

W5d

California Coastal Commission
South Coast District Office
200 Oceangate, 10th Floor
Long Beach, CA 90802-4416
Attn: Sherilyn Sarb, Deputy Director

February 4, 2011

RE: Application No. 5-10-237 (Washington Holdings, Dana Point)
Agenda Item 5.d., Wednesday, February 9, 2011

Dear Ms. Sarb and Coastal Commissioners:

The South Orange County Chapter of Surfrider Foundation wishes to submit the following comments regarding Agenda Item 5.d.

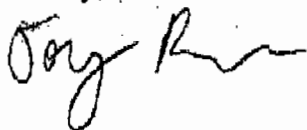
We do not oppose the plan to allow a channel to be created as specified in the commission staff report. We anticipate that the findings will show what we already know: the elimination or minimization of stagnant water conditions should reduce the potential for bacteria re-growth and lessen fecal indicator bacteria concentration in the monitored shallow ocean water.

Our concern lies mainly with what Washington Holdings expects to do with those findings in the future. We will strongly oppose any suggestion to armor the channel, as it could adversely affect natural sediment flow and erosion.

We strongly advocate that the **only** action the bulldozers are allowed to do during this one-year pilot project is digging out the channel as specified by the commission in Special Conditions 1-4 and previously in Consent Cease and Desist Order No. CCC-08-CD-01. There should be no beach "grooming" or other actions that don't serve the purpose of the project.

We appreciate the opportunity to submit comments on this issue.

Sincerely,



Doug Reece
Chairman
South Orange County Chapter
Surfrider Foundation

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COASTAL COMMISSION

CALIFORNIA COASTAL COMMISSION

South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

W5dPermit Application No. **5-10-237**

Date: January 27, 2011

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**ADMINISTRATIVE PERMIT****APPLICANT:** Washington Holdings, Attn: Chad Christensen**PROJECT****DESCRIPTION:**

Reduce the occasional risk of high bacteria levels at Monarch Beach by creating temporary berms of sand to channel runoff from Salt Creek directly into the Pacific Ocean. Establish water flow from the Salt Creek outlet perpendicular to the shoreline by creating two (2) sand berms, upcoast and downcoast of the ponded water and outlet flow on the beach, that are limited to 3 feet high and 4 feet wide, and approximately 130 feet long, each. If necessary to direct the flow, a pilot channel, no more than 4 feet wide is proposed to be excavated from the area between the berms, and out to the daily high tide line. This is a 'pilot' project to be carried out and monitored for a period of one (1) year in order to help develop a long term management plan for the outlet.

PROJECT**LOCATION:**

500 Monarch Bay Drive, City of Dana Point (Orange County)
APN# 670-151-55

EXECUTIVE DIRECTOR'S DETERMINATION: The findings for this determination, and for any special conditions, appear on subsequent pages.

NOTE: P.R.C. Section 30624 provides that this permit shall not become effective until it is reported to the Commission at its next meeting. If one-third or more of the appointed membership of the Commission so request, the application will be removed from the administrative calendar and set for public hearing at a subsequent Commission meeting. Our office will notify you if such removal occurs.

This permit will be reported to the Commission at the following time and place:

WEDNESDAY, FEBRUARY 9, 2011, 9:00 a.m.
Chula Vista City Council Chambers
276 Fourth Avenue
Chula Vista, CA 91910

IMPORTANT - Before you may proceed with development, the following must occur:

Pursuant to 14 Cal. Admin. Code Sections 13150(b) and 13158, you must sign the enclosed duplicate copy acknowledging the permit's receipt and accepting its contents, including all conditions, and return it to our office. Following the Commission's meeting, and once we have received the signed acknowledgement and evidence of compliance with all special conditions, we will send you a Notice of Administrative Permit Effectiveness.

BEFORE YOU CAN OBTAIN ANY LOCAL PERMITS AND PROCEED WITH DEVELOPMENT, YOU MUST HAVE RECEIVED BOTH YOUR ADMINISTRATIVE PERMIT AND THE NOTICE OF PERMIT EFFECTIVENESS FROM THIS OFFICE.

PETER DOUGLAS
Executive Director

By: Karl Schwing
Title: Coastal Program Analyst III

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 term or 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.

SPECIAL CONDITIONS: See page 9.

EXECUTIVE DIRECTOR'S DETERMINATION (continued):

The Executive Director hereby determines that the proposed development is a category of development, which, pursuant to PRC Section 30624, qualifies for approval by the Executive Director through the issuance of an Administrative Permit. Subject to Standard and Special Conditions as attached, said development is in conformity with the provisions of Chapter 3 of the Coastal Act of 1976 and will not have any significant impacts on the environment within the meaning of the California Environmental Quality Act. If located between the nearest public road and the sea, this development is in conformity with the public access and public recreation policies of Chapter 3.

FINDINGS FOR EXECUTIVE DIRECTOR'S DETERMINATION:

A. PROJECT DESCRIPTION, BACKGROUND AND PRIOR COMMISSION ACTION ON SITE

The proposed project is located at the outlet to Salt Creek, at Monarch Beach, seaward of the Monarch Beach Beach Club located at 500 Monarch Bay Drive, City of Dana Point (Orange County) [Exhibit 1 & 2]. The proposal is a 1-year long pilot project aimed at reducing the occasional risk of high bacteria levels at Monarch Beach by creating temporary berms of sand to channel runoff from Salt Creek, that currently ponds on the beach, directly into the Pacific Ocean. Two (2) sand berms would be created, upcoast and downcoast of the ponded water and outlet flow on the beach, that are limited to 3 feet high and 4 feet wide, and approximately 130 feet long, each. The depth of the trench hasn't been specified by the applicant. If necessary to direct the flow, a pilot channel, no more than 4 feet wide is proposed to be excavated from the area between the berms, and out to the high tide line [Exhibit 3]. This is a 'pilot' project to be carried out and monitored for a period of one (1) year in order to help develop a long term management plan for the outlet.

The watershed which contributes to the flows within Salt Creek is largely developed and includes areas in the Cities of Laguna Niguel and Dana Point. Salt Creek originates in the City of Laguna Niguel, flowing beneath Marina Hills Drive, Niguel Road, Pacific Island Drive, and Pacific Coast Highway, before discharging onto Monarch Beach and finally into the Pacific Ocean.

Under guidance and regulatory authority from the San Diego RWQCB, the County of Orange (Orange County Watersheds and Orange County Flood Control District) and the Cities of Laguna Niguel and Dana Point annually develop a workplan to address water quality at a watershed planning and implementation level. In particular, the City of Dana Point has been implementing "source control" programs to reduce polluted water runoff from its origins throughout the approximately 4,500 acre (6 square miles) Salt Creek watershed area in an attempt to prevent it from reaching storm drains, creeks, waterways, and beaches. These source control programs include efforts to curb irrigation and excess urban runoff, weekly street sweeping, commercial and construction site inspections, ordinance enforcement, inlet filters, new Best Management Practice (BMP) requirements for developments, and public education and outreach.

Source control programs, however, take time to achieve measurable water quality improvements, and despite these programs being implemented, Salt Creek and Monarch Beach continued to have high bacteria levels in the water, and the beach continued to have frequent high bacteria postings. The City of Dana Point, therefore, in 2005, installed an ozone water treatment plant to disinfect the water in Salt Creek before it reaches Monarch Beach and the Pacific Ocean. Water quality has improved with the combined efforts of the source control programs and the ozone treatment plant. However, when flows from the creek are not sufficient to breach the sand berm that naturally forms seaward of the creek outlet, the water ponds within a scoured out area at the outlet and within low depressions on the beach behind the sand berm. Here, the water collects bacteria again and supports growth of bacteria in the stagnated water.

