

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE
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W20b

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Filed: 8/15/01
49th Day: 10/3/01
Staff: SC
Staff Report: 8/20/01
Hearing Date: 9/12/01
Commission Action:

**STAFF REPORT
PERMIT AMENDMENT**

Application number.....3-90-041-A5

Applicant.....City of Capitola

Project Location.....Soquel Creek rivermouth, Capitola, Santa Cruz County

Project Description.....Further amendment to permit 3-90-041 to allow for annual artificial breaching of Soquel Creek Lagoon at Soquel Creek river mouth for five years

Original Permit.....Implementation of the Soquel Creek Lagoon Enhancement and Management Plan including yearly formation of a sandbar across Soquel Creek in conjunction with an ongoing program to monitor and restore the natural creek system.

File documents:..... Soquel Lagoon Management and Enhancement Plan, 1990; Soquel Creek Lagoon Monitoring Reports, 1990-97, 1999, 2000 (D.W. Alley & Associates); Summary Report Regarding Development, Implementation and Monitoring of the Soquel Creek Lagoon Management and Enhancement Plan, 1996 (D.W Alley & Associates); CDP 3-89-75; CDP 3-90-041; CDP 3-90-041-A2; CDP 3-90-041-A4.

Staff Recommendation.....Approval with Conditions

Procedural Note

Coastal Development Permit Amendments

The Commission's regulations provide for referral of permit amendment requests to the Commission



California Coastal Commission

RBH

if:

1. The Executive Director determines that the proposed amendment is a material change,
2. Objection is made to the Executive Director's determination of immateriality, or
3. The proposed amendment affects conditions required for the purpose of protecting a coastal resource or coastal access.

If the applicant or objector so requests, the Commission shall make an independent determination as to whether the proposed amendment is material (Title 14 California Administrative Code Section 13166).

The subject application is being forwarded to the Commission because the Executive Director has determined that the proposed amendment represents a material change to the original permit.

I. EXECUTIVE SUMMARY

The City of Capitola is requesting to amend coastal development permit 3-90-041-A4 to allow for artificial breaching of the Soquel Creek lagoon consistent with the policies of the Soquel Creek Lagoon Management and Enhancement Plan (Management Plan), for a period of five years. Breaching protocols in the Management Plan include the use of a flume to pass storm flow during minor rain episodes, postponement of full breaching of the sandbar until late fall to avoid killing juvenile steelhead by flushing them into the Bay before they are ready to adapt fully to saltwater, notching of the sandbar at an elevation that will cause the sandbar to breach prior to flooding of the adjacent residences and businesses, and monitoring of sandbar breaching (see Exhibit 4). The breaching activities are overseen by the California Department of Fish and Game 1601 stream alteration agreement process.

Staff recommends approval of the amendment and notes that all previous conditions from coastal development permit 3-90-041 and subsequent amendments A1 through A4 remain in effect (except for Special Condition #3 of permit amendment 3-90-041-A4, which prohibited artificial breaching of the sandbar).

II. STAFF RECOMMENDATION ON AMENDMENT

The staff recommends that the Commission, after public hearing, **approve** the proposed amendment subject to the standard and special conditions below. Staff recommends a **YES** vote on the following motion:

***Motion:** I move that the Commission approve Coastal Development Permit Number 3-90-041-A5 subject to the conditions below and that the Commission adopt the following resolution:*

***Staff Recommendation of Approval.** Staff recommends a **YES** vote. Passage of this motion will result in approval of the amendment as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the*



Commissioners present.

Resolution to Approve a Coastal Development Permit Amendment. *The Commission hereby approves the coastal development permit amendment on the ground that the development as amended and subject to conditions, will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit amendment 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 amended development on the environment; or (2) there are no feasible mitigation measures or alternatives that would substantially lessen any significant adverse effects of the amended development on the environment.*

III. CONDITIONS OF APPROVAL

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 or 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.

IV. RECOMMENDED FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. Recent Permit History

In April 2001 the Commission approved amended coastal development permit (CDP) 3-90-041-A4 which allows the City of Capitola to continue implementation of the Soquel Creek Lagoon Management and Enhancement Plan (Management Plan) for a period of five years, consistent with permits issued by the California Department of Fish and Game (CDFG) and the Army Corps of Engineers (ACOE). This Management Plan includes yearly formation of a sandbar across Soquel



Creek in conjunction with an ongoing program to monitor and restore the natural creek system. Special Condition #3 of CDP3-90-041-A4, however, specifically states that artificial breaching of the lagoon system is not allowed. Instead, this condition requires that the City return for a coastal permit amendment that incorporates the recommendations of CDFG and the National Marine Fisheries Service (NMFS) regarding artificial breaching, for the protection of steelhead. In past years, the City has been issued emergency permits for artificial breaching of the sandbar when flooding was imminent. The City of Capitola is now requesting to amend CDP 3-90-041-A4 to allow for annual artificial breaching of the Soquel Creek Lagoon sandbar for a period of five years.

