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original staff report

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W20a ✓
Friday, May 6, 2016
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California Coastal Commission
725 Front Street #300
Santa Cruz, CA 95060

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MAY 06 2016

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

Re: W20a, Application Number: 3-15-0166

Chair Kinsey and Commissioners:

Thank you for the opportunity to comment on Application #3-15-0166, the Seaside Company's after the fact approvals their impacts to the San Lorenzo River and Lagoon in the summer and fall of 2014:

- Special Condition 1 proposes a "contribution" of \$50,000 to a "seasonal head-driven culvert" proposed by the City of Santa Cruz in their IS/MND. Unfortunately CCC deferred to the City when the issue came before the Commission (CDP No. 3-15-0144) and in doing so clearly abandoned any responsibility or accountability for the IS/MND to the City of Santa Cruz. As such, this represents "off-site" mitigation, CCC has no control over the implementation or out-come of the project.
 - a. The examples offered of water leaks within the City of Santa Cruz are circumstantial at best: one would expect a history of 'leaks' including events associated with other 'high' water events (e.g., winter storms) that would be more problematic, and why were these issues, if they exist, not addressed previously (e.g., when the Del Mar movie house was refurbished 10+ years ago)? I am not that surprised that there are basements adjacent to the San Lorenzo River that have water issues, that is something that comes with building in the floodplain; those issues belong to the property owner and need to remain on site.
 - b. The City's culvert is likely more driven by the Berry Swenson's and other proposed developments along Front Street than any interest to protect fish. The impacts of contributing to the culvert frustrate and are contrary to the intent of Coastal Resource Impact Mitigations.
 - c. It would be nice if "good cause" for extending a deadline were defined before any Special Condition is approved.
 - d. This amount is trivial compared to the direct and cumulative impacts of the Seaside's Company's actions on ESHA for coho, steelhead, tidewater goby and/or other species in these events. NMFS's fine didn't amount to more than a weekend sales of pink popcorn, I hope that the CCC can do better.
 - e. The actual/alternative use of the fine/contribution should be for actual protection and restoration of ESHA for coho, steelhead and tidewater goby in the San Lorenzo River watershed, not just monitoring/watching its demise... and the magnitude of the "contribution" needs to be able to survive the "rising tide" of sea level, toxic algae and other anthropogenic driven processes/impacts and/or dewatering.
- According to the staff report the Seaside Co. carried out a breaching of the San Lorenzo River in September of 2014 under an Emergency Permit, subsequent to the unpermitted breaching in July of the same year. Since all parties were aware of the conditions, and the illegal nature of the July breach, the events of September should not have been treated as an "Emergency" CDP, nor should they be treated as a ECDP here.

- The Application speaks in terms of feasible options but does not discuss the feasible option of the Seaside Company moving its basement infrastructure adjacent to the San Lorenzo River to a drier location. This is a perfectly reasonable request: the river was there when the Boardwalk was built, and the seasonal lagoon process was there in those "historical" times as well as in the present. Application 3-15-0166 needs to consider moving the location of this infrastructure to avoid further impacts to ESHA, permitted or not.

Thank you

David Kossack

W20a

5/6/16

California Coastal Commission
725 Front St. # 300
Santa Cruz Ca 95060

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MAY 06 2016

jane mio
215 Mtn. View Ave.
Santa Cruz. Ca 95062

Re: W20a, Application #: 3-15-0166
Staff: Ryan Maroney

CALIFORNIA
COASTAL COMMISSION

Dear Chair Kinsey and Commissioners,

I like to thank you for the opportunity to comment & address some items in the Santa Cruz Seaside Company application.

The Project Description states 2 Seaside Co. violations with a Staff Recommendation of issuing retro 'Approval with Conditions'.

If I understand the purpose of this CDF Hearing correctly then the CA. Coastal Commission is willing to forgive Seaside Co. their violations, if the applicant is willing to contribute \$ 50,000 for the IMP project/ culvert project and adhere to other stated conditions.

Combining the 2 items, which are actually 2 separate issues, brings up these questions:

- * Is the Seaside Co. shouldering the Calif. Coastal Commission to define the financial contribution amount for the IMP/culvert project to the City of Santa Cruz?
- * Is the purpose of the application to settle on a one time financial culvert contribution for a ever changing environment situation?

The Seaside Co. violations stand on their own and by themselves. A retro approval for their violations seems inappropriate. The Seaside Co. has repeatedly shown inadequate environmental knowledge/expertise in their actions. This in spite of reoccurring notifications to these facts from various agencies dating back to March 2012.

On page 10 is stated:

Thus, in order to minimize such impacts, the Coastal Act requires: 1) implementation of the most environmentally-protective "feasible" option to protect existing development, and 2) incorporation of the best feasible mitigation measures.

This raises the question:

- * Has the Seaside Co. proven that they enacted all feasible possibilities to protect their business from the 'natural' impact in an environment responsible manner?

On page 12 the lagoon depth is mentioned:

In addition, it is important for the lagoon to maintain adequate depth in order to provide habitat for the protected species identified above.

This asks for the question:

- * Is the heavy current sediment/sand build-up in the lagoon considered in proper depth for the protected species?
- * Is there data available for how much this sediment/sand build-up has raised the riverbed from prior year?

* Was changing riverbed depth considered in the 5' water level determination?

Please note: Watershed Biologists and local fish experts have recorded Steelhead in the San Lorenzo River, which is remarkable and sign of restoration success on behalf of Steelhead population. To assure their survival is of outmost importance.

The Seaside Co. build a berm along the Boardwalk side in the winter months. The winter storms, in natural conditions, wash the sand along the Main Beach. It seems that this year's unusual currents and berm have caused high sand build up in the Estuary Stretch. See photos below.

On page 14 is stated:

Although Condition 5 of ECDP 3-12- 009-G provided Seaside Company two years (until March 2014) to identify a comprehensive response to San Lorenzo River flooding and Boardwalk and Main Beach Management, a comprehensive response was not identified in this timeframe.

The brings up the question:

* Is the Seaside Co. relying strongly on external help instead of exploring intensive, internal solutions to their location issue?

On page 22 the waterproofing is addressed:

However, because the July 2014 breach event and the November 2014 seawall waterproofing were done without the benefit of permits, it does not appear that any CEQA action was taken on these project components.

This invites the question:

* Is it important that a business knows and follows laws/regulations/guidelines before taking actions on their own?

* Is failure of attaining proper permits excused due to after the fact no environment harm findings?

Summary:

* The Seaside Co. is situated in a location, which is subject to 'acts of God' (in insurance terms).

* This requires strong business leadership to assure that save conditions are pursued, may that be people, business and environment.

* The cost of on-going maintenance, unexpected occurrences, unpredicted consequences of culvert project are not addressed in the application.

*The applicant is not stating that they intend to build a mutual beneficial partnership with all City/State/Fed agencies in order to achieve the best results for their business, City of Santa Cruz and the environment.

* A financial contribution for the culvert project should be independent from the retro approval request.

*The culvert project is a test program, in which the Seaside Co. should be greatly interested in since their business would benefit if it succeeds.

* The above questions deserve consideration

Conclusion:

The Seaside Co. application deserves further evaluation before it receives an " Approval with Conditions"

I thank you very much for time and consideration of my concerns
jane mio/Santa Cruz

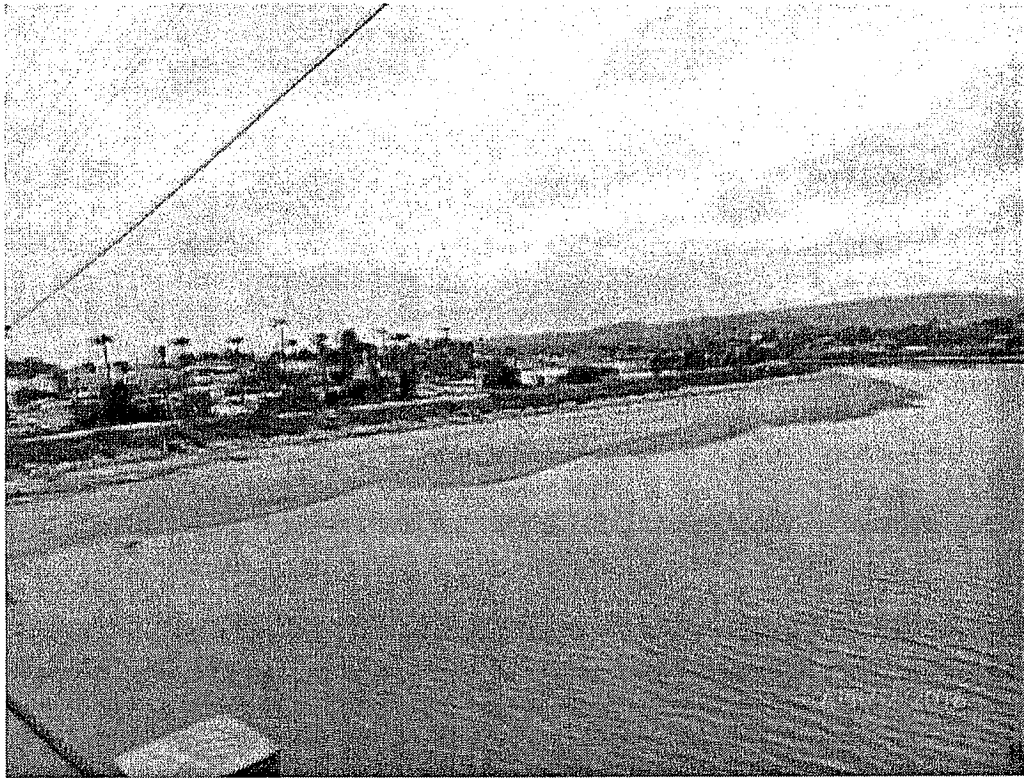
See photos below

Remnant of winter berm



Sand build up by Boardwalk





Sand build up along
Boardwalk parking lot



Sand build up by Riverside
Ave. bridge

W20a

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Saturday May 7, 2016

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CALIFORNIA
COASTAL COMMISSION

California Coastal Commission
725 Front St. #300
Santa Cruz, Ca. 95060

Re: W20a, Application Number:3-15-0166

Dear Mr. Kinsey and CCC Commissioners:

As I read over the application I understand and appreciate the complexity of applying fines and balancing solutions.

Although the city of Santa Cruz has made a great deal of effort to work at resolving the issue of flooding, I find it surprising that the city of Santa Cruz has generously agreed to pay for the bulk of the cost of the "culvert" project. Whatever justification the City of Santa Cruz has, its clear the Seaside Company has found a helpful partner in paying for this unfortunate circumstance.

Furthermore, I find that the dollar amount of \$50,000 to fix the flooding problem and prevent future issues to have little barring on the actual damage they have done to the wildlife and the cost of State time and resources.

At the very least, I encourage the CCC to apply an added fine of equal value of \$50,000 which would bring educational resources, needed vegetation restoration, and habitat protection to the endangered Coho, Steelhead and Tidewater Goby which reside in the San Lorenzo River. The current conditions of the San Lorenzo River are grave due to a variety of conditions including: high bacteria, Algae blooms, lack of shade causing water temperature issues and other pollutants.

I urge the CCC to consider that the fine for this offense should be commensurate to other similar CCC negotiated settlements.

Best Regards
Lisa Sheridan

CALIFORNIA COASTAL COMMISSION

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W20a

Filed: 10/22/2015
Action Deadline: 5/22/2016
Staff: Ryan Moroney - SC
Staff Report: 4/29/2016
Hearing Date: 5/11/2016

STAFF REPORT: CDP HEARING

Application Number: 3-15-0166

Applicant: Santa Cruz Seaside Company

Project Location: San Lorenzo River Mouth Area at Main Beach in the City of Santa Cruz.

Project Description: Follow-up approval for September 26-27, 2014 breaching of the San Lorenzo River performed under Emergency Coastal Development Permit (ECDP) G-3-14-0031; After-the-fact approval for: 1) July 8, 2014 unpermitted breaching of San Lorenzo River; 2) waterproofing upgrades performed on Santa Cruz Beach Boardwalk's seawall.

Staff Recommendation: Approval with Conditions.

SUMMARY OF STAFF RECOMMENDATION

Through this application, the Santa Cruz Seaside Company is seeking: 1) after-the-fact approval for the July 8, 2014 unpermitted breaching of San Lorenzo River; 2) a follow-up CDP for the September 27, 2014 emergency breaching of the San Lorenzo River (ECDP G-3-14-0031); and 3) after-the-fact approval for waterproofing upgrades performed on the basement seawall of the Santa Cruz Beach Boardwalk.

The project site is located on private property owned by the Santa Cruz Seaside Company (Seaside Company) as well as within sovereign tidelands and submerged lands that have been transferred, in trust, from the State Lands Commission to the City of Santa Cruz. The mouth of the San Lorenzo River (River) is characterized by both natural and built features including San Lorenzo Point, a rock outcrop of the Purisima mudstone formation on the River's eastern edge, and the Santa Cruz Main Beach to the south and west. The lagoon that forms seasonally is generally situated at the confluence of the San Lorenzo River and the Pacific Ocean and is constrained by the River levees, the historic Santa Cruz Boardwalk (Boardwalk) to the west, and San Lorenzo Point. Federally endangered and threatened species, including Coho salmon, steelhead and tidewater goby, occur or have the potential to occur within the San Lorenzo River's lagoon. This seasonal lagoon formation causes flooding of the Seaside Company's Boardwalk facility when the water surface elevation of the lagoon exceeds a certain level.

The Coastal Act recognizes the need for flood control projects to protect public infrastructure and private property, but also acknowledges that such projects can, by their very nature, result in impacts to important coastal resources. Thus, in order to minimize such impacts, the Coastal Act requires that: 1) the most environmentally protective "feasible" option to protect existing development be employed, and 2) all feasible mitigation measures be incorporated into the project. Other sections of the Coastal Act reiterate the need for development to protect and enhance marine resources and habitat. Subsequent to the breaching events at issue here, the Commission determined, through findings for CDP No. 3-15-0144 (City of Santa Cruz Interim Management Plan) that a seasonal head-driven culvert is expected to be the most environmentally protective, feasible option for preventing future localized flooding resulting from seasonal lagoon formation of the River.

In this case, the Seaside Company mechanically breached the River's lagoon on two separate occasions, one unpermitted, and one authorized by an emergency permit, causing impacts to sensitive coastal species. In order to mitigate the impacts of the breachings, **Special Condition 1** requires the Seaside Company to contribute \$50,000 to implementation of a seasonal head-driven culvert to manage the River in a way to avoid future flooding impacts. The Applicant is in agreement with this condition. While there are a variety of potential mitigation options, Staff believes that this is the best long-term option for mitigating the impacts associated with the July and September 2014 breaching events because the head-driven culvert should ultimately eliminate the need for mechanized breaching of the River and the coastal resource impacts associated with such breaching events. Thus, as conditioned, the project can be found consistent with the Coastal Act policies cited above.

Accordingly, Staff recommends that the Commission approve a CDP with conditions for the project. The motion to act on this recommendation is found on page 4 below.

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APPENDICES

Appendix A – Substantive File Documents

EXHIBITS

Exhibit 1 – Vicinity Map
Exhibit 2 – Photographs of Project Site
Exhibit 3 – Project Plans
Exhibit 4 – Photographs of Flooding Impacts
Exhibit 5 – Notice of Violation Letter (V-3-14-0110)
Exhibit 6 – NOAA Notice of Violation and Assessment
Exhibit 7 – California Department of Fish and Wildlife Letter dated May 1, 2015
Exhibit 8 – National Marine Fisheries Service Letter dated May 1, 2015
Exhibit 9 – Seaside Company Letter dated June 15, 2015 and Commission Staff's Response
Exhibit 10 – Seaside Company Email Correspondence dated May 15, 2015
Exhibit 11 – City of Santa Cruz Letter dated March 23, 2014

I. MOTION AND RESOLUTION

Staff recommends that the Commission, after public hearing, **approve** a coastal development permit for the proposed development. To implement this recommendation, staff recommends a **YES** vote on the following motion. Passage of this motion will result in approval of the CDP as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

***Motion:** I move that the Commission approve Coastal Development Permit Number 3-15-0166 pursuant to the staff recommendation, and I recommend a yes vote.*

***Resolution to Approve CDP:** The Commission hereby approves Coastal Development Permit Number 3-15-0166 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.*

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the Permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. **Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the Permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

1. Coastal Resource Impact Mitigation. WITHIN SIXTY DAYS OF APPROVAL OF THIS CDP, the Santa Cruz Seaside Company shall submit evidence that it has provided a sum of \$50,000 into an interest-bearing account held by the City of Santa Cruz, the purpose of which is to contribute to the cost of planning, designing, and implementing the “head-driven culvert” project authorized pursuant to CDP No. 3-15-0144. The entire fee and any accrued interest shall be used solely for the above-stated purpose, in consultation with the Executive Director, within one year of the fee being deposited into the City’s account. This deadline may be extended by the Executive Director for good cause. In addition, in the event the City is not able to use the mitigation fee for planning, designing and implementing the head driven culvert within the required timeframe (including any extension thereto), the funds may, subject to review and approval from the Executive Director, be used for other coastal resource mitigation action on the San Lorenzo River, including, but not limited to, tidewater goby monitoring and/or enhancement, water quality improvements, etc., however in no event may the funding be used for any breaching event(s).

2. Liability for Costs and Attorneys’ Fees. The Permittee shall reimburse the Coastal Commission in full for all Coastal Commission costs and attorneys’ fees (including but not limited to such costs/fees that are: (1) charged by the Office of the Attorney General; and/or (2) required by a court) that the Coastal Commission incurs in connection with the defense of any action brought by a party other than the Permittee against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this permit. The Permittee shall reimburse the Coastal Commission within 60 days of being informed by the Executive Director of the amount of such costs/fees. The Coastal Commission retains complete authority to conduct and direct the defense of any such action against the Coastal Commission.

IV. FINDINGS AND DECLARATIONS

A. PROJECT LOCATION

Project Location

The project site is located on Santa Cruz’s Main Beach near the mouth of the San Lorenzo River (River) and seaward of the Santa Cruz Beach Boardwalk (Boardwalk), which is owned by the Santa Cruz Seaside Company (Seaside Company). The project site is located on Seaside Company property as well as within sovereign tidelands and submerged lands that have been transferred, in trust, from the State Lands Commission to the City of Santa Cruz. The mouth of the River is characterized by both natural and built features including San Lorenzo Point, which is a rock outcrop of the Purisima mudstone formation on the River’s eastern/downcoast edge, and the Santa Cruz Main Beach to the west (upcoast). The lagoon that forms seasonally is generally situated at the confluence of the River and the Pacific Ocean and is constrained by river levees, the historic Boardwalk to the west, and San Lorenzo Point. See **Exhibit 1** for a project location map; see **Exhibit 2** for photos of the site.

B. PROJECT BACKGROUND

The San Lorenzo River and its Lagoon System

The San Lorenzo River drains an approximately 137-square-mile watershed into the Pacific Ocean at the north end of the Monterey Bay. The City of Santa Cruz is located adjacent to the lower three miles of the River and encompasses much of the River's historic floodplain. The County of Santa Cruz has jurisdictional authority of the area of the watershed beyond City limits. In the late 1950's, the Army Corps of Engineers (ACOE) constructed a flood control project along the San Lorenzo River, creating a flood control channel and associated levees along the lower 2.5 miles of River located seaward of Highway 1. In 1994, the ACOE approved the San Lorenzo River Flood Control and Environmental Restoration Project, which was completed in 2003. That project raised the height of the levees, replaced storm drains, and revegetated the outer levee slopes with native riparian species.

A seasonal lagoon forms at the mouth of the San Lorenzo River each summer and fall, which is typical of many coastal watersheds in California. The sandbar that forms the downstream side of the lagoon evolves seasonally in response to coastal processes of waves, wave run-up, tides and sand supply. All of these processes vary seasonally and can affect the lagoon's water level. The lagoon receives both freshwater river flows and saltwater from oceanic tides and wave overtopping. This exchange of flows with the ocean is controlled by the shape and depth of the River mouth, which is primarily formed by wave action and tidal scour.

Federally endangered Central California Coast Evolutionarily Significant Unit Coho salmon (*Oncorhynchus kisutch*) and federally threatened Central California Coast Distinct Population Segment steelhead (*Oncorhynchus mykiss*) occur, or have the potential to occur, within the San Lorenzo River's lagoon. Additionally, designated critical habitat for both of these listed species occurs within the project area. The site also supports Essential Fish Habitat (EFH) for various life stages of fish managed under the Pacific Coast Groundfish Fishery Management Plan (FMP), Coastal Pelagic Species FMP, and the Pacific Coast Salmon FMP. The tidewater goby (*Eucyclogobius newberryi*), which is a federally listed endangered species and is state listed as a species of special concern, is also known to inhabit the lagoon. According to the National Marine Fisheries Service (NMFS), in order to protect all of the above-mentioned species, the lagoon should be managed at a Water Surface Elevation of *at least 5 feet* NGVD29¹ as measured at the train trestle bridge gauge just inland and upriver from the Boardwalk, but higher elevations (i.e. increased depth) would have the beneficial effect of increasing the extent and quality of steelhead rearing habitat.

¹ National Geodetic Vertical Datum of 1929 (NGVD29 or NGVD) is a vertical control datum. It was established throughout the United States in 1929 through a general adjustment and is used to establish vertical control for survey purposes. NGVD29 was generally equivalent in 1929 to mean sea level (MSL) but as sea level has changed MSL and NGVD29 have become slightly different. Due to a more recent general adjustment, the North American Vertical Datum of 1988 (NAVD88) has replaced NGVD29 as a vertical control and it is gradually being incorporated into land surveys. In the Monterey Bay area, NGVD29 is still used commonly by many communities, and the trestle bridge gauge is based on NGVD29.

Impacts Arising from Lagoon Formation

As discussed in more detail in the findings of coastal development permit (CDP) 3-15-0144 (San Lorenzo River Interim Management Program, City of Santa Cruz, approved by the Commission on July 8, 2015), seasonal lagoon formation near the mouth of the San Lorenzo River regularly results in documented flooding of public and private infrastructure and properties in the immediate vicinity of the lower River and in downtown Santa Cruz. The Boardwalk and its associated facilities and infrastructure are particularly affected by such flooding due to their location in direct proximity to the lagoon. See **Exhibit 4** for photographs of flooded infrastructure.

