



MANAGER'S REPORT SAN DIEGO, CALIF.

DATE ISSUED: April 29, 1998

REPORT NO. 98-8

ATTENTION:

Natural Resources and Culture Committee,

Agenda of May 6, 1998

SUBJECT:

CHILDREN'S POOL: SEALS, POLLUTION AND REMOVAL OF

SAND TO REDUCE BEACH WIDTH

REFERENCE:

Manager's Report No. 98-29 Issued February 11, 1998

Manager's Report No. 97-176 Issued September 29, 1997

<u>SUMMARY</u>

<u>lssues</u> -

- 1. Shall the Committee accept this status report on Children's Pool seals and pollution, including the City Manager's plan to replace barricades on the beach between people and seals?
- 2. Shall the City Manager be directed to apply for a Coastal Development Permit to remove up to 3,000 cubic yards of sand from Children's Pool beach in La Jolla in order to reduce beach width on a trial basis to evaluate impacts on water safety, pollution, and seals?

Manager's Recommendations -

- 1. Accept this status report and endorse the City Manager's plan to replace barricades on the beach between people and seals.
- 2. Recommend to the City Council that the City Manager be directed to apply for a Coastal Development Permit, and subsequently proceed to remove sand from Children's Pool beach on a trial basis.

<u>Other Recommendations</u> - None at this time. Note: This report was prepared with the civil engineering input of Testing Engineers-San Diego, Inc., the oceanographic and coastal engineering input of Coastal Environments, and the public safety input of City Lifeguard Services.

Fiscal Impact -

- 1. Replacing the barricades on the beach would have no fiscal impact.
- 2. Removal and transport of the sand to the disposal site approved in the permit will be performed by City forces with City equipment within the Coastal Parks Division Fiscal Year 1999 beach maintenance operating budget, resulting in a reduced level of kelp removal and beach grooming during the operation. Depending on the tide conditions, weather conditions, what month permits allows us to do the work, availability of City equipment, and any other unforeseen interferences, it is anticipated that fifteen (15) working days would be the minimum number of days it would take to remove and transport the sand. The labor costs to remove and transport the sand is estimated to be anywhere from \$20,000 to \$40,000. Contractual services to measure the subsequent rate of sand accretion will not exceed \$4,800 with funds available in the Coastal Parks Division Fiscal Year 1999 operating budget.

BACKGROUND

Children's Pool in La Jolla has been closed to water contact since September 4, 1997 due to high fecal coliform counts from harbor seals. On February 18, 1998 this Committee accepted the Manager's recommendations to: 1) continue the practice which was begun on January 28, 1998 of not placing barricades on the beach between people and seals on a trial basis, in an effort to restore shared use of the beach and water by people and seals; and 2) hire a consultant to evaluate the scope of work, cost and probable impacts of opening the four plugged sluiceways in the Children's Pool breakwater in order to restore water flow through the breakwater to reduce the size of the beach and increase the size of the "pool," thereby improving water safety for human users of Children's Pool and potentially reducing the number of seals hauling out on the beach. The Committee additionally directed a comprehensive review of the seal and pollution signs at Children's Pool, and that any necessary signage improvements be made based on that review.

DISCUSSION

Pollution

The chart of fecal coliform counts presented at the February meeting has been updated to include the counts to-date, see attached. On just two dates, February 2 & 23, 1998, counts were below the level at which human contact is prohibited.

Bacterial counts vary widely from day to day and from one location to another in the Children's Pool. Occasionally, very high values are observed next to the breakwater, while there are much lower values at the center or near Coast Boulevard. There are occasional days with very high counts amidst a period of lower values, and vice-versa. This variability masks any correlation with the number of seals present, or physical variables such as the changing wave heights or tide ranges. However, there does seem to be a general tendency for bacteria counts to be lower during the winter months of November 1997 through February 1998. This corresponds to the time when we had an unusually large number of storms, and correspondingly large waves. We do not yet know whether the bigger waves during this time caused improved water flushing in the Pool, or whether the counts decreased for some other reason. This is continuing to be investigated using the existing data gathered by the City.

<u>Barricades</u>

There has been no apparent reduction in harbor seal haul-out on the beach at Children's Pool, nor reduction in fecal coliform counts in the Pool, as a result of not placing barricades on the beach between people and seals. Lifeguards are being drawn away from their primary duties by people complaining about the human-seal interactions resulting from the absence of barricades. The Park and Recreation Department has received eleven letters of outrage from members of the public about people infringing too closely on the seals. There have also been seventeen letters to the Park and Recreation Department urging the City to do whatever it takes, short of physically harming the seals, to reduce the pollution to safe levels and restore human use of the Pool. We believe that the absence of barricades is not having the desired effect of reducing seal haul-out and resultant pollution so, contingent on Committee endorsement, the Manager plans to begin replacing barricades on the beach to separate people and seals.