Special Condition #2b of CDP 3-90-041-A4 requires the permittee to submit a copy of CDFG's stream alteration agreement to the Executive Director (see Exhibit 3). City staff and Commission staff are still awaiting receipt of this document. However, Commission staff has been in contact with CDFG personnel who have indicated that CDFG will impose conditions in the stream alteration agreement that will ensure that Management Plan protocols are carried out effectively, including protocols for artificial breaching. CDFG personnel do not anticipate any substantive changes to these conditions.

B. Area Description/General Background

Soquel Creek drains one of the major watersheds of central Santa Cruz County. The Creek enters Monterey Bay at its northern rim. The City of Capitola (Exhibit 1) was founded at the creek's mouth in the 1870's and became California's first seaside resort. The City is now highly urbanized but retains its role as an important visitor serving recreation area and derives a major portion of its income from tourists. The lagoon area of the creek is subject to saltwater inflow and remains within the original coastal permit jurisdiction of the California Coastal Commission. The lagoon is bounded on the south by Capitola Beach and the sea, on the east by the town center and its Esplanade, and on the west by Capitola Wharf. Resort accommodations and restaurants front the lagoon. Upstream, residential development lines both banks of the creek.

Under natural conditions and in a year of average rainfall, Soquel Creek flows into the sea well into the summer months. As the seasonal drought sets in, the creek's flow gradually decreases and a sandbar forms across its mouth, creating a natural lagoon. For many decades the City has artificially closed the creek mouth before the Memorial Day weekend. The elevated river level forms a lagoon for recreational uses and in the fall supports the City's Begonia Festival, an annual flower-float parade down the river. The creek's outflow from the lagoon is then diverted through a permanent flume structure (Exhibit 2). The flume contains flashboards that can be removed to allow water through the flume. The City successfully accelerates the conversion of saltwater in the lagoon to freshwater through the use of a shroud device. The shroud is manually bolted to the flume and draws the heavier saltwater from the bottom of the lagoon and accelerates the conversion to freshwater, which is beneficial to young steelhead.

Prior to development of the Management Plan, the City historically breached the sandbar after the Begonia Festival in September. Early breaching, however, eliminates most steelhead rearing habitat



and possibly kills many juvenile steelhead by flushing them into the Monterey Bay before they are ready to adapt to saltwater. The one to three months between the Begonia Festival and the first heavy rains provide additional time for juvenile steelhead to grow, increasing the likelihood of their ocean survival. CDFG requires maximum delay of artificial sandbar breaching, this being consistent with flood control.

In 1990 a bolt was set into a wooden piling adjacent to the restaurants at the lagoon. The bolt's elevation was surveyed to coincide with the water surface elevation at which flooding was imminent (1.77 feet above the top of the flume inlet). The management goal is to pass storm flow through the flume during the first small storm events during the fall, without breaching the sandbar. The City accomplishes this by removing boards from the flume inlet prior to and during increased storm flow. The wooden cover of the first flume portal may also be removed. Small storms in the early fall usually do not produce much sustained runoff. Although the lagoon level may rise slightly with the inflow of urban runoff, the rise can be of short duration if some flashboards are removed to increase flume capacity. As an alternative to premature sandbar breaching, the sandbar can be notched with a tractor and a number of flashboards can be removed from the flume so that larger, later storms and lagoon inflows will breach the sandbar prior to any flooding of the residences, streets, and businesses around the lagoon. Postponing complete breaching of the sandbar until the larger storms later in the fall allows steelhead to be better adapted to saltwater conditions.

C. Project Description

The City of Capitola proposes to use methods to artificially breach the lagoon sandbar to prevent flooding of adjacent residences and businesses during periods of high rainfall. In the fall the City proposes to use a tractor to cut a notch in the sandbar adjacent to the flume. The notch (trench) runs the full width of the sandbar (lagoon to ocean) to focus water once the lagoon water reaches the notch's level. The City proposes to cut the sandbar notch at the elevation of the piling bolt. This will prepare the sandbar so that with sufficient storm flow, the sandbar will breach prior to flooding of the adjacent residences and businesses. The City proposes to use the flume to pass storm flow during minor rain episodes to prevent early breaching of the sandbar. If the flume is able to receive and pass through the storm flow such that flooding does not become a threat, then the boards will be replaced in the flume inlet after the storm flow has passed, and the sandbar remains intact. If the water surface reaches the elevation of the piling bolt during a large storm (despite the effort to pass storm flow through the flume), then the City will further facilitate sandbar breaching to prevent flooding of surrounding residences and businesses. In this case a tractor will be used to re-cut the sandbar notch so that the sandbar breaches prior to flooding (the notch must be re-cut because over time the notch fills in from foot-traffic on the beach). By postponing breaching until later in the fall, once the breaching occurs there should be sufficient flow in the creek to send a plume of freshwater into the Monterey Bay to allow lagoon fish to slowly acclimate to the salinity change and to keep the sandbar open.