So, despite source control and 'end of pipe' treatment, the runoff from Salt Creek occasionally contains high levels of bacteria that pose a health risk to the public. Water quality data submitted by the applicant has been reviewed by the Commission's water quality staff, who has confirmed the data shows high levels of bacteria.

From the pond, the runoff meanders laterally along Monarch Beach before reaching the Pacific Ocean. At times, the applicant has stated that the meandering flow causes contamination of the beach and makes recreational access to the beach difficult.

The applicant has proposed to address these issues by directing the flows from Salt Creek to the Pacific Ocean, without stagnating, so that bacteria doesn't have time to grow to high concentrations and so that stagnant water conditions will only occur directly in front of the Salt Creek storm drain outlet. This would be achieved by excavating a shallow channel in the natural sand berm that forms parallel to the beach, and to construct low berms, perpendicular to the shoreline, on each side of the channel, to direct the water. The berms and channel are proposed to be formed with hand tools and mechanized equipment as necessary and feasible. Mechanized equipment will be limited to a small excavator (no larger than CAT 305C), backhoe, or compact track loader (e.g., Bobcat). The use of mechanized equipment is expected to be necessary in order to effectively move the volume of sand that will create the channel and berms. All mechanized equipment would enter and exit the beach at a single point identified by a biological monitor, and all equipment would be staged and serviced (e.g., refueled) in the nearby paved parking area, never on the beach. No long-term storage of equipment on the site would occur. Beyond the applicants' property, a pilot channel may be constructed, no more than four (4) feet wide and two (2) feet deep, if approved by the California State Lands Commission, to guide the ponded water to the surf zone (see Special Conditions 4 and 6).

Throughout the year-long trial period, the berms and channel will be reconstructed as necessary, to maintain their shape and function. The same methods, as described above, will be implemented and the dimensions of the berms and channel will be maintained so as not to exceed the length, width, and height of the approved design. All maintenance work will be performed in accordance with the special precautions, avoidance measures, and seasonal restrictions outlined in the applicants proposal to minimize impacts to sensitive species, such as the California grunion. Prior written approval from the Commission's Executive Director will be obtained for any reconstruction activities required in excess of once per month.

The temporary remedial action of forming berms and a channel is experimental and will be monitored for effectiveness in improving bacteria levels on Monarch Beach over the course of 1 year, which will allow for testing through all seasonal conditions [see draft plan attached as Exhibit 4]. Appropriately trained personnel will conduct monthly monitoring visits to assess the physical function of the berms and channel, to ensure that the project remains consistent with federal and State environmental regulations, and to note the distance from berms to the high tide mark. A qualified biologist or other appropriately trained personnel will monitor wildlife use of the scour pond at the outfall of Salt Creek. Also, if deemed necessary by the Commission's Executive Director, a geologist or civil engineer with coastal experience shall prepare a report on berm erosion and submit that report to the Commission. The quality of the outflow water on Monarch Beach is being monitored by the Orange County Watersheds program (see Water Quality section below). Data will continue to be collected by the Watersheds program throughout the year-long berm and channel study and will be analyzed and compared to earlier data. Supplementary water quality data will also be collected by the applicant, as outlined in their proposal. The results of the monitoring will be submitted to the Executive Director, and will be used by the applicant to prepare a long term management plan for the outlet.

The Salt Creek outlet discharges onto a sandy beach area that is owned by the Mathis Family 1996 Trust ("Mathis Trust"). The Mathis Trust property includes a private beach club and some sandy beach area between the ocean and a seawall that protects the club house. The beach seaward of the Mathis Trust property is State tidelands. The private club and the private portion of the beach are used by residents within the Monarch Bay residential community and, through an agreement between the Mathis Trust and the St. Regis Resort, by guests of the St. Regis. Immediately downcoast of the subject property is Salt Creek Beach Park; and the Niguel Marine Life Refuge is located immediately offshore of both Salt Creek and the subject property. The work area depicted on the applicant's plans indicate the berms and trench would be located on the Mathis Trust property. However, to be effective, the trench may need to be extended seaward of the Mathis Trust property, onto State tidelands. The applicant does not yet have permission from the California State Lands Commission (CSLC) to undertake any work on State tidelands. As required in Special Condition No. 4 & 6, the applicant will not be able to carry out work on State tidelands unless and until they obtain approval from the CSLC. Furthermore, pursuant to Special Condition No. 5, the applicant shall not construe the Coastal Commission's approval of this permit as constituting a waiver of any public rights that exist or may exist on the property. Nor shall the permittee use this permit as evidence of a waiver of any public rights that may exist on the property.

Finally, the proposed project may require approvals from other agencies, such as the Regional Water Quality Control Board, the California Department of Fish and Game, U.S. Fish & Wildlife Service, and the U.S. Army Corps of Engineers, among others. The applicant has not yet submitted evidence of approvals or evidence that no such approvals are required. If these other agencies require changes to the project, the applicant will need to obtain further review from the Commission to implement those changes. Therefore, Special Condition 6 is imposed.

On April 9, 2008, the Commission adopted Consent Cease and Desist Order No. CCC-08-CD-01 ("Consent Order") to address unpermitted development in the form of grading, berming Salt Creek to restrict its natural flow pattern, artificial breaching of Salt Creek, and removal of beach wrack and other organic material from Monarch Beach, without a coastal development permit. The Consent Order requires the 'Respondents' to "...cease and desist from engaging in any further development, as that term is defined by PRC section 30106 located at or seaward of 500 Monarch Bay Drive, in the City of Dana Point, Orange County, APN 670-151-55 ("subject property"), including, but not limited to, grading, construction of berms, removing wrack and other organic material (noting that this is not intended to prohibit the removal of trash and other inorganic material by hand raking as needed or minor, incidental relocation of wrack within the subject property), and breaching of Salt Creek or other breaching activities, unless authorized pursuant to the Coastal Act, PRC §§ 30000-30900, and/or the City of Dana Point certified Local Coastal Program, or recognized, in writing, by the Commission to be exempt..." The subject permit would authorize, subject to conditions, certain development that is otherwise prohibited by the Consent Order, including creating two berms and a trench perpendicular to the shoreline to direct flows from the Salt Creek outlet to the ocean including incidental relocation of beach

wrack within the footprint of the berms and trench. No other berms, trenching, relocation of beach wrack, grading, or beach grooming is authorized. However, nothing in the permit shall be construed as superceding or replacing the requirements of Consent Cease and Desist Order No. CCC-08-CD-01, adopted by the Commission on April 9, 2008, and such requirements remain fully in effect. In addition to the above-listed prohibitions, the Consent Order requires, among other things, the payment of penalties, installation of two (2) informational/educational signs which describe, through text and photographs/graphics, the importance and biological significance of beach wrack and grunion, and an agreement to pay stipulated penalties in the amount of \$500 per day per violation for non-compliance with the Consent Order. Pursuant to Section 2.0 and 17.0 of the Consent Order, as a successor in interest to the Respondents, the applicant is required to comply with the Consent Order. Thus, the Commission imposes Special Condition 12.

B. MARINE RESOURCES

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 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.

Sections 30230 and 30231 of the Coastal Act require that marine resources and coastal water quality shall be maintained and where feasible restored, that protection shall be given to areas and species of special significance, and that uses of the marine environment shall be carried out in a manner that will sustain biological productivity of coastal waters.

1. California least tern

The California least tern is a migratory bird species usually arriving at southern California breeding sites in late March or early April and departing by mid-September. The closest California least tern (*Sterna antillarum brownii*) nesting sites are located at Newport Bay, over 13 miles north, and Camp Pendleton, over 10 miles south of the subject site (*California Least Tern Breeding Survey, 2008, California Department of Fish and*

Game). Because of the distance from the breeding colony the project will not adversely impact California least terns by interfering with nesting and/or foraging activities.

