chanticleer Site.

**TABLE 2-2
COMPONENTS FOR TREATMENT AT CHANTICLEER SITE^a**

EIR Description of AWPf at Chanticleer Site	Modified Project Description of AWPf at Chanticleer Site
<p><i>AWPF (with Tertiary Treatment at SC WWTF)</i></p> <ul style="list-style-type: none"> • Process building (25-30 ft. in height) to house major facility equipment including: <ul style="list-style-type: none"> - RO system - UV AOP system • Operation building/lab (to be enclosed, 20 ft. in height) and maintenance/storage (to be covered by a canopy) • Educational program area (signage and walk-through area) • Electrical and instrumentation equipment building (13 ft. in height) • Purified water & brine pump stations (to be enclosed, 20 ft. in height) • RO process tank to be used during cleaning of the RO units (10 ft. in height) • RO transfer pumps and cartridge filters (may be located outdoors) • Paved access road/vehicle parking areas • Exterior nighttime security lighting • 1,600 ft. long, 10-foot-tall iron/chain-link fence with privacy slats around the site's perimeter <p>Total Disturbance Area: 60,000 ft²</p>	<p><i>AWPF (with Tertiary Treatment at SC WWTF)</i></p> <ul style="list-style-type: none"> • Process building (25-30 ft. in height) to house major facility equipment including: <ul style="list-style-type: none"> - MF system (indoors) - RO system (indoors) - UV AOP system (under canopy) - electrical room (indoors) - Cartridge filters (outdoor) - Chemical storage (under canopy) • Operation building and maintenance/storage (to be occupied at the New Parcel existing building) • Educational program area (signage and walk-through area) (to be occupied at the New Parcel existing building) • Purified water and brine pump stations and wet wells (wet wells, 20 ft. in height, pumps located outdoors) • MF Feed Tank (50,000 gallons, 25 ft. tall), RO feed tank (24 ft. in height, located outdoors) • MF backwash pumps, RO feed tank and RO transfer pumps (located outdoors) • Two 10,000-gallon neutralization tanks located outdoors • Paved access road/vehicle parking areas • Exterior nighttime security lighting • 1,600 ft. long, 8 to 10-foot-tall iron/chain-link fence with privacy slats or similar around the site's perimeter <p>Total Disturbance Area: 75,000 ft²^b</p>

NOTES:

^a Structure dimensions and overall footprint values are approximate.

^b Conversion of the New Parcel existing building to Project use does not require additional areas of construction disturbance.

Construction

The District proposes to use the existing building and parking area at the New Parcel to be acquired during construction of the Project as an on-site construction office and worker parking associated with construction activities at the Chanticleer Site. Upon completion of construction activities, the building would be converted to serve as the District's education center and treatment facility office. Use of the building would reduce the number of on-site construction trailers at the Chanticleer Site; as well as avoid the need for construction of a proposed new education center/treatment office building and storage at the Chanticleer Site included in the EIR Project Description. No major physical revisions (e.g., structural changes, additional power, internet) would be required to use the New Parcel building or parking area for construction activities. The only minor revisions to the new parcel would consist of the following:

- Striping of the parking area, addition of an additional restroom stall, and minor changes to the internal building layout, to make the new parcel building and parking area compliant with the Americans with Disabilities Act (ADA).²
- Painting the exterior to be consistent with other structures at the Chanticleer site and potentially match the appearance of the interior of the existing building with other District facilities.
- Adding some new landscaping consistent with other District facilities to the exterior portions of the parcel.
- Changing the location of the approved iron/chain-link fence with privacy slats or similar to include the New Parcel within the Chanticleer Site fence line.
- Allowing some staging of construction equipment or supplies at the New Parcel site.

The Modified Project would also eliminate the need for construction of the operations building and maintenance shop/storage buildings at the Chanticleer Site because the existing building at the New Parcel would be used to house the operations of those facilities.

The estimated construction duration, permanent and temporary construction area, and depth of excavation at the Chanticleer Site would be the same as described in the EIR. The Modified Project would result in 1,840 fewer cubic yards of exported material for the Chanticleer site compared to the approved Project for a total of 1,500 cubic yards of exported material; however, the Modified Project would result in an additional 820 cubic yards of imported fill material compared to the approved Project for a total of 850 cubic yards of imported material. The same types of construction equipment would be required for construction activities at the Chanticleer Site as identified in the EIR for the approved Project; however, the hours of operation per day for some of the equipment would increase under the Modified Project. Same as for the approved Project, an average of 12 (and up to 16) construction workers per day would be required, and the construction period would be approximately 24 months. Construction hours would occur during normal working hours; weekdays between the hours of 8:00 a.m. and 5:00 p.m., and possibly on Saturdays between the hours of 9:00 a.m. and 5:00 p.m.

² The EIR Project Description included two onsite restroom stalls as part of the Chanticleer site education center and office; thus, the addition of a restroom stall to the existing structure at the new parcel would result in the same total number of restroom stalls as described in the EIR.

2. Project Description

It is estimated that a total of approximately 2,030 truck round trips would be required to import materials and export debris to/from the Chanticleer Site under the Modified Project, which would be 280 additional round trips compared to the approved Project. Refer to **Figure 3** for an illustration of the changes at the Chanticleer site associated with the proposed Modified Project.

The Project includes landscaping along the site fence lines as shown on Figure 3, and including the Soquel Avenue frontage, outside the proposed Project site fence line but within the overall Chanticleer parcel purchased by the District. However, since approval of the Project, Santa Cruz County has approached the District regarding the frontage area, and asked the District to consider a land use agreement where the County would utilize the entire frontage area for a portion of their proposed Highway 1 pedestrian overcrossing project.³ Thus, landscaping proposed for this area would not be installed under the Project as initially proposed in order to avoid expenditure of public funds by the District on landscaping that may be removed soon after and replaced by the overcrossing project. If a land use agreement is not executed and the County does not move forward with the overcrossing project by the completion of the PWS Chanticleer construction phase, the District would then hydroseed the area, confer with the County on the status of their pedestrian-overcrossing project, and then proceed with installing the landscaping as originally planned if the County ultimately does not proceed with their project within four years of completion of construction.

Operation

During the operational phase of the Modified Project, the same parameters identified in the certified EIR related to the operations building, the education program, and the maintenance shop/storage would apply, with the only exception that those facilities and the program would be housed at the existing building at the New Parcel. The same long-term functions that would have taken place at the northwestern portion of the Chanticleer Site would now instead take place at the existing building on the New Parcel. Consistent with its ongoing public outreach and education initiatives, the District's educational program would continue to focus on water use, reuse, treatment, and conservation. As part of this program, the District would offer tours of the AWPf at the New Parcel and Chanticleer Site to members of the public. Up to four tours would be offered per month, for groups of up to 30 people each. The purified water and brine pumps would be sited in the northern portion of the site, closer to Soquel Avenue than proposed in the EIR project description. The operational water use would remain the same as described in the certified EIR.