D. Coastal Act Issues

1. Marine Environment /Environmentally Sensitive 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.

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.

Section 30236 of the Coastal Act states:

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 floodplain 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.

Section 30107.5 of the Coastal Act states:

"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.



Section 30240 of the Coastal Act states:

(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.

Section 30253 (1) of the Coastal Act states:

New development shall minimize risks to life and property in areas of high geologic, flood, and fire hazard.

Soquel Creek lagoon, while narrow and shallow, provides significant habitat for migratory waterfowl, fish, and invertebrates. It is a particularly important environment for anadromous steelhead since fingerlings use the lagoon as a nursery during the summer months. The fish gain size and stamina there, enabling them to survive at sea once their out-migration occurs.

Because of the significance and sensitivity of the stream habitat, Soquel Creek is identified as an environmentally sensitive habitat where habitat values must be protected from disruption and only uses dependent upon the resource allowed, as specified in Section 30240 of the Coastal Act. Additionally, Sections 30230 and 30231 of the Coastal Act require the maintenance and restoration of the biological productivity and quality of coastal streams to maintain optimum populations of marine organisms and to protect human health. Sections 30230, 30231, 30236, and 30240 strictly protect marine resources. Very limited and specialized developments are permitted in streams and wetlands.

Coastal Act Section 30236 allows for flood control projects as necessary for public safety or to protect existing development. Natural breaching of the sandbar could cause flooding of the commercial and residential development of Capitola Village. Historically, the City artificially breached the sandbar in September after the Begonia Festival. Early breaching, however, eliminates most steelhead rearing habitat and possibly kills many juvenile steelhead by flushing them into the Bay before they are ready to adapt to saltwater. The Management Plan contains a number of recommendations regarding fall breaching of the sandbar, including trying to maintain sandbar integrity until late in the fall and monitoring of sandbar breaching by a qualified fisheries biologist (see Exhibit 4).

As stated above, CDFG has not yet completed its stream alteration agreement regarding lagoon formation and artificial breaching. CDFG, however, has indicated that certain conditions will likely be contained in the forthcoming stream alteration agreement. These include sweeping of public



streets in early fall to reduce polluted runoff into the creek (the City sweeps the streets weekly), trying to maintain sandbar integrity until late in the fall by passing early and small storm flows through the flume by removing flashboards when necessary, and notching the sandbar in the fall at a predetermined elevation that prevents flooding. These conditions are consistent with the provisions for breaching in the Management Plan.

In addition, ACOE has consulted with NMFS regarding continued implementation of the Management Plan, including conditions for artificial breaching. The conclusion reached was that "Due to measures proposed by the City of Capitola for the management of the lagoon and breaching, the NMFS concluded that the project was not likely to adversely affect threatened CCC ESU steelhead trout..." (see Exhibit 5). In addition, the ACOE has communicated their approval of artificial breaching if it is performed consistent with the Management Plan (personal communication Bob Smith, ACOE).

As stated above, all previous conditions from CDP 3-90-041-A4 (except Special Condition #3) remain in effect, including the requirement that the City perform water quality monitoring and submit yearly monitoring reports. The City's biological consultant monitors water temperature, salinity, and oxygen levels of the lagoon from May until October. These water quality parameters are then rated according to the tolerances of steelhead. The City's consulting biologist also monitors breaching of the sandbar, consistent with the Management Plan. Santa Cruz County monitors bacteria levels at the mouth of Soquel Creek on a weekly basis throughout the year. In the year 2000, the volunteer group Urban Watch sampled water from designated storm drains that lead into Soquel Creek. This sampling was done weekly from May through the first major storm event of the fall. These water samples were tested for detergents, copper, phenols, chlorine, turbidity, ammonia, color, and odor. The Urban Watch program was performed in cooperation with the City of Capitola, the Monterey Bay National Marine Sanctuary (MBNMS), and the Coastal Watershed Council. This year, due to high turnover of City staff, the City did not pay the required fee to be in the Urban Watch program. The City, however, has stated its intent to take part in the Urban Watch program in 2002 (personal communication with Greg Gauthier, Executive Director of Coastal Watershed Council).