2012 Emergency Permit

In March 2012, following late season heavy rains, the San Lorenzo River deflected upcoast to the west and threatened to flood the Boardwalk's basement and other Boardwalk facilities. Commission staff issued ECDP 3-12-009-G,² authorizing the Seaside Company to conduct berming of the river to divert the flow of the San Lorenzo River to prevent flooding of the Boardwalk's facilities. The emergency work entailed creating a channel to direct the River to the sea through two berms to avoid/minimize damage to existing Boardwalk facilities. Condition 5 of that ECDP encouraged the Seaside Company to "provide a comprehensive response to the issue of San Lorenzo River flooding and its relation to the Boardwalk and Santa Cruz Main Beach management in a manner that is most protective of the beach area, San Lorenzo River resources, and public recreational access, including through application of the least environmentally damaging alternatives for addressing flood risks and allowing the River/lagoon system to operate as naturally as possible without artificial manipulation."

The ACOE Regional Permit authorizing the 2012 emergency work (File Number 2012-00092S) further required that the City of Santa Cruz, the Seaside Company, ACOE and NMFS to enter into a Memorandum of Agreement (MOA) outlining a schedule with milestones for the completion of an application to include an interim management plan for flood control and a long-term proposal for flood control that precludes mechanical sandbar management. The result of these efforts was the San Lorenzo River Interim Management Program (CDP 3-15-0144, discussed further below).

July 2014 Unauthorized Breach

In June of 2014, the Seaside Company contacted the California Natural Resources Agency and the California Department of Fish and Wildlife (CDFW) to discuss breaching the River's lagoon due to increasing water levels and attendant flooding of the Boardwalk's basement and other infrastructure. CDFW attempted to quickly develop protocols designed to limit breaching impacts to sensitive fish and wildlife resources. However, the Seaside Company did not seek

² Emergency CDP (ECDP) 3-12-009-G authorized emergency development to redirect flow of the San Lorenzo River away from the Santa Cruz Beach Boardwalk (Boardwalk) structure and out to the Pacific Ocean. Specifically approximately 1,500 cubic yards of beach sand was used to construct an approximately 400-foot-long berm to protect the Boardwalk structure and seawall, and another 3,000 cubic yards of beach sand was used to excavate a trench and construct a second, approximately 500-foot-long berm to redirect the river out to the ocean. CDP 3-12-020-W authorizes this emergency development.

other relevant authorizations from the ACOE, the National Oceanic and Atmospheric Administration (NOAA), U.S. Fish and Wildlife Services (USFWS), the Regional Water Quality Control Board (RWQCB), or the Commission that were required prior to breaching of the lagoon. Without such authorizations, on or about July 8, 2014, the Seaside Company breached the River using two low-ground-pressure mini-excavators owned by the Seaside Company and operated by trained personnel from the Seaside Company's Maintenance Department. Excavation began at the ocean side of the sandbar and continued back toward the lagoon with the intent of closing the breach once the water surface elevation (WSE) reached 5 feet as measured at the trestle bridge gauge. However, the breach became uncontrollable, and Seaside Company personnel were not able to close the breach, which resulted in the lagoon draining to a level well below the target 5-foot³ WSE.

In response to this event, the Commission opened Violation Case No. V-3-14-0110 for unpermitted breaching of the San Lorenzo River Lagoon and sent a Notice of Violation Letter to the Seaside Company on August 20, 2014. (See **Exhibit 5**). That letter identified Commission staff's serious concerns about the potential impacts resulting from the unpermitted breaching of the lagoon, including but not limited to "the potential impact on steelhead trout, Coho salmon, tidewater goby and other wildlife in the shallow portions of the closed San Lorenzo River Lagoon and Main Beach" due to draining of the lagoon below 5-feet NGVD29.

In addition, in August of 2015, NOAA assessed a civil monetary penalty of \$7,000 against the Seaside Company for violation of the Endangered Species Act (ESA). Specifically, NOAA found that Seaside Company breached the sandbar at the San Lorenzo River "in a manner that harmed or killed one or more Central California Coast Distinct Population Segment steelhead (*Oncorhynchus mykiss*, "CCC steelhead"), a species of steelhead that is listed as a threatened species under the ESA. Breaching the sandbar caused the rapid dewatering of the San Lorenzo River lagoon, resulting in significant modification or degradation to CCC steelhead habitat in the lagoon, which actually killed or injured one or more CCC steelhead by significantly impairing their essential behavioral patterns including spawning, rearing, migrating, feeding and sheltering." (See **Exhibit 6**.)

September 2014 Emergency Permit

After the unauthorized July 2014 breaching event, the sandbar and the associated lagoon reformed naturally over time, leading to a rise in the lagoon water levels. On September 26 and 27, 2014, the Seaside Company conducted a controlled breach of the lagoon (authorized under ECDP G-3-14-0031) to prevent Boardwalk basement flooding. The goal was to lower lagoon water levels from 7 to 5 feet NGVD29 through a managed channel to prevent a breach that would rapidly dewater the lagoon. On both days, a channel was excavated at the far eastern end of Main Beach near the trestle bridge. The channel was approximately 10 feet in width and 750 feet in length at its initial cut. The orientation of the channel was roughly southwest and directed approximately toward the mid-point of the upcoast Santa Cruz Municipal Wharf. The channel was opened on an incoming tide. At the end of both days, the channel was mechanically closed by filling it with sand to prevent further drainage and scouring of the channel. The volume of

³ The level to which the lagoon drained is unknown.

sand needed to close the channel at the end of each day was estimated between 1,000 and 1,200 cubic yards. Biological monitors were present during all breaching activities, and before-and-after water quality conditions were also documented for this breaching event. According to the City's biologist, a total of 90 tidewater gobies were found stranded, 86 of which were released alive into deeper River waters, and four of which died before they could be returned to the River. Thus, this breaching event resulted in four documented mortalities of tidewater goby, a federally-listed endangered species.

The San Lorenzo River Interim Management Program

Following these events, the City of Santa Cruz convened a series of meetings with Federal and State natural resource agencies to develop a framework for an integrated river mouth management program for the San Lorenzo River based on existing conditions, established objectives, and a timeframe for implementation. Meetings were held in the fall of 2014 to review existing site conditions and coastal process findings, to discuss management alternatives and the preferred set of management activities so as to avoid the need for future emergency breaches, and to develop a more comprehensive, proactive river mouth management program. The City and its consultants thereafter developed the proposed "San Lorenzo River Interim Management Program" (IMP) following review of existing data on water quality, stream flow, biological resources, and fisheries of the San Lorenzo River Lagoon. Working with Federal and State resource agencies, including Commission staff, the IMP process sought to develop a preferred management program for the River that balances the need for protection of natural resources with the need to protect existing development from flooding impacts. The City's "head-driven" culvert management option was the culmination of those efforts and was authorized by CDP 3-15-0144. The culvert will be composed of a series of three 4-foot diameter standpipes (risers) that will be partially buried in the lagoon adjacent to San Lorenzo Point. These risers will be connected to a horizontal culvert buried under the beach and will connect the lagoon to the Pacific Ocean with a duck-bill outlet. Lagoon water would seep into the porous bottoms of the risers, feeding flows into the horizontal culvert. Outflows through the culvert would be driven by the head difference between the closed lagoon and the ocean. The overall intent of the IMP is to provide time to finalize, fund, and implement the culvert, and then test its effectiveness as the environmentally preferred long-term strategy, while in the meantime allowing mechanical breaching of the lagoon system as necessary to avoid flooding impacts until the culvert is in place. At this time, the City does not have all the necessary funding to implement the head-driven culvert project.

C. PROJECT DESCRIPTION

The Applicant is seeking: 1) after-the-fact approval for the July 8, 2014 unpermitted breaching of the River (as discussed in detail above); 2) follow-up authorization of the September 26-27, 2014 breaching of the River performed pursuant to ECDP G-3-14-0031 (as discussed in detail above); and 3) after-the-fact approval for waterproofing upgrades performed on the Boardwalk's basement seawall (discussed directly below).

In February and March of 2015, without seeking appropriate authorization from the Commission, the Seaside Company waterproofed 640 linear feet of the Boardwalk's seawall (i.e. the portion of the seawall located closest to the River, which protects the Boardwalk's basement) with

approximately 5,000 square feet of waterproofing materials. In preparation for this work, the Seaside Company excavated a temporary trench in the sand, approximately three feet deep by four feet wide, using one mini-excavator, one loader and hand excavation. Paraseal membrane with aluminum termination bars were mechanically fastened to seams in the basement seawall, reinforcement fabric was installed, and the fabric was set into elastomeric⁴ sealant. The joints were then covered with a waterproof membrane, and then two coats of a waterproof membrane were placed over the entire 640 linear feet of Boardwalk seawall located closest to the River.

According to the Seaside Company, all phases of the waterproofing project were completed using best management practices in accordance with the City of Santa Cruz's Commission-approved Beach Management Plan (CDP 3-11-027, as amended), and Seaside Company further states that during construction, the beach was kept as clean and orderly as possible. After installation of the waterproofing material was completed, the Seaside Company used its beach cleaner to sift and remove any construction debris from the sand and disposed of this material at an appropriate landfill, and the beach was restored to its original condition upon completion of the project.

See **Exhibit 3** for project plans.

D. STANDARD OF REVIEW

The project is located on tidelands, submerged lands, and public trust lands within the Commission's adopted original jurisdiction boundary. Thus, the standard of review for the proposed project is the Chapter 3 policies of the Coastal Act.

E. FLOOD CONTROL AND MARINE RESOURCES

Relevant Policies

Section 30236 of the Coastal Act governs water supply and flood control:

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

Thus, the Coastal Act recognizes the need for flood control projects to protect public infrastructure and private property, but also acknowledges that such projects can by their very nature result in impacts to important coastal resources. Thus, in order to minimize such impacts, the Coastal Act requires: 1) implementation of the most environmentally-protective "feasible"

⁴ Elastomeric is defined as "an elastic substance occurring naturally, such as natural rubber, or produced synthetically, such as butyl rubber or neoprene."

option to protect existing development, and 2) incorporation of the best feasible mitigation measures.

In addition, other sections of the Coastal Act reiterate the need for development to protect and enhance marine resources and habitat.

Section 30230 of the Coastal Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

In addition, Section 30231 of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Finally, Section 30240 of the Coastal Act governs development in environmentally sensitive habitat areas, and in parks and recreation areas adjacent to ESHA, such as the Main Beach and the Boardwalk:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Analysis

As discussed above, seasonal lagoon formation at the mouth of the San Lorenzo River has resulted in documented flooding of private infrastructure at the Seaside Company's Boardwalk. See **Exhibit 4**. At the same time, the San Lorenzo River Lagoon provides important and critical habitat for anadromous, marine and freshwater fish species and waterfowl, including special status species such as tidewater goby (*Eucyclogobius newberryi*), Central California Coastal steelhead (*Oncorhynchus mykiss*), Central California Coastal coho salmon (*Oncorhynchus kisutch*). Indeed, lagoon habitat has been shown to be very important for rearing juvenile

steelhead. In unaltered natural systems, these “closed” lagoons provide a highly productive environment for rearing juvenile steelhead due to their predominantly freshwater condition with cooler temperatures, high food production, and provision of cover from predators.

In addition, it is important for the lagoon to maintain adequate depth in order to provide habitat for the protected species identified above. According to a letter from CDFW to the City of Santa Cruz, a lagoon water surface elevation of 5 feet NGVD29 at the trestle bridge gauge is the minimum depth required to protect special status fish species:

*... CDFW advised the City that in order to reduce impacts to special-status fish species, the 5.0-foot was the point at which no further reductions to WSE should occur. CDFW also indicated that temporary channel outlets should be constructed of dimensions in a manner to reduce the probability of uncontrollable lagoon draining events. Furthermore, an emergency permit issued by another agency for emergency mechanical breaching of the San Lorenzo River lagoon in September 2014 also addressed these concerns and included several special conditions, including one to ensure that the lagoon did not dewater below five feet. Therefore, as previously discussed with the City, CDFW recommends that the proposed Project, as part of the three-year management plan, specifies that the channel will be excavated at an angle from the shallowest part of the lagoon and face the appropriate wave-action direction to aid in re-closure, and will be at a minimum width of 10 feet, maximum depth of 2 feet, and length of 250-1,000 feet to minimize slope and outflow velocity and reduce the rate of lagoon drainage and risk of channel scour. Additionally, CDFW recommends the Project specify that channel excavation will retain a lagoon WSE of 5.0 feet as measured at the train trestle bridge staff gage. (See **Exhibit 7**).*

Similar concerns were raised by NMFS in its comments on this project’s environmental document:

*Due to serious concerns regarding the quality and quantity of steelhead rearing habitat in the San Lorenzo River Lagoon, NMFS recommends the City manage the lagoon at a water surface elevation (WSE) of at least five feet (ft) NGVD29. (See **Exhibit 8**; emphasis added).*

July 8, 2014 Unauthorized Breaching Event

According to the Applicant, the July 8, 2014 unauthorized breaching event was performed in accordance with protocols developed by CDFW. (See **Exhibit 5 at page 7**.) However, before the breaching event, the Applicant did not consult with or receive appropriate authorization from other regulatory agencies with jurisdiction over the River and its natural resources, including the ACOE, NOAA, NMFS, USFWS, RWQCB, or the Commission. Therefore, as required by Coastal Act Section 30236, this portion of the current project was not appropriately analyzed and conditioned to ensure that it was designed and implemented in the most environmentally protective manner, and it is clear that not all appropriate mitigation measures were incorporated and implemented to ensure appropriate protections for coastal and other natural resources, including those protocols that have been required for subsequent breaches. Specifically, the

methodology used in this breaching event was not designed by a person with experience in coastal engineering, breaching protocols, or mitigation measures that are typically put in place to protect sensitive fish species, such as 1) using a shallow part of the lagoon (~2 feet deep) as a sill to reduce the likelihood of head cutting⁵ and scour up to the thalweg⁶ in order to reduce the possibility of completely draining the lagoon; 2) establishing a sand track “peninsula” near the outlet opening on the beach side to control the direction of flow and head cutting; 3) maintaining sand piles adjacent to the inlet to provide the ability to immediately control head cutting; 4) avoiding construction activities in the wetted areas of the lagoon; 5) implementing fish surveys prior to installation of the temporary outlet channel or head driven culvert, and; 6) collecting any tidewater gobies or other fish species found on the dewatered sandbars or in the outlet channel, and releasing them in a safe location. Such measures were not implemented in the July 8, 2014 unauthorized breaching event. As a result, the Applicant lost control of the breach and was not able to close the lagoon mouth at the designated 5-foot mark on the trestle bridge gauge. Instead, the lagoon rapidly dewatered and fell to a level far lower than the designated 5-foot mark. As explained by the natural resource agency experts, lowering the lagoon below the 5-foot mark likely resulted in significant impacts to special status fish species.

It should be noted that for the authorized September 2014 breaching event, the appropriate regulatory agencies were consulted and numerous additional avoidance and mitigation measures *were* incorporated into that breaching event, including the requirement to place four fisheries biologists at various locations along the River to observe potential impacts to special status species, which reduced the known take of special status tidewater gobies from 90 strandings to only four mortalities, as discussed above and immediately below. As stated above, however, the Applicant did not implement appropriate breaching protocols and mitigation measures for the unauthorized July 8, 2014 breaching event, inconsistent with the requirements of Coastal Act Section 30236. Given the lack of appropriate protocols and mitigation measures, the Applicant lost control of this unauthorized breaching event and the lagoon became dewatered, likely resulting in the loss of a multitude of tidewater goby⁷ and at least one or more CCC steelhead. Thus, the July 8, 2014 unauthorized breaching event had significant impacts to at least one fish species of special biological significance (and possibly more), inconsistent with Coastal Act Section 30230, and did not maintain the biological productivity of the River, inconsistent with Coastal Act Section 30231.

September 26-27, 2014 Emergency Breaching Event

In contrast to the July 8, 2014 breaching event, the Applicant did consult with all appropriate regulatory agencies and obtained the required permitting (of particular relevance here, ECDP G-3-14-0031) for the emergency breaching events of the River lagoon, which were performed on September 26, and 27, 2014. Specifically, ECDP G-3-14-0031 required that the project be

⁵ “Head cut” in stream geomorphology is an erosional feature of some intermittent and perennial streams where an abrupt vertical drop in the stream bed occurs.

⁶ “Thalweg” is a line connecting the lowest points of successive cross-sections along the course of a valley or river.

⁷ This likelihood is based on the 90 observed strandings of tidewater gobies in the permitted and controlled September 2014 breaching events, which took place only two-and-a-half months after the unpermitted July 2014 breaching event.

implemented in a manner to ensure a controlled draw-down of the water surface elevation, and also required that various mitigation measures, including those identified by other agencies, be incorporated into the project. As a result, the breaching event was designed in an appropriate manner allowing for a controlled draw-down to the 5-foot elevation at the trestle bridge gauge, at which time the lagoon breach was closed. In addition, because the ACOE authorization required the presence of four fisheries biologists placed at various locations along the River during the breaching activities, there was sufficient trained personnel present to document 90 tidewater goby strandings which occurred as a result of the breaching events and take appropriate measures to prevent the mortality of 86 out of the 90 stranded fish by moving those fish to deeper River water. That said, the project nevertheless resulted in the documented take of four tidewater gobies. Thus, even with the protocols established pursuant to the Commission's ECDP and the other resource agencies' authorizations, the September 26 to 27, 2014 breaching event impacted fish species of special biological significance and did not appropriately maintain the biological productivity of the River, events which if they had not been otherwise authorized by ECDP procedures, would be deemed inconsistent with Coastal Act Sections 30230 and 30231, respectively. Mitigation for these impacts is therefore necessary to bring the project into compliance with Coastal Act Sections 30230, 30231, and 30236.

Furthermore, Coastal Act Section 30236 allows alterations of rivers for flood control projects where: no other method for protecting existing structures in the flood plain is feasible; such protection is necessary for public safety or to protect existing development; and the best feasible mitigation measures are incorporated into the project. Although ECDP G-3-14-0031 authorized controlled breaching events to deal with the San Lorenzo River lagoon flooding, subsequent analysis of the lagoon system by the City of Santa Cruz and regulatory agencies has identified an even more environmentally-protective option for avoiding flooding impacts associated with seasonal lagoon formation: the seasonal, head-driven culvert design that was approved by the Commission for implementation by the City under CDP 3-15-0144. This fact is relevant because ECDP 3-12-009-G (which authorized the Seaside Company to breach the lagoon in March 2012 to divert the flow of the San Lorenzo River to prevent flooding of the Boardwalk's facilities – see "Project Background" section above) included Condition 5, which directed the Seaside Company to provide a comprehensive response to the issue of San Lorenzo River flooding and its relation to the Boardwalk and Main Beach management. Such a comprehensive response was to be done in a manner that is most protective of the beach area, San Lorenzo River resources, and public recreational access, including through application of the least environmentally damaging alternative for addressing flood risks and allowing the River/lagoon system to operate as naturally as possible without artificial manipulation.⁸ Although Condition 5 of ECDP 3-12-009-G provided Seaside Company two years (until March 2014) to identify a comprehensive response to San Lorenzo River flooding and Boardwalk and Main Beach Management, a comprehensive response was not identified in this timeframe. Instead, subsequent to the timeframe required to identify a comprehensive response, ECDP G-3-14-0031 was issued for controlled breaching events – the approach that has historically been used to deal with San

⁸ Similarly, the ACOE authorization in 2012 for emergency work (File Number 2012-00092S) required the City of Santa Cruz, the Seaside Company, ACOE and NMFS to enter into a Memorandum of Agreement (MOA) outlining a schedule with milestones for the completion of an application to include an interim management for flood control and a long-term proposal for flood control that precludes mechanical sandbar management.

Lorenzo River lagoon flooding at the Boardwalk and Main Beach. However, the environmentally-superior head-driven culvert design identified and approved under CDP 3-15-0144 is the appropriate way to address future flooding hazards in a manner consistent with Coastal Act Section 30236.

Mitigation for Fish Impacts

There are various options that will help to mitigate for the impacts to sensitive fish species due to the unpermitted July 2014 breaching event and the September 2014 breaching events (previously authorized by ECDP G-3-14-0031 and now the subject, in part, of this follow-up CDP), and thus ensure that those projects' impacts are appropriately mitigated as required by Coastal Act Sections 30230, 30231, and 30236. One such option would be for the Seaside Company to implement a tidewater goby monitoring and enhancement plan consistent with the USFWS "Tidewater Goby Recovery Plan" designed to offset the impacts associated with the breaches, which outlines four recovery action tasks: 1) monitor, protect, and enhance current habitat conditions for extant populations; 2) conduct research to acquire additional information needed for management; 3) restore degraded habitats to suitable conditions and reintroduce or introduce tidewater gobies to those habitats; and 4) develop and implement an information and education program. These tasks could be performed at the local level for the San Lorenzo River tidewater goby population. A second option would be for the Seaside Company to provide tidewater goby and CCC steelhead habitat improvements in the San Lorenzo River, such as installing several PVC pipes into the sides of the creek banks to serve as potential spawning grounds for steelhead and as refugia for gobies from swift moving water, adding woody debris in such a way that it would create some still pools or provide nearby marsh habitat improvements. As a third option, the Seaside Company could implement water quality improvements for the San Lorenzo River, such as installation of pollution control best management practices for runoff entering the River and lagoon system, which would benefit tidewater gobies, CCC steelhead, and other species.