References

Black & Veatch, 2020. Pure Water Soquel Treatment Process Design. May 29, 2020.

³ The proposed overcrossing is a County-initiated transportation project, with separate and independent utility from the District's Project. Additionally, the Santa Cruz County Regional Transportation Commission, in cooperation with the California Department of Transportation and Federal Highway Administration, has undertaken separate CEQA/NPA review for this proposal. Nonetheless, the District is disclosing the status of the County's project for public transparency purposes.



Pure Water Soquel: Groundwater Replenishment and Seawater Intrusion Prevention .160164

Figure 3
 Chanticleer Site Plan under Modified Project

SOURCE: Brown and Caldwell; SqCWD, 2020

2. Project Description

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Environmental Checklist

3.1 Aesthetics

Setting

The setting surrounding the New Parcel to be acquired is the same as that described in the certified EIR for the Chanticleer Site. Affected viewers and exposure conditions associated with the New Parcel are limited to numerous motorists, bicyclists, and pedestrians traveling along Chanticleer Avenue, Soquel Avenue, and Highway 1; with exposure for brief periods, within an existing commercial and light industrial area.

Findings of Previously Certified EIR

The certified EIR identified less-than-significant impacts associated with the approved Project for potential to degrade existing visual character or quality of the site or surroundings, and to create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area. As discussed on EIR page 4.2-20, impacts associated with scenic vistas and scenic resources are not applicable to this Project.

Project Change Analysis

<i>Impacts (and Supporting Information Sources):</i>	<i>New Potentially Significant Impact</i>	<i>New Less Than Significant with Mitigation Incorporated</i>	<i>New Less Than Significant Impact</i>	<i>Same Impact as Approved Project</i>	<i>Less Impact than Approved Project</i>
AESTHETICS					
Impact 4.2-1: The Project would not substantially degrade the existing visual character or quality of the site and its surroundings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Impact 4.2-2: The Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The changes to the SC WWTF site would not be visible from public areas, as they are interior to the existing WWTF. The changes to the Chanticleer Site layout would not include minor rearrangement of site features within a site that is currently enclosed by fencing that restricts views of the site. As discussed in Section 2.3, Proposed Changes to the Project, overnight work may be preferred when connections to existing SC WWTF facilities are made, which would require construction lighting. As discussed on EIR Page 4.2-29, standard construction lighting includes shielding and the ability to focus light downward towards the work area and away from adjacent areas. Further, the use of lighting would be within the existing SC WWTF which includes night lighting and would not be distinct from existing lighting. Thus, use of night lighting would not result on light and glare effects on adjacent areas.

The rearrangement of site elements within the main portion of the Chanticleer site would continue to be obscured by fencing, as occurs under existing conditions. While the Modified Project would change the commercial nature of the New Parcel site due to the proposed 50-foot fence that would be installed along its Chanticleer Avenue frontage. This portion of the New Parcel currently includes signage, emergency water pipes, and other infrastructure. Thus, addition of fencing would be consistent with the commercial/industrial appearance of the site and Project would not substantially degrade the existing visual character or quality of the site or surroundings and the associated impact would be less than significant. Finally, conversion of use of the existing structure for use under the Modified Project would not include addition of lighting. There are no zoning or other regulations governing scenic quality that apply to the project sites. While most of the proposed landscaping would be implemented by the completion of construction as described in the EIR, as discussed in Section 2.3, Proposed Changes to the Project, the Soquel Avenue frontage, which currently consists of unmaintained grass and bare soil areas, would be hydroseeded after construction until the Santa Cruz County overcrossing project⁴ is implemented in this area. If the overcrossing project does not require use of the frontage area, or construction of that project does not occur within 4 years of completion of Project construction, the proposed Project landscaping would be installed along the frontage. Thus, for up to 4 years following completion of construction, the vegetation of the Soquel Avenue frontage area would appear similar to existing conditions. Therefore, all potential impacts on aesthetic resources that would be associated with the Modified Project would be the same as the approved Project.

Conclusion

Implementation of the Modified Project would not result in any new or more significant impacts regarding degradation of the existing visual character or quality of the site or surroundings than those identified in the previously certified EIR. **(Same Impact as Previously Approved Project [Less than Significant])**

Implementation of the Modified Project would not result in any new or more significant impacts associated with the creation of a new source of light or glare that could adversely affect daytime or nighttime views in the area. **(Same Impact as Previously Approved Project [Less than Significant])**

⁴ The proposed overcrossing is a County-initiated transportation project, with separate and independent utility from the District's Project. Additionally, the County has undertaken separate CEQA review for this proposal, including consideration of aesthetic resources effects. Nonetheless, the District is disclosing the status of the County's project for public transparency purposes.

PUREWATER SOQUEL PROJECT
2021 ADDENDUM
EXCERPTS RE: AESTHETICS



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memorandum

date September 29, 2021

to Skyler Murphy, Melanie Mow-Schumacher, Soquel Creek Water District

from Alisa Moore, Project Manager; Gusty Minyard, Project Associate; Matt Fagundes, Analyst

subject Pure Water Soquel: Groundwater Replenishment and Seawater Intrusion Prevention Project – 2021 Addendum to the Environmental Impact Report

Introduction

This memorandum serves as the 2021 California Environmental Quality Act (CEQA) Environmental Impact Report (EIR) Addendum (2021 Addendum) to the Certified Pure Water Soquel: Groundwater Replenishment and Seawater Intrusion Prevention Project EIR (Certified EIR) (2018) and 2020 EIR Addendum to the Certified EIR (2020 Addendum). The CEQA Guidelines (Sections 15162 and 15164) require that a lead agency prepare an addendum to a previously Certified EIR if some changes or additions to the environmental evaluation of a project are necessary, but none of the following occurs:

1. There are no substantial changes in the project which require major revisions to the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. There are no substantial changes with respect to the circumstances under which the project is undertaken which require major revisions to the previous EIR due to involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. No new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, which shows any of the following:
 - a. The project will have one or more significant effects not discussed in the previous EIR;
 - b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; The project will result in impacts substantially more adverse than those disclosed in the EIR; or

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Pure Water Soquel: Groundwater Replenishment and Seawater Intrusion Prevention Project –
2021 Addendum to the Environmental Impact Report

- d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The 2021 Addendum summarizes the Project as considered in the Certified EIR and 2020 Addendum, describes additional treatment design changes made since the certification of the EIR and adoption of the 2020 Addendum, and analyzes any change in environmental effects associated with those changes. As discussed further in the section entitled ‘Recommendations’, the Project would not result in substantial changes to the certified EIR or 2020 Addendum because it would not involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and would not result in substantial changes with respect to the circumstances under which the Project is undertaken which require major revisions to the certified EIR due to involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