In conclusion, the City follows procedures for artificial breaching of the sandbar, as outlined in the Management Plan, which include a delay in breaching until late fall to protect the creek's steelhead population, consistent with flood control. Also, the Management Plan protocols regarding artificial breaching are consistent with the proposed draft conditions of CDFG's stream alteration agreement. In addition, NMFS and ACOE have communicated their approval of artificial breaching if it is performed consistent with the Management Plan. Finally, the City's biological consultant performs water quality sampling during the months when the lagoon is present. The County samples for bacteria on a weekly basis. The City has stated its intent to have Urban Watch renew weekly sampling of runoff into the Soquel Creek from May through the first major storm event of the fall. Given all of the above, the proposed artificial breaching is consistent with the marine environment and environmentally sensitive habitat policies of the Coastal Act.



2. Public Access

Section 30211 of the Coastal Act states:

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.

The project site is located between the first public road and the sea. Pursuant to Section 30211, development shall not interfere with the public's right of access to the sea where acquired through use. As described above, the City proposes to use a tractor to cut a notch into the sandbar to facilitate breaching in the event of a large storm. This notch may need to be re-cut during the fall because over time the notch fills in from foot-traffic on the beach. Cutting the notch will cause a temporary limited disturbance to a small portion of Capitola Beach, but the remainder of the beach will be available to the public during this process. Therefore, the proposed project is consistent with the access policies of the Coastal Act.

V. 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. The Coastal Commission's review and analysis of land use proposals has been certified by the Secretary for Resources as being the functional equivalent of environmental review under CEQA. Accordingly, the Commission finds that as conditioned the proposed project will not have significant adverse effects on the environment within the meaning of CEQA; that there are no feasible alternatives that would significantly reduce any potential adverse effects; and, accordingly, the proposal, as conditioned is in conformance with CEQA requirements.