2. California Grunion

The California grunion is a small fish in the silversides family and is extremely unusual among fish in its spawning behavior. The grunion spawn on the sandy beaches in the project vicinity immediately following spring tides (high tides that occur during the full and new moons) from March to August. The eggs are incubated in the sand until the following series of spring tide conditions, approximately 10 to 15 days, when the eggs hatch and are washed into the sea. California grunion is a species of concern due to its unique spawning behavior. They are carefully managed as a game species.

According to CDFG, all beaches are potential grunion spawning habitat. The proposed channel and berms will be located in an area known to be a grunion spawning area. The applicant is proposing to avoid impacts to grunion by following a protocol developed in conjunction with the County. Special Condition No. 9 provides that project activities shall not be allowed on any part of the beach below the semilunar high tide mark when California grunion are present during any run periods and corresponding egg incubation periods. To ascertain the presence of California grunion, Special Condition No. 9 requires that in the event that excavation, construction, maintenance or removal activities will occur during the seasonally predicted run period and egg incubation period for the California grunion (*Leuresthes tenuis*), as identified by the California Department of Fish and Game, a qualified resource specialist shall document any grunion spawning activity and if grunion are present, no excavation, construction, maintenance, or removal activities shall occur below the semilunar high tide mark.

3. Western Snowy Plover

The Western snowy plover (*Charadrius alexandrinus nivosus*) are small, sand colored shorebirds that use sandy beaches for nesting and roosting from southern Washington to Baja California. The Snowy plover forages on invertebrates in the wet sand, amongst surf-cast kelp, on dry sandy areas above the high tide, on salt pans, on spoil sites, and along the edges of salt marshes, salt ponds, and lagoons (USFWS 2001). Snowy plovers breed primarily above the high tide line on coastal beaches, sand spits, dune-backed beaches, sparsely-vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries. They tend to be site faithful, with the majority of birds returning to the same nesting location in subsequent years (USFWS 2001 citing Warriner et al. 1986). The breeding season for snowy plovers along the Pacific coast extends from early March to mid-September. The majority of California's wintering snowy plovers roost and forage in loose flocks on sand spits and dune-backed beaches, with some occurring on urban and bluff-backed beaches, which are rarely used for nesting (USFWS 2001). Roosting snowy plovers usually sit in small depressions in the sand, or in the lee of kelp, other debris, or small dunes (USFWS 2001 citing Page et al. 1995).

The snowy plover was listed by the U.S. Fish and Wildlife Service (USFWS) as a threatened species in March 1993. Subsequently USFWS designated 180 miles of coastline in California, Oregon, and Washington as critical habitat in 1999. Critical habitat is a specific designation that identifies areas that are essential to conservation of an endangered species. The USFWS has released a *Recovery Plan for the Pacific Coast Population of Western Snowy Plover* (August 2007).

The salt creek lagoon/estuary/pond and surroundings do provide many of the requirements of snowy plovers. Although they have been documented here, they have not been observed nesting in the area. Nevertheless, avoidance of impacts must be assured, therefore Special Condition 9 is imposed.

4. Beach Sand Habitat

A variety of biological resources are present on sandy beaches. Intertidal sand is habitat to a variety of invertebrates such as amphipods, isopods, and polychaete worms. Beach wrack on the upper beach provides habitat for more invertebrates such as beach hoppers, flies and their larvae. All these species are significant food resources for shore birds.

The proposed project involves some temporary disturbance to the sandy beach during excavation of the trench and formation of the sand berms. The disturbed areas would be up to 12 feet wide, over the width of the beach, plus areas involved in transit of equipment and people. Sand will be moved in the course of the project, but none would be removed from the beach. Also, some incidental relocation of beach wrack would be expected. However, no removal of beach wrack should occur. Wrack disturbed by the trenching/berm construction activities should be replaced in its preexisting location to the maximum extent feasible, or immediately nearby (i.e. within a few feet of where it was). Limiting the construction of berms to the area landward of the high tide line will further minimize effects on beach wrack. Trenching may need to occur seaward of the high tide line. To minimize the effects of the disturbance, the Commission imposes Special Conditions 1 through 4 and 9.

Conclusion

For the aforementioned reasons, the Commission finds that the proposed project, as conditioned, is consistent with Sections 30230, 30231, and 30240 of the Coastal Act.

C. WATER QUALITY

Section 30230 of the Coastal Act states, in pertinent part:

Marine resources shall be maintained, enhanced, and where feasible, restored.

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 30232 of the Coastal Act states, in pertinent part:

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials.

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.

The proposed project involves work at an urban stream outlet that carries urban runoff to the sea. Although Salt Creek is a naturally occurring stream, the stream outlet has been previously modified through the construction of a concrete box culvert and concrete erosion control apron. The project does not constitute channelization or substantial alteration of rivers and streams. The capacity of the existing outlet will not be changed. As such, no additional storm water runoff will result from the proposed project. Nevertheless, urban stream outlets are the discharge points for contaminants that are

entrained in urban runoff. The contaminants may include trash and particulate debris, petroleum hydrocarbons, bacteria and pathogens, heavy metals, sediments, synthetic organic compounds, nutrients, pesticides and herbicides, and others. These pollutants may build up at the ocean outlet, and any movement of sediment at the mouth may cause the release of contaminants into coastal waters. The applicant proposes to utilize Best Management Practices (BMPs) when carrying out their activities and will monitor the runoff being discharged from the outlet to determine if the proposed maintenance will have a detrimental effect on the surf zone water quality.

Best Management Practices

The proposed project would involve some use of heavy machinery on sandy beaches or in tidal inlets. Machinery may have oils, greases, heavy metals, and other vehicular fluids on the body of the machine. In order to ensure implementation of BMPs designed to prevent adverse impacts to water quality and marine waters, the Commission imposes Special Conditions 9 and 10. Special condition 10 requires conformance with "Best Management Practices" and requires additional Good Housekeeping Practices.

Monitoring

Compliance with the special condition discussed above will mitigate any immediate water quality impacts associated with the proposed maintenance activities. However, the long-term effects of maintenance activities must also be considered. The applicant is also proposing to evaluate the effects of the maintenance activities on water quality through a monitoring program. A report will be prepared at the end of the 1-year pilot project which includes water sample analyses and an evaluation of effects on biotic resources.

In order to examine the long-term effects of the outlet maintenance activities, the Commission imposes Special Condition 9. Special Condition 9 includes some refinements to the water quality monitoring to assure that the effects of the project are adequately characterized. Special Condition 9 also requires the applicant to submit their monitoring report to the Executive Director within 45 days of the conclusion of the 1-year pilot project. If significant adverse impacts are observed these will need to be addressed in any subsequent request. Only as conditioned does the Commission find the proposed development consistent with Sections 30230, 30231 and 30232 of the Coastal Act.

D. PUBLIC ACCESS AND RECREATION

Section 30210 of the Coastal Act states:

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.

Section 30212(a)(2) of the Coastal Act states, in pertinent part:

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:

(2) adequate access exists nearby

Section 30604(c) of the Coastal Act requires that every coastal development permit issued for any development between the nearest public road and the sea include a specific finding that the development is in conformity with the public access and public recreation policies of Chapter 3, including 30210 and 30212 identified above. The proposed project is located on the beach, between the first public road and the sea.

As described previously, the proposed project consists of involves a temporary pilot project to address adverse water quality conditions at the beach. Construction impacts, such as obstruction of lateral or vertical access to the shoreline with equipment, can affect the public's ability to access the beach and

recreate on it. Construction related impacts can be partially alleviated by conducting work when beach use by the public is typically low. Furthermore, the establishment of berms/trenches across the beach can be an impediment to lateral access along the beach, if they are too tall, wide or deep. However, adverse water quality, which this project is attempting to address, can also impact public use and enjoyment of the beach. Directing flows straight to the ocean, instead of allowing those flows to meander across the beach, may also increase the amount of dry sandy beach available for public recreational use. However, the benefit to public access of the presence of dry sandy beach will only be realized if the applicant agrees to not place or install development anywhere on the public beach that would obstruct or impede public access in any way and/or give any impression to a member of the public that the beach area is private and not public, or create the appearance of a private beach. To ensure that the proposed activities minimize impacts to continued public access, the Commission imposes Special Conditions 4 and 11. The Commission finds the proposed development, as conditioned, consistent with the public access and recreation policies of the Coastal Act.