Certified EIR and Project Approval

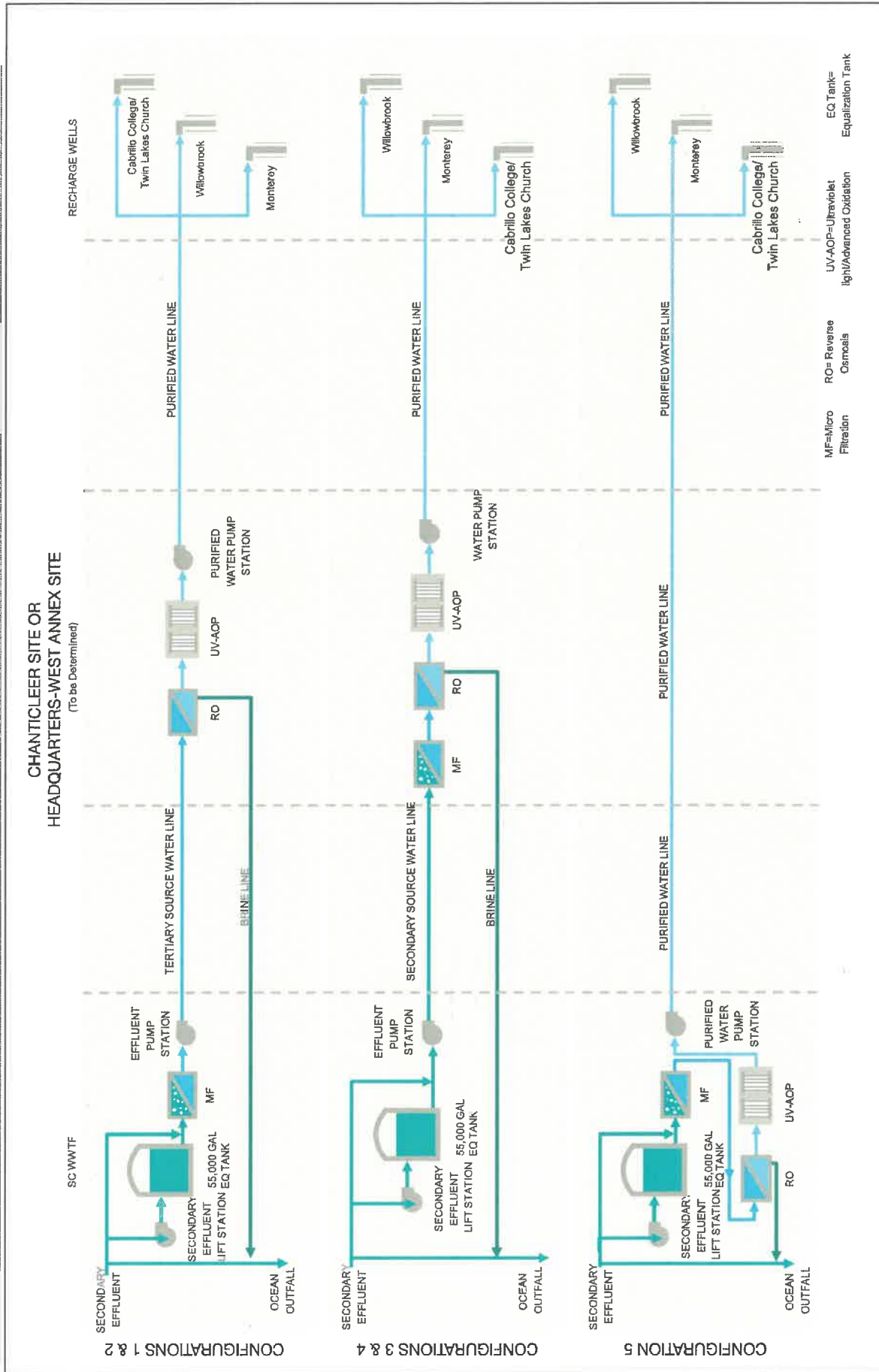
The Pure Water Soquel Project would supplement natural recharge of the Santa Cruz Mid-County Groundwater Basin with purified water. The approved Certified EIR Project Description allows for existing secondary effluent from the Santa Cruz Wastewater Treatment Facility (SC WWTF) to be purified and then recharged into the aquifer.

The Certified EIR considered five treatment configurations (Treatment Configuration), which were approved as part of the Project (Certified EIR pages 3-7 and **Figure 1**):

1. A new tertiary treatment system¹ at the SC WWTF, coupled with an Advanced Water Purification Facility (AWPF) at the Chanticleer Site for advanced purification of the tertiary effluent; or
2. A new tertiary treatment system at the SC WWTF, coupled with an AWPF at the Headquarters-West Annex Site for advanced purification of the tertiary effluent; or
3. A new AWPF at the Chanticleer Site for advanced purification of secondary effluent from the SC WWTF; or
4. A new AWPF at the Headquarters-West Annex Site for advanced purification of secondary effluent from the SC WWTF; or
5. A new AWPF at the SC WWTF for advanced purification of secondary effluent from the SC WWTF.

Soquel Creek Water District Resolution 18-31, adopted by the Board of Directors on December 18, 2018, directed the District to prioritize the further design and planning of tertiary treatment at the SC WWTF and AWPF at the Chanticleer Site (Treatment Configuration 1 of the Certified EIR); while also coordinating with the City of Santa Cruz on the potential to site the full advanced water purification treatment at the SC WWTF (Treatment Configuration 5 of the Certified EIR) provided no delay would occur to the Project schedule. Subsequently, on March 5, 2019, the City of Santa Cruz and District staff made a joint recommendation to the District Board that tertiary treatment at the SC WWTF and advanced water purification at the Chanticleer site be implemented rather than the full advanced water purification treatment facility solely at the SC WWTF (Treatment Configuration 1 of the Certified EIR).

¹ Tertiary-level treatment is more advanced than secondary. The tertiary treatment process involves the use of additional chemicals, and can also include filtration technologies. Tertiary-level treatment removes additional solids and microorganisms, and provides greater disinfection, relative to primary- or secondary-level treatment.



SOURCE: Brown and Caldwell, 2017

Pure Water Soquel: Groundwater Replenishment and Seawater Intrusion Prevention. 160164
Figure 1
 Options for Treatment Trains, as Presented in Certified EIR

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2021 Addendum to the Environmental Impact Report

However, as noted above, all 5 Treatment Configurations were considered in the Certified EIR and were approved as part of the Project in Resolution 18-31.