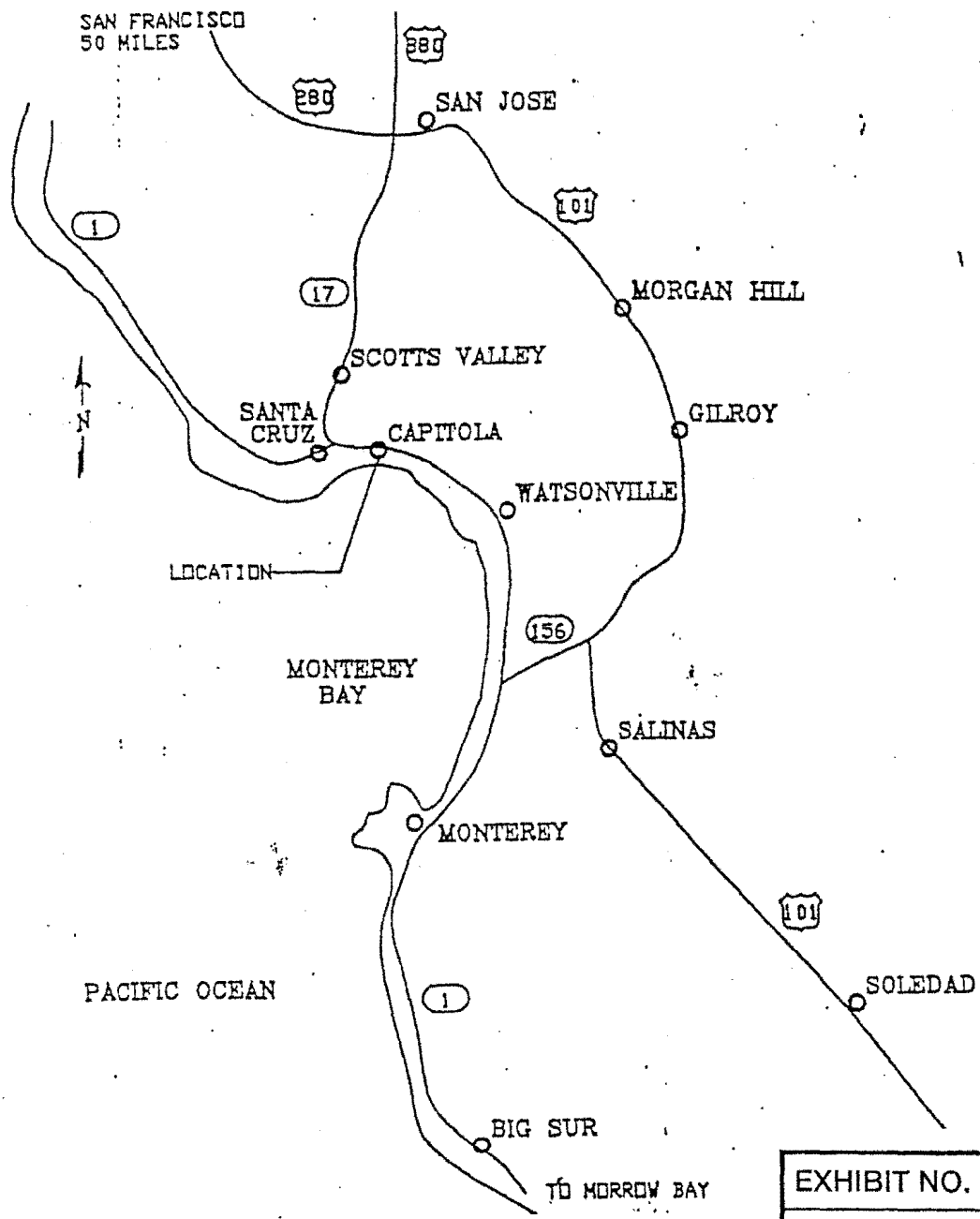
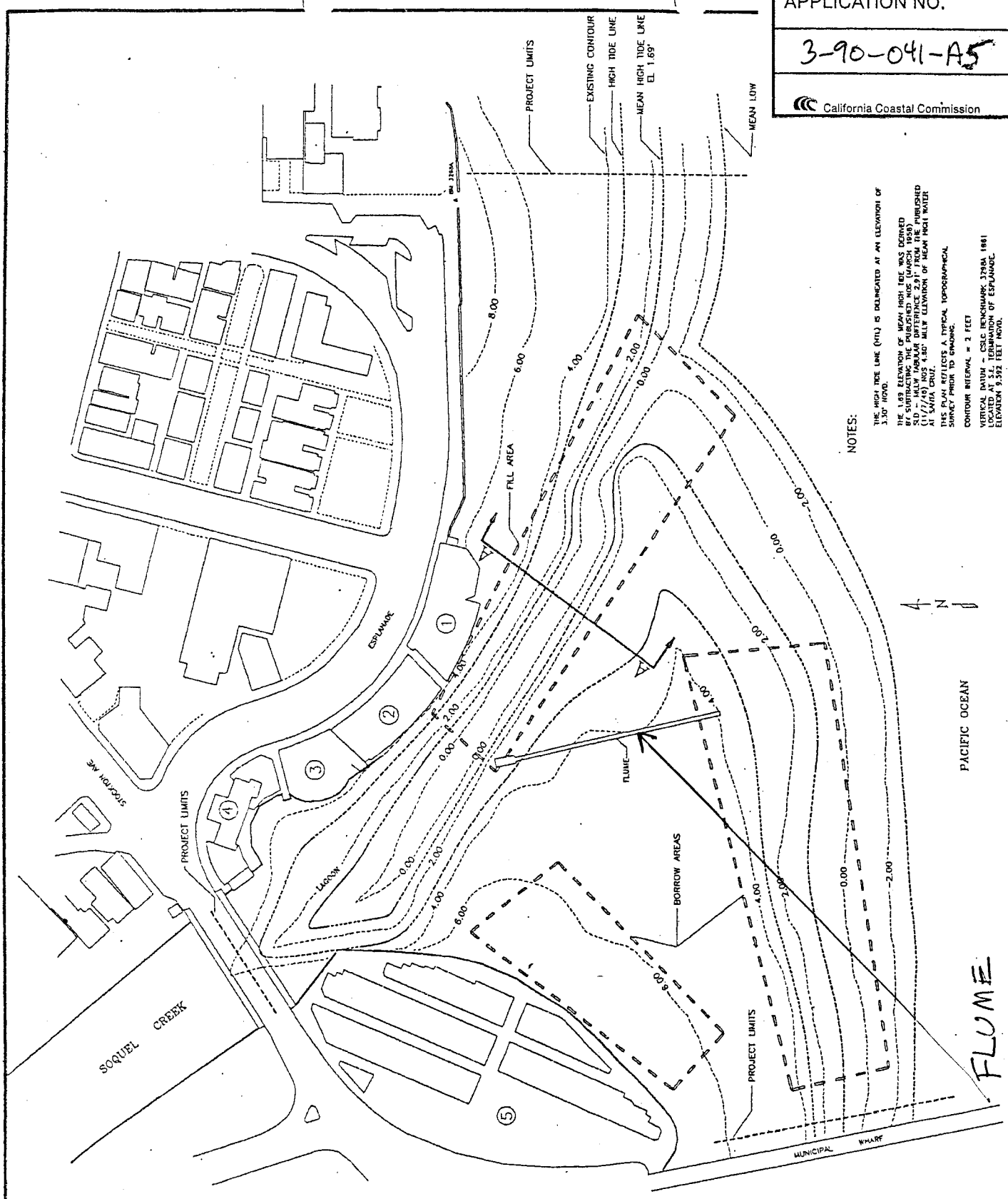