However, given that the Boardwalk is located directly adjacent to the River mouth and, as such, flooding of the Boardwalk's basement and other infrastructure due to lagoon formation will likely continue to occur over time, the most appropriate option to mitigate for impacts relating to the breaching events is for the Seaside Company to contribute to the cost of implementing the City's San Lorenzo River Interim Management Program (IMP) for lagoon management as authorized under CDP 3-15-0144 (discussed above). Such funding would be used specifically for the approved (but not yet implemented) head-driven culvert, which is designed to maintain an appropriate water surface elevation for the River that eliminates flooding impacts without the need for mechanized breaching, while doing so in a controlled manner that protects sensitive fish species. Therefore, funding of the IMP/culvert will ensure that Seaside Company's future flood control efforts for seasonal River lagoon formation are consistent with Coastal Act Sections 30230 (protection of marine resources) and 30231 (maintenance of biological productivity and water quality). Funding of the IMP/culvert is the best long-term option for mitigating the impacts associated with the aforementioned breaching events because it should ultimately eliminate the need for mechanized breaching of the River and the coastal resource impacts associated with such breaching events, thus ensuring consistency with Coastal Act Section 30236 (necessary flood control projects with best mitigation measures feasible) and facilitating the Seaside Company's long-overdue condition compliance with Condition 5 of ECDP 3-12-009-G (identification of comprehensive response to River lagoon flooding). Finally, the Seaside

Company has expressed its willingness to pursue this option because it represents a proactive solution in avoiding future breaches and future resource impacts associated with abating flooding of Seaside Company infrastructure. Thus, the appropriate mitigation in this case is for the Seaside Company to monetarily contribute to the City's IMP for the ultimate purpose of building the head-driven culvert.

Determining the appropriate dollar amount that the Seaside Company should contribute to help implement the IMP to address, in rough proportionality, the resource impacts associated with the aforementioned breaching events is not a straight-forward proposition. Indeed, natural resource agencies have struggled for decades in trying to place a value on "natural resource damages."⁹ One possible measure would be to identify the number of tidewater goby "taken" (as defined under the federal ESA) in each event and then place a value on each individual. However, this approach may be inadvisable since the Commission does not actually implement the ESA. Even as a practical matter, this exercise would be difficult, given that the July 2014 breaching event did not include biological monitors and thus it is not precisely known how many tidewater gobies were impacted by the breaching event (whether arising to the level of "take" or not for purposes of the ESA). Since 90 tidewater gobies were stranded and four died after the September 2014 breaching events (breaching events that were heavily monitored by fishery biologists and subject to extensive agency protocols), the Commission could reasonably assume that approximately 90 tidewater gobies were stranded and that some amount of tidewater gobies greater than zero died in the July 2014 breaching event. Furthermore, the Commission could also reasonably assume that *more* than 90 tidewater gobies were stranded and *more* than four gobies died in the July 2014 breaching event given the rapid dewatering of the lagoon well below the 5-foot target water surface elevation (without the benefit of extensive monitoring and protective protocols). However, given that the July 2014 breaching event was undertaken without the benefit of any monitoring, it is difficult to determine the exact number of individual tidewater gobies that were stranded and died during that event. It is even more difficult to determine a value on each individual. There does not appear to be any scientific-based determination establishing the value of an individual tidewater goby. That said, one potential proxy would be to use the penalty provision of the Endangered Species Act. However, as previously mentioned, the Commission does not enforce the ESA, and thus the monetary values associated with it do not necessarily correspond with interests protected by the Coastal Act.

Another potential way of valuing the impacts would be the cost to provide suitable replacement habitat. The following table shows San Lorenzo River lagoon area and volume at various stages as determined by Environmental Science Associates (2015) and Waterways Inc. ("San Lorenzo River Stage Storage Curve and Long Profile," October 31, 2014):

⁹ See, e.g. Natural Resource Damage Assessment: The Role of Resource Restoration, Mazzotta et al, 34 Nat. Resources J. 153 (1994).

Water Surface Elevation (WSE) (NGVD29)	Lagoon Volume (acre-ft)	Lagoon Surface Area (acres)
1.0	61	
2.0	89	
3.0	119	31
4.0	151	34
5.0	186	38
6.0	223	41
7.0	262	45

Thus, the difference between a WSE of 5.0 versus 3.0 translates to potentially seven acres (38 acres vs. 31 acres, respectively) and 67 acre-feet (186 acre-feet vs. 119 acre-feet) of tidewater goby habitat that is dewatered as the Lagoon is drawn down from 5 feet of the trestle gauge to 3 feet. The cost for obtaining seven acres of coastal property and restoring it for goby habitat would be upwards of hundreds of thousands of dollars. Moreover, using this measure fails to take into consideration the fact that the lost acreage is often quickly restored as the lagoon reforms.

Another way to analyze an appropriate mitigation fee would be to look at what the Seaside Company saved in actual costs by virtue of avoiding the permitting process for the unauthorized July 2014 breaching event. According to the City and the Seaside Company, the average cost of a mechanized breach event, using all of the regulatory required protocols, amounts to approximately \$25,000 to \$30,000. The costs for the unauthorized July 2014 breaching event were substantially less than this because the regulatory protocols were not procured as “a cost of doing business.” Thus the Seaside Company benefitted economically from the unauthorized July 2014 breaching event because the bulk of the work appears to have been performed by maintenance staff.

However, the above calculation to determining the appropriate mitigation fee does not adequately take into consideration the proportional amount of mitigation that would be required for a *future* River breaching event, which Seaside Company can be expected to pursue in the event that Seaside Company does not contribute towards the development of the head-driven culvert. One way to calculate this amount would be to consider the anticipated costs of business in securing all necessary regulatory entitlements and protocols for undertaking the same work in the future (*i.e.*, controlled breaching event) and assuming similar resource impacts (*e.g.*, 90 strand gobies, four dead gobies). As stated above, the average cost of a mechanized breach event, assuming all necessary regulatory protocols, is between \$25,000 and \$30,000. Therefore, an appropriate mitigation fee for the development proposed under this coastal development permit application should adequately account for mitigation required for the July unpermitted breaching events (\$25,000 to \$30,000) **and** the mitigation (here, the cost of securing necessary regulatory entitlements and protocols) required for a future River breaching event (\$25,000 to \$30,000), which Seaside Company can be expected to pursue in the absence of developing the head-driven culvert. Therefore, an appropriate, all-encompassing, but conservative, mitigation fee estimate would be \$50,000.

Finally, another way to approach this problem is to examine what it would cost to implement an appropriate medium- to long-term solution to avoid future mechanized breaching events, as was envisioned by the 2012 permit conditions imposed by the Commission and the ACOE on the Seaside Company. In this case, the City has estimated the cost of the culvert to be \$350,000 for materials, installation and demobilization, not including the cost of design, maintenance, and monitoring, which are estimated at \$150,000. (See City letter in **Exhibit 11**). However, imposing the entire cost of this effort on the Seaside Company would appear to be disproportionate given that the lagoon flooding also affects City (and therefore public) infrastructure, such as sidewalks and roads.

Considering the above, the Seaside Company has agreed to provide a mitigation fee of \$50,000 toward implementation of the IMP, and specifically toward development and implementation of the head-driven culvert. This is an appropriate and proportional fee in light of all of the circumstances identified above. The \$50,000 figure also represents a conservative cost estimate of two mechanized breaching events (\$25,000 x 2), which is the same number at issue under this CDP. Mitigation for two mechanized breaching events covers the economic benefit received by the Seaside Company by undertaking the July 2014 breaching event without proper authorizations (a roughly \$25,000 to \$30,000 windfall) and the cost of a future breaching event which the Seaside Company can be expected to pursue through a coastal development permit (which can be expected to result in similar coastal impacts as identified in this Staff Report) if the Seaside Company does not contribute towards construction of the head-driven culvert (again, roughly \$25,000 to \$30,000). Finally, \$50,000 represents approximately 10% of the estimated cost of implementing the head-driven culvert option, which is more than fair given the Seaside Company's relative involvement in and future benefit from flood management of the River. **Special Condition 1** therefore requires that the Seaside Company pay \$50,000 into a City account designated specifically for design and implementation of the IMP head driven culvert.

Future River Management

As discussed above, Coastal Act Section 30236 authorizes flood protection projects in riverine systems in order to protect existing development only where the project is the least environmentally-damaging "feasible" alternative and the best feasible mitigation measures are implemented. Over the course of late 2014 through 2015 the City worked with Federal and State resource agencies, including Commission staff, in an attempt to develop a preferred management program for the River that balances the need for protection of natural resources with the need to protect existing development from these flooding impacts. The proposed "head-driven" culvert management option authorized pursuant to CDP No. 3-15-0144 was the culmination of those efforts. Thus, CDP No. 3-15-0144 authorized up to six breaching events of the San Lorenzo lagoon sandbar, for the summer/fall season of 2015 (i.e. until November 15, 2015), as well as the potential for an additional six breaching events in 2016 if the City is able to demonstrate that it has not yet obtained the necessary funding and/or the necessary additional data to implement the Temporary Head-Drive Culvert project. That approval also stated that "in no case may breaching occur after November 15, 2016 without an amendment to this permit." The rationale for that condition was essentially to provide time to finalize, fund and implement the culvert, and then test its effectiveness as the environmentally preferred long-term strategy, while in the meantime allowing mechanical breaching of the lagoon system as necessary to avoid flooding impacts until the culvert is in place.

The purpose of CDP No. 3-15-0144 was to identify and implement a long-term solution to appropriately handle future flooding associated with typical seasonal lagoon formation on the San Lorenzo River. Such an approach is more consistent with the Coastal Act than past historical practices of relying on emergency CDPs to address this seasonal flooding. Indeed, given the current understanding of the history and geomorphology of the San Lorenzo River, it would be difficult at this point to characterize future flooding associated with typical seasonal lagoon formation on the San Lorenzo River as “sudden or unexpected” as required by the Commission regulations in order to authorize emergency action. (Coastal Commission Regulations 14 C.C.R. § 13009). Furthermore, the Commission approved CDP No. 3-15-0144 with the hope that the head-driven culvert will come to bear as the most environmentally-protective, feasible alternative to mechanized breaching of the River Lagoon for flood management of the San Lorenzo River. Therefore, it is in the Seaside Company’s interest to work collaboratively with the City to implement the head-driven culvert option specified in the IMP, because the Commission has indicated its intent to move away from permitting mechanized breaching emergency CDPs as the River flood-management approach that is most consistent under the Coastal Act.

Conclusion

In sum, the Coastal Act recognizes the need for flood control projects to protect public infrastructure and private property, but also acknowledges that such projects can, by their very nature, result in impacts to important coastal resources. Thus, in order to minimize such impacts, the Coastal Act requires that: 1) the most environmentally protective “feasible” option to protect existing development be employed, and 2) that the best feasible mitigation measures be incorporated into the project. Other sections of the Coastal Act reiterate the need for development to protect and enhance marine resources and habitat. The Commission has determined that a seasonal head-driven culvert is the most environmentally-protective, feasible option for preventing future localized flooding resulting from seasonal lagoon formation of the River.

In this case, the Seaside Company mechanically breached the River Lagoon on two separate occasions causing impacts to sensitive coastal species. In order to mitigate for those impacts, **Special Condition 1** requires the Seaside Company to contribute \$50,000 towards implementation of a seasonal head-driven culvert to manage the River in a way to avoid future flooding impacts. This is the best long-term option for mitigating the impacts associated with the July and September 2014 breaching events because it should ultimately eliminate the need for mechanized breaching of the River in the future and the coastal resource impacts associated with such breaching events. Thus, as conditioned, the project is found consistent with the Coastal Act policies cited above.

F. PUBLIC ACCESS AND RECREATION

Coastal Act Section 30604(c) requires that every coastal development permit issued for any development between the nearest public road and the sea “shall include a specific finding that the development is in conformity with the public access and public recreation policies of [Coastal Act] Chapter 3.” Coastal Act Sections 30210, 30211, 30213, 30214 and 30221 specifically

protect public access and recreation. In particular:

***30210.** In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

***30211.** Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

***30213.** Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. ...*

***30214.** The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following...*

***30221.** Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

These overlapping policies clearly protect public access and recreation opportunities for the public, particularly free and low-cost access.

Analysis

The Coastal Act requires maximization of public access to the beach and shoreline resources, and further provides that the public access policies be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case. The summer sandbar that forms at the River mouth is heavily used by the public and sometimes connects the City's Main Beach to the Seabright segment of Twin Lakes State Beach. Mechanized breaching of the river negatively affects the usability of the affected portion of Main Beach during each breaching event. However, Main Beach is very large, extending laterally for about 3,000 feet from the downcoast River mouth upcoast to the Santa Cruz Municipal Wharf, and during the summertime the depth of the beach reaches about 500 feet. The breaching activities occupied a small portion of the beach at its most downcoast end. In addition, the temporary nature of each of the breaching events, lasting a total of about three days for both events, thus did not impact public access and recreation for any significant period of time. Moreover, in each case, the project was implemented such that the beach would be restored to its original state following each event. Thus, the project can be found consistent with the above-cited public access and recreation policies of the Coastal Act.

G. BASEMENT SEAWALL WATERPROOFING

The basement seawall waterproofing aspect of the project did not significantly impact any coastal resources. Specifically, it was conducted directly adjacent to the Boardwalk property after the River had naturally breached in the winter of 2014, and thus did not take place in ESHA. Likewise, the impacts to public access were only temporary in nature, the project took place during a lower-beach-use winter period, and only impacted a fraction of the Main Beach area available for public use. Finally, with respect to shoreline protection impacts, the basement seawall is a pre-Coastal Act structure and the work done can be viewed as ordinary maintenance and repair of that structure. The Commission therefore finds this aspect of the project to be consistent with the Coastal Act.

That said, it should also be noted that the basement seawall waterproofing has not eliminated flooding impacts to the Boardwalk facility resulting from seasonal lagoon formation. Specifically, following the waterproofing upgrades, but prior to the Commission's approval of the IMP, the Seaside Company identified flooding impacts to the basement from the River in May of 2015 and inquired as to the possibility of a mechanized breach of the lagoon. (See **Exhibit 10**.) While the Seaside Company did not follow through with an ECDP application, the request itself makes it clear that seasonal lagoon formation continues to impact the Boardwalk facilities.

H. VIOLATION

As discussed above, on or about July 8, 2014, the Seaside Company breached the River without the required Coastal Development Permit. In response to this event, the Commission opened Violation Case No. V-3-14-0110 for unpermitted breaching of the San Lorenzo River Lagoon and sent a Notice of Violation Letter to the Seaside Company on August 20, 2014. (See **Exhibit 5**.) That letter identified the fact that the Seaside Company was aware of the requirement for a CDP based on ECDP No. 3-12-009-G. In addition, the seawall waterproofing component of this application included non-exempt development activities conducted without the benefit of a CDP.

The Applicant seeks to resolve the violations through this application and the permit is conditioned to resolve the coastal resource impacts associated with those violations. Approval of this application pursuant to the staff recommendation, issuance of the CDP, and the Applicant's subsequent compliance with all terms and conditions of the CDP will result in resolution of the above described violations. That said, the Commission specifically finds that any future river manipulation conducted by the Seaside Company in this location, including but not limited to breaching of the River's lagoon, without a CDP or ECDP will be considered a "knowing and intentional" for the purposes of Coastal Act Section 30820.

Although development has taken place prior to the Commission's consideration of this application, consideration by the Commission has been based solely upon the Coastal Act.

I. LIABILITY FOR COSTS AND ATTORNEYS' FEES

Coastal Act Section 30620(c)(1) authorizes the Commission to require applicants to reimburse the Commission for expenses incurred in processing CDP applications. Thus, the Commission is authorized to require reimbursement for expenses incurred in defending its action on the pending CDP application in the event that the Commission's action is challenged by a party other than the Applicant. Therefore, consistent with Section 30620(c), the Commission imposes **Special Condition 2** requiring reimbursement for any costs and attorneys' fees that the Commission incurs in connection with the defense of any action brought by a party other than the Applicant challenging the approval or issuance of this permit.

J. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 of the California Code of Regulations requires that a specific finding be made in conjunction with coastal development permit applications showing the application to be consistent with any applicable requirements of CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect that the activity may have on the environment.

On January 28, 2015, the City, acting as the CEQA lead agency, determined that the September 26 and 27, 2014 mechanized breaching events constituted emergency action. However, because the July 2014 breach event and the November 2014 seawall waterproofing were done without the benefit of permits, it does not appear that any CEQA action was taken on these project components. The Coastal Commission's review and analysis of land use proposals has been certified by the Secretary of Resources as being the functional equivalent of environmental review under CEQA. The preceding coastal development permit findings discuss the relevant coastal resource issues with the proposal, and the permit conditions identify appropriate modifications to avoid and/or lessen any potential for adverse impacts to said resources. As such, there are no additional feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse environmental effects which approval of the proposed project, as conditioned, would have on the environment within the meaning of CEQA. Thus, if so conditioned, the proposed project will not result in any significant environmental effects for which feasible mitigation measures have not been employed consistent with CEQA Section 21080.5(d)(2)(A).

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

- 1.** San Lorenzo Lagoon Interim Management Program Initial Study and Mitigated Negative Declaration, City of Santa Cruz. (Adopted June 9, 2015).
- 2.** “City of Santa Cruz San Lorenzo Lagoon Interim Management Program Project Description and Supplemental Project Information,” Conservation Collaborative. (February 3, 2015).
- 3.** “Biological Opinion for San Lorenzo River Interim Management Program,” Hagar Environmental Science (March 15, 2015).
- 4.** “San Lorenzo River Lagoon Interim Management Program – Coastal Processes and Data Integration to Support Interim Management Options,” ESA (October 2014).
- 5.** “San Lorenzo River Lagoon Interim Management Program: Geomorphic and Channel Feasibility Study.” ESA (January 2015).
- 6.** San Lorenzo Urban River Plan. (January 2002).
- 7.** Recovery Plan for the Tidewater Goby, USFWS, December 2005.

FIGURE 1A: Project Location

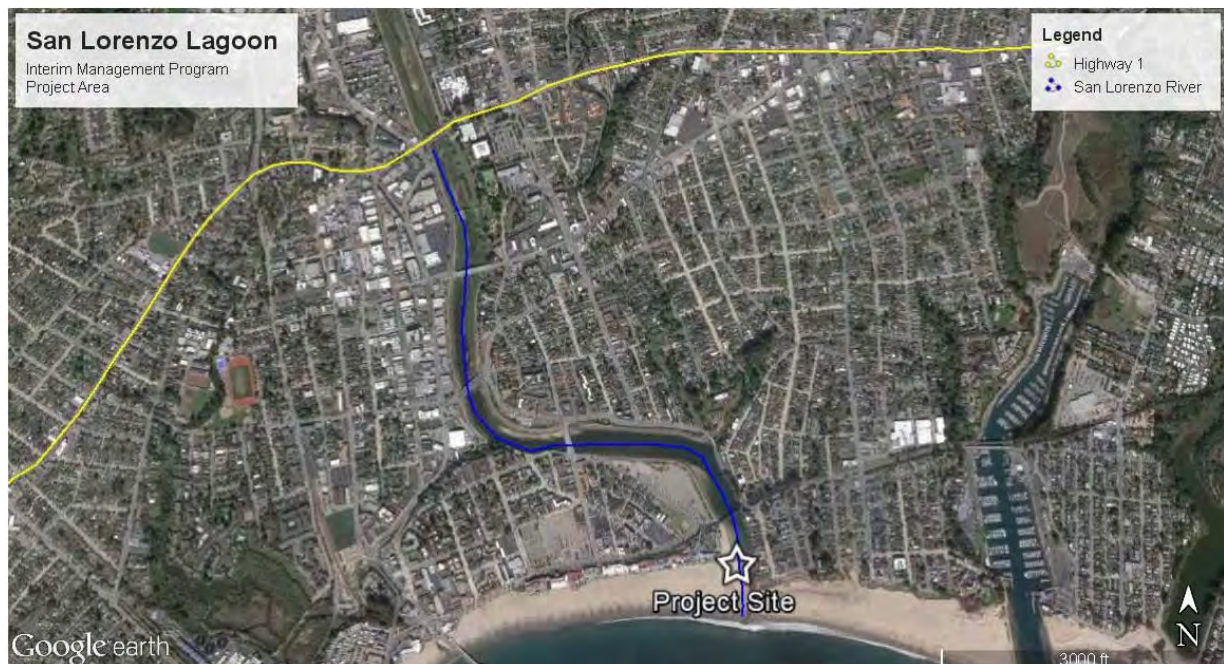
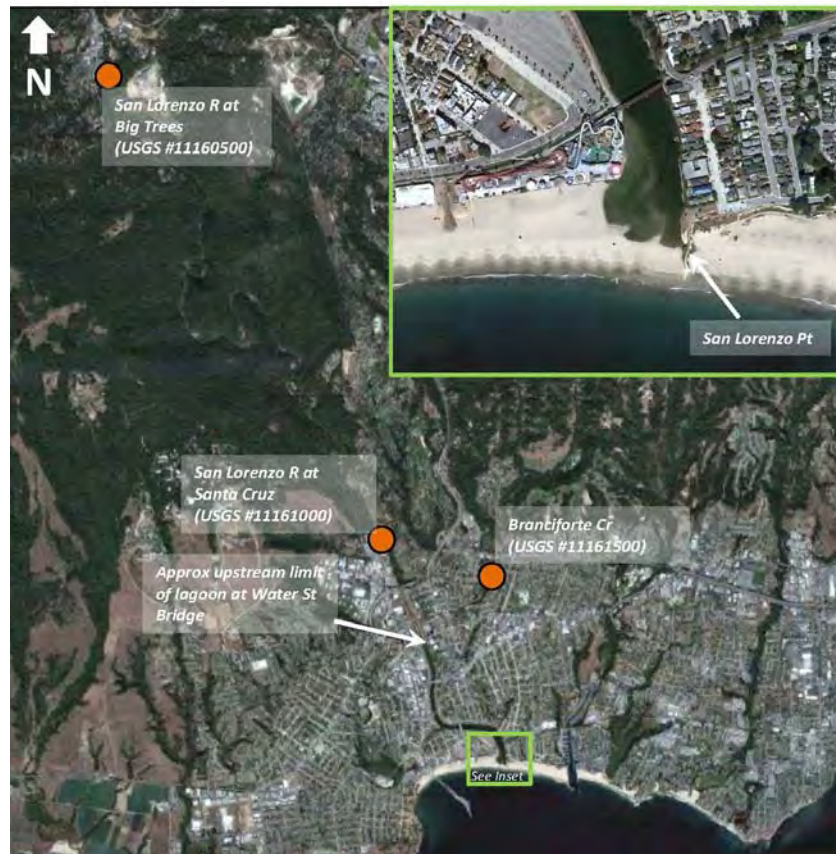


FIGURE 1B: Project Properties



San Lorenzo Lagoon Interim Management Program Project Area

FIGURE 2: San Lorenzo River Mouth Conditions



San Lorenzo River – example of barrier beach open condition (March 16, 2002). Photo from California Coastal Records Project



San Lorenzo River – example of barrier beach closed condition (October 1, 2008). Photo from California Coastal Records Project

FIGURE 3: Examples of San Lorenzo River Channel Migration

Spillover channel condition, 2014. Photo by Conservation Collaborative.