2020 Addendum

Subsequent to the certification of the EIR, a parcel adjacent to the Chanticleer Site, 2455 Chanticleer Avenue (“New Parcel”), was listed for sale and the District proposed to acquire the New Parcel and incorporate it into the design of the Project, specifically the design of the AWPf at the Chanticleer Site. This proposed purchase required a discretionary action, which triggered the need for the 2020 Addendum. Further, as part of the District’s project development process, an evaluation of the 2019 SC WWTF secondary effluent water quality was conducted which showed that nitrite levels in the secondary effluent had increased in recent years (Black & Veatch, 2020). The evaluation indicated that if nitrite levels were to remain at 2019 levels in the future, project operations would need to increase the sizing of the ultraviolet light-based advanced oxidation process (UV-AOP) equipment from that described in the Certified EIR, replace the UV-AOP processor units more frequently than anticipated in the Certified EIR, or include pretreatment that would reduce nitrite and ammonia levels prior to membrane treatment. The District considered including pretreatment utilizing the process of nitrifying biologically aerated filter (nBAF) at the SC WWTF site to address the needed reduction in nitrite and ammonia levels.

The 2020 Addendum to the Certified EIR was prepared to evaluate the potential for any new significant impacts, or a substantial increase in the severity of previously identified significant impacts, to occur related to the project description changes described above. The 2020 Addendum determined that neither the 2020 Addendum Project Description, nor any changes in circumstances surrounding the 2020 Addendum Project Description, result in any new significant impact, or substantially increase the severity of an impact identified in the Certified EIR. The 2020 Addendum further determined that no new mitigation was required beyond those measures in the adopted MMRP. The 2020 Addendum was adopted in November of 2020.

2021 Addendum

Subsequent to the certification of the EIR and adoption of the 2020 Addendum, District staff have proposed additional design changes, primarily to address 1) existing space limitations at the SC WWTF site, 2) ongoing SC WWTF operational activities, and 3) the need for the City of Santa Cruz to plan for future WWTF upgrades. Thus, the space made available to the Pure Water Soquel Project, and construction and operational requirements necessitated by existing SC WWTF operations, presented design and operational challenges for the Pure Water Soquel Project that could be avoided by reducing Pure Water Soquel facilities at the SC WWTF. Further, consolidation of treatment at a single location would eliminate the need for separate treatment operations and staff. Accordingly, District staff have proposed an updated version of Treatment Configuration 3 (new AWPf at the Chanticleer Site for advanced purification of secondary effluent from the SC WWTF).

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Santa Cruz Wastewater Treatment Facility Description

Facilities at the SC WWTF would include (also shown on **Figure 2**):

- Pump Station (source water pump station and electrical transformer) and brine return pipeline receiving connection point located on equipment pads; consistent with Treatment Configuration 3 as analyzed in the Certified EIR. Exterior building lighting would be included at the pump station and receiving connection area, consistent with existing security and safety lighting found throughout the SC WWTF (exterior building lighting was not previously proposed for the pump station and receiving connection area).
- PG&E metering enclosure near the corner of Bay Street and California Street replacing an empty storage shed, currently in disrepair, next to the park restroom; updating the location of the electrical metering enclosure sited at the edge of the SC WWTF in the Certified EIR and 2020 Addendum.
- A radio communication pole, approximately 60-feet tall, with base diameter of 3 feet and tapering up to 1.5 feet at the top; located next to the pump station, consistent with the Certified EIR's discussion of standard radio-based supervisory control and data acquisition (SCADA) to be installed at each site.²
- Pretreatment and associated facility components described in the 2020 Addendum would not be constructed at the SC WWTF; however, the cloth filter strainer described in the 2020 Addendum would be retained in order to provide non-potable reuse water for use by the City of Santa Cruz.

Because the Santa Cruz site is an active Wastewater Treatment Facility, Project construction work will continue to be closely coordinated with City staff throughout the duration of construction. The same types of construction equipment and daily construction schedule would be required for construction activities at SC WWTF as identified in the Certified EIR; however, the number of hours per day of use for some of the equipment would be updated (see Air Quality discussion below). As noted in the Certified EIR, construction activities would primarily occur during normal working hours; weekdays between the hours of 8 a.m. and 5 p.m., and possibly on Saturdays between the hours of 9 a.m. and 5 p.m. However, to provide flexibility in construction crew scheduling and to meet the request of the SC WWTF staff to coordinate Project construction activities with the ongoing SC WWTF operations, construction activities may begin at 7 a.m., and 10-hour and 12-hour long shifts may be considered. Further, limited nighttime construction may occur, in order to complete connection points between the Project and existing SC WWTF facilities (such as connection of the Project brine return line to the SC WWTF outfall tunnel portal box) during SC WWTF low flow time periods, which are typically at night. These activities would require small hand tools, such as rotary hammer drills and impact wrenches, along with an air compressor, dewatering pump, confined space air blower, and extended reach forklift. If the connection work occurs at night, construction lighting would be required.

Chanticleer Facility Description

Consistent with Certified EIR Treatment Configuration 3, the Chanticleer site would include: ultrafiltration (UF)/microfiltration (MF) to yield a tertiary-level of treatment, followed by reverse osmosis (RO), and an ultraviolet light-based advanced oxidation process (UV-AOP), as well as associated pumps, chemical storage, a learning center and office, demonstration garden, and landscaping (see **Figure 3**). Due to the higher than expected nitrites in the treated secondary effluent described above, pretreatment is required. However, rather than nBAF pretreatment at the SC WWTF (considered in the 2020 Addendum), the Project would include an ozone