EXHIBIT NO. 1
APPLICATION NO.
3-90-041-A5
California Coastal Commission

<p>PURPOSE: ANNUAL LAGOON CLOSURE & BEACH GRADING PER SOQUEL CREEK MANAGEMENT PLAN.</p> <p>DATUM: NGVD</p> <p>ADJACENT PROPERTY OWNERS:</p> <ul style="list-style-type: none"> ① MICHAEL R. DELAGNES ② BEGGONIA OCEANSIDE PROPERTIES ③ JOSEPH ORLANDO ④ JOSEPH EALY ⑤ VENETIAN COURT HOMEOWNERS ASSOCIATION 	<p>LOCATION MAP</p> <p>CITY OF CAPITOLA 420 CAPITOLA AVENUE CAPITOLA CA 95010</p>	<p>CAPITOLA BEACH GRADING PLAN</p> <p>IN: CAPITOLA BEACH/SOQUEL CREEK AT: MONTEREY BAY COUNTY OF: SANTA CRUZ STATE: CA APPLICATION BY: CITY OF CAPITOLA</p> <p>SHEET 1 OF 1 DATE: 5-16-94</p>
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NOTES:
 THE HIGH TIDE LINE (HTL) IS DELINEATED AT AN ELEVATION OF 3.30' MVD.
 THE 1.89' ELEVATION OF MEAN HIGH TIDE WAS DERIVED BY SUBTRACTING THE PUBLISHED MEAN (MARCH 1989) S.D. - M.L.W. TIDAL DIFFERENCE 2.91' FROM THE PUBLISHED MEAN HIGH TIDE ELEVATION OF 4.30' MEAN ELEVATION OF MEAN HIGH WATER AT SANTA CRUZ.
 THIS PLAN REFLECTS A TYPICAL TOPOGRAPHICAL SURVEY PRIOR TO ENGINEERING.
 CONTOUR INTERVAL = 2 FEET
 VERTICAL DATUM - CSLC BENCHMARK 3798A 1981
 ELEVATION 9.532 FEET MVD.

PURPOSE: ANNUAL LAGOON CLOSURE & BEACH GRADING PER SOQUEL CREEK MANAGEMENT PLAN.
 DATUM: NGVD
 ADJACENT PROPERTY OWNERS:
 ① MICHAEL R. DELAGNES
 ② BEGONIA OCEANSIDE PROPERTIES
 ③ JOSEPH ORLANDO
 ④ JOSEPH EALY
 ⑤ VENETIAN COURT HOMEOWNERS ASSOCIATION

PLAN VIEW

 SCALE
 CITY OF CAPITOLA
 420 CAPITOLA AVENUE
 CAPITOLA CA 95010

CAPITOLA BEACH GRADING PLAN
 EXISTING SITE TOPOGRAPHY
 IN: CAPITOLA BEACH/SOQUEL CREEK
 AT: MONTEREY BAY
 COUNTY OF: SANTA CRUZ STATE: CA
 APPLICATION BY: CITY OF CAPITOLA
 SHEET 1 OF 3 DATE: 04-01-94

development as amended and subject to conditions, will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit amendment 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 amended development on the environment; or (2) there are no feasible mitigation measures or alternatives that would substantially lessen any significant adverse effects of the amended development on the environment.

III. CONDITIONS OF APPROVAL

A. 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 or 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.

B. Special Conditions

1. APPROVED DEVELOPMENT

- a. **THIS PERMIT, SUBJECT TO THE FOLLOWING CONDITIONS,** allows for ongoing implementation of the Soquel Creek Lagoon Management and Enhancement Plan (July 1990), which includes yearly formation of a sandbar at the mouth of Soquel Creek. This permit shall run for up to five years and will expire May 1, 2006. Any proposed substantive change in the stated method of lagoon formation or description of area disturbed shall be submitted to the State Lands Commission for review and to the Executive Director for review and approval or a determination that a coastal development permit amendment is necessary. The information shall be submitted in a timely fashion (not less than three months prior to proposed sandbar formation) to allow adequate time for processing an amendment if needed.



Exhibit 3
3-90-041-A5
Pg 1 of 2

- b. **FOR EACH YEAR OF THE PERMIT** the City shall hire a qualified fisheries biologist to monitor sandbar closure and lagoon water quality throughout the summer and fall lagoon period, as well as perform any additional monitoring measures required by other resource agencies. The fisheries biologist will prepare annual monitoring reports that detail all aspects of lagoon formation and results of water quality monitoring and fish censuses. These reports shall include recommendations regarding further management policies related to maintenance of the summer lagoon. The monitoring reports will also detail all previously made recommendations regarding water quality and whether or not these recommendations have been implemented. If recommendations have not been implemented, the monitoring report shall state the reasons why and offer alternative recommendations for the subsequent year to address the observed problems. By June 1st of each subsequent year the City will forward a copy of the annual report to the Executive Director for review.
- c. The City may request a subsequent amendment of this permit, to extend implementation for an additional time period, by filing an amendment application before May 1, 2006, provided that all five required annual monitoring reports have been submitted.