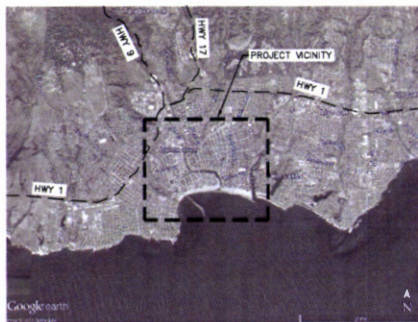


Western channel migration example, October 2005. Photo from California Coastal Records

SANTA CRUZ BEACH BOARDWALK COASTAL MANAGEMENT IMPROVEMENTS

PREPARED FOR THE
SANTA CRUZ SEASIDE COMPANY
CITY OF SANTA CRUZ, SANTA CRUZ COUNTY, CALIFORNIA

NOT FOR CONSTRUCTION



LOCATION MAP

1" = 1 MILE



VICINITY MAP

1" = 3,000'

SHEET INDEX

- 1 TITLE SHEET
- 2 WATERPROOFING UPGRADES TO BASEMENT WALL
- 3 TYPICAL PARTIAL OUTLET CHANNEL
- 4 NOTES


DEFINITIONS

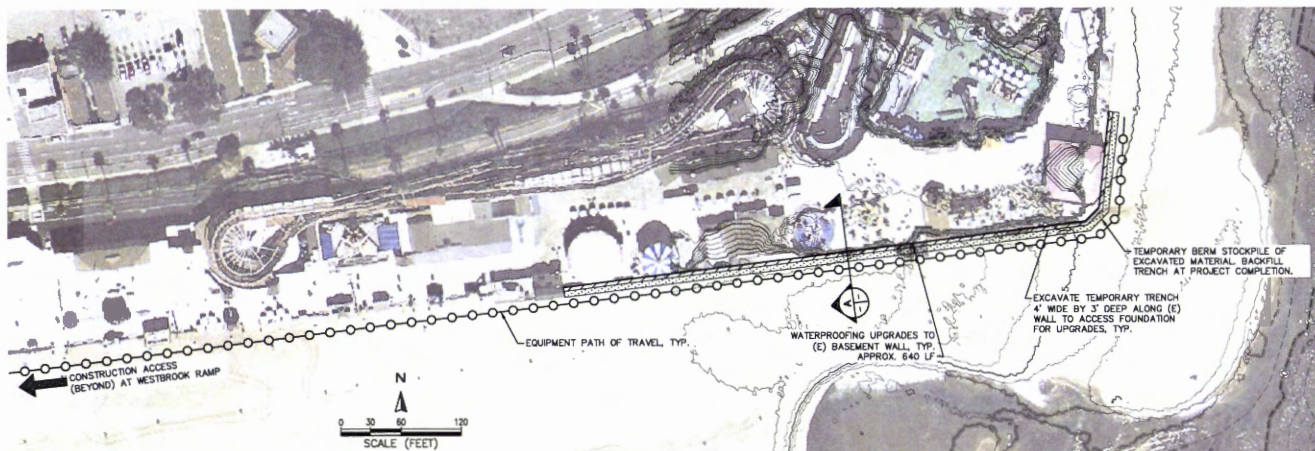
PROJECT OWNER: SANTA CRUZ SEASIDE COMPANY
CONTACT: MIKE SUKEL
PH: (831) 460-2565

PROJECT ENGINEER: ENVIRONMENTAL SCIENCE ASSOCIATES
CONTACT: LOUIS WHITE, PE
PH: (415) 262-2300

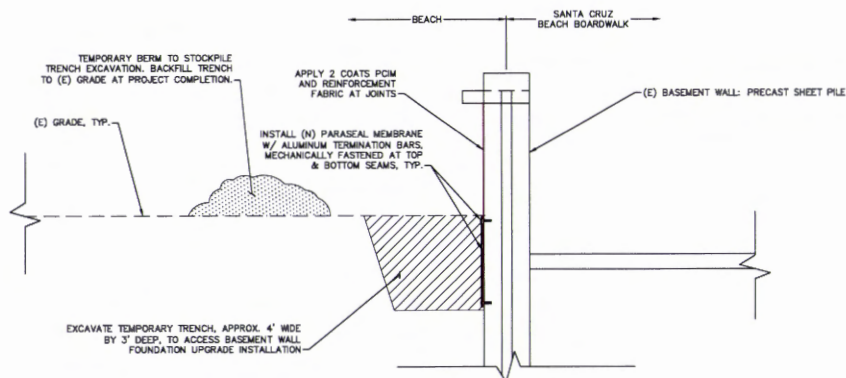


**PRELIMINARY
NOT FOR CONSTRUCTION**

 PREPARED BY:	TITLE SHEET
	SANTA CRUZ BEACH BOARDWALK COASTAL MGT. IMPROVEMENTS
PREPARED FOR: SANTA CRUZ SEASIDE CO. 400 BEACH STREET SANTA CRUZ, CA 95060-5491	SHEET 1 OF 4



1 WATERPROOFING UPGRADES TO BASEMENT WALL
1 2 SITE PLAN 1" = 16'



A BASEMENT WALL WATERPROOFING IMPROVEMENTS
TYPICAL SECTION 1" = 2'

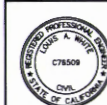
SHEET NOTES:

1. UPGRADES TO BASEMENT WALL AS PRESENTED ARE BASED ON DESCRIPTIONS AND DOCUMENTATION OF WORK PERFORMED BY THE SANTA CRUZ SEASIDE COMPANY
2. DIMENSIONS OF EXISTING BASEMENT WALL ARE APPROXIMATE
3. TOPOGRAPHY BASED ON LIDAR COLLECTED AS PART OF THE CALIFORNIA COASTAL LIDAR PROJECT (NOAA 2010)
4. AERIAL IMAGERY FROM NOAA (2012) REPRESENTS OPEN LAGOON CONDITIONS



PROJECT TITLE
WATERPROOFING UPGRADES
TO BASEMENT WALL
SANTA CRUZ BEACH BOARDWALK
COASTAL MGT. IMPROVEMENTS

PREPARED FOR
SANTA CRUZ SEASIDE CO.
400 BEACH STREET
SANTA CRUZ, CA 95060-5491



APPROVED

DESIGNED ESA
DRAWN L. WHITE
RECHECKED L. WHITE
SCALE AS NOTED
DATE OCTOBER 12, 2015
SHEET



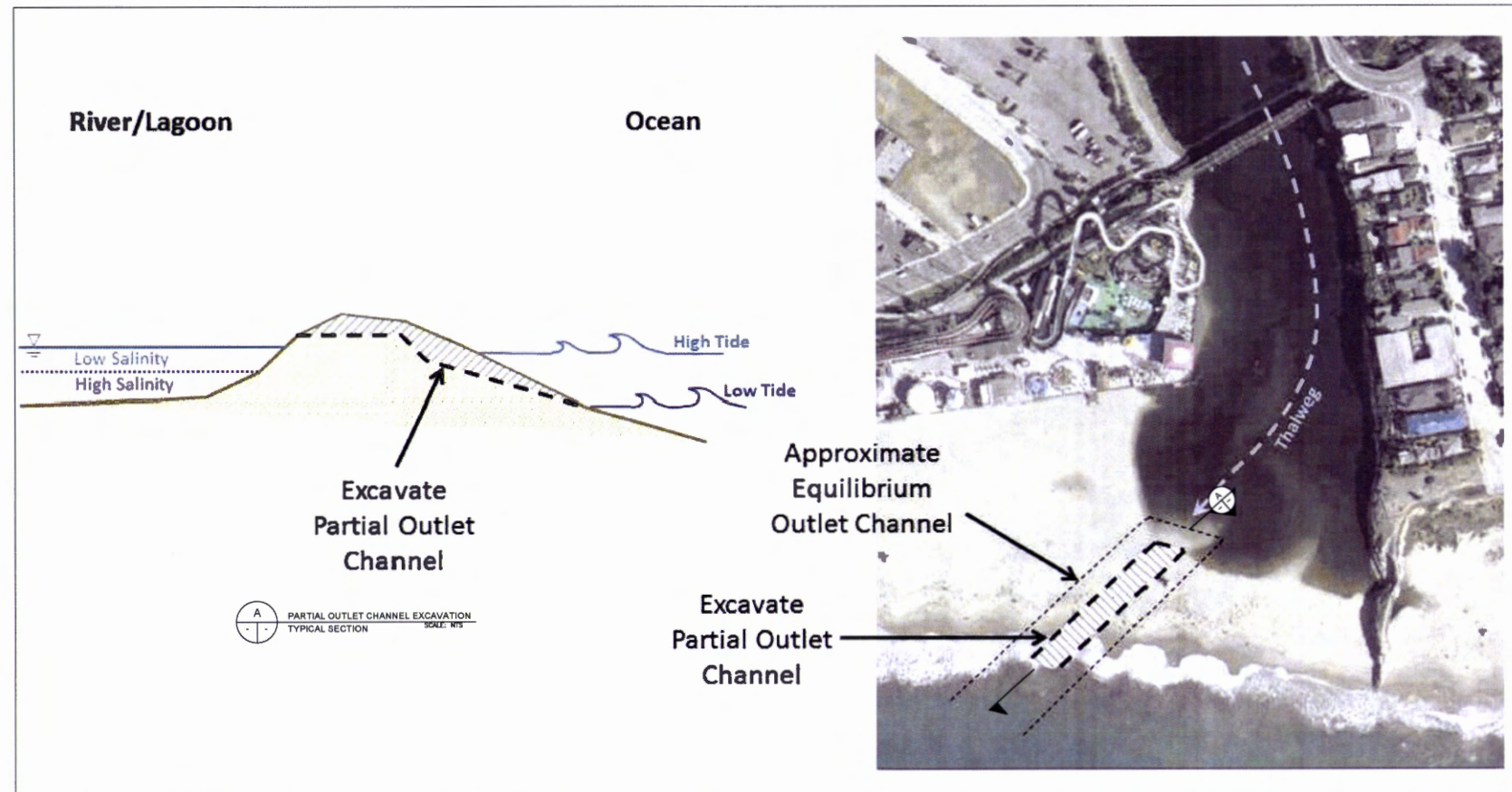
**PRELIMINARY
NOT FOR CONSTRUCTION**

2
2 of 4

RECEIVED

OCT 22 2015

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA



SHEET NOTES:

1. EXCAVATION CHANNEL SHOWN IN DRAWINGS REPRESENTATIVE OF SEPTEMBER 2014 BREACHING EVENT. AN EARLIER BREACH EVENT OCCURRED IN JULY 2014 AND WAS LOCATED 50 TO 100 FEET TO THE EAST. THE EQUILIBRIUM DIMENSIONS OF BOTH BREACH EVENTS WERE APPROXIMATELY THE SAME, AND RESULTED IN TEMPORARY LOWERING OF LAGOON WATER LEVEL TO TARGET ELEVATION 3' TO 4' NGVD.
2. BREACH DRAWING IS BASED ON DESCRIPTIONS OF WORK PERFORMED BY THE SANTA CRUZ SEASIDE COMPANY AND THE CITY OF SANTA CRUZ

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OCT 22 2015

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

**PRELIMINARY
NOT FOR CONSTRUCTION**

PREPARED BY: TYPICAL PARTIAL OUTLET CHANNEL PROJECT: SANTA CRUZ BEACH BOARDWALK COASTAL MGT. IMPROVEMENTS	PREPARED FOR: SANTA CRUZ SEASIDE CO. 400 BEACH STREET SANTA CRUZ, CA 95060-3491
APPROVED: _____ DESIGNED: EBA DRAWN: L. WHITE INCHARGE: WHITE SCALE: AS NOTED DATE: OCTOBER 13, 2015 SHEET: 3 of 4	

A:\projects\2015\20150817\01 - Santa Cruz Seaside Boardwalk - COC Permit Application\04 - C78506\Drawings\01 - Bay - 10-12-15 - 01.dwg, 10/14/15, PM

NOTES

Temporary Outlet Channel

Construction Description: A shallow part of the lagoon (~2 feet deep) will be used as a sill to reduce the likelihood of headcutting and scour up to the thalweg to reduce the chance of a complete draining of the lagoon. A sand track "peninsula" will be graded in the lagoon near the outlet opening on the beach side. This peninsula will act to control the direction of flow and headcutting. Once established, a blade will be used to cut a shallow opening to begin flow from the lagoon to the ocean. As headcutting occurs, documented by periodic walking depth measurements, sand will be pushed into the headcut/thalweg to reduce further scour and channel formation. Walking surveys will be performed every 30 minutes. Sand piles will be maintained adjacent to the inlet to provide immediate ability to control headcutting. Once the desired elevation of 3.0' to 4.0' NGVD is reached, the outlet channel will be closed.

Minimization Measures: The following minimization measures are proposed to increase the likelihood of a successful Temporary Outlet Channel installation and closure.

- Establish nets for intercepting any fish that may be carried towards channel opening
- Survey location of the thalweg and beach profile before breach
- Side cast material on the ocean side of the channel
- Open the outlet channel on an incoming tide
- Draw water down into the outlet channel over a wide shallow area
- Stockpile sand peninsula and monitor frequently for headcutting

Notification Process: When lagoon stage rises above 4.5' NGVD, convene City departments and resource agencies to discuss and evaluate site conditions, weather predictions, identify preferred lagoon outlet channel location, review construction standards, and determine desired final stage of the lagoon.

Key considerations will include the following:

- Weather, swell and tide predictions - the City and resource agencies will evaluate the best available long-term weather forecast to determine weather, swell and tide conditions for optimal channel configuration and placement.
- River discharge.
- Channel establishment evaluation - In all cases, the principal goal of establishing the lagoon outlet channel will be to minimize the likelihood of uncontrolled lagoon draining. Targeted outlet channel location and specifications, width and height of the outlet breach, outflow discharge, and current lagoon water quality conditions will be evaluated and discussed prior to developing a final plan.
- Fish presence and utilization of habitats to be affected by outlet channel.
- Coordination - the City will confer with heavy equipment operators and biological monitors to coordinate efforts.

Public Notification Plan: The City of Santa Cruz will conduct a Public Notification Plan including issuing adequate press release information to local media outlets and announcement on City website.

Final Plan Developed and Documented: Targeted conditions to establish the seasonal outlet channel include:

- Outlet channel drains the lagoon to elevation 3.0' to 4.0' NGVD before closure
- Outlet channel is located in an agreed diagonal position at eastern end of Main Beach and staked accordingly
- Outlet channel details include excavation location, depth, length and width
- Identify need and locations of necessary control berms
- Identification of tidal conditions including timing to appropriate tidal phases
- Resulting lagoon water surface elevation documented

EQUIPMENT BEST MANAGEMENT PRACTICES

Temporary Outlet Channel and Seawall Waterproofing Upgrades

The most up-to-date equipment Best Management Practices will be deployed for the IMP. These practices include:

- Contractors must have a supply of fuel and hydraulic fluid spill containment supplies onsite to facilitate a quick response to unanticipated or fuel or hydraulic fluid spill emergencies.
- Construction equipment must be checked at the beginning of the workday. If leaks occur during work in the channel (top of bank to top of bank), the contractor must contain the spill and remove the affected soils.
- Staging/storage areas for equipment, materials, fuels, and lubricants, must be located outside of the stream's normal high water height and above ocean high tide levels. Stationary equipment such as motors, pumps, generators, compressors, located on the beach must be positioned over drip pans.
- Cleanup of all spills must begin immediately. NMFS must be notified immediately of spills into sensitive aquatic resources and must be consulted regarding cleanup procedures. If an incident occurs after normal business hours or on a weekend, a voice mail message must be left at the phone number of 651-420-5017.
- After channel outlet establishment or a breach, all temporary, construction-related material must be removed from Santa Cruz Main Beach.
- City of Santa Cruz staff or their qualified designee must provide on-site training for work crews to ensure protection of the stream zone and listed wildlife species. City of Santa Cruz staff or their qualified designee is empowered to halt construction activities if they determine the project is resulting in unintended or unanticipated adverse impacts to listed species or their habitats.
- Construction monitoring to ensure no harm or harassment of state and federally protected species such as, silverwater gobies, steelhead, and coho salmon occur during operation of heavy equipment or shovel activities.

RECEIVED

OCT 22 2015

CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA



PRELIMINARY
NOT FOR CONSTRUCTION

 PREPARED BY:	NOTES
	PROJECT: SANTA CRUZ BEACH BOARDWALK COASTAL MGT. IMPROVEMENTS
PREPARED FOR:	SANTA CRUZ SEASIDE CO. 400 BEACH STREET SANTA CRUZ, CA 95060-5491
APPROVED:	DESIGNED: JSA DRAWN: L. WHITE INCHARGE: WHITE SCALE: AS NOTED DATE: OCTOBER 12, 2015 SHEET: 4 of 4

4

4 of 4

San Lorenzo River Lagoon



San Lorenzo River Lagoon



Cave train



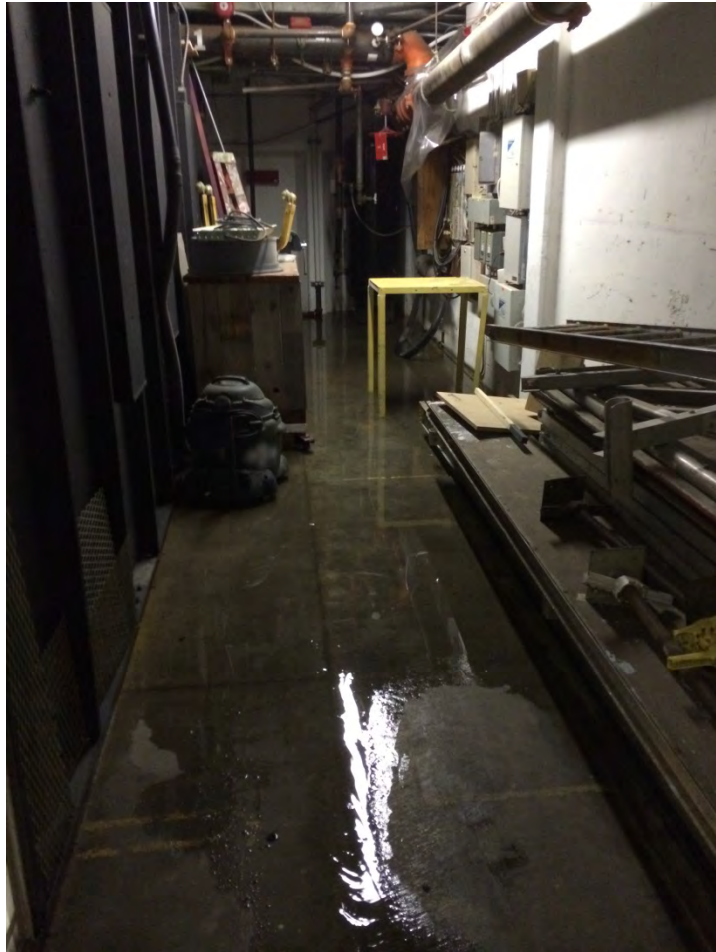
Flooded facilities



Workshop



Flooded facilities



Flooded facilities



CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
PHONE: (831) 427-4863
FAX: (831) 427-4877
WEB: WWW.COASTAL.CA.GOV

**August 20, 2014**

Chris Reyes, Director of External Affairs
Seaside Company
400 Beach Street
Santa Cruz, CA 95060

Property Location: Mouth of the San Lorenzo River, City of Santa Cruz

Violation File No.: V-3-14-0110

Violation¹: Unpermitted breaching of the San Lorenzo River Lagoon

Dear Mr. Reyes:

The California Coastal Act² was enacted by the State Legislature in 1976 to provide long-term protection of California's 1,100-mile coastline through implementation of a comprehensive planning and regulatory program designed to manage conservation and development of coastal resources. The California Coastal Commission ("Commission") is the state agency created by and charged with administering the Coastal Act of 1976. In making its permit and land use planning decisions, the Commission carries out Coastal Act policies, which among other goals, seek to protect and restore sensitive habitats (such as coastal lagoons); protect natural landforms; protect scenic landscapes and views to the sea and; provide maximum public access to the sea.

Violation

Our staff has confirmed that the Santa Cruz Seaside Company ("Seaside Company") is responsible for the unpermitted breaching of the San Lorenzo River Lagoon that occurred on July 8, 2014. Said breaching occurred within the Coastal Zone and without a coastal development permit ("CDP"). Pursuant to Section 30600 (a) of the Coastal Act, any person wishing to perform or undertake development in the Coastal Zone must obtain a coastal development permit, in addition to any other permit required by law. "Development" is broadly defined by Section 30106 of the Coastal Act as:

¹ Please note that the description herein of the violation at issue is not necessarily a complete list of all development on the subject property that is in violation of the Coastal Act and/or that may be of concern to the Commission. Accordingly, you should not treat the Commission's silence regarding (or failure to address) other development on the subject property as indicative of Commission acceptance of, or acquiescence in, any such development.

² The California Coastal Act of 1976 is codified in Sections 30000 to 30900 of the California Public Resources Code. All further section references are to that code unless otherwise indicated.

"Development" means, on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511).

As used in this section, "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.

The breaching of the San Lorenzo River lagoon is an activity that constitutes development as defined by the Coastal Act. We have searched our files and find no record of a CDP having been issued to authorize the subject breaching. Thus, the subject breaching is unpermitted development, and a violation of the Coastal Act.