E. LOCAL COASTAL PROGRAM

Section 30604(a) of the Coastal Act provides for the issuance of coastal development permits directly by the Commission in regions where the local government having jurisdiction does not have a certified local coastal program. The permit may only be used if the Commission finds that the proposed development will not prejudice the ability of the local government to prepare a Local Coastal Program which conforms with the Chapter 3 policies of the Coastal Act.

The proposed development is taking place in the City of Dana Point, which has a certified Local Coastal Program (LCP). However, the development is taking place on the beach, all of which is occurring partially or wholly within the Commission's area of original jurisdiction. Section 30601.5 of the Coastal Act allows the Commission to take action on development proposals where there is both local and Commission jurisdiction, and the City of Dana Point has agreed to let the Commission process a CDP for the portions of this project within the City's jurisdiction. Therefore, the development must be evaluated for consistency with the Chapter 3 policies of the Coastal Act. The project, as conditioned, is consistent with the Chapter 3 policies of the Coastal Act and therefore will not prejudice the ability of the City to continue to administer its LCP.

F. CALIFORNIA ENVIRONMENTAL QUALITY ACT

As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect that the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

G. SPECIAL CONDITIONS

1. No mechanized equipment shall operate below the daily high water mark. Hand tools may be utilized, but only in accordance with the Revised Final Monitoring and Maintenance Plan required in special condition 9.
2. Sand used to create the berms shall only be obtained from sandy beach areas soaked by freshwater/stormwater at the Salt Creek outlet or sand from the natural berm, that is in the allowed work area, if it is higher than the stagnant water pond. Sand will not be taken from dry sand outside the work area or areas soaked by ocean water. No organic beach wrack¹ may be removed from the beach. Only minor, incidental relocation of beach wrack within the allowed

¹ The term "wrack" or "beach wrack" is used to describe the organic material such as kelp and sea grass that is cast up onto the beach by surf, tides, and wind.

work areas may occur. Relocation or covering of beach wrack is prohibited outside the approved work areas.

3. No fill or sanitization of any existing depression on the beach upcoast or downcoast of the Salt Creek outlet is authorized. Inorganic trash may be removed by hand. Any beach wrack picked up during trash removal must be separated from the trash and returned to the area from which it was removed (removal of beach wrack is prohibited).
4. Public Access: The proposed unlined sand channel shall be aligned in a manner which provides for safe, level, unobstructed public access to and along those beach areas the public has a legal right to utilize. By acceptance of this permit, the applicant agrees to not place or install development anywhere on the public beach that would obstruct or impede public access in any way and/or give any impression to a member of the public that the beach area is private and not public, or create the appearance of a private beach. To minimize impacts on public access, berm/channel construction/re-establishment shall occur during non-holiday, mid-week periods to the maximum extent feasible. The top elevation of the two sand berms shall not be more than three (3) feet above the adjacent sandy beach and shall not exceed four (4) feet width. An unlined sand channel, no more than four (4) feet wide and two (2) feet deep may be excavated between the sand berms to direct flow from Salt Creek. The berms and sand channel shall be the minimum length necessary to direct discharges from Salt Creek to the Pacific Ocean. The sand berms shall not be constructed seaward of the high tide line. The sand berms and sand channel may only be constructed seaward of the applicant's property, on State lands, if the applicant obtains authorization from the State Lands Commission to do so, as required in Special Condition 6.
5. Public Rights: The Coastal Commission's approval of this permit shall not constitute a waiver of any public rights that exist or may exist on the property. The permittee shall not use this permit as evidence of a waiver of any public rights that may exist on the property.
6. Other Agency & Landowner Approvals: This permit does not obviate the need to obtain necessary authorizations and/or permits from other agencies and/or authorizations from property owners or anyone having any legal interest in the property upon which the work is proposed to take place, including, but not limited to the California State Lands Commission, Regional Water Quality Control Board, California Department of Fish and Game, U.S. Fish and Wildlife Service, and U.S. Army Corps of Engineers. **PRIOR TO ISSUANCE OF THE NOTICE OF ADMINISTRATIVE PERMIT EFFECTIVENESS**, the applicant shall provide to the Executive Director a copy of a permit, or letter of permission, or evidence that no permit or permission is required to undertake the proposed development from the California Regional Water Quality Control Board, the California Department of Fish and Game, and the fee title property owner of assessors parcel number 670-151-55. **PRIOR TO COMMENCEMENT OF ANY DEVELOPMENT SEAWARD OF THE APPLICANT'S PROPERTY ON STATE LANDS**, the applicant shall provide to the Executive Director a copy of final authorization from the California State Lands Commission to commence development on State lands. The applicant shall inform the Executive Director of any changes to the project required by these agencies and property owner(s). Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.
7. Duration of Approval: Unless this permit otherwise expires pursuant to Standard Condition No. 2, this administrative coastal development permit (5-10-237) shall expire one (1) year from the date the applicant initiates the development in accordance with this permit approval. Within 30 days of initiating the project, the applicant shall notify the Executive Director, in writing, of the date development commenced. Except as provided in Public Resources Code Section 30610 and applicable regulations, and as specifically provided in this condition, any future development as defined in PRC section 30106, including but not limited to, maintenance activities beyond the scope of this approval and/or expiration date of this permit, shall require an

amendment to 5-10-237 from the California Coastal Commission or shall require an additional coastal development permit from the California Coastal Commission.

8. Frequency of Berm/Trench Construction: As proposed by the applicant, except as described below, the re-establishment of the proposed sand berms and trench may occur only once per month, for 12 consecutive months, beginning with the initial construction of the sand berms and trench. A second re-establishment within each one-month period may be authorized, in writing, by the Executive Director, if the Executive Director finds good cause to grant such authorization based on evidence submitted by the applicant, and in consultation with other agencies as applicable, that a second event is necessary to address adverse water quality conditions at the beach, and that such re-establishment will have no significant adverse effects on coastal resources. The Executive Director may request any supplementary information he/she deems necessary, from the applicant, to make such findings.

9. **MONITORING**

- A. **PRIOR TO ISSUANCE OF THE NOTICE OF ADMINISTRATIVE PERMIT**

EFFECTIVENESS, the applicant shall submit for the review and approval of the Executive Director, two (2) copies of a Revised Final Monitoring and Maintenance Plan, that is in substantial conformance with the plan dated January 6, 2011, to measure the effectiveness of the proposed project on improving water quality at the Salt Creek outlet, and the environmental effects of the project, except that it shall be modified and be in substantial conformance with the following:

Water Quality Monitoring

(1) The applicant shall ensure that dry weather samples are collected on a twice-per-month basis and both 24 hours before and 72-96 hours after at least 5 storm events per year, to include analysis of total coliform, fecal coliform, and Enterococcus bacteria. This before-and-after sampling should target predicted rain events that are expected to bypass the Salt Creek treatment and the follow-up report should indicate the size of the storm event and whether it did bypass the treatment system

Berm/Trench Construction & Re-establishment Monitoring

(2) Photographs, taken from various established photo points approved by the Executive Director as part of the monitoring plan, shall be taken of the before and immediately after conditions for each berm/trench establishment event;

(3) The date, time, and duration of construction activity shall be documented;

(4) The location and quantity of beach wrack within the project limits shall be photo-documented or mapped in the 'before' and 'after' conditions;

(5) A qualified biologist/monitor shall conduct visual surveys of the project site for the presence of California grunion (*Leuresthes tenuis*) during the grunion spawning period (March through August) to determine the presence of spawning grunion prior to any excavation, construction, reconstruction, maintenance, or removal activities associated with the project in the intertidal area. Monitoring of spawning activity shall occur during the expected grunion runs that occur during the spring tides each month and that are posted by California Department of Fish and Game (for a current grunion run schedule contact the CDFG at GRUNION, California Department of Fish and Game, Marine Region 4665 Lampson Ave. Suite C Los Alamitos, CA 90720). Preferably, monitoring should occur all four nights of the typical run; but, at a minimum, monitoring shall occur on at least two nights of the run, and one of those nights must be the 3rd night of the run. Prior to any project activities, the monitor shall examine the beach area and redirect and/or stop work that may cause impacts to spawning grunion or incubation activity. The monitor shall document any grunion spawning activity, and if grunion are present in any lifestage, no excavation, construction, reconstruction, maintenance, or removal activities shall occur during the

grunion spawning activity below the semilunar high tide mark for the two-week incubation period and until subsequent monitoring indicates no additional spawning has occurred.