2. OTHER AGENCY PERMITS/REQUIREMENTS

- a. **PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE SANDBAR**, the permittee shall provide to the Executive Director a copy of the U. S. Army Corps of Engineers permit (including a copy of the NMFS consultation), or letter of permission, or evidence that no Corps permit is necessary for the life of the project. If the Corps permit is for less than five years, the permittee must acquire and submit subsequent Corps permits or letters of permission for the remaining years of this permit, prior to commencement of construction of the sandbar during subsequent years.
- b. **PRIOR TO COMMENCEMENT OF CONSTRUCTION**, the permittee shall submit a copy of the California Department of Fish and Game's stream alteration agreement to the Executive Director. If the CDFG stream alteration agreement is for less than five years, the permittee must acquire and submit subsequent CDFG stream alteration agreements or letters of permission for the remaining years of this permit, prior to commencement of construction of the sandbar during subsequent years.

3. ARTIFICIAL BREACHING

This permit amendment does not allow for artificial breaching of the lagoon system. Any future artificial breaching will require submittal of a subsequent coastal permit amendment in a timely fashion (not less than three months prior to the proposed breaching) to allow adequate time for processing. The amendment application shall incorporate the recommendations of the California Department of Fish and Game and National Marine Fisheries Service regarding artificial breaching. The amendment application shall detail the specifics of how and when the proposed breaching will be carried out.



rafts of pondweed fragments and begonias covered a substantial portion of the lagoon. Filamentous algae began to grow within and beneath the pondweed rafts, and the algae, along with the rapidly decomposing begonias, resulted in an aesthetic and water quality (dissolved oxygen) problem for the lagoon. The onshore wind concentrated the rafts along the edges and upstream portions of the lagoon.

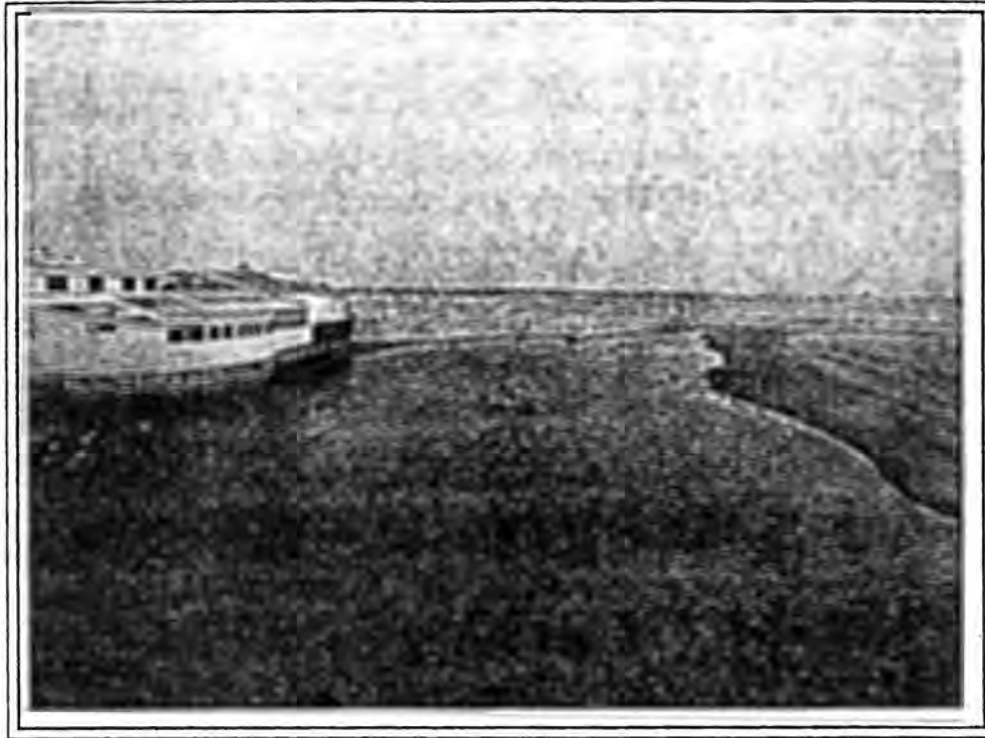
Adopted Recommendations for Managing the Begonia Festival

17. The City shall issue a permit to the organizers of the Begonia Festival that will stipulate the following: 1) allow only the partial dismantling floats in the lagoon to the extent needed to carefully remove floats from the water, 2) the remainder of the dismantling will be done away from the lagoon, 3) begonias at the dismantling site will be disposed of off-site, and 4) remaining pondweed fragments and begonias will be removed from the lagoon within 48 hours after the end of the Begonia Festival and disposed of off-site. The City Public Works Department shall insure that these steps are taken to prevent water quality problems in the lagoon.