Background

Based on the attached letter from you to Scott Wilson, with the California Department of Fish and Wildlife ("CDFW"), dated July 3, 2014; the post-breaching biological monitoring report, dated July 10, 2014, by Kittleson Environmental Consulting and; the meeting that occurred on July 16, 2014 attended by the Seaside Company, the City, CCC, CDFW, NMFS, RWQCB, and USACE, it is evident that the Seaside Company is responsible for the breaching of the San Lorenzo River Lagoon that occurred on July 8, 2014. Although it was known in advance that the breaching would take place, the Seaside Company did not contact Coastal Commission staff or submit an application for an emergency or a regular CDP to authorize the activity.

As you may know, the Seaside Company obtained ECDP No. 3-12-009-G from the Commission on March 20, 2012 authorizing the creation of a channel to direct the river to the sea and the temporary placement of two berms to keep the river confined in the new channel, all done to prevent flooding of the Seaside Company's basement and to prevent damage to other Boardwalk facilities. Subsequently, the Seaside Company submitted an application for a follow-up CDP (as required by the ECDP), which is still incomplete and not filed (CDP application 3-12-020). Thus, the Seaside Company was aware of the requirement to obtain a CDP for work in this location.

In addition to the requirement to obtain a CDP from the Commission prior to undertaking the subject breaching activity, permits may also be required from other state, local, and federal agencies as coastal lagoons are considered to be sensitive (protected) habitat for several state and federally listed species.

Coastal Resource Impact

Coastal lagoons are environmentally sensitive habitat areas ("ESHA") that are protected by the Coastal Act. Several Coastal Act policies apply here including: Section 30231, which requires that the biological productivity and quality of coastal waters be maintained; Section 30230, which requires that uses of the marine environment be carried out in a manner that will sustain the biological productivity of coastal waters for long-term commercial, recreational, scientific, and educational purposes; Section 30236, which allows for alterations to streambeds when required for flood control projects where no other less damaging alternative is feasible and when necessary to protect public safety or existing development and; Section 30240 which states that environmentally sensitive habitat areas shall be protected and that development within or adjacent to such areas must be designed to prevent impacts which could degrade those resources.

Commission staff has serious concerns about the potential impacts resulting from the unpermitted breaching of the lagoon that has occurred, including but not limited to, the potential impact on steelhead trout, Coho salmon, tide water goby and other wildlife in the shallow portions of the closed San Lorenzo River Lagoon and Main Beach.

Resolution

In many cases, violations involving unpermitted development may be resolved administratively by removal of the unpermitted development and restoration of any damaged resources or by obtaining a coastal development permit authorizing the development after-the-fact. Removal of the development and restoration of the site also requires a coastal development permit. Therefore, in order to resolve this matter in a timely manner and reduce the possibility of a monetary penalty or fine, we are requesting that you submit a complete coastal development permit application by **September 18, 2014** to authorize the breaching activity that took place on July 8, 2014.

It may be possible to consolidate the follow-up CDP for the berms, authorized pursuant to ECDP 3-12-009-G, and after-the-fact approval of the subject lagoon breaching in a single CDP application. Please contact me by no later than **September 1, 2014** regarding how you intend to resolve this violation.

Our understanding is that the City of Santa Cruz is in the process of developing a comprehensive San Lorenzo Rivermouth Management Plan (Plan), which will be prepared in consultation with the various resource agencies mentioned in the "Background" section above. The future Plan will

include protocols for when breaching activities may occur, and the methods that must be used when breaching to protect sensitive species and their lagoon habitat. Development of the Plan, which will need to be authorized by a CDP, is critically important to provide for ongoing management of the San Lorenzo River Lagoon and to avoid future unauthorized breaching activities.

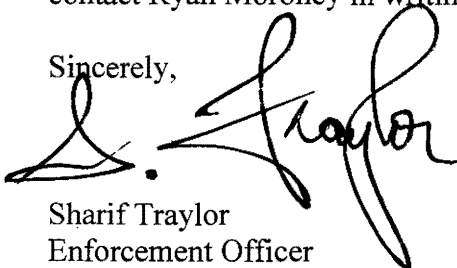
While we are hopeful that we can resolve this matter amicably, please be advised that the Coastal Act has a number of potential remedies to address violations of the Coastal Act including the following:

Section 30809 states that if the Executive Director of the Commission determines that any person has undertaken, or is threatening to undertake, any activity that may require a permit from the Coastal Commission without first securing a permit, the Executive Director may issue an order directing that person to cease and desist. Section 30810 states that the Coastal Commission may also issue a cease and desist order. A cease and desist order may be subject to terms and conditions that are necessary to avoid irreparable injury to the area or to ensure compliance with the Coastal Act. Section 30811 also provides the Coastal Commission the authority to issue a restoration order to address violations at a site. A violation of a cease and desist order or restoration order can result in civil fines of up to \$6,000 for each day in which the violation persists.

Additionally, Sections 30803 and 30805 authorize the Commission to initiate litigation to seek injunctive relief and an award of civil fines in response to any violation of the Coastal Act. Section 30820(a) (1) provides that any person who undertakes development in violation of the Coastal Act may be subject to a penalty amount that shall not exceed \$30,000 and shall not be less than \$500 per violation. Section 30820(b) states that, in addition to any other penalties, any person who "knowingly and intentionally" performs or undertakes any development in violation of the Coastal Act can be subject to a civil penalty of not less than \$1,000 and not more than \$15,000 per violation for each day in which the violation persists.

Thank you for your immediate attention to this matter. If you have any questions concerning this letter, please contact me in writing at the above address or by phone at 831-427-4881. If you have any questions concerning the completion and submittal of the CDP application, please contact Ryan Moroney in writing at the above address or by phone at 831-427-4891.

Sincerely,

A handwritten signature in black ink, appearing to read "Sharif Traylor", is written over a horizontal line.

Sharif Traylor
Enforcement Officer
Central Coast District

Enclosures: 1) Copy of your letter dated July 3, 2014 to Scott Wilson.
2) Copy of biological monitoring report dated July 10, 2014.

Cc: Dan Carl, Deputy Director, Central Coast District Office, CCC.
Susan Craig, Manager, Central Coast District Office, CCC.
Ryan Moroney, Planner, Central Coast District Office, CCC.
Lisa Haage, Chief of Enforcement, CCC.
Heather Johnston, Enforcement Supervisor, Northern Districts, CCC.

Donna Meyers, Principal
Conservation Collaborative
204 Laguna Street
Santa Cruz, CA 95060

Scott Collins, Assistant to the City Manager
City of Santa Cruz
809 Center Street, Room 10
Santa Cruz, California 95060

Jonathan Ambrose
National Marine Fisheries Service
777 Sonoma Ave., Rm. 325
Santa Rosa, CA 95404

Melissa A. Farinha, Environmental Scientist - Santa Cruz County
California Department of Fish and Wildlife
7329 Silverado Trail
Napa, CA 94558

Jacob M. (Jake) Martin
Senior Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Ventura Fish and Wildlife Office-Santa Cruz Sub-office
1100 Fiesta Way
Watsonville, CA 95076

Greg Brown
U.S. Army Corps of Engineers
1455 Market Street
San Francisco, CA 94103

Kim Sanders
Central Coast Regional Water Quality Control Board

V-3-14-0110
Santa Cruz Seaside Company
August 20, 2014
Page 6

895 Aerovista Place, Suite 101
San Luis Obispo, CA. 93401-7906

Derek Roy
National Oceanic and Atmospheric Administration – Southwest Enforcement Division
501 W. Ocean Blvd, Suite 4300
Long Beach, CA 90802-4213



July 3, 2014

Scott Wilson
California Department of Fish and Wildlife
Bay Delta Region
7329 Silverado Trail
Napa, California 94558

Dear Mr. Wilson,

The following letter outlines the activity and minimization measures that will be enacted by the Santa Cruz Seaside Company (SCSC) when addressing impacts caused by flooding from the San Lorenzo River.

The information below is a comprehensive description of the planned activity.

- Up to two low ground pressure mini excavators owned by SCSC will be used.
- Trained personnel from SCSC Maintenance Department will staff each mini excavator.
- Additional personnel from SCSC Maintenance Department and SCSC Security Department will be on site to provide assistance.
- Spill response kits will be on site if needed.
- In order to achieve the minimization efforts requested by CDFW we estimate that the work will take approximately 6 hours.

The information below is a comprehensive description of the minimization efforts that SCSC, in partnership with the City of Santa Cruz will undertake to lessen the impacts of the activity described above. The minimization efforts outlined below reflect the specific actions requested by CDFW in previous email correspondence.

- The channel will be placed at an angle from the shallowest area of the lagoon and will face the appropriate wave-action direction to aid in re-closure.
- Excavation will begin at the ocean side and continue back towards the lagoon.
- Sand bar breaching will be performed during the appropriate period within the daily tide cycle to avoid large differences between lagoon and ocean water surface elevations to keep the lagoon from draining at a pace that would be detrimental to the fishery resource.


- Water quality profile, as specified in Melissa Farinha's email dated June 27 will be handled by the City of Santa Cruz. Samples will be taken prior to breaching and at a frequency appropriate to inform impacts assessment for planning and environmental review documents. Water quality parameters to be monitored include: temperature, dissolved oxygen, salinity, depth and upstream surface flow connectivity.
- SCSC will work with the City of Santa Cruz to ensure a Qualified Fisheries Biologist is on site during breaching activities to monitor for fish stranding.
- Immediately upon discovery of conditions that precipitate a breaching event SCSC will notify CDFW. Notification will be via email and addressed to Brenda.Blinn@wildlife.ca.gov and Melissa.Farinha@wildlife.ca.gov.
- A barrier sandbar exists currently. The barrier sandbar will be re-established to pre-action elevation to the extent possible. Sandbar modifications will be initiated during outgoing tide and timed to complete modifications on the incoming tide so as utilize wave run up for sandbar re-establishment.
- SCSC will work to ensure that water surface elevation is not reduced below the 5-foot mark at the staff plate on the train trestle bridge.
- SCSC will work to retain the greatest amount of water depth within the lagoon to the maximum extent feasible.

While SCSC will make the items outlined above our highest priority rapidly changing river conditions may impact our ability to meet the requirements and other components outlined above.

If you have any questions or need additional information please contact Kris Reyes at (831) 332-6966.

Thank you for your continued support and assistance.

Sincerely,



Kris Reyes



Kittle Environmental Consulting

3284 Malibu Drive, Santa Cruz, CA 95062

Phone: 831-251-0215 Fax: 831-479-0138

e-mail: garykit@pacbell.net

7/10/2014

ATTENTION: Scott Collins
City of Santa Cruz
Assistant City Manager
809 Center Street, Room 10
Santa Cruz, California 95060

SUBJECT: Biological Monitoring Report - San Lorenzo River Lagoon Breach
7/8/2014 - 7/10/2014

SUMMARY

Following a 4:00 pm, 7/8/2014 request by Scott Collins, City of Santa Cruz Assistant City Manager, Gary Kittle/Kittle Environmental Consulting (KEC) conducted biological monitoring of the Seaside Co. lagoon breaching that occurred shortly after 10:00 pm on 7/8/2014. KEC was asked by the City to directly contact Chris Reyes and Dave Jessen from the Seaside Co., who provided directions to the site and the proposed breach schedule. KEC received no hard copies of resource agency permits, conditions, or monitoring requirements and conducted no fish handling or fish relocations during the monitoring period.

The primary biological monitoring effort entailed 30 minutes of pre-breach visual surveys and 4 hours of monitoring during the breach-period equipment activities. KEC's biological monitoring efforts were limited to visual surveys conducted to document potential presence of steelhead (*Oncorhynchus mykiss*), Coho salmon (*Oncorhynchus kisutch*), tidewater goby (*Eucyclogobius newberryi*) and other wildlife in the shallow portions of the closed San Lorenzo River Lagoon downstream of the railroad trestle and Main Beach. KEC was present from 9:30 pm to 2:00 am and left the site prior to the 3:00 am low tide. KEC was not present during the period of time that the Seaside Co attempted to close off the pilot breach channel.

Only two fish species were positively identified by headlamp-illuminated night-time observation. Topsmelt (*Atherinops affinis*) were abundant throughout the shallow back-beach, backwater areas and were observed occasionally in the deeper portions of the lagoon. Sculpin (*Cottus sp.*) were less common, but widely distributed in the shallow backwaters. More than 10 black-crowned night herons (*Nycticorax nycticorax*) were observed throughout the breach period, feeding on topsmelt along the edges of the declining lagoon and several hundred gulls (*species undetermined*) were resting on the beach berm in the vicinity of the project activity.

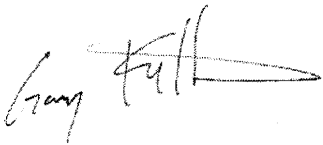
No salmonids or tidewater goby were observed during the 7/8-9/2014 night observations, although visibility was extremely limited and only areas less than 18" deep were surveyed extensively for safety reasons. Due to the limited visibility, no quantitative estimates of fish were attempted. Approximately 10 topsmelt were observed swimming out of the pilot breach channel after midnight, as the lagoon draining commenced.

Follow-up field visits to the beach and lagoon were conducted 6:00-6:45 am and 4:30-5:30 pm on 7/9/2014 and then again 6:00-8:30 am on 7/10/2014. The follow-up visits were done to look for mortalities and stranded fish, and to document the condition of the breach channel and adjacent habitats.

During the 7/9/2014 and 7/10/2014 follow-up visits several hundred topsmelt and approximately 30 sculpin mortalities were documented in the drained backwater areas that previously were separated by a low sand berm built and maintained by the Seaside Co. No salmonids or tidewater goby mortalities were observed.

Photos from the follow-up visits are included below.

Please contact me if more information is needed.

A handwritten signature in black ink, appearing to read "Gary Kittleson", with a long horizontal stroke extending to the right.

Gary Kittleson

SITE PHOTOS



LEFT: Breach outlet looking downstream from San Lorenzo Point. 6:30 am 7/9/2014

RIGHT: Breach outlet looking upstream from San Lorenzo Point. 6:30 am 7/9/2014



LEFT: Breach outlet looking downstream from San Lorenzo Point. 4:30 pm 7/9/2014

RIGHT: Breach outlet looking upstream from left bank. 4:45 pm 7/9/2014



LEFT: Isolated, stranded topsmelt and sculpin being eaten by gulls. 5:00 pm 7/9/2014

RIGHT: Dead topsmelt and sculpin. 5:05 pm 7/9/2014



LEFT: Dead topsmelt on Main Beach. 5:15 pm 7/9/2014

RIGHT: Dead topsmelt and sculpin. 5:20 pm 7/9/2014



LEFT: Breach outlet looking downstream at rising tide. 4:50 pm 7/9/2014

RIGHT: Breach outlet. 4:45 pm 7/9/2014



LEFT: Breach outlet looking upstream at rising tide. 7:20 am 7/10/2014

RIGHT: Breach outlet looking downstream at rising tide. 7:30 am 7/10/2014



**UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration**

Glenn Anderson Federal Building
501 W. Ocean Blvd., Suite 4470
Long Beach, CA 90802

OFFICE OF THE GENERAL COUNSEL
ENFORCEMENT SECTION

August 3, 2015

Santa Cruz Seaside Company
400 Beach Street
Santa Cruz, CA 95060

United Parcel Service

David Jessen
854 Martin Road
Santa Cruz, CA 95060

United Parcel Service

Re: NOAA Case No. SW1402623; Santa Cruz Seaside Company and David Jessen

Dear Sirs:

The National Oceanic and Atmospheric Administration (NOAA), Office of General Counsel, is responsible for prosecuting violations of the Endangered Species Act on behalf of the Secretary of Commerce.

An investigative report prepared by the NOAA Office of Law Enforcement regarding events that occurred on July 9, 2014, has been referred to this office for prosecution. Based on our review of that report, this office has determined that you violated the Endangered Species Act and regulations promulgated under that Act. This office hereby assesses a civil monetary penalty of \$7,000.00 for your violation of this statute and regulations promulgated under that Act.

Accordingly, you have been issued the enclosed Notice of Violation and Assessment ("Notice"). This is a civil administrative action, not a criminal proceeding. The Notice and the enclosed copy of the regulations governing NOAA civil administrative proceedings explain your rights in this process. **Read these documents carefully.**

The civil monetary penalty of \$7,000.00 is assessed jointly and severally against you. You are both jointly, and each individually, liable for the entire penalty. Whether one of you pays the entire amount or each of you pay equal or unequal portions of the penalty is for you to determine.

If you choose not to contest the charged violation(s) and the civil monetary penalty assessed above, you may resolve this matter by signing the Settlement Agreement which is included with the Notice.

To encourage your prompt acceptance of responsibility for this violation and early resolution of this matter, NOAA is willing to settle this case for a reduced amount. If you sign the Settlement Agreement within 30 days after your receipt of the Notice, the base penalty assessed in the



Exhibit 6

3-15-0166

1 of 9

Notice will be reduced by 10%. Therefore, the amount of your assessed penalty of \$7,000.00 would be reduced to \$6,300.00. This offer expires 30 days after receipt of the Notice, but may be extended by the Enforcement Attorney for an additional 30 days upon request. After the expiration of this early settlement offer, NOAA will proceed against you for the full assessed penalty amount indicated in the Notice. If you seek to settle the case after the expiration of the 30-day early settlement period, you must contact the undersigned Enforcement Attorney, who will discuss settlement terms and conditions with you or your legal representative.

By signing the Settlement Agreement, you waive your right to a hearing and agree to pay the civil monetary penalty. To resolve the case at this point and on these terms, sign and date the Settlement Agreement at the bottom of the last page and return it to my attention at Glenn Anderson Federal Building, 501 W. Ocean Blvd., Suite 4470 Long Beach, CA 90802. The NOAA Finance Office will then contact you with payment instructions.

If you wish to contest the charged violation(s) and/or the civil monetary penalty assessed in the Notice, you must request a hearing before an administrative law judge by sending a written, dated request to the address shown above within 30 days of your receipt of the Notice. At the hearing, the administrative law judge will conduct an independent determination of whether the charged violation occurred and, if so, what the penalty should be. The administrative law judge is not bound by the amount assessed in the Notice, but may, after taking into account all of the factors required by applicable law, assess a penalty up to the maximum amount provided by law.

If you believe that you lack the financial ability to pay the assessed penalty, please refer to the section titled "Assessed Penalty" in the enclosed Notice.

IMPORTANT: If you fail to respond within 30 days of your receipt of the Notice by either 1) signing and returning the enclosed Settlement Agreement, 2) contacting me to seek to have the Notice amended, modified, or rescinded, 3) requesting a hearing, or 4) requesting an extension of time to respond to the Notice, you will become liable for the violations and assessed penalties described in the Notice.

Sincerely,

Paul Ortiz



Enclosures:

1. Notice of Violation and Assessment
2. Preliminary Worksheet – Recommended Assessment of Penalty and Permit Sanction
3. Settlement Agreement
4. 15 C.F.R. Part 904, "Civil Procedures"

UNITED STATES DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NOTICE OF VIOLATION AND ASSESSMENT
OF ADMINISTRATIVE PENALTY

Endangered Species Act

ISSUED TO:

Santa Cruz Seaside Company
400 Beach Street
Santa Cruz, CA 95060

United Parcel Service

David Jessen
854 Martin Road
Santa Cruz, CA 95060

United Parcel Service

Re: NOAA Case No. SW1402623; Santa Cruz Seaside Company and David Jessen

This is your official Notice of the civil violation and assessment of administrative penalty described below.

FACTS CONSTITUTING VIOLATION

Count 1 - On or about July 9, 2014, in Santa Cruz, California, the Santa Cruz Seaside Corporation, acting by and through David Jessen (RESPONDENTS), an employee and/or agent of Santa Cruz Seaside Corporation, did knowingly violate the Endangered Species Act (the Act) and regulations promulgated thereunder; to wit, RESPONDENTS did unlawfully and knowingly take a species of fish or wildlife listed as threatened pursuant to section 1533 of the Act. Specifically, RESPONDENTS breached the sandbar at the San Lorenzo River lagoon in a manner that harmed or killed one or more Central California Coast Distinct Population Segment steelhead (*Oncorhynchus mykiss*, "CCC steelhead"), a species of steelhead that is and was listed as a threatened species under the Act. Breaching the sandbar caused the rapid dewatering of the San Lorenzo River lagoon, resulting in significant modification or degradation to CCC steelhead habitat in the lagoon which actually killed or injured one or more CCC steelhead by significantly impairing their essential behavioral patterns including spawning, rearing, migrating, feeding and sheltering.

STATUTE(S)/REGULATION(S)/PERMIT(S) VIOLATED

Count 1 - 16 USC § 1538(a)(1)(G)(reference 50 CFR §223.102, 50 CFR §223.203(a))

SEIZED ITEMS

None.

ASSESSED PENALTY

Count 1 - \$7,000.00

Total Assessed Penalty: \$7,000.00

You may seek to have this penalty amount modified on the basis that you do not have the ability to pay the penalty assessed in accordance with. Any request to have the penalty amount modified on this basis must be made in accordance with 15 C.F.R. §§ 904.102 and 904.108, and should be accompanied by supporting financial information.

NOTICE

This is not a criminal action. You, your attorney, or other representative have 30 calendar days from receipt of this Notice in which to respond. During this time, you may:

(1) **Accept the proposed settlement** by signing the Settlement Agreement below and returning it to:

Paul Ortiz
NOAA
501 W. Ocean Blvd., Suite 4470
Long Beach, CA 90802.