(6) A qualified biologist shall survey for the presence of Western snowy plover (*Charadrius alexandrinus nivosus*) during the breeding and nesting season (March 1 to September 30). The monitor shall document the presence of any snowy plovers, and if snowy plovers are present, no excavation, construction, reconstruction, maintenance, or removal activities shall occur within 300 feet of any nesting or breeding area until subsequent monitoring indicates the nesting/breeding snowy plover(s) are no longer present.

(7) In the event the environmental monitor concludes that the applicant has violated, or is violating these conditions, or if any unforeseen sensitive habitat issues arise, the applicant must cease work. The environmental monitor shall immediately notify the Executive Director if activities outside of the scope of this coastal development permit occur or if habitat is removed or impacted beyond the scope of the work indicated in this coastal development permit. If significant impacts or damage occur to sensitive wildlife species, the applicant shall stop all work and be required to submit a revised, or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit.

(8) The results of all monitoring shall be documented. Within 45 days of the conclusion of the 1-year project period, the applicant shall submit the results of all monitoring to the Executive Director for review and approval.

- B. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

10. STORAGE OF CONSTRUCTION MATERIALS, MECHANIZED EQUIPMENT AND REMOVAL OF CONSTRUCTION DEBRIS

A. The permittee shall comply with the following construction-related requirements:

- (1) No construction materials, debris, or waste shall be placed or stored where it may be subject to water, wind, rain, or dispersion;
- (2) Any and all debris resulting from construction activities shall be removed from the project site within 24 hours of completion of the project;
- (3) Construction debris and sediment shall be removed from construction areas each day that construction occurs to prevent the accumulation of sediment and other debris which may be discharged into coastal waters;
- (4) Erosion control/sedimentation Best Management Practices (BMP's) shall be used to control dust and sedimentation impacts to coastal waters during construction. BMPs shall include, but are not limited to: placement of sand bags around drainage inlets to prevent runoff/sediment transport into coastal waters; and
- (5) All construction materials, excluding lumber, shall be covered and enclosed on all sides, and as far away from a storm drain inlet and receiving waters as possible.

- B.** Best Management Practices (BMPs) designed to prevent spillage and/or runoff of construction-related materials, sediment, or contaminants associated with construction activity shall be implemented prior to the on-set of such activity. Selected BMPs shall be maintained in a functional condition throughout the duration of the project. Such measures shall be used during construction:
- (1) The applicant shall ensure the proper handling, storage, and application of petroleum products and other construction materials. These shall include a designated fueling and vehicle maintenance area with appropriate berms and protection to prevent any spillage of gasoline or related petroleum products or contact with runoff. It shall be located as far away from the receiving waters and storm drain inlets as possible;
 - (2) The applicant shall develop and implement spill prevention and control measures;
 - (3) The applicant shall maintain and wash equipment and machinery in confined areas specifically designed to control runoff. Thinners or solvents shall not be discharged into sanitary or storm sewer systems. Washout from concrete trucks shall be disposed of at a location not subject to runoff and more than 50-feet away from a stormdrain, open ditch or surface water; and
 - (4) The applicant shall provide adequate disposal facilities for solid waste, including excess concrete, produced during construction.

11. STORAGE/STAGING AREA FOR CONSTRUCTION & CONSTRUCTION ACCESS CORRIDOR

- A. PRIOR TO ISSUANCE OF THE NOTICE OF ADMINISTRATIVE PERMIT EFFECTIVENESS,** the permittee shall submit a plan for the review and approval of the Executive Director which indicates that the construction staging area(s) and construction corridor(s) will avoid impacts to public access, to beach areas or to sensitive habitat areas.

1. The plan shall demonstrate that:
 - (a) Construction equipment shall not be staged or stored outside the staging or storage area
 - (b) Public parking areas shall not be used for staging or storage of equipment
 - (c) Beach areas and habitat areas shall not be used as staging or storage areas
 - (d) The staging and storage area for construction of the project shall not obstruct vertical or lateral access to the beach.
2. The plan shall include, at a minimum, the following components:
 - (a) A site plan that depicts:
 - (1) Limits of the staging area(s)
 - (2) Construction corridor(s)
 - (3) Construction site
 - (4) Location of construction fencing and temporary job trailers, if any

- B.** The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this

coastal development permit unless the Executive Director determines that no amendment is legally required.

12. CONSENT CEASE AND DESIST ORDER REMAINS FULLY IN EFFECT

Nothing in this permit shall be construed as superceding or replacing the requirements of Consent Cease and Desist Order No. CCC-08-CD-01, adopted by the Commission on April 9, 2008. As the successor in interest to the responding party subject to the Consent Order, the applicant shall comply with the terms and conditions of the Consent Order, which includes but is not limited to, the prohibition on grading of the beach, construction of berms, breaching of Salt Creek or other breaching activities, and removing wrack and other organic material, except as explicitly authorized in this permit, and the requirements to install two (2) informational/educational signs which describe, through text and photographs/graphics, the importance and biological significance of beach wrack and grunion, and an agreement to stipulated penalties for non-compliance with the order.

ACKNOWLEDGMENT OF PERMIT RECEIPT/ACCEPTANCE OF CONTENTS:

I/We acknowledge that I/we have received a copy of this permit and have accepted its contents including all conditions.