G. Fall Breaching of The Sandbar

How Things Work. Historically, the City has artificially breached the sandbar after the Begonia Festival. However, early breaching eliminates most steelhead rearing habitat and possibly kills many juvenile steelhead by flushing them into the bay before they are ready to adapt to salt water. The one to three months between the Festival and the first heavy rains provide additional time for juvenile steelhead to grow, increasing their likelihood of ocean survival. The CDFG requires maximum delay of artificial sandbar breaching, this being consistent with flood control.

EXHIBIT NO. 4
APPLICATION NO.
3-90-041-A5
PR. L13 California Coastal Commission



The winter estuary.

Small storms in early fall usually do not produce much sustained runoff. Although the lagoon level may rise slightly (up to one foot) with the inflow of urban runoff, the rise can be of short duration if some flashboards are removed to increase culvert capacity. If artificial breaching is done before early, small storms, the sandbar usually reforms quickly. Lagoon fish mortality is high as steelhead are flushed out into high salinity water without adequate freshwater to dilute the ocean water long enough to allow fish acclimation. Water quality in the reformed lagoon is normally poor, due to salt water layering.

As an alternative to premature sandbar breaching, the beach can be notched and a number of flashboards can be removed from the culvert so that larger, later storms and lagoon inflows will breach the sandbar prior to any flooding around the lagoon. The notch (trench) would run the full width of the sandbar (lagoon to ocean) to focus water once the lagoon reaches the trench's level. Then down-cutting of the beach is rapid, and potential flooding is alleviated. The lagoon elevations associated with flood

prevention have been surveyed and marked at various locations around the lagoon. A line has been painted on the Shadowbrook Restaurant bulkhead, and a large bolt has been screwed into a piling at the beach on the east side at the elevation that the sandbar notch will initiate breaching. This notching successfully initiated breaching in 1989 without flooding. By postponing the breaching until later in the fall, once the breaching occurs, there is sufficient flow in the creek to send a plume of freshwater into the bay to allow lagoon fish to slowly acclimate to the salinity change and keep the sandbar open.

Adopted Recommendations for Fall Breaching of the Sandbar

18. The City shall remove several flashboards (approximately 8-10 inches in height) prior to the approach of the first storms in fall in order to lower the lagoon water level and to increase outflow capacity of the culvert. This will delay the need for sandbar breaching until the arrival of larger winter storms and runoff capable of keeping the lagoon open, thus mimicking or even enhancing natural conditions and reducing maintenance.

19a. Public Works shall notch the sandbar in fall on the west side of the outlet culvert at the pre-determined elevation that prevents flooding (approximately 1.77 feet = 21 inches above the top of the upstream end of the culvert). A bolt has been attached at that elevation to a piling adjacent to the restaurants. Until bank erosion occurs adjacent to the property with the greatest flooding potential, this elevation will allow 1.3 feet of free board to the top of the berm that presently prevents flooding. By notching the sandbar, runoff from a larger, late fall storm will breach the sandbar prior to flooding with little additional effort needed to artificially breach the bar during the storm. The City shall notify the monitoring group before any anticipated emergency breaching and/or facilitated natural breaching.

19b. The City shall post warning signs to instruct the public to avoid the trench and surrounding beach when sandbar breaching appears imminent.

Exhibit 4
3-90-041-A5
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CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

Subject: Soquel breaching

Date: Tue, 31 Jul 2001 15:06:48 -0700

From: Jonathan Ambrose <Jonathan.Ambrose@NOAA.GOV>

Organization: F/SWR-Santa Rosa PRD

To: "Craig, Susan" <s.craig@coastal.ca.gov>

CC: "Morrison, Ed" <emorrison@ci.capitola.ca.us>


Susan;

The US Army Corps of Engineers (Corps) initiated section 7 consultation under the federal Endangered Species Act (ESA) with the National Marine Fisheries Service (NMFS) concerning possible adverse effects to Central California Coast (CCC) Evolutionarily Significant Unit (ESU) steelhead trout (*Oncorhynchus mykiss*) and CCC ESU coho salmon (*Oncorhynchus kisutch*) resulting from the proposed breaching of the Soquel Creek lagoon by the City of Capitola, Santa Cruz County, California.

Due to measures proposed by the City of Capitola for the management of the lagoon and breaching, the NMFS concluded that the project was not likely to adversely affect threatened CCC ESU steelhead trout, CCC ESU coho salmon, their designated critical habitats, or Essential Fish Habitat per the Magnuson-Stevens Fisheries Act. Due to the NMFS concurrence with the Corps determination of "not likely to adversely affect", the section 7 consultation was concluded informally with a letter to the Corps dated 4 May 2001.

Provided all the conditions in the NMFS letter of concurrence are met, the NMFS has no additional concerns regarding the breaching project. If you have any questions regarding this email please feel free to contact me at (707) 575-6091.

Jon Ambrose

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