Upon receipt of your signed Settlement Agreement, the below Enforcement Attorney will sign it and mail copies to you and the NOAA Finance Office. The NOAA Finance Office will send you a bill and instruct you where to send your payment. **Do not send your check or money order to the Enforcement Attorney;**

or

(2) **Seek to have this Notice modified** to conform to the facts or the law as you see them, or seek to have the assessed penalty modified on the basis that you do not have the ability to pay, by contacting the attorney listed below;

or

(3) **Request a hearing** before an Administrative Law Judge (ALJ) to deny or contest all, or any part, of the violation charged and the civil penalty assessed. Such request must be dated; and be in writing; and must be served either in person or by mail, to the address listed in the signature block below. The requester shall either attach a copy of this Notice or refer to the case number appearing in the heading of this Notice. The ALJ will independently determine whether the

violation occurred and what penalty will be assessed. The ALJ is not bound by the amount assessed in this Notice, but may after taking into account all of the factors required by applicable law assess a penalty up to the maximum amount provided by law;

or

(4) **Request an extension of time** of up to 30 calendar days to respond. Such a request must be made within 30 calendar days from receipt of this Notice. Agency counsel may, for good cause, grant an additional 30-day extension beyond the initial 30-day extension.

or

(5) **Take no action**, in which case this Notice shall become final in accordance with 15 C.F.R. § 904.104.

WARNING: If you should fail to exercise your rights within 30 calendar days following receipt of this Notice, all of the allegations and the penalty herein will be taken as admitted and this assessment will become a final administrative order enforceable in United States District Court. The enclosed regulations govern these civil procedures and explain your rights. Read them carefully.

JOINT & SEVERAL LIABILITY: The civil monetary penalty is assessed jointly and severally against all the Respondents. All Respondents jointly, and each individually, are liable for the total monetary penalty. Whether one of the Respondents pays the entire amount or each Respondent pays equal or unequal portions of the penalty is for the Respondents to determine. This case will not, however, be closed against any of the Respondents until the total assessed penalty or a mutually agreed upon compromise amount is paid.

SMALL BUSINESS REGULATORY ENFORCEMENT FAIRNESS ACT: In accordance with the provisions of the Small Business Regulatory Enforcement Fairness Act, the Small Business Administration has established a National Small Business and Agriculture Regulatory Ombudsman to receive comments from small businesses about excessive or unfair federal regulatory enforcement actions. If a small business wishes to comment on the enforcement actions of NOAA, it may do so via the internet at www.sba.gov/ombudsman, by email at ombudsman@sba.gov, by mail (Small Business Administration, Office of the National Ombudsman, 409 Third St. SW, Washington, D.C. 20416), or by calling 1-888-REG-FAIR.

Please note: The right to file comments with the Ombudsman is independent of the rights afforded every respondent, including the right to contest the assessment of a civil monetary penalty or permit sanction. If you wish to exercise any of your rights as a respondent, you must do so in accordance with the procedures described in 15 C.F.R. Part 904, and separately from any comments you may provide to the Ombudsman.

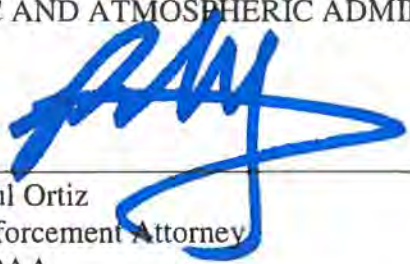
FINDINGS, CONCLUSIONS, AND ORDER: Having considered all the facts and circumstances presented in this Notice and taking into account the criteria for determining the amount of the civil penalty as provided in 15 C.F.R. § 904.101(b), the Agency finds that the

Respondents did violate the Endangered Species Act and the regulations set forth above as alleged, and that a just and reasonable disposition for the violation is a civil monetary penalty of \$7,000.00.

IT IS SO ORDERED.

ON BEHALF OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION:

Date: August 3, 2015



Paul Ortiz
Enforcement Attorney
NOAA
501 W. Ocean Blvd., Suite 4470
Long Beach CA, 90802
(562) 980-4069

**WORKSHEET -RECOMMENDED ASSESSMENT
OF PENALTY AND/OR PERMIT SANCTION**

Case Number: SW1402623

Name of Alleged Violator(s): Santa Cruz Seaside Company/David Jessen

Description of Violation: Unlawful take of fish species listed as threatened under the ESA.

The penalty assessed in this NOTICE is based on a review and application of the facts that comprise the violation(s) charged, penalty schedules, penalty matrixes, adjustment factors, and economic considerations set forth in NOAA's "Policy for the Assessment of Civil Administrative Penalties and Permit Sanctions" (hereinafter "Penalty Policy"). The Penalty Policy is posted at: The Penalty Policy is posted at: http://www.gc.noaa.gov/documents/Penalty%20Policy_FINAL_07012014_combo.pdf

COUNT: 1

I. Base Penalty

Initial Base Penalty

A. Offense Level (I through VI):	III
B. Culpability (A through D)	C - Reckless
C. Matrix Penalty	\$5,750

Adjustment Factors

D. History of Compliance	\$0
E. Other Such Matters as Justice May Require:	
a. Activity After Violation/Cooperation	\$0
b. Other (amount of impacted habitat, aggregation of takes)	\$1,250

Total Base Penalty:	\$7,000
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II. Proceeds of the Unlawful Activity and Additional Economic Benefit

A. Proceeds of Unlawful Activity	\$0
B. Additional Economic Benefit	\$0

Total Economic Benefit:	\$0
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III. TOTAL PENALTY for Count 1 (I + II):	\$7,000.00
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IV. TOTAL PENALTY (all counts):	\$7,000.00
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**NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
UNITED STATES DEPARTMENT OF COMMERCE**

Endangered Species Act

SETTLEMENT AGREEMENT

**NOAA CASE NO. SW1402623
Santa Cruz Seaside Company and David Jessen**

The National Oceanic and Atmospheric Administration (NOAA), United States Department of Commerce, initiated civil penalty proceedings against Respondents David Jessen and Santa Cruz Seaside Company, on August 3, 2015 by issuing a Notice of Violation and Assessment of Administrative Penalty ("Notice"), in the amount of \$7,000.00. Respondents David Jessen and Santa Cruz Seaside Company, (hereinafter referred to as "Respondents") and NOAA hereby enter into this Settlement Agreement ("Agreement") in full settlement and compromise of all claims any party may have arising out of the events described in the Notice.

The parties hereby agree as follows:

(1) Respondents admit the facts constituting the violation described in the Notice, waive their right to a hearing, and relinquish and transfer to the United States all right, title, and interest in any item(s) seized in connection with the violation described in the Notice.

(2) Respondents voluntarily agree to the terms and conditions of settlement as stated herein.

(3) In recognition of Respondents' timely acceptance of responsibility, NOAA accepts the Respondents' payment of a reduced civil penalty amount of \$6,300.00 as full settlement of all claims, charges, and complaints by NOAA arising from the violations described in the Notice, EXCEPT that the payment of the penalty amount and the signing of this agreement does not remove from Respondents' the requirement to pay any suspended penalties agreed to under any prior settlement agreements.

(4) A copy of this executed Agreement will be sent to the NOAA Finance Office. The NOAA Finance Office will then send the Respondents bills and direct the Respondents where to send the payment.

(5) Respondents understand that the violation described in the Notice will constitute a prior violation in NOAA's consideration of any penalty that may be assessed against the Respondents for any future violations.

(6) NOAA accepts Respondents' consent to, and fulfillment of, the terms of this Agreement as full settlement of all claims, charges, and complaints by the United States

which have been brought or could have been brought against the Respondents arising from the violation described in the Notice.

(7) All parties agree that rights of appeal are hereby waived and each party shall bear its own fees and other expenses incurred by it in connection with any of the proceedings pertaining to this matter.

(8) It is the intent of the parties that if it is determined that any portion of the agreement is declared invalid, all other provisions shall remain in effect.

(9) This Agreement is effective as of the date it is accepted on behalf of NOAA.

Accepted on behalf of David Jessen:

_____	_____
Date	David Jessen or Authorized Representative

Accepted on behalf of Santa Cruz Seaside Company:

_____	_____
Date	Authorized Representative

Accepted on behalf of the National Oceanic and Atmospheric Administration:

_____	_____
Date	Paul Ortiz Enforcement Attorney Enforcement Section, Office of General Counsel National Oceanic and Atmospheric Administration



State of California – The Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
7329 Silverado Trail
Napa, CA 94558
(707) 944-5500
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director



May 1, 2015

Mr. Scott Collins
City of Santa Cruz
809 Center Street, Room 10
Santa Cruz, CA 95060

Dear Mr. Collins:

Subject: San Lorenzo River Lagoon Interim Management Program Project, Initial Study/Mitigated Negative Declaration, SCH #2015042002, Santa Cruz County

The California Department of Fish and Wildlife (CDFW) has reviewed the Initial Study/Mitigated Negative Declaration (IS/MND) for the San Lorenzo River Lagoon Interim Management Program Project (Project). CDFW is submitting comments on the IS/MND as a means to inform the City of Santa Cruz (City), as the Lead Agency, of our concerns regarding potentially significant impacts to biological resources associated with the proposed Project and to provide recommendations on additional information to be included in a revised Final MND.

CDFW is a Trustee Agency pursuant to the California Environmental Quality Act (CEQA) § 15386 with responsibility under CEQA for commenting on projects that could affect biological resources. As Trustee for the state's fish and wildlife resources, CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and their habitat for the benefit and use by the people of California. CDFW also acts as a Responsible Agency pursuant to CEQA § 15381 based on its discretionary authority regarding Project activities that impact streams and lakes (Fish and Game Code §§ 1600 – 1616), or result in the "take" of any species listed as candidate, threatened, or endangered pursuant to the California Endangered Species Act (CESA, Fish and Game Code, § 2050 et seq.).

Project Location and Description

The Project is located on the San Lorenzo River extending from the confluence with the Pacific Ocean for approximately 700 feet upstream within the limits of the City of Santa Cruz. The Project proposes to prevent unauthorized river lagoon breaching and control water surface elevation (WSE) of the lagoon that forms at the mouth of the San Lorenzo River to an elevation of 5.0 feet using the National Geodetic Vertical Datum of 1929 to prevent localized flooding to public and private properties and infrastructure. The Project is designed to be an adaptive management program for addressing activities related to fisheries habitat, flooding, and public access and safety where the river mouth empties at Santa Cruz Main Beach. The Project includes two primary management activities to be implemented during the proposed three-year management period of 2015 through 2017 between May 1 and November 15. The two management activities include installation of a

temporary outlet channel that would be implemented each year in 2015 and 2016, and a head driven culvert (also considered temporary) that would be implemented in 2016 (if funding is secured) and 2017.

The temporary outlet channel would consist of a controlled drawdown of the lagoon WSE to prevent water from reaching the 5.0 foot elevations. The temporary outlet channel will be constructed up to six times during the season as needed to draw the lagoon down to 3.0 to 4.0 feet, and then the channel will be closed. Construction and closure of the each temporary outlet channel would take place within a one day period. Typical channel dimensions would be on the order of 35 to 50 feet in width and 75 feet in length. The head driven culvert (culvert) will allow the lagoon elevation to reach 5.0 feet under normal river mouth closure conditions and then maintain that elevation through passive removal of water from the lagoon via overflow of surface waters through a small weir and infiltration through the barrier sandbar as an additional contribution. A series of three 4-foot diameter standpipes (risers) would be partially buried in the lagoon adjacent to San Lorenzo Point, and would be connected to a 450-foot horizontal culvert buried in the beach connecting the lagoon to the ocean. It is estimated the culvert could be constructed in less than two weeks.

Comments on Project Description

The IS/MND, under *Background: History of Flooding and Lagoon Breaching*, describes the facilities and infrastructure subject to flooding such as the Santa Cruz Beach Boardwalk (Boardwalk), residential streets, and the levee and drainage system. However, this section of the IS/MND does not adequately quantify or relate the extent of flooding to lagoon WSE. For example, the capacity of the existing levee and drainage facilities to accommodate and alleviate flooding is not clearly described. It is CDFW's understanding that the basement of the Boardwalk has been the first infrastructure to flood as lagoon WSE begins to rise. Recently, the Boardwalk upgraded its facilities to fortify them against flooding potentials that would begin to occur when the San Lorenzo River Lagoon reached a WSE of 5.5 feet. Any recent improvements in nearby infrastructure to protect against flooding should be clearly described and analyzed in the MND.

CDFW recommends the MND be revised to evaluate the feasibility and effectiveness of improvements to the City's storm drain system and levee drainage systems for the purpose of maintaining a higher WSE and reducing impacts associated with a reduced lagoon volume on special-status species within the lagoon.

The IS/MND states that the preparation of plans for the Project included a series of meetings with the state and federal resource agencies that included identifying management alternatives and that the final alternatives were identified as the Project's proposed management activities. However, limited discussions between CDFW and the City have occurred in regards to lowering the WSE to less than 5.0 feet or reductions to the temporary channel outlet dimensions, and during those discussions, CDFW expressed concerns with these activities. During these resource agency meetings, CDFW advised the City that in order to reduce impacts to special-status fish species, the 5.0-foot was the point

at which no further reductions to WSE should occur. CDFW also indicated that temporary channel outlets should be constructed of dimensions in a manner to reduce the probability of uncontrollable lagoon draining events. Furthermore, an emergency permit issued by another agency for emergency mechanical breaching of the San Lorenzo River lagoon in September 2014 also addressed these concerns and included several special conditions, including one to ensure that the lagoon did not dewater below five feet. Therefore, as previously discussed with the City, CDFW recommends that the proposed Project, as part of the three-year management plan, specifies that the channel will be excavated at an angle from the shallowest part of the lagoon and face the appropriate wave-action direction to aid in re-closure, and will be at a minimum width of 10 feet, maximum depth of 2 feet, and length of 250-1,000 feet to minimize slope and outflow velocity and reduce the rate of lagoon drainage and risk of channel scour. Additionally, CDFW recommends the Project specify that channel excavation will retain a lagoon WSE of 5.0 feet as measured at the train trestle bridge staff gage.

Additionally, this section of the IS/MND (Page 5) states that the resource agencies and the City agreed to four objectives. To clarify, identification of overriding considerations for emergency actions (Objective 4) was not an objective to which CDFW agreed since flooding issues related to the WSE in the San Lorenzo River Lagoon are predictable and foreseeable.

Biological Resources

The IS/MND states that the San Lorenzo River Lagoon typically experiences intermittent "open" conditions (i.e. technically an estuary and not a lagoon) throughout the summer but does not discuss or evaluate the extent to which past illegal breaching has influenced this intermittent transition from a lagoon to an estuary throughout the summer season. The IS/MND discusses water quality impacts of extended lagoon closures based on data that may have been taken from one geographic location and sampled from the surface and bottommost points in the water column. This sampling protocol would not be representative of the entire lagoon throughout its extent nor of the entire water column. CDFW has concerns as to whether data have been extrapolated beyond a reasonable scope and whether any analyses of lagoon water quality data have accounted for time-interdependency of samples and freshwater inflow. In addition, the Biological Assessment (Attachment 2 of the IS/MND) heavily references an analyses that has not been finalized due to potential flaws in study design and data analyses (i.e. *Comparative Lagoon Ecological Assessment Project (CLEAP) Santa Cruz County, California, 2006 Draft Final Report*). CDFW recommends that the IS/MND either strike these sections from the IS/MND and Biological Assessment or include sections on sampling design, sampling locations, sampling depths, timing of sampling, methodologies used for statistical analyses and goodness of fit testing (if applicable) and results from statistical analyses. CDFW also recommends (as discussed during past meetings with the City) that analyses and interpretation of lagoon water quality data would benefit from review by the National Marine Fisheries Service (NMFS) staff and/or other non-private experts in lagoon water quality dynamics.

The IS/MND includes information on observed stranding and mortality of tidewater goby (*Eucyclogobius newberryi*) during the controlled breach for WSE drawdown that occurred in September 2014, and states that the San Lorenzo River lagoon encompasses 66 acres of habitat for the species. The IS/MND also concludes that habitat for the tidewater goby will not be adversely impacted but that indirect impacts may occur within the Project construction area. Tidewater goby is listed as endangered under the federal Endangered Species Act (ESA) and is a State Species of Special Concern. CDFW recommends that the impacts analysis on tidewater goby include loss of habitat by quantifying the changes in areal extent of inundated habitat at various lagoon WSE levels and that the IS/MND be revised to include compensatory mitigation measures to offset mortalities and loss of habitat for tidewater gobies.

The IS/MND indicates that steelhead (*Oncorhynchus mykiss*) and coho salmon (*Oncorhynchus kisutch*) may be present within the Project area, and that the Project may not be able to completely avoid impacts to steelhead and coho habitat. Central California Coast Evolutionarily Significant Unit coho salmon (hereafter coho) is listed as endangered under CESA and ESA. Central California Coast Distinct Population Segment of steelhead (DPS; hereafter steelhead) is listed as threatened under ESA and designated as a State Species of Special Concern. The IS/MND states that steelhead appear to prefer areas of the San Lorenzo River Lagoon that have deeper water relative to the rest of the lagoon and that they probably avoid the shallower depths to avoid predation by birds and to find areas with preferred cover and environmental parameters.

CDFW recommends that the IS/MND be revised to include an evaluation of impacts to fisheries resources, including:

- 1) the relationship between reducing lagoon depths to the various proposed WSE levels and the ability of steelhead and coho to avoid avian and mammalian predators;
- 2) the relationship between reducing lagoon depths to the proposed 3.0-foot WSE elevations and impacts to freshwater and lagoon volumes;
- 3) the relationships between expected increases in solar radiation and temperatures throughout the lagoon's extent and steelhead rearing habitat; and
- 4) compensatory mitigation measures to offset impacts from loss of habitat and cover from avian predators (e.g., seasonal installation of completely submerged cover structures for fish that span the majority of the water column).

CDFW recommends that the IS/MND be revised to include the methodologies to be used for monitoring of fish stranding during drawdown of WSE, and a complete mitigation, monitoring and reporting program. The mitigation, monitoring and reporting program should include the following:

- 1) an evaluation of the volume of habitat conditions in the lagoon from data collected in multiple locations at intervals of 0.25-meter depths throughout the water column to evaluate lagoon water quality dynamics and evaluation of lagoon stratification;

- 2) measures to evaluate direct Project impacts to fish;
- 3) the number of qualified biologists to be used during activities associated with temporary outlet channel construction;
- 4) avoidance, minimization and mitigation measures to be implemented for the different types of impacts identified; and
- 5) effectiveness evaluations of the Project's avoidance, minimization and mitigation measures.

If surveys or monitoring indicate that coho are present at the Project site and take of the species cannot be avoided, then please be advised that an Incidental Take Permit (ITP), pursuant to Fish and Game Code § 2080 *et seq.* must be obtained if a project has the potential to result in take of species of plants or animals listed under CESA, either during construction or over the life of the project. Issuance of an ITP is subject to CEQA documentation and analysis. Therefore, the IS/MND must specify impacts, mitigation measures, and a mitigation, monitoring and reporting program. If the Project will impact CESA-listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain an ITP.

Conclusion

CDFW appreciates the opportunity to provide comments on the IS/MND for the subject Project. If you have any questions, please contact Ms. Melissa Farinha, Environmental Scientist, at (707) 944-5579; or Ms. Brenda Blinn, Senior Environmental Scientist (Supervisory), at (707) 944-5541.

Sincerely,



Scott Wilson
Regional Manager
Bay Delta Region

cc:

State Clearinghouse

Kim Sanders, Regional Water Quality Control Board – kim.sanders@waterboards.ca.gov

Jacob Martin, U.S. Fish and Wildlife Service – jacob.martin@fws.gov

Joel Casagrande, National Marine Fisheries Service – joel.casagrande@noaa.gov

Gregory Brown, United States Army Corps of Engineers – gregory.g.brown@usace.army.mil

Susan Craig, California Coastal Commission – susan.craig@coastal.ca.gov

Ryan Maroney, California Coastal Commission – ryan.maroney@coastal.ca.gov

Captain Don Kelly, CDFW Law Enforcement Division



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
 West Coast Region
 777 Sonoma Avenue, Room 325
 Santa Rosa, California 95404-4731

May 1, 2015 Refer to NMFS No: 151422WCR2015SR00137

Scott Collins
 City of Santa Cruz
 Office of the City Manager
 809 Center Street, Room 10
 Santa Cruz, California 95060

Submitted electronically to SCollins@cityofsantacruz.com

Dear Mr. Collins:

Thank you and the City of Santa Cruz (City) for the opportunity to comment on the City's March 2015 Mitigated Negative Declaration (MND) for the *San Lorenzo River Lagoon Interim Management Program* (IMP) at the San Lorenzo River Mouth in the City of Santa Cruz. NOAA's National Marine Fisheries Service (NMFS) has reviewed the MND materials received on April 23, 2015. According to the MND, the City is considering the proposed IMP as a means to address longstanding conflicts related to federally listed species, their habitat, flooding, as well as public access and safety. The IMP includes two management activities to be implemented during the proposed three-year management period of 2015 through 2017: 1) a temporary lagoon outlet channel that would be constructed in 2015 and 2016; and 2) installation of a Head Driven Culvert that would be implemented in 2016 (if funding is secured) and in 2017.

Federally endangered Central California Coast Evolutionarily Significant Unit coho salmon (*Oncorhynchus kisutch*) and federally threatened Central California Coast Distinct Population Segment steelhead (*O. mykiss*) occur or have the potential to occur within the San Lorenzo River Lagoon. Additionally, designated critical habitat for both of these listed species occurs within the proposed project reach. The site also supports Essential Fish Habitat (EFH) for various life stages of fish managed under the Pacific Coast Groundfish Fishery Management Plan (FMP), Coastal Pelagic Species FMP, and the Pacific Coast Salmon FMP, pursuant to section 305(b) of the Magnuson-Stevens Fisheries Conservation and Management Act (MSA). Given these sensitive public trust resources, NMFS expects the proposed project will be designed in such a way as to avoid, minimize, and mitigate impacts to ESA listed species, their designated critical habitat, and EFH, and, if possible, improve existing conditions for these resources. Depending on the project design and methods used for construction and implementation, consultation with the designated federal action agency pursuant to section 7 of the ESA, as amended (16 U.S.C. 1531 et seq.) and EFH consultation pursuant to the MSA would be expected. Listed below are NMFS' comments regarding the MND.