Applicant's Signature

Date of Signing

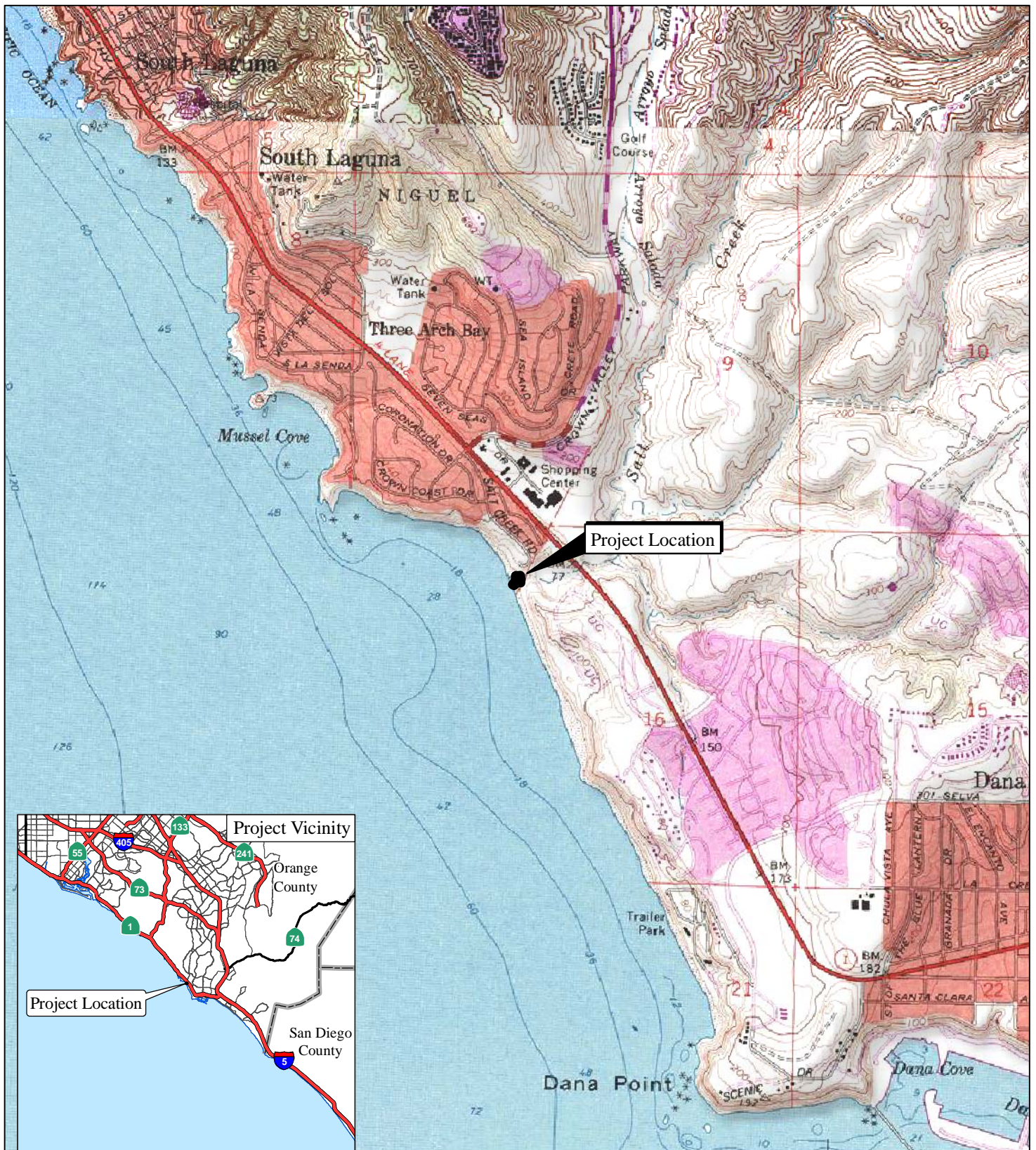
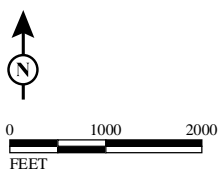


FIGURE 1



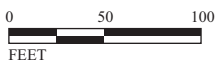
SOURCE: USGS 7.5' QUAD - DANA POINT (75)
 I:\WAH1001\GIS\Fig1_ProjLoc.mxd (10/28/2010)



FIGURE 2

L S A

— Property Limit



SOURCE: Google Earth & Monarch Bay Home Owners Association Figures

I:\WAH1001\G\Current Config.cdr (10/28/10)

Monarch Beach Management Plan
Current Configuration of Salt Creek Flow on Monarch Beach

5-10-237
Exhibit 2

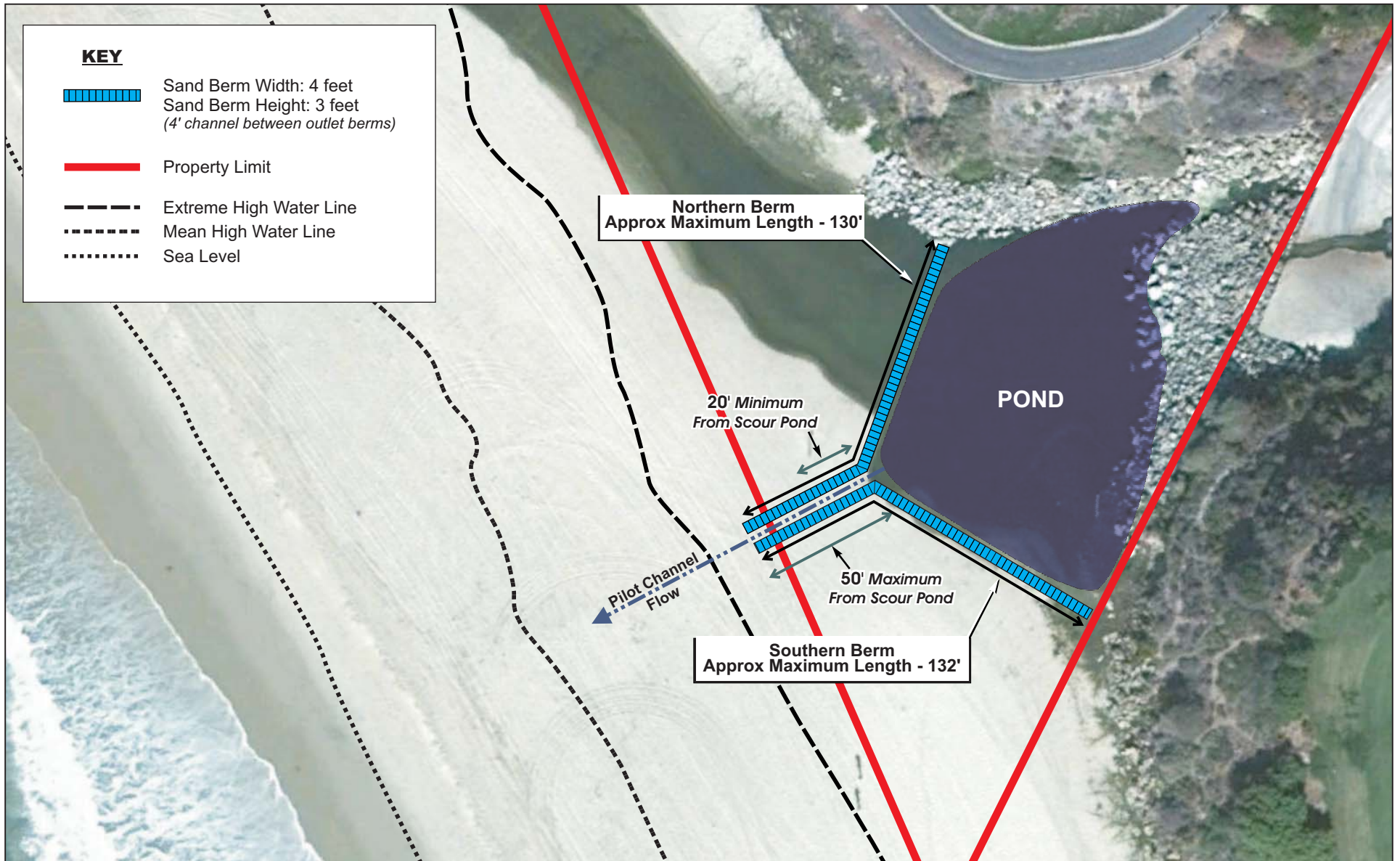


FIGURE 3

L S A



SOURCE: Aerial- Google Earth, & Monarch Bay Home Owners Association

I:\WAH1001\G\Proposed Aerial.cdr (11/5/10)

Monarch Beach Management Plan
Proposed Temporary Berm and Channel

**MONARCH BEACH
MONITORING AND MAINTENANCE PLAN**

FOR ADMINISTRATIVE COASTAL DEVELOPMENT PERMIT

500 MONARCH BAY DRIVE, DANA POINT, CA 92629

Submitted to:

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10866 Wilshire Blvd., Suite 820
Los Angeles, California 90024
(310) 234-6731

Prepared by:

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LSA Project No. WAH1001

LSA

January 6, 2011

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BACKGROUND

Monarch Beach is a wide, gently sloping sandy beach located near the community of Monarch Bay, Dana Point, California (Figure 1; all figures are provided in Appendix A). The Salt Creek outlet structure drains runoff water onto Monarch Beach, where the runoff first gathers in a fresh-to-brackish-water scour pond and then flows across the beach and into the Pacific Ocean.