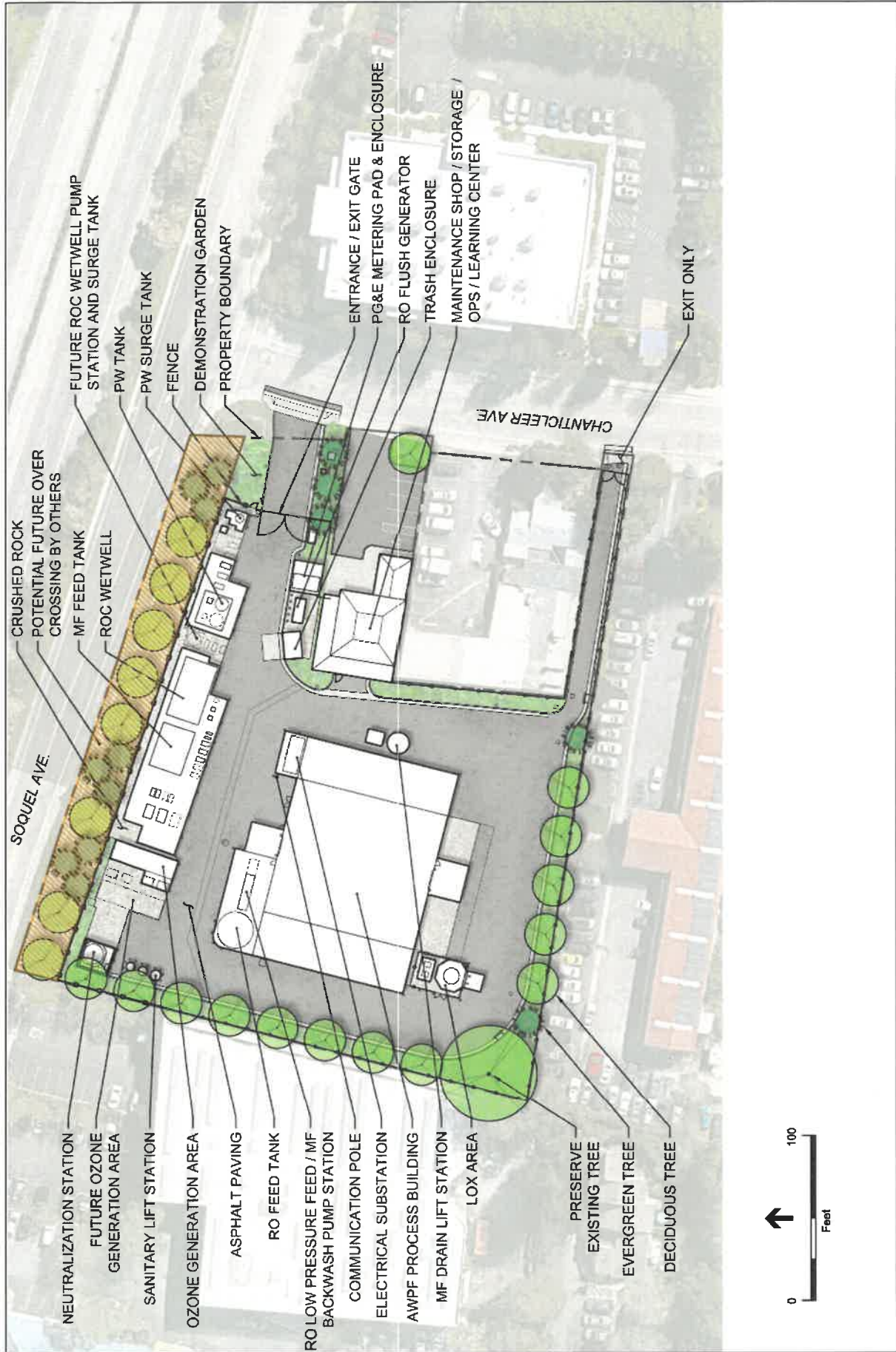
² While the need for SCADA equipment was discussed in the Certified EIR for each site location, the type and location within the overall site layout was not known in 2018 (Certified EIR page 3-42).



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Figure 2
Santa Cruz Wastewater Treatment Facility Site Plan

SOURCE: Black & Veatch, 2021

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SOURCE: Black and Veatch; SqCWD, 2021

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Figure 3
Chanticleer Site Plan

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pretreatment system at the Chanticleer site. Ozone and nBAF pre-treatment are equally effective nitrite pre-treatment systems. This approach has the environmental advantage of not requiring installation of deep piles to support the treatment system as would have been necessary for nBAF systems. Further, nBAF generates more backwash than ozone, which requires disposal to the wastewater system. Thus, the proposed pre-treatment system has been updated from that considered in the 2020 Addendum to reduce the amount of construction required to support the pre-treatment system and to reduce the volume of backwash requiring disposal. The Chanticleer site would now also include a permanent emergency generator (80 kW RO Flush Emergency Generator with a 175-gallon fuel tank), to provide for operational flexibility during power outages. Annual testing of the generator would not exceed 50 hours per year, with frequency of tests determined by vendor. In addition to annual testing, the generator is only used in the event of a power outage.

Consistent with the Certified EIR's discussion of SCADA requirements, an approximately 60-foot-tall radio communication pole, with base diameter of 3 feet, tapering up to 1.5 feet at the top, would be located to the north of the AWPf process building.

Further, while the Chanticleer site does not have as many space limitations as the SC WWTF site, the north side of the Chanticleer site bounded by Soquel Avenue has been removed from the Project site layout to allow for construction and operation of the Santa Cruz County/Caltrans future bicycle-pedestrian bridge, which may be under construction at the same time as the Project.

As discussed in the 2020 Addendum, the maintenance shop, storage, operations office, and learning center would be within the existing building located along Chanticleer Avenue (former retail glass shop) and the AWPf facility would be located in the center of the site. The ozone generation area (for ozone pretreatment), microfiltration tank, and other tanks and pumps would be located along the north boundary of the site.

As discussed in the Certified EIR's Project Description, under Chemical Use and Storage (Certified EIR page 3-41), the chemicals used during the treatment process would be stored onsite at the purification facility in accordance with applicable regulatory requirements. Chemical storage facilities would include secondary concrete containment, alarm notification systems, and fire sprinklers. Chemicals to be used during the water purification process and the projected annual usage amounts are similar to that listed in Certified EIR Table 3-9, with the exception of the use and storage of ozone for pretreatment. The main treatment process chemicals would be housed in various bulk storage tanks of up to 5,000 gallons, located inside or near the process building. Cleaning chemicals would be stored in smaller containers. Sumps and sump pumps within the chemical containment area and loading areas would collect and contain any chemicals accidentally released during operations.

The same types of construction equipment and daily construction schedule would be required for construction activities as identified in the Certified EIR; however, the number of hours per day of use for some of the equipment would be updated (see Air Quality discussion below). As noted in the Certified EIR, construction activities would primarily occur during normal working hours; weekdays between the hours of 8 a.m. and 5 p.m., and possibly on Saturdays between the hours of 9 a.m. and 5 p.m.

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2021 Addendum Environmental Analysis

The following discussion summarizes the Findings of the Certified EIR and 2020 Addendum, provides an updated analysis of the Project, and concludes with a summary of the difference, if any, between the findings of the Certified EIR and 2020 Addendum, and the Project.

However, the analysis below does not include topics that would not be subject to change. For instance, the overall Project site boundaries and locations have not been revised and the overall types of construction and operation activities have not been revised; thus, the potential effects to biological and cultural resources would not change from that discussed in the Certified EIR and 2020 Addendum. Further, the overall operational approach to advanced treatment, recharge, retention time, and reporting program remains subject to the California Code of Regulations (CCR) Section 60301.390 for a Groundwater Replenishment Reuse Project (GRRP), which is “a project involving the planned use of recycled municipal wastewater that is operated for the purpose of replenishing a groundwater basin designated in the Water Quality Control Plan for use as a source of municipal and domestic water supply.” Thus, there would be no change in water quality, groundwater quality, or other geohydrology effects from those disclosed and discussed in the Certified EIR and 2020 Addendum.