Water surface elevation management

- Due to serious concerns regarding the quality and quantity of steelhead rearing habitat in the San Lorenzo River Lagoon, NMFS recommends the City manage the lagoon at a water surface elevation (WSE) of at least five feet (ft) NGVD29¹. It is NMFS' understanding that during net freshwater inflow of less than three cubic feet per second (cfs), the IMP would maintain the lagoon WSE at a depth of three ft. The lagoon WSE would only increase once net freshwater flow increases above three cfs. However, considering California's current drought conditions, there is concern that net freshwater inflow may drop below three cfs for extended periods of time, resulting in a WSE that would likely persist at three ft or lower. Further, the rationale for an outflow pipe with an elevation of three ft was not clearly described in the MND. Due to the potential benefits to steelhead and their habitat by increasing the lagoon WSE to five ft or more, we recommend that an analysis be provided that explores an increased WSE and decreased head difference.
- The MND states flooding occurs when the lagoon WSE is above five ft, but does not provide exact flood stage elevations for local infrastructure. The MND states that Boardwalk facilities have been flood-proofed (new pumps, resealing below-grade, and above-grade seawall), but a WSE where flooding now occurs at the Boardwalk or other City or federal facilities (*e.g.*, levees) is not given. The MND does mention the pump system at the levees starts at approximately four ft, storm drain and basements flood higher than five ft, and the theatre floods at seven ft. Therefore, it is unclear whether or not the lagoon could be managed at an elevation potentially greater than five ft, such as 5.5, 6.0 or 6.5 ft. Higher elevations would increase the extent and quality of steelhead rearing habitat (*i.e.*, increased depth) while potentially avoiding flooding of local infrastructure.

Freshwater conversion and manual valve operation

- The Head Driven Culvert may increase the amount of time to fill the lagoon to a WSE of 5 ft, which could adversely affect the quantity and quality of critical habitat for rearing juvenile steelhead and coho salmon. While NMFS supports the concept of the Head Driven Culvert, how it is operated with respect to WSE and water quality is of concern. Ideally, after the sandbar closes from a tidally-influenced configuration, the lagoon would fill with freshwater to five ft as quick as possible. The report provided with the MND (Geomorphic and Engineering Channel Feasibility Study²) calculates the average time to fill the lagoon during the dry season when the Head Driven Culvert would be operational. Under normal conditions the report states that starting from a WSE of three ft, it would take approximately six days to reach five ft. Alternatively,

¹ All water surface elevation levels discussed hereafter refer to the National Geodetic Vertical Datum of 1929 (NGVD29).

² ESA. 2015. "San Lorenzo River Lagoon Interim Management Program: Geomorphic and Engineering Channel Feasibility Study." Prepared for the City of Santa Cruz, January 2015.

the MND estimates that it would take approximately two to three weeks to reach five ft if the bottom risers of the Head Driven Culvert were operational (outflow approximately three cfs). NMFS recommends operation of a manually operated valve, combined with continuous water quality monitoring, to achieve relatively rapid filling of the lagoon to a maximum WSE while concurrently minimizing the duration and extent of water column stratification. For example, once the lagoon WSE reaches just under five ft, NMFS recommends that the trapped saltwater on the bottom of the lagoon be released through the Head Driven Culvert system by way of the perforated bottoms of the standing risers and a valve located on the horizontal drain pipe.

- The MND mentions a manual valve on the Head Driven Culvert that could be closed and opened, although a detailed description of the valve and its operation are lacking in the MND and associated documents. NMFS recommends the City provides a detailed description of the manual valve and its proposed operation.
- During drought conditions with a net freshwater inflow less than three cfs, the MND and associated documents state that the lagoon WSE would be maintained at three ft. It is the stated objective of the MND to manage the lagoon at a minimum of five ft, thus NMFS recommends the City implement a formal management plan for the manual valve(s). For the benefit of steelhead and other species, NMFS recommends the valve be closed or partially closed when needed to maintain the lagoon WSE at five ft and decrease stratification. We also recommend the City design a water quality monitoring program (or augment existing programs) to assess their valve operations.


Installation, demobilization, and salmonid migration

- According to the MND, installation of the culvert may occur in the spring after flood flows have subsided, but while flows are still high enough to keep the mouth open (20 cfs or more, typically before July 1). If this occurs, Mitigation Measure 2 states that the valve will remain closed (not in operation) until the City has decided that the first seasonal longer-term closure has started and the steelhead and coho salmon migration period to the ocean has ended. The MND states that this typically happens after July 1, but the date may vary depending on how dry the year is. It is unclear in the MND (pg.45) if the intermittent sandbar openings in spring are expected to be natural or due to the construction of a Temporary Outlet Channel. NMFS recommends the City clarify the cause of these intermittent sandbar openings (*i.e.*, Temporary Outlet Channel construction, or natural sandbar breach, or both). In addition, NMFS recommends the City provide information about the maximum rate of flow out of the Head Driven Culvert in order to determine the need for a Temporary Outlet Channel during Culvert operation (*i.e.*, what is the maximum rate flow (cfs) the horizontal discharge pipe can convey to the ocean?).
- The MND states that the demobilization and installation procedures of the Head Driven Culvert will be similar and will take approximately two weeks. Demobilization may occur in October or November, prior to the first major rainfall events, if practicable,

and installation may occur before July 1, as previously discussed. Although the timing of demobilization and installation and equipment best management practices (in the MND, Table 2) are intended to reduce impacts to coho salmon and steelhead, it is not clear whether or not the demobilization and installation activities during the construction periods will impact salmonid migration. NMFS recommends specific measures be designed and implemented for the demobilization and installation construction periods to avoid and or minimize any delay to salmonid migration.

NMFS appreciates the opportunity to comment on the MND and recommends the City continue to coordinate with us during the development of the project design. Please contact Joel Casagrande at (707) 575-6016, or joel.casagrande@noaa.gov, or Brian Meux at (707) 575-1253, or brian.meux@noaa.gov, if you have questions regarding these comments.

Sincerely,


for

Alecia Van Atta
Acting Assistant Regional Administrator
California Coastal Office

Copy to ARN File: 151422WCR2015SR00137
Copy to Chron File



June 15, 2015

Ryan Moroney
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

Subject: **Coastal Development Permit Application No. 3-12-020 (Follow-up CDP for San Lorenzo River/Lagoon Management at Main Beach, Santa Cruz, CA)**

Dear Mr. Moroney:

Please accept this letter and related attachments in response to your letter dated October 17, 2014. Your letter listed outstanding items that required attention in order to file the application and bring this issue to a close.

As noted in your October 17, 2014 letter items 4 and 5 have been properly addressed. Based on our phone discussion on April 3, 2015 and our subsequent email correspondence on the same date you extended the deadline for compliance on items 1-3 to June 16, 2015.

During our April 3, 2015 phone conversation regarding items 1 (Memorandum of Agreement) and 2 (River Management Plan) we agreed that the work done by the City of Santa Cruz and the Santa Cruz Seaside Company (SCSC) to address issues relating to the San Lorenzo River would be sufficient to comply with these items. This was reiterated in your April 3, 2015 email to me along with a request for a written explanation of Santa Cruz Seaside Company's position with respect to these items.

As you know the 2012 incident triggered the City of Santa Cruz to begin developing the San Lorenzo River Lagoon Interim Management Program. The San Lorenzo River Lagoon Interim Management Program is now before the California Coastal Commission for your review and consideration. SCSC has been an active participant in the development of the City's management program.

Concurrent with the development of the City's management program SCSC began a work plan designed to reduce the impacts on our property caused by the San Lorenzo River. A summary of that work has been provided to the California Coastal Commission previously but has been included with this letter. We continue to work

on this issue internally and are continuously upgrading our pumps in an attempt to further reduce the impacts caused by the river.

With regards to item 3 (Monterey Bay National Marine Sanctuary) the City of Santa Cruz requested in late October 2014 to take the lead in contacting the Monterey Bay National Marine Sanctuary. The reasoning for this was that the City wanted to align their engagement with the Sanctuary on this issue with the work they were doing to develop their management program. Attached is a letter from the City of Santa Cruz addressing this issue. If you have additional questions about the Sanctuary's involvement on this issue or the City's management program please contact Scott Collins at the City of Santa Cruz.

I believe the information included in this letter will allow us to finally close this permit application. If you have additional questions or need more information please feel free to contact me at (831) 460-3345 or via email at pr@beachboardwalk.com.

Sincerely,

A handwritten signature in blue ink, appearing to read 'KR' followed by a stylized flourish.

Kris Reyes
Santa Cruz Seaside Company

From: [Kris Reyes](#)
To: [Moroney, Ryan@Coastal](#)
Cc: [Craig, Susan@Coastal](#)
Subject: Re: Regarding CDP Application No. 3-12-020
Date: Monday, June 15, 2015 3:52:22 PM

I broke my response out below in red.

Thanks,

Kris

From: "Moroney, Ryan@Coastal" <Ryan.Moroney@coastal.ca.gov>
Date: Monday, June 15, 2015 at 3:44 PM
To: Kris Reyes <pr@scseaside.com>
Cc: "Craig, Susan@Coastal" <Susan.Craig@coastal.ca.gov>
Subject: RE: Regarding CDP Application No. 3-12-020

Thanks, Kris. As of now, we are unfortunately not set up for electronic submittals of CDP application materials. Therefore, can you please send over hard copies of the materials attached to your email? Once we receive those I will take a closer look and let you know if we need anything further, but I think that should do it.

I've asked Debbie Shull in our office to get the the information mentioned above in hard copy form on Tuesday.

Also, just a quick point of clarification. Your letter states that "During our April 3, 2015 phone conversation regarding items 1 (Memorandum of Agreement) and 2 (River Management Plan) we agreed that the work done by the City of Santa Cruz and the Santa Cruz Seaside Company (SCSC) to address issues relating to the San Lorenzo River would be sufficient to comply with these items." In that conversation, I definitely agreed that staff would accept the SCSC follow-up CDP application as complete without an MOU and/or Management Plan. However, I by no means intended to give you the impression that the work done by SCSC and the City was "sufficient to comply with those items" and I am sorry of you understood otherwise. While I used different language in my email we are on the same page about this aspect.

Rather, as I stated in the email I sent to you just a few weeks ago (attached), the fact that SCSC was seeking permission to breach the Lagoon again reaffirmed the need for Seaside Company to pursue additional efforts (beyond the water-proofing work already done) to achieve a long-term solution to managing the lagoon without the need for artificial breaching of the lagoon, either separately from, or in conjunction with, the City's current efforts, as discussed in our original application status letter. Moreover, the City's current plan is an "interim" pilot project, and only covers the next few years, so I think there is still a lot of work that needs to be done in terms of developing and implementing a long-term management program for the river/lagoon system in a way that protects the SCSC

facilities but is also protective of the important coastal resources at stake. This requires a larger conversation. I'm out of the office the remainder of the week but will follow up with you on Monday of next week.

Thanks - Kris

Thank you,

Ryan Moroney

California Coastal Commission
Central Coast District Office
725 Front Street, Suite 300
Santa Cruz, CA 95060
(831) 427-4891 (Direct)

From: Kris Reyes [<mailto:pr@scseaside.com>]
Sent: Monday, June 15, 2015 10:14 AM
To: Moroney, Ryan@Coastal
Subject: Regarding CDP Application No. 3-12-020

Ryan,

Attached is a letter from Santa Cruz Seaside Company regarding Coastal Development Permit Application No. 3-12-020 (Follow-up CDP for San Lorenzo River/Lagoon Management at Main Beach, Santa Cruz, CA).

You will also find two additional attachments referenced in our letter.

Please let me know if you have additional questions or need more information.

Thanks,

Kris Reyes
Santa Cruz Seaside Company

From: [Moroney, Ryan@Coastal](mailto:Moroney_Ryan@Coastal)
To: [Kris Reyes](#); [Sanders, Kim@Waterboards](mailto:Sanders_Kim@Waterboards); [Brown, Gregory G SPN](#)
Cc: [Scott Collins](#); [Craig, Susan@Coastal](mailto:Craig_Susan@Coastal)
Subject: RE: Potential River Opening Request From Santa Cruz Beach Boardwalk
Date: Friday, May 15, 2015 3:22:49 PM
Attachments: [G-3-14-0031 Emergency Permit \(San Lorenzo River Emergency Channel\).pdf](#)
[Status Letter \(second\) re CDP Application 3-12-020 \(Seaside Co\).pdf](#)

Kris:

Thank you for keeping us in the loop. Here is a link to our emergency permit [application](#). If you anticipate artificially breaching the lagoon, please provide us with a detailed project description as soon as possible, and note that any such activity should be consistent with the terms and conditions of the previous emergency permit (attached), including the requirement that fish monitors be on site during breaching activities, as well as the need for a follow-up CDP. I'd also note as an aside that this would seem to reaffirm the need for Seaside Company to pursue additional efforts (beyond the water-proofing work already done) to achieve a long-term solution to managing the lagoon without the need for artificial breaching of the lagoon, either separately from, or in conjunction with, the City's current efforts, as outlined in the attached letter.

From: Kris Reyes [<mailto:pr@scseaside.com>]
Sent: Friday, May 15, 2015 12:22 PM
To: Sanders, Kim@Waterboards; Moroney, Ryan@Coastal; Brown, Gregory G SPN
Cc: Scott Collins
Subject: Potential River Opening Request From Santa Cruz Beach Boardwalk

I hope this email finds you all doing well.

As the three permitting agencies for the San Lorenzo River opening in September of last year I wanted to take a moment and check in on current conditions and where we stand heading into Memorial Day Weekend next week.

As you may know the river closed a couple of weeks ago. Last week the river reached approximately 7 feet on the trestle gauge and at various times on Saturday we had up to three different rides closed and a significant amount of flooding in our basement work area. The river ultimately breached late Saturday and the conditions stabilized by Sunday.

As of today the river is closed and at approximately 6 feet. We did a thorough walk through of the impacted areas earlier today. Thankfully the improvements we have made since September are helping and the conditions at 6 feet are considerably better than they were a year ago at this time. We expect the water level to rise throughout the next few days and once it hits 7 feet we will again start to experience significant impacts.

So, projecting forward over the next week we are very concerned about the river continuing to rise and reaching 7 feet. As stated above the impacts at 7 feet are likely to be very significant to our guests, our employees and our operations. We are continuing to look at our pumps and ensure they are functioning at their full capacity to help mitigate these impacts.

However, given that Memorial Day Weekend is a week away and is always one of our 3 busiest weekends of the year I wanted to raise the flag today about the possibility of the Santa Cruz Seaside Company seeking permission from your agencies to open the river and lower the water level to 5 feet sometime before Memorial Day Weekend. Please note that at this time it's simply a possibility but I wanted to raise the flag now and inquire as to whether or not the necessary paperwork could be processed within a week.

We are continuing to work on our end to make sure our pumps are functioning at full capacity and as we continue to make tweaks it's possible that we may be fine even at 7 feet. However, I thought it would be wise to broach the subject with you now.

Finally, I recognize that the City of Santa Cruz has made considerable progress on their interim management plan but it has not yet been approved. Therefore, I would assume if an opening is needed it would be done outside of the interim management plan and that Santa Cruz Seaside Company would be acting as the lead on this in the same manner we did in September of last year.

Any thoughts or insight on the issues raised above would be much appreciated.

Thank you,

Kris Reyes
Santa Cruz Seaside Company

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
PHONE: (831) 427-4863
FAX: (831) 427-4877
WEB: WWW.COASTAL.CA.GOV



October 17, 2014

Kris Reyes
Santa Cruz Seaside Company
400 Beach Street
Santa Cruz, CA 95060

Subject: **Coastal Development Permit Application No. 3-12-020 (Follow-up CDP for San Lorenzo River/Lagoon Management at Main Beach, Santa Cruz, CA)**

Dear Mr. Reyes:

On September 23, 2014 we received the transmittal from Santa Cruz Seaside Company regarding the above referenced project, responding to our June 13, 2012 application status letter and our August 20, 2014 violation letter regarding unpermitted breaching of the San Lorenzo River Lagoon. We have reviewed all of the materials you have submitted to date and are in need of additional information to adequately analyze the proposed project for Coastal Act conformance. Towards this end, we are unable to file this application until the following is submitted:

1. **Memorandum of Agreement.** The United States Army Corp of Engineers (USACE) Regional Permit for authorization of the work performed at the mouth of the San Lorenzo River requires that the City of Santa Cruz, USACE, the National Marine Fisheries Service, and the Seaside Company to enter into a Memorandum of Agreement (MOA) outlining a schedule with milestones for the completion of a USACE application, to include an interim management for flood control and a long-term proposal for flood control that precludes mechanical sand bar management. We have reviewed a draft of a Memorandum of Understanding (MOU) circulated by the City, and related to development of an interim management plan for the San Lorenzo River Lagoon. First, it should be noted that an MOA differs significantly from an MOU in that an MOA represents a legal commitment to action (and, typically funding), whereas an MOU simply captures a mutual intention of the parties.¹ Moreover, the MOU that was circulated does not appear to include the Seaside Company as a party, nor does it adequately address the requirement for a long-term proposal for flood control that precludes mechanized breaching. Your September 22, 2014 letter states that "the City of Santa Cruz has taken the lead in development of an interim management program." We do not believe that this satisfies the terms of the USACE permit, nor does it obviate the need for the Seaside Company to actively pursue development of both an interim and long-term management plan for the San Lorenzo River Lagoon (see, item 2 below), particularly in light of the fact that it is the flooding of the Seaside Company's facilities that appears to be one of the primary drivers behind the need for such management plan. Accordingly, we maintain that a Memorandum of Agreement in which the Seaside Company is a party would

¹ See, e.g. <http://corpslakes.usace.army.mil/partners/moumoa.cfm>

be necessary. We believe the most appropriate course of action would be for the MOU that has been circulated by the City to be revised as a Memorandum of Agreement to which Seaside Company is a party, thus committing the Seaside Company, along with the City, to pursuing both an interim and long-term management plan to alleviate flooding of the Seaside Company's facilities in a manner that is consistent with applicable State and Federal law. Absent such action and commitment by Seaside Company, we would pursue a separate and independent process to resolve the numerous outstanding issues related to Seaside Company's manipulation of the San Lorenzo River, including the 2012 berming project that is the subject of this CDP, the July/2014 unauthorized breach that is the subject of Violation File No. V-3-14-0110, as well as the follow-up CDP required for ECDP No. G-3-14-0031 (authorizing the emergency breach of September 26-27, 2014.) Please let us know how Seaside Company would prefer to proceed in this regard.

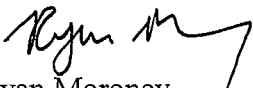
2. **River Management Plan.** As indicated in our previous letter, Condition 5 of ECDP 3-12-009-G directs Seaside Company to provide a comprehensive response to the issue of San Lorenzo River flooding and its relation to the Boardwalk and Santa Cruz Main Beach management in a manner that is most protective of the beach area, San Lorenzo River resources, and public recreational access, including through application of the least environmentally damaging alternative for addressing flood risks and allowing the river/lagoon system to operate as naturally as possible without artificial manipulation. Again, your September 22, 2014 letter states that the City has been the lead agency in the development of an interim management program for the San Lorenzo River. However, the City's involvement in a process to develop an interim management plan does not obviate Seaside Company's independent obligation to: 1) be an active participant in that interim program, and 2) take the lead, along with the City, in preparation of a long-term management plan. Again, we believe the most obvious solution would be for the Seaside Company to commit to participation in the ongoing process initiated by the City intended to address these issues through an MOA as discussed above. Again, absent such action and commitment, we would insist that a separate and independent process would be required of Seaside Company to resolve the numerous outstanding issues related to its breaching of the San Lorenzo, including the 2012 berming project that is the subject of this CDP, the July/2014 unauthorized breach that is the subject of Violation File No. V-3-14-0110, as well as the follow-up CDP required for ECDP No. G-3-14-0031 (authorizing the emergency breach of September 26-27, 2014.) Again, please advise as to how Seaside Company would prefer to proceed in this regard.
3. **Monterey Bay National Marine Sanctuary.** Your September 22, 2014 letter indicates that it is your understanding that the Monterey Bay National Marine Sanctuary (Sanctuary) "is not part of this process." However, as mentioned in our June 13, 2012 letter, both the prior emergency project and any proposed interim or long-term management plan may include development and/or construction access and staging below the mean high water line, i.e. the project may be located within the Sanctuary's permitting jurisdiction. Therefore, we would again request that you please contact the Sanctuary (Deirdre Whalen at 831-646-4207) and

inquire as to any necessary permit process there, if applicable. Depending on Seaside Company's decision as to how it wishes to proceed with regard to items 1 and 2 above, that application can be made in conjunction with the ongoing permitting process for the interim management plan or as part of a separate and independent process. In either case, if Sanctuary staff determines that the project is not located within its jurisdiction, you will need to provide evidence from the Sanctuary stating that no approval is necessary from that agency.

4. **State Lands Commission.** We received a copy of the September 19, 2014 letter from the State Lands Commission indicating its determination that the subject property is within the sovereign tidelands and submerged lands that have been transferred, in trust, to the City of Santa Cruz.
5. **Fee.** This confirms that the fee for this permit was made by check dated June 28, 2012.

We will hold the application for six months from today's date (i.e., until April 16, 2015) pending Seaside Company's response to items 1 and 2 above and the Sanctuary's response regarding jurisdiction. After these responses have been received, the application will again be reviewed and will be filed if all is in order (Government Code Section 65943(a)). Please submit all of the requested responses and Sanctuary materials at the same time. Please note that there may be additional materials necessary for filing purposes depending upon the nature of the information provided pursuant to the above-listed requirements. I look forward to working with you on this project. Please do not hesitate to contact me at (831) 427-4863 if you have any questions regarding the above information requests.

Sincerely,



Ryan Moroney
Coastal Planner

cc: Scott Collins, Assistant to the City Manager, 809 Center Street, Room 10
Santa Cruz, California 95060



OFFICE OF THE CITY MANAGER

809 Center Street, Room 10, Santa Cruz, CA 95060 • (831) 420-5010 • Fax: (831) 420-5011 • www.cityofsantacruz.com

RECEIVED

MAR 26 2015

March 23, 2014

CALIFORNIA
COASTAL COMMISSION

Mr. Ryan Moroney
Coastal Planner
California Coastal Commission
Central Coast District Office
725 Front Street, Suite 300
Santa Cruz, CA 95060

Dear Mr. Moroney:

The City of Santa Cruz is in receipt of your February 17, 2015 letter requesting additional information on our CDP Application 3-15-0144. Below, please find additional clarification pertaining to the list of information that you have requested, as well as the completed forms. Large format plan sets will be sent to your office under separate cover.