The goal of this project is to implement a pilot program to reduce the occasional risk of high bacteria levels at Monarch Beach, by creating and maintaining temporary (for up to one year) berms of sand to channel runoff from Salt Creek directly into the Pacific Ocean. Despite the installation of a water treatment system in Salt Creek in 2005, which is located just before the outfall of creek flow onto Monarch Beach, the runoff from Salt Creek onto Monarch Beach occasionally contains high levels of bacteria that pose a health risk to the public. The runoff currently gathers in a scoured pond at the outfall of Salt Creek, and bacteria levels increase when the water remains stagnant for extended periods of time. From the pond, the runoff meanders laterally along Monarch Beach before reaching the Pacific Ocean (Figure 2). At times, the meandering flow causes contamination of the beach and makes recreational access to the beach difficult.

The monitoring results of this year-long pilot program will be used to develop a longer term Beach Management Plan, subject to a subsequent Coastal Development Permit (CDP) issued by the California Coastal Commission (Commission).

METHODS

Temporary berms will be formed with sand obtained from the project site and placed in a funnel shape on both sides of the Salt Creek scour pond with a channel that will direct the runoff water, in a linear flow, from the scour pond into the Pacific Ocean (Figure 3). The berms will be 3 feet (ft) tall by 4 ft wide, extending 20 to 50 ft towards the ocean from the western edge of the existing scour pond. The channel, located between the two berms, will be the same width and length as the berms (4 ft by 20 to 50 ft) and will encourage drainage of water from the western edge of the outfall pond directly into the ocean.

The total berm length will be no more than 132 ft from the riprap at the Salt Creek outfall, and the length of the berms will be determined by how far they need to extend towards the ocean to effectively channel the runoff directly into the ocean. The shortest effective length is expected to be approximately 20 ft beyond the existing scour pond, but if they must be lengthened, the berms would not extend farther than approximately 50 ft, which is currently estimated to be above the extreme high tide line, from the western edge of the pond (Figure 3). As long as the berms remain above the high tide, they are not expected to be washed away by the tide, and will not involve discharged fill material into waters of the United States. For this reason, a U.S. Army Corps of Engineers (Corps) permit is not expected to be necessary. Should the length of the berms need to be extended onto State Lands, conditional authorization by the Commission Executive Director, and authorization by the California State Lands Commission and the Corps will be required and obtained.

Prior to the initiation of any work under the CDP, either evidence of approval or evidence that no approval is required from the agencies (Corps, California Department of Fish and Game [CDFG],

Regional Water Quality Control Board [RWQCB] and California State Lands Commission) and will be provided to the Commission.

The berms and channel will be formed with hand tools and mechanized equipment as necessary and feasible. Mechanized equipment will be limited to a small excavator (no larger than CAT 305C), backhoe, or compact track loader (e.g., Bobcat). The use of mechanized equipment is expected to be necessary in order to effectively move the volume of sand that will create the channel and berms. The mechanized equipment is also not expected to cause significant compaction of the sand due to the minimally compacting nature of dry sand. All mechanized equipment would enter and exit the beach at a single point identified by the biological monitor, and all equipment would be staged and serviced (e.g., refueled) in the nearby paved parking area, never on the beach. No long-term storage of equipment on the site would occur.

All work will be monitored by appropriately trained personnel who will (1) ensure that environmental impacts are minimized; (2) supervise, document, and report on the remedial action; (3) record the date of work, volume of sand added, and reason for added sand each time the berms are built or rebuilt; and (4) if work is a repair, note whether damage was due to increased stream flow, stream meander tendencies, damage from waves, or some combination thereof. A qualified biologist or other appropriately trained personnel will also conduct monthly surveys of all wildlife utilizing the Salt Creek outfall pond in order to monitor the direct impacts of the project on wildlife. The results of these surveys will be incorporated into biological impact assessments included in the quarterly and final (upon completion of the pilot study) reports. If necessary to prevent impacts (e.g., to ground nesting birds), the monitor will halt, postpone, or modify the work as necessary to avoid such impacts.

MONITORING

The temporary remedial action of forming berms and a channel is experimental and will be monitored for effectiveness in improving bacteria levels on Monarch Beach over the course of 1 year, which will allow for testing through all seasonal conditions. Appropriately trained personnel will conduct monthly monitoring visits to assess the physical function of the berms and channel, to ensure that the project remains consistent with federal and State environmental regulations, and to note the distance from berms to the surf zone. A qualified biologist or other appropriately trained personnel will monitor wildlife use of the scour pond at the outfall of Salt Creek. Also, if deemed necessary by the Commission's Executive Director, a coastal geologist shall prepare a report on berm erosion and submit that report to the Commission. The quality of the outflow water on Monarch Beach is being monitored by the Orange County Watersheds program (see Water Quality section below). Data will continue to be collected by the Watersheds program throughout the year-long berm and channel study and will be analyzed and compared to earlier data.

During the year that the temporary berms and channel are in place and being tested, LSA Associates, Inc. (LSA) will use information and data resulting from the monthly assessments to develop a long-term beach management plan that both addresses the biological and environmental concerns associated with the project and incorporates impact minimization and mitigation measures. If necessary, LSA will begin the permit application process, for a permanent remediation project with the Corps, RWQCB, CDFG, and the State Lands Commission.

Physical Function

During the monthly monitoring visits, appropriately trained personnel will monitor and assess how effective the temporary berms and channel are at guiding the flow of water directly towards the ocean and preventing the flow from meandering laterally along the beach. The monitor will also determine the shortest length at which the berms and channel remain effective, and the lengths will be kept at this minimum. Should they need to be extended onto State Lands, authorization will be obtained from the Commission's Executive Director, the California State Lands Commission, and the Corps.

Upon completion of the experimental year-long period, the berms and channel will be considered effective if they function as planned a majority of the time. However, if the berms and channel frequently erode or fail as a result of increased outflow from Salt Creek, such as during storm events, or from other causes, they will need to be redesigned for the long-term Beach Management Plan.

Water Quality

As part of the monitoring work during the experimental year, the water quality will be monitored to determine whether the berms and channel effectively reduce bacteria levels at Monarch Beach. The National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit, issued by the San Diego RWQCB to Orange County and the incorporated cities of South Orange County, requires routine bacteriological monitoring of coastal storm drains and their respective ocean receiving waters. Pursuant to these requirements, a monitoring program was developed by the County, approved by the RWQCB, and implemented by the Orange County Watersheds program.

The Salt Creek outfall area is one of the water quality sampling locations monitored by the Orange County Watersheds program. Monitoring is conducted at three locations: (1) at the discharge from the Salt Creek outfall; (2) 25 yards upcoast (northerly direction) of the outfall-ocean interface in the surf zone; and (3) 25 yards downcoast (southerly direction) of the outfall-ocean interface in the surf zone. Dry weather samples are typically collected weekly and approximately 72 hours following storm events for the analysis of total coliform, fecal coliform, and *Enterococcus* bacteria (Appendix B). If necessary (e.g., due to budget or staff reductions), the Applicant will supplement the County's efforts in order to continue water quality monitoring on at least a twice-per-month basis and both before and 72-96 hours after at least five storm events per year. This could be in the form of supplemental funding, or providing trained technicians using identical sampling methods. The data collected from the Salt Creek and Monarch Creek sampling site (SCM1) over the course of the year-long berm and channel study will be analyzed and compared to data from previous years and throughout the year to determine if bacteria levels are affected by the proposed remedial action.