Aesthetics

Findings of Certified EIR and 2020 Addendum

As discussed in Certified EIR Section 4.2, Aesthetics, the SC WWTF and Chanticleer sites are limited in terms of public views, and the existing visual quality of each site is low based on the current level of development at and surrounding the Project sites:

Project Site	Visual Quality	Affected Viewers and Exposure Conditions	Visual Sensitivity
Santa Cruz WWTF Site	Low	Poorly exposed. Site is within an existing treatment facility complex that is inaccessible to the public and largely screened from public areas. Some direct/open views of the existing facility may be available from the Lagoon trail system.	Low
Chanticleer Site	Low	Limited exposure to numerous motorists, bicyclists and pedestrians traveling along Chanticleer Avenue, Soquel Avenue, and Highway 1; with exposure for brief periods, within an existing commercial and light industrial area.	Low

(Excerpt of information from Certified EIR Table 4.2-1)

For the SC WWTF site, the Certified EIR found that Pure Water Soquel facilities would not be visible from other vantage points in Neary Lagoon Park or La Barranca Park, or from Bay Street. Given that the site has low visual quality, exposure, and visual sensitivity and that the type and scale of the Certified EIR Project Description proposed facilities would be consistent with the existing WWTF facilities, there would not be a substantial adverse effect on the visual character or quality of the site and its surroundings. The visual character and quality impact associated with the SC WWTF facility would be **less than significant**.

For the Chanticleer site, the Certified EIR include a photo simulation comparing existing site conditions and conditions with an AWPF. The simulated AWPF conditions were based on preliminary designs and landscape plantings at maturity (approximately 10 years after planting); and it was acknowledged the facility could be adjusted during final design, including details such as landscape planting palette, paint and fencing colors, and

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some adjustment of building layouts. Under existing conditions, views of the Chanticleer site are dominated by a vacant structure (removed in 2020), surrounding fence line, and existing commercial structures along Chanticleer Avenue adjacent to the site. Under the simulated conditions, the upper portion of facility structures would be visible; however, compared to existing conditions, the visual character and quality impact associated with the Chanticleer facility would be **less than significant**.

The only new permanent light source used during operation of the SC WWTF and Chanticleer sites would be exterior security lights at the Chanticleer site. The area requiring lighting would be at building entrances and along parking and pathways, which would not be in close vicinity to residences or other land uses that would be sensitive to light and glare. In particular, for the Chanticleer site, the entrances of structures that could require lighting are oriented towards the center of each site, rather than exterior areas that are closer to other land uses. Further, the security lighting would be in keeping with existing lighting at other nearby commercial and institutional light uses, in addition to roadway lighting. For these reasons, construction and operation of the SC WWTF and Chanticleer facilities would not constitute a new source of substantial light or glare and any impacts would be **less than significant**.

2021 Addendum Environmental Analysis

At the SC WWTF, Project components would remain similar to that considered in the Certified EIR (as described above). As in the Certified EIR, the largest new facility would be the pump station, which would not be visible or would not be distinguishable from existing SC WWTF facilities, as viewed from public areas such as La Barranca Park or Neary Lagoon Park. The potential metering enclosure location, adjacent to the restroom at Neary Lagoon Park, would be of similar scale and replace an existing shed that is in poor repair.

The proposed telecommunications pole would be located at the northern edge of the WWTF facility, with the Neary Lagoon trail to the north of the facility. Glimpses of the existing facility which includes elements that are the same height as the Project telecommunication pole, are available from the trail, however, mature trees, topography, and the curvilinear path visibly separates the trail from the facility in most areas. Similarly, the Project telecommunication pole would be likely be visible from portions of the trail, the pole would not be distinguishable from other SC WWTF elements of similar height, and would be blocked from views in most areas, as under current conditions.

Construction activities would occur during daytime hours, with the exception of a limited number of nighttime construction days. Should additional construction lighting be required, beyond that already present to support ongoing SC WWTF operations, the light would be indistinguishable from existing operational lighting. New operational security lighting is proposed at the SC WWTF under the Project. The security lighting would be in keeping with existing lighting found throughout the SC WWTF, and other institutional light uses, in addition to roadway lighting. For these reasons, construction and operation would not constitute a new source of substantial light or glare and any impacts.

For the Chanticleer site, updated photo simulations have been prepared comparing existing site conditions and Project conditions (see **Figures 4 and 5**). The simulated conditions were based on the Project designs and landscape plantings at maturity (approximately 10 years after planting) with updates to the landscaping palette, paint and fencing colors, and adjustment of building layouts. Under existing conditions, views of the Project site are dominated by a vacant structure (removed in 2020), surrounding fence line, and existing commercial structures along Chanticleer Avenue adjacent to the Project site. Under the Project, the upper portion of facility



Existing view of Project Site



Simulated view of the Project Site



Existing view of Project Site



Simulated view of the Project Site

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structures would be visible, similar to the Certified EIR analysis. The communications pole would replace an existing vertical element within the site and, from public viewpoints, the pole would be consistent in scale with existing vertical elements and buildings in the vicinity. For instance, there are 5 existing communications and electrical poles in the fore and middle ground view; with the poles located along Soquel Avenue being the same height as the proposed pole, which would be seen in the middle ground of views. Further, the adjacent County Sheriff-Coroner's Office is a two-story structure topped with multiple communication poles. While the site layout and features have been revised, the facility would be seen within the context of commercial and other development in the area by motorists, pedestrians, and bicyclists passing the site. Given the low existing visual quality of the site, and low viewer sensitivity, the Project design would not result in a substantial visual character and quality effect. Finally, construction activities would occur during daytime hours, and no new lighting is proposed at the Chanticleer site beyond that considered in the Certified EIR.

Conclusion

Implementation of the Project would not result in a substantial aesthetic resources effect. **(Same Impact as Previously Approved Project [Less than Significant])**

Air Quality

Findings of Certified EIR and 2020 Addendum

The Certified EIR and 2020 Addendum identified less-than-significant impacts with mitigation for the potential to generate emissions of criteria air pollutants that could contribute to a violation of an ambient air quality standard during construction, to conflict with or obstruct implementation of the applicable air quality plan, and to expose sensitive receptors to substantial pollutant concentrations; and identified less-than-significant impacts regarding the potential to generate a long-term increase of criteria pollutant emissions during operations, and create objectionable odors that would affect a substantial number of people.

2021 Addendum Environmental Analysis

Generation of Criteria Pollutants and Consistency with the Air Quality Plan

Construction. To consider the air quality effects associated with the Project, the latest version of the California Emissions Estimator Model (CalEEMod 2020.4.0) was used to estimate emissions to reflect the construction activities that would occur at the SC WWTF and Chanticleer Site. The modeling runs were also updated to include a 2021 construction start date for these elements, as opposed to the 2020 construction start date modelled for the 2020 Addendum. Construction activities at the Chanticleer Site and SC WWTF under the Project would involve the use of the same off-road diesel-fueled equipment for similar daily use periods as those described in the 2020 Addendum.