1. **Authorized Agent:** The completed Authorized Agent form has been completed and is attached.
2. **Proof of Applicant's Legal Interest in the Property:** A letter from the Seaside Company is attached authorizing the use of its property for the proposed activities covered by the permit.
3. **Project Description:**
 - a. **Long-Term Solution:** The City of Santa Cruz has no dedicated funding source for management activities associated with the San Lorenzo River Flood Control Project or associated areas, such as Main Beach, with regards to the summer lagoon management. All funds for these types of activities must come from the General Fund or Federal or State grant sources. Minimum responsibilities associated with the San Lorenzo River Flood Control Project include annual vegetation maintenance and levee maintenance and

operations in accordance with the U.S. Army Corps of Engineers Operations and Maintenance Manual.

In order to prepare a long-term management plan for the lagoon, the City must either assign limited General Fund dollars or work with the U.S. Army Corps of Engineers to obtain Federal or State funds for the planning process and associated costs such as CEQA and NEPA review. The City has estimated that a long-term management plan will range from \$350,000–\$600,000 (this includes all the permit, design, engineering, infrastructure, construction, and maintenance costs) to complete and will take approximately 18–24 months. The City is pursuing funding sources from the U.S. Army Corps of Engineers and the California Department of Water Resources State Flood Control Subventions Program, as well as Proposition 1 Water Bond funds to be disbursed later in 2015. The Interim Management Program (IMP) will provide useful information to inform the long-term management plan, especially in regards to reduction of flooding impacts, habitat conditions within the lagoon under the installed culvert condition, and utilization of the lagoon by focus fish species under the IMP activities. This data can be gathered through the IMP monitoring program as proposed.

b. Economic Analysis: The City does not have the funding to prepare an economic analysis for the two activities proposed for the IMP and understands that the California Coastal Act does not require economic analysis for coastal development permits. The City is able, however, to provide clarification for the costs of the two activities proposed for the IMP and their associated maintenance costs and apologize for any confusion in the information prepared and submitted. The engineering and feasibility cost estimates for the two activities are clarified as follows.

1. **Temporary Outlet Channel:** Estimated cost is \$30,000 per action. This is considered a high-end cost estimate for this activity, and six channels implemented in a season would be \$180,000. There is no way to predict how many channels will be needed in a given season, so the cost could vary from \$30,000 to \$180,000 for this activity.
2. **Temporary Head-Driven Culvert:** Estimated cost is \$350,000 for materials, installation, and demobilization (this does not include design, maintenance, and monitoring costs, which are estimated at \$150,000). As described previously, there is no dedicated source of funding for this activity at this time, and the City requires time to obtain the funding for this activity. The City is proposing that the Head-Driven Culvert not be made permanent until its effectiveness can be evaluated via the three-year IMP. If the Head-Driven Culvert is determined to be part of the long-term solution, annual costs of \$100,000–\$200,000 are estimated for maintenance and monitoring. The City is committed to achieving the objectives of the IMP during the three-year program timeline and would like to have additional information about flood relief and habitat conditions before committing to this as the long-term management action. Further, the City is committed to identifying long-term management through a planning process.

- c. **Temporary/Seasonal Versus Permanent Culvert (Alternatives) Analysis:** The City understands that the best environmental project would avoid or limit activities to sensitive coastal resources and has developed the IMP to achieve that. The Temporary Head-Driven Culvert is a new technology never proposed for use in a coastal lagoon in California to achieve the desired objectives of the IMP.

The installation and demobilization will occur in an area of active wave and tidal action and has been designed to be as non-intrusive as possible. Installation will include trenching only 100-foot sections and backfilling immediately after the culvert sections are installed. Project equipment will be on tires, not treads, and is not expected to cause beach erosion. The construction zone will not require dewatering of the river, nor will it require major excavation of the beach except for the 500-foot channel for installation. Permanent infrastructure, such as the concrete flume used in Soquel Creek, is also avoided through the temporary nature of the IMP activities until such time that they can be evaluated for more permanent use.

- d. **Public Access Impact Analysis:** The temporary nature of both the Temporary Outlet Channel and Temporary Head-Driven Culvert are not expected to impact public access at the implementation site for significant periods. The Temporary Outlet Channel is expected to be completed in a 12-hour period or less and will be timed to a low- and high-tide cycle as is practicable. The location of the Temporary Outlet Channel will likely be at the far eastern side of the Main Beach where public access is often limited due to the lagoon braiding in most years or to a flooded beach area with poor water quality. Public use of this area for beach activities is variable, and the area is easily closed off for the temporary nature of installing the channel.

The Temporary Head-Driven Culvert can be installed in the early morning hours based on negative low tides, and all activities will be focused at the eastern end of the Main Beach against San Lorenzo Point with access for equipment provided by the access ramp under the Trestle Bridge. The area can be flagged off and monitored by City staff during construction periods. Even during installation, the public can still access the Main Beach, and after installation, the culvert will not hinder public access to San Lorenzo Point or other areas of the Main Beach. After installation, the risers, culvert piping, H-piles, weights, and duck-bill outlet feature are not expected to cause public access issues. The risers will likely be partially or totally submerged in the lagoon and underwater and, unless purposely accessed by swimming or boating, should not affect the public. The top of the riser inlet will be screened. The culvert piping will be buried under four feet of sand and with the buildup of the sandbar and beach during the summer months this piping is not expected to cause public access issues. The H-piles and weights similarly will be underwater and are not expected to affect public access or result in beach erosion. The duck-bill outlet feature may be exposed during certain tides and will likely be affected by wave action and beach erosion. It will be visible on the beach and easily seen by beach walkers and can be marked, as necessary, and is not expected to impact public access. The duck-bill is much less intrusive than other outfall features in beaches, such as the cement weir at Capitola Beach used for Soquel Creek lagoon management (see Photos 1 and 2).

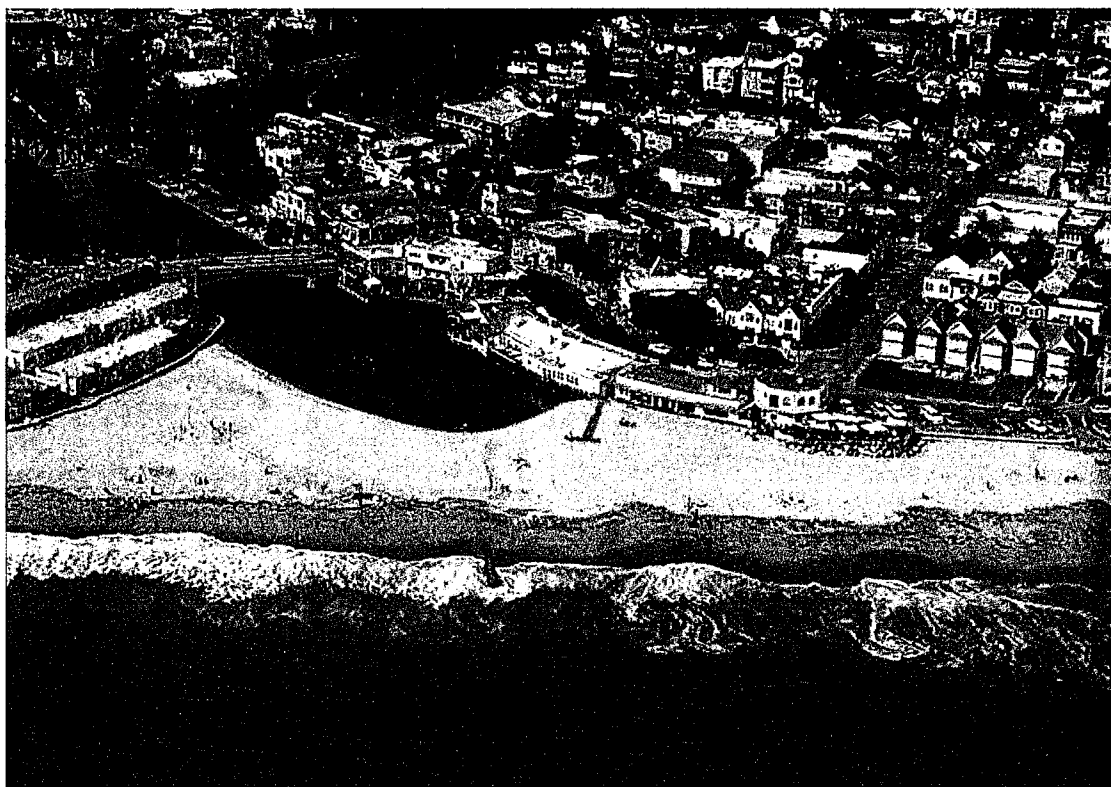


Photo 1: Note cement bulkhead of flume extending into ocean mid-beach.



Photo 2: Cement flume structure on Capitola Beach.

A Permanent Head-Driven Culvert attached to San Lorenzo Point is not proposed as part of the IMP and, therefore, public access impacts are not appropriate to be provided at this time. However, the City believes that public access impacts would be similar to those of the Temporary Head-Driven Culvert and that the area near San Lorenzo Point would be temporarily closed during the installation of the culvert over an estimated construction period. Once installed, the culvert and associated piping would be underwater when the lagoon was closed. Design and engineering for a permanently installed culvert on San Lorenzo Point has not been completed, so impacts to public access cannot be accurately stated at this time.

- e. **Flooding Impact Analysis/5.0 Feet NGVD:** The following additional information and evidence is provided to document the flooding associated with lagoon elevations exceeding 5.0 Feet NGVD and effects on City infrastructure and neighboring properties.
1. **San Lorenzo River Flood Control Levee Pump Facilities:** These facilities are designed to be standby storm water pumps and not continuous water circulating pumps. From July 28, 2014–October 8, 2014 (73 days) pumps at San Lorenzo/Bixby ran a total of 121 hours while the river was shoaled. Pumping starts at an approximate four-foot river level. There was no significant change in run times even with a one-foot control drop that was made in September 2014. In comparison to July 2010–July 2011 when river flows were greater and 33.89 inches of rain fell, the pumps at San Lorenzo/Bixby ran a total of 205 hours over a one-year period.
 2. **Ground Saturation along Low-Lying Areas North of Levee:** The associated rise of lagoon waters under streets and into infrastructure north of the levee includes impacts to pavement and street conditions and to a stoplight electrical system. Photos 1 and 2 of the Project Description and Supplemental Project Information document already submitted show ground saturation impacts along San Lorenzo Boulevard and Ocean Street. These photos were taken on October 22, 2014 when river levels were noted at 5.3 feet at the Soquel Bridge. Photos 1 and 2 in the Project Description and Supplemental Project Information document a sinkhole that occurred at the time of the photo.

Additional photos (Photos 1 and 2) are included in this response letter below documenting ground saturation impacts. The following photos were taken on September 16, 2014 and show groundwater saturation impacting stoplight electrical wires and street pavement weeping at San Lorenzo Boulevard and Ocean Street. The river was noted at five feet at the Soquel Bridge at the time of the photo.
 3. **Flooding in Basements of Buildings along Pacific Avenue in Santa Cruz:** The City of Santa Cruz received reports of flooding in basements of buildings along Pacific Avenue in Santa Cruz on September 14, 2014. Photos 3, 4, and 5 show these conditions in September 2014 when river levels were above five feet.



Photos 1 and 2: Taken on San Lorenzo Boulevard near Ocean Street, September 16, 2014.



Photo 3: Del Mar Theater basement flooding.

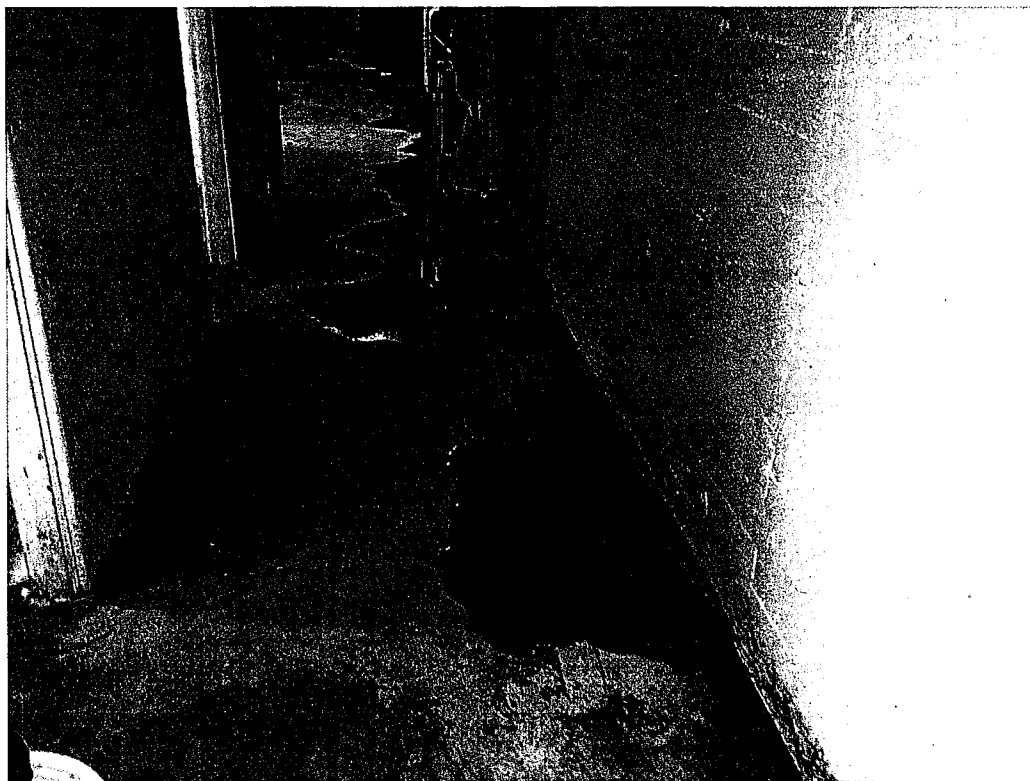


Photo 4: Del Mar Theater ground floor flooding.

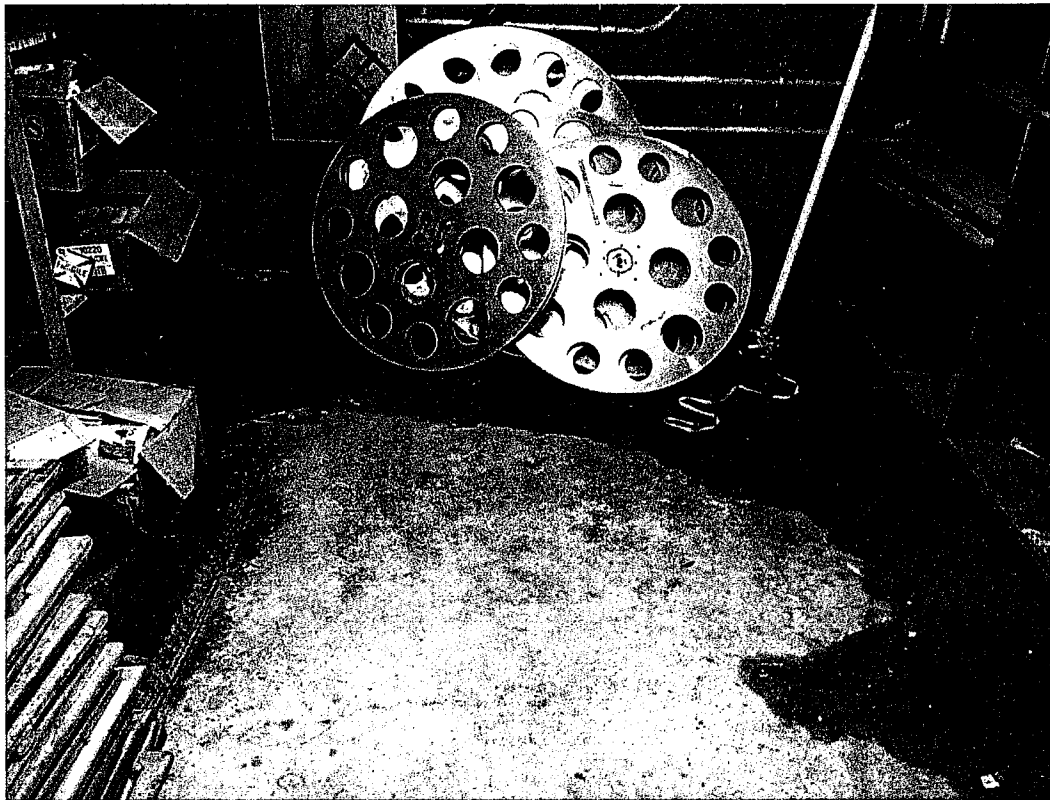


Photo 5: Del Mar Theater storage area flooding.

- f. **Temporary Outlet Channel Component:** The IMP requests permit approvals for implementing up to six Temporary Outlet Channels per season from May 1–November 15. This request is based on examination of twelve years of water surface and stream-flow data collected for the San Lorenzo River Lagoon. Review of this data resulted in this estimate of the potential maximum number of Temporary Outlet Channels needed. In a given year, the need to implement a Temporary Outlet Channel will be influenced by stream-flow conditions. The City will not implement a Temporary Outlet Channel if trigger conditions are not occurring. The period of time proposed for implementing the outlet channel is May 1–November 15 to correspond to the time when the lagoon naturally closes, which is during these months when river flows are reduced. This period is also proposed to avoid the need for emergency breaches when low flows maintain a closed lagoon for longer periods and may occur as early as May and into November. Recent low-flow conditions have resulted in this occurring.

In general, review of the 2002–2013 data demonstrate the following key findings which provided the estimate of needing to potentially implement up to six channels during a season:

- Closures tend to be intermittent in April–July and longer (>2 weeks) from August–November.
- On average, closures in May–June lasted less than three days, and the stage only

surpassed five feet for an average of less than twenty-four hours. This is likely because of the high flows (>30 cfs) in those months, which cause breaching before waves can build the beach higher than five feet.

- Closures are most common in August–October (>13 days per month) and less common in November–December (<5 days per month). Late summer closures sometimes lasted longer than one month (See Coastal Processes Report figures).

The six days maximum refers to six individual days if six channels were done in a season. Each channel is estimated to take less than twelve hours to complete depending on tide conditions.

4. **Project Plans:** A set of large format project plans will be provided under separate cover and BMP language will be provided on the plan set. Smaller sets are attached to this letter.
5. **Construction Access:** Both activities will require the use of heavy equipment. Staging will be from the Santa Cruz Beach Boardwalk parking area (APN #007-321-09) and along the beach (APNs #007-321-07 and #007-321-04). Equipment will be stored in the parking area when not in use. Equipment will be washed off before and after daily use. Equipment will enter the area via the access ramp under the Trestle Bridge and stay to the west of the lagoon area or will access through Santa Cruz Beach Boardwalk ramps along APN #007-321-04 or City of Santa Cruz APN #007-321-03 if conditions are not appropriate at the direct project site. Equipment will include a bulldozer and excavator. The excavator will be equipped with rubber tires. Installation will occur during low-tide periods and contact with ocean waters is not expected. Please see the Project Description and Supplemental Project Information Pages 19–28 for specific Action Triggers, Construction Description, Minimization Measures, Notification Processes, Public Notification Plan, Final Plan Development and Documentation, and Equipment Best Management Practices for both activities.
6. **Public Access During Construction:** The Project Description and Supplemental Project Information describes a Public Notification Plan process for each activity. The areas of the beach used for the installation of the channel or culvert will be taped off with construction and safety tape and appropriate City personnel will be on-site during construction, including safety personnel, to keep the public away from the work area. Public access is not desired during the construction period for the culvert and channel due to the presence of heavy equipment. The public will only be denied access to this portion of the Main Beach for the period that it takes to complete the channel (estimated at a maximum of twelve hours) or install the culvert. Due to the availability of other areas along the Main Beach during the construction period, no mitigation is proposed for public access impacts at the specific construction site.
7. **Construction Plan and Best Management Practices:** The construction plans will include these Best Management Practices in the printed versions provided to the California Coastal Commission (CCC).

Mr. Ryan Moroney

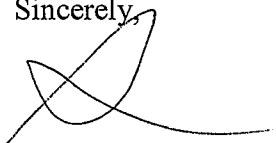
March 23, 2015

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8. **Visual Impact Analysis:** The City requests a meeting or phone call to discuss the need for this analysis. The majority of the culvert system will either be submerged or buried under the sand. The duck-bill outlet may be exposed during some tide periods, but can be painted as needed to avoid visual impact. Several examples of duck-bill outlets used on other beaches in California are provided in the Supplemental Information. The duck-bill outlet, as proposed, will not include a cement collar. Greater visual impacts exist on local beaches than the system proposed for the IMP, including the cement culvert and weir at Capitola Beach (see previous photos).
9. The Biological Report will be sent under separate cover.
- 10-13. The City will implement the requested actions.
14. The City has submitted the project for review by the Monterey Bay National Marine Sanctuary (MBNMS). The MBNMS has not provided comment on the project as of the date of this letter.
15. The State Lands Commission has determined that the project will take place within sovereign tidelands and submerged lands that have been transferred in trust to the City of Santa Cruz (see attached letter of September 19, 2014).
16. **Other Permit Approvals:** The other permits for the IMP as listed in the application materials are currently under review. The City will keep the CCC informed as these permits are provided to the City.
17. **Development and Permitting History:** The City received permit approvals on April 8, 1992 for a water level control structure for the San Lorenzo Lagoon. The permit number was 3.29.15. The City has provided the design and associated documents for this project as a submittal with this letter.

Thank you for the opportunity to provide additional information concerning the IMP. If you have any additional questions, please contact me by phone at (831) 420-5017 or via e-mail at scollins@cityofsantacruz.com.

Sincerely,



Scott Collins

Assistant to the City Manager

Attachments