Biological Impact Assessment and Monitoring

Biological surveys and an impact assessment were conducted at the project site by LSA and Coastal Resources Management (CRM) in 2002, 2004, and 2006, for planning assessments associated with the City of Dana Point's Salt Creek water treatment plant project (Appendix C). No rocky intertidal or soft bottom benthic marine organisms were observed living on the protective rip rap or within the scour ponds surrounded by the rip rap during either the 2002 or 2006 surveys. No marine plants, invertebrates, or fish were observed within flow leading to the sandy beach shoreline. No sensitive,

rare, threatened, or endangered plant or wildlife species were found at the site during the surveys, but Monarch Beach and the Salt Creek scour pond do provide foraging habitat for a number of shorebirds. The Salt Creek habitat on Monarch Beach is not considered critical habitat for the tidewater goby (*Eucyclogobius newberry*), a federally listed endangered fish that lives in brackish water coastal lagoons in California (Appendix C). However, Monarch Beach's wide, gently sloping sand is considered potential spawning habitat for the California grunion (*Leuresthes tenuis*), a federally managed species (Appendix C). Although no work or mechanized equipment will enter grunion spawning areas, this pilot program includes a grunion avoidance protocol, which will minimize the possibility of impact to grunion (Appendix D).

Prior to, during, and monthly after the construction of the temporary berms and channel, a qualified biologist will conduct biological surveys, the results of which will be incorporated into biological impact assessments included in the quarterly and final (upon completion of the pilot study) reports (see "Reporting" below). Special precautions, avoidance measures, and seasonal restrictions to minimize impacts to shorebirds and sensitive species, such as the California grunion, will be enforced (Appendix D).

MAINTENANCE

Throughout the year-long trial period, the berms and channel will be reconstructed as necessary, to maintain their shape and function. The same methods, as described above, will be implemented and the dimensions of the berms and channel will be maintained so as not to exceed the length, width, and height of the approved design. All maintenance work will be performed in accordance with the special precautions, avoidance measures, and seasonal restrictions outlined herein to minimize impacts to sensitive species, such as the California grunion. Prior written approval from the Commission's Executive Director will be obtained for any reconstruction activities required in excess of once per month.

REPORTING

Quarterly reports, beginning 3 months from the project start date, will be submitted to the Commission, detailing the results of the monthly monitoring assessments. The reports will include observations of the physical function, water quality, and maintenance requirements of the berms and channel, as well as results from the wildlife surveys. The final report will feature an analysis of the overall effectiveness and impacts of the project and will provide recommendations for the long-term Monarch Beach Management Plan. Additional reports will be provided, as necessary, should the berms need to be extended in order to be effective.

APPENDIX B

SCM1: SALT CREEK OUTFALL MONITORING DATA 2010

Appendix B
SCM1: Salt Creek Outfall Monitoring Data 2010

2010 Data: SCM1 Northern end of Salt Creek Beach Park and just south of the Monarch Bay Beach Club, Dana Point															
Input		Discharging outfall Pipe													
Pipe		Samples taken from Discharging Pipe													
Ent		Enterococcus Concentration													
FC		Fecal Coliform Concentration													
TC		Total Coliform Concentration													
CFS		Cubic Feet per Second													
The Salt Creek site is SCM1 – “upcoast” is 25 yards north of where the pond/stream meets the ocean and “SCM1 pipe” is in the pond/stream prior to commingling with the surf and “downcoast” is 25 yards south where the pond/stream meets the ocean.															
Upcoast					Input						Downcoast				
Location	Date & Time	TC	FC	ENT	Location	TC	FC	ENT	CFS	Temp deg C	Location	TC	FC	ENT	Temp deg C
SCM1 Upcoast	05-Jan-10 10:52	680	30	230	SCM1 Pipe	>8,600	270	1800	1.04	13.2	SCM1 Downcoast	>560	9	70	15.2
	26-Jan-10 10:55	>1,200	<9	40		15000	430	630	2.6	13.2		>680	20	60	16.2
	02-Feb-10 10:31	130	9	9		6300	200	340	1.74	15.2		110	<9	<9	16.8
	17-Feb-10 11:55	90	9	9		>3,600	220	260	2.64	14.6		250	9	9	16.1
	23-Feb-10 11:16	9	<9	<9		>11,400	550	640	2.22	11.4		20	9	<9	15.8
	03-Mar-10 10:40	20	9	<9		4900	130	170	2.1	14		200	<9	<9	12.6
	09-Mar-10 10:26	150	<9	<9		>10,600	>1,450	570	0.272	13.7		140	<9	9	16.3
	16-Mar-10 10:47	570	20	40		40000	330	1600	0.384	13.8		60	<9	<9	11.9
	23-Mar-10 10:39	730	70	40		40000	500	1250		16.9		20	<9	9	15
	31-Mar-10 10:15	<9	<9	<9		27000	290	320	5.4	16.6		90	<9	20	16.6
	21-Apr-10 10:27	70	<9	9		34000	>1,020	5200	0.36	15.5		3100	140	620	14.6
	04-May-10 11:17	110	20	9		590	80	90	0.6	17.7		20	20	<9	15.5
	11-May-10 11:50	1050	490	1030		590	430	70	0.24	18.1		210	<9	9	17.1
	18-May-10 13:29	40	<9	9		>560	9	40	0.96	19.7		<9	<9	<9	18.6
	25-May-10 10:24	940	730	120		>1,200	<9	70	0.28	16.9		120	120	40	14.8
	02-Jun-10 11:06	40	9	<9		>330	20	50	0.176	17.7		<9	<9	<9	19.3
	08-Jun-10 10:21	30	<9	<9		>930	70	140	0.288	21.9		<9	<9	<9	20.4
	15-Jun-10 10:14	100	<9	60		6000	490	1340	0.42	21.4		180	<9	30	21.6
	22-Jun-10 10:44	310	9	<9		2500	130	40	0.273	20.6		<9	<9	<9	20.3
	29-Jun-10 10:39	2800	140	260		>11,300	3300	3900	0.448	22.5		<9	9	<9	22.1
	07-Jul-10 11:19	>4,800	510	1660		>31,000	17000	10700	0.8	22.4		30	9	<9	20.8
	13-Jul-10 10:31	>100	9	<9		>13,800	1200	1900	0.28	22.7		>230	30	9	16.9
	20-Jul-10 10:17	>770	90	70		>137,000	27000	9400	0.392	23.1		20	<9	<9	21.8
	27-Jul-10 10:04	>140	40	9		>2,500	310	500	0.3	21.5		70	20	<9	19
	03-Aug-10 10:23	210	20	9		2200	440	360	0.184	21.5		40	<9	<9	17.8
	10-Aug-10 10:43	>20	<9	9		>1,330	580	400	0.18	23.8		20	20	<9	17.8
	17-Aug-10 10:05	>560	450	380		>3,200	1220	450	0.325	23.1		9	<9	<9	16.2
	24-Aug-10 10:46	>220	20	40		>1,100	350	180	0.33	24.5		<9	<9	<9	18.5
	01-Sep-10 10:23	40	<9	20		>1,600	580	200	1.28	23.8		>120	20	60	26.3
	08-Sep-10 10:40	>60	<9	<9		>5,300	2500	380	2.76	22.4		<9	<9	<9	21.6
	14-Sep-10 10:42	20	9	<9		>1,400	350	40	1.8	24.7		>40	9	30	18.1
	21-Sep-10 11:33	40	<9	<9		>3,300	160	310	2.803	20.5		>220	9	9	20.1
	28-Sep-10 09:46	>170	20	9		>6,300	760	600		23.1		>250	20	<9	19.8
	13-Oct-10 11:28	>20	<9	40		>920	140	50				40	<9	<9	20.3
	03-Nov-10 11:07	60	9	9		>2,000	390	550		19.6		130	<9	<9	18.9
	16-Nov-10 10:30	70	<9	9		>6,900	390	690		19.2		>360	30	140	19