The most conservative (i.e., most emitting) daily emissions scenario modelled for the Certified EIR and 2020 Addendum included simultaneous construction activities at the Chanticleer Site, one of the recharge well sites, and at two pipeline sites. Maximum daily construction emissions associated with the Project would be slightly reduced compared to those documented in the 2020 Addendum (see Exhibit AQ and GHG). The Certified EIR and 2020 Addendum determined that construction emissions as a whole would exceed the MBARD's significance threshold for NO_x, resulting in a significant impact relative to the generation of emissions of criteria air pollutants that could contribute to a violation of an ambient air quality standard during construction, and conflicting with

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implementation of the applicable air quality plan. This remains true as emissions would continue to exceed the significance threshold for NO_x, resulting in a significant impact.

The Certified EIR recommended implementation of Mitigation Measures 4.3-1a (Construction Emissions Reduction Plan) and 4.3-1b (Idling Restrictions) to reduce maximum construction-related emissions of NO_x to less than the 137 pounds-per-day significance threshold, reducing the construction impacts to a less than significant level. Accordingly, the District's Board imposed those mitigation measures as part of the approval of the Project Because Mitigation Measure 4.3-1a requires the District to demonstrate that emissions would not exceed 137 pounds NO_x per day, there will be no change in emissions with mitigation (i.e., the Project could only generate up to 137 pounds NO_x per day). Therefore, with implementation of Mitigation Measures 4.3-1a and 4.3-1b, the potentially significant impact regarding the generation of emissions of criteria air pollutants (that could contribute to a violation of an ambient air quality standard during construction, and conflict with implementation of the applicable air quality plan) would still be reduced to a less-than-significant level.

Operation. The only new emission source that would be associated with routine operations of the Project would be from the testing and maintenance of a new 107 horsepower (hp) emergency generator at the Chanticleer Site. Testing of the emergency generator would be limited to up to 50 hours year. Emissions associated with this testing would be negligible (i.e., well under 0.1 ton per year for each of the criteria pollutants and precursors) and would not exceed the MBARD significance thresholds (see Exhibit AQ and GHG). Accordingly, the air quality impacts associated Project operations would remain in less than significant, as under the Certified EIR.

Toxic Air Contaminants and Odors

The screening-level construction period Health Risk Assessment prepared for the Certified EIR and revised for the 2020 Addendum, has been further revised to reflect the slight adjustment in construction activities that would occur at the SC WWTF and Chanticleer Site. As in the Certified EIR, the assessment methodology is based on Office of Environmental Health Hazard Assessment guidelines. The revised Health Risk Assessment considers only construction-related emissions, as the only on-site long-term emissions source associated with the Project is the periodic testing of the 107 hp emergency generator for up to 50 hours year. The revised Health Risk Assessment found that the associated exposure of nearby sensitive receptors to emergency generator testing emissions would not constitute a significant health risk.

Further, under the Project, the amount of short-term diesel particulate matter (DPM) that would be generated from the use of off-road diesel construction equipment at the Chanticleer Site and SC WWTF would be decreased as compared to the 2020 Addendum.³ The decrease in DPM emissions and the corresponding decrease in cancer risk reflects the California Emissions Estimator Model's default construction equipment assumptions, reflect the year on year improvement in emissions from off-road equipment due to increases in new, more efficient equipment, and decreases in older, more polluting equipment in the overall equipment inventory for the area.

Unmitigated construction under the Project would result in a cancer risk of 54 in one million (down by approximately 7 in one million relative to the 2020 Addendum) in the vicinity of the Chanticleer Site and 13 in one million (down by approximately 9 in one million) in the vicinity of the SC WWTF, which would exceed the significance threshold of 10 in one million.

³ This is primarily because the emissions for the Project were modelled with a 2021 start date for construction of treatment facility elements instead of the 2020 start date modelled for the approved Project as modified by the 2020 Addendum.

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With mitigation, the maximum non-cancer risk would be well below the significance threshold for construction activities at both sites. The mitigated cancer risk associated with construction activities at the Chanticleer Site and SC WWTF would be slightly reduced compared to the amount described in the 2020 Addendum, and risks would continue to be well under the significance threshold of 10 in one million (see Exhibit AQ and GHG).

As discussed in the Certified EIR and 2020 Addendum, construction activities that would be associated with the Project could result in temporary odors from use of diesel-fueled equipment and routine operations at the Chanticleer Site. The odor impact under the Project would be the same as under the Certified EIR and 2020 Addendum, less than significant.

Conclusion

Implementation of the Project would result in the same significant impacts as described in the Certified EIR and 2020 Addendum relative to the generation of emissions of criteria air pollutants that could contribute to a violation of an ambient air quality standard during construction, conflicts with implementation of the applicable air quality plan, and construction emissions that could expose sensitive receptors to substantial pollutant concentrations. These significant impacts would be reduced to less-than-significant levels with implementation of mitigation. **(Same Impact as Previously Approved Project [Less than Significant with Mitigation])**

Implementation of the Project would not result in a substantial long-term increase of criteria pollutant emissions during operations, or odorous emissions during construction or operations that would adversely affect a substantial number of people. **(Same Impact as Previously Approved Project [Less than Significant])**

Greenhouse Gases (GHGs)

Findings of Certified EIR and 2020 Addendum

The Certified EIR and 2020 Addendum concluded that there would be less-than-significant impacts with respect to generation of GHGs, and regarding the potential for conflict with the Executive Order B-30-15 Emissions Reduction Goal.

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Construction. To consider the GHG effects associated with the Project, the California Emissions Estimator Model runs prepared for the Certified EIR and 2020 Addendum were revised to reflect the updated construction activities that would occur at the SC WWTF and Chanticleer sites. Construction activities and associated GHG emissions generated by the Project would be less than what was previously analyzed in the 2020 Addendum. GHG emissions generated by construction would total approximately 987 metric tons CO₂e, which is approximately 152 metric tons less than described in the 2020 Addendum (see Exhibit AQ and GHG). This equates to a 50-year amortized annual average value of approximately 20 metric tons CO₂e, which is approximately 3 metric tons less than would be generated as described in the Certified EIR and 2020 Addendum.

Operations. The Project would generate long-term GHG emissions associated with electrical power consumption, vehicle travel, and emergency generator testing. Indirect emissions would increase due to an increase in electricity demand of approximately 7,800 MWh per year (approximately 1,600 MWh per year greater than reviewed in the 2020 Addendum). In addition, there would be 50 hours of emergency generator testing that was

Operational Noise Levels

Source	Source level at 50 feet	Distance	Noise level at distance	Noise level at distance with additional attenuation
Chanticleer Site Sources				
MF Feed Pump Station	59	330	38.51	28.51
Purified Water Pump Station	59	400	36.42	26.42
RO Feed Pump Station (shielding)	59	230	42.43	32.43
Neutralization Recirculation Pump	59	330	38.51	28.51
RO Flush Pumps	59	250	41.53	31.53
MF Backwash Pumps	59	225	42.67	32.67
Open Loop Colling Water Pumps	59	260	41.10	31.10
Closed Loop Cooling Water Pumps	59	310	39.19	29.19
Ozone Sidestream Pumps	59	330	38.51	28.51
Ozone Destruct Units (Blowers)	68	330	47.51	37.51
Decarb Blowers	68	380	45.98	35.98
MF Air Compressors	62	215	46.16	21.16
MF Blowers	68	200	52.95	27.95
MF CIP Pump	62	180	48.09	23.09
RO CIP Pump	62	185	47.79	22.79
RO HP Feed Pumps	62	185	47.79	22.79
RO Second Stage Booster Pumps	62	215	46.16	21.16

Additional Attenuation Values (dBA)

Shielding Reduction	10
Enclosure Reduction	25

Noise Source	28.51	26.42	32.43	28.51	28.51	31.53	32.67	31.10	31.10	29.19	28.51	37.51	35.98	21.16	27.95	23.09	22.79	22.79	21.16
	709.81	438.81	1750.27	709.81	709.81	1420.94	1849.14	1286.22	829.89	829.89	709.81	5638.20	3962.47	130.72	623.52	203.82	190.32	190.32	130.72
	28.51	26.42	32.43	28.51	28.51	31.53	32.67	31.10	29.19	28.51	37.51	35.98	21.16	27.95	23.09	22.79	22.79	21.16	

Adding Noise Sources 43.18

	source level at 50 feet	Distance	Noise level at distance	Noise level at distance with additional attenuation
SC WWTF Sources				
Secondary Effluent Pump Station	62	570.00	35.58	25.58
Title 22 UV Feed Pump	62	550.00	35.97	25.97
Backup Title 22 Pump Station	62	525.00	36.47	26.47

Shielding Reduction 10

Noise Source	25.58	25.97	26.47
	361.19	394.93	443.64
	25.58	25.97	26.47

Adding Noise Sources 30.79

See Caltrans Page 14

SC WWTF Ldn Project plus Existing

Noise Source	37.00	65.00
	5011.87	3162277.66
	37.00	65.00

Adding Noise Sources 65.01

Chanticleer Site Ldn Project plus Existing

Noise Source	49.00	58.00
	79432.82	630957.34
	49.00	58.00

Adding Noise Sources 58.51

Calculated Ldn - Chanticleer Site

TIME	dBA	Numbers...	10 dBA	5 dBA
Midnight	0 / 24	43	19953	63096
am	1:00	43	19953	63096
	2:00	43	19953	63096
	3:00	43	19953	63096
	4:00	43	19953	63096
	5:00	43	19953	63096
	6:00	43	19953	63096
	7:00	43	19953	63096
	8:00	43	19953	63096
	9:00	43	19953	63096
	10:00	43	19953	63096
	11:00	43	19953	63096
	12:00	43	19953	63096
pm	1:00	43	19953	63096
	2:00	43	19953	63096
	3:00	43	19953	63096
	4:00	43	19953	63096
	5:00	43	19953	63096
	6:00	43	19953	63096
	7:00	43	19953	63096
	8:00	43	19953	63096
	9:00	43	19953	63096
	10:00	43	19953	63096
	11:00	43	19953	63096
	12:00	43	19953	63096
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	2:00	43	19953	63096
	3:00	43	19953	63096
	4:00	43	19953	63096
	5:00	43	19953	63096
	6:00	43	19953	63096
	7:00	43	19953	63096
	8:00	43	19953	63096
	9:00	43	19953	63096
	10:00	43	19953	63096
	11:00	43	19953	63096
	12:00	43	19953	63096

Leq Morning Peak Hour 7:00-10:00 a.m.

43 dBA

Leq Evening Peak Hour 4:00-8:00 p.m.

43 dBA

Leq Nighttime 10:00 pm-7:00 a.m. (not penalized)

43 dBA

Leq Daytime 7:00 am-10:00 p.m.

43 dBA

Leq 24-Hour

43 dBA

Ldn: 10 dBA penalty for noise between 10:00 p.m. and 7:00 a.m.

49 dBA

CNEL: 5 dBA penalty for noise between 7:00p.m. and 10:00 p.m.,

and 10 dBA penalty for noise between

10:00 p.m. and 7:00 a.m.

50 dBA

CNEL - Ldn 0.2603428

Calculated Ldn - SC WWTF Site

TIME	dBA	Numbers...	10 dBA	5 dBA
Midnight	0 / 24	31	1259	3981
am	1:00	31	1259	3981
	2:00	31	1259	3981
	3:00	31	1259	3981
	4:00	31	1259	3981
	5:00	31	1259	3981
	6:00	31	1259	3981
	7:00	31	1259	3981
	8:00	31	1259	3981
	9:00	31	1259	3981
	10:00	31	1259	3981
	11:00	31	1259	3981
	12:00	31	1259	3981
pm	1:00	31	1259	3981
	2:00	31	1259	3981
	3:00	31	1259	3981
	4:00	31	1259	3981
	5:00	31	1259	3981
	6:00	31	1259	3981
	7:00	31	1259	3981
	8:00	31	1259	3981
	9:00	31	1259	3981
	10:00	31	1259	3981
	11:00	31	1259	3981
	12:00	31	1259	3981
	1:00	31	1259	3981
	2:00	31	1259	3981
	3:00	31	1259	3981
	4:00	31	1259	3981
	5:00	31	1259	3981
	6:00	31	1259	3981
	7:00	31	1259	3981
	8:00	31	1259	3981
	9:00	31	1259	3981
	10:00	31	1259	3981
	11:00	31	1259	3981
	12:00	31	1259	3981

Leq Morning Peak Hour 7:00-10:00 a.m.	31 dBA
Leq Evening Peak Hour 4:00-8:00 p.m.	31 dBA
Leq Nighttime 10:00 pm-7:00 a.m. (not penalized)	31 dBA
Leq Daytime 7:00 am-10:00 p.m.	31 dBA
Leq 24-Hour	31 dBA
Ldn: 10 dBA penalty for noise between 10:00 p.m. and 7:00 a.m.	37 dBA
CNEL: 5 dBA penalty for noise between 7:00p.m. and 10:00 p.m., and 10 dBA penalty for noise between 10:00 p.m. and 7:00 a.m.	38 dBA

CNEL - Ldr	0.2603428
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