Reducing Beach Width

It is feasible to unplug the four sluiceways in the Children's Pool breakwater. The cost is estimated to be about \$40,000; more if protective grates and/or open-close gates are installed. However, before the opened sluiceways could be expected to function, up to three-quarters of the sand in Children's Pool would need to be removed. The current volume of sand in Children's Pool is about 4,200 cubic yards. Removal of up to 3,000 cubic yards would restore the beach width to its historical value, somewhat narrower than the mid-point of the breakwater, as seen in the 1931 photograph, attached. This can be compared to the current beach width, which has stabilized at about the point shown in the 1998 photograph, also attached.

There is uncertainty about whether opened sluiceways could function as intended without periodic supplemental sand excavation, both within the Pool and on the ocean side of the breakwater where sand occasionally builds up higher than the level of the sluiceways. Depending on the normal rate of sand build-up in the Pool, which cannot

be adequately determined from available historical photographs, the need for sand excavation may be frequent or infrequent. If frequent, any additional benefit of opening the sluiceways for improved water flow may be outweighed by the safety and maintenance issues associated with opening the sluiceways. One safety issue is the possible undertow that small children would feel in proximity to the sluiceways and whether safety grating of the opening would be sufficient protection. A maintenance issue is the regular removal of debris that would be caught in the safety grating.

Since sand needs to be removed from Children's Pool in advance of opening the sluiceways, it is recommended that the sand be removed on a trial basis without opening the sluiceways at this time. During this trial, the following will be evaluated: 1) whether fewer seals haul-out on the beach because there is less available beach and because the shoreline where the seals haul-out is in closer proximity to the walkway and public restrooms at the back of the beach with their greater human traffic and noise; 2) whether fecal coliform counts reduce to safe levels, possibly due to fewer seals hauling-out on the beach or to dilution of seal feces because there is a larger "pool" of water; and 3) whether it appears that moving the point of human water entry into the Pool farther away from the rip at the end of the breakwater shows potential for improved water safety for human users of the Pool when pollution numbers reach safe levels.

Based on the results of this trial, it can be determined whether reducing the beach width at Children's Pool meets the objective of restoring shared use of the beach and water by people and seals, or if it at least meets the objective of improving water safety for people by creating a larger "pool." If the trial does not meet either of these objectives, then the beach could be allowed to re-build naturally. If it meets one or both of these objectives, then based on the rate of sand build-up in the pool, recommendations can be developed to keep the beach narrow by implementation of one or both of the following measures: 1) opening one to four sluiceways, with or without safety grating and open-close gates; and/or 2) periodically excavating sand.

Given the need of San Diego beaches for sand replenishment, eroded during the El Nino storms, it will certainly be an unusual permit request to the Coastal Commission to remove sand from Children's Pool beach. However, the rationale is sound and we expect the permit to be granted. It is anticipated that the only real issue will be the sand disposal site. Disposal site options include: a) storing the sand on Fiesta Island for possible return to the Children's Pool if the trial does not meet objectives; b) hauling the sand to La Jolla Shores, where this minor volume will be negligible; c) pumping the sand across the breakwater to the adjacent beach if it is determined that there would not be a negative environmental impact to the area's hard substrate; or d) hauling the sand to another beach, inside or outside the littoral cell, where the grain size would be compatible.

<u>Signs</u>

Concerns were expressed at the February 18, 1998, Committee meeting about the adequacy of seal and pollution signs at Children's Pool. In February, signs posted at the Pool included: 4-warning signs, 2-permanent seal bite signs and 3-seal rock reserve signs, for a total of nine signs.

In addition to the nine signs mentioned above, there were also 2-portable pollution signs in English and Spanish posted on the beach. As of March 2, 1998, Lifeguard Services stopped posting the two portable pollution signs on the beach, due to the continued theft of the signs from the beach area.

The number of seal and pollution signs have been increased, and ten new signs have been posted; 4-permanent seal bite signs and 6-metal pollution signs in English and Spanish, for a total of nineteen signs as of April 24, 1998, see attached chart.

The Park and Recreation Department is currently working with Sea World on developing an interpretive sign for the Children's Pool. If the City and Sea World can work out an agreement, it is the hope that the sign would be installed by the end of the year. We believe this signage program effectively educates the public and is appropriate.

ALTERNATIVES

- 1. Do not accept this report or its plan to resume placing barricades between people and seals on the beach.
- 2. Do not recommend applying for a Coastal Development Permit to remove up to 3,000 cubic yards of sand from the beach at Children's Pool on a trial basis.
- 3. Express a preference for the sand disposal site to be identified in the application for a Coastal Development Permit.
- 4. Recommend other actions to try to restore shared seal and human use of the beach and water at Children's Pool
- 5. Recommend resuming placement of the beach barricades and directing the City Manager to initiate discussions with the County Department of Environmental Health concerning state regulations requiring the posting and closure of beaches with high fecal coliform counts.
- 6. Direct the City Manager to develop a plan and identify funding for an ongoing program of day and night seal disturbance at Children's Pool to eliminate beach haul-out within the legal limits of the Federal Marine Mammal Protection Act, to be accomplished in a humane manner, for the protection of the public health and

welfare, in order to reduce the fecal coliform counts in the Children's Pool to a level safe for human contact.

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Approved: Penelope Culbreth-Graft, DPA
Assistant City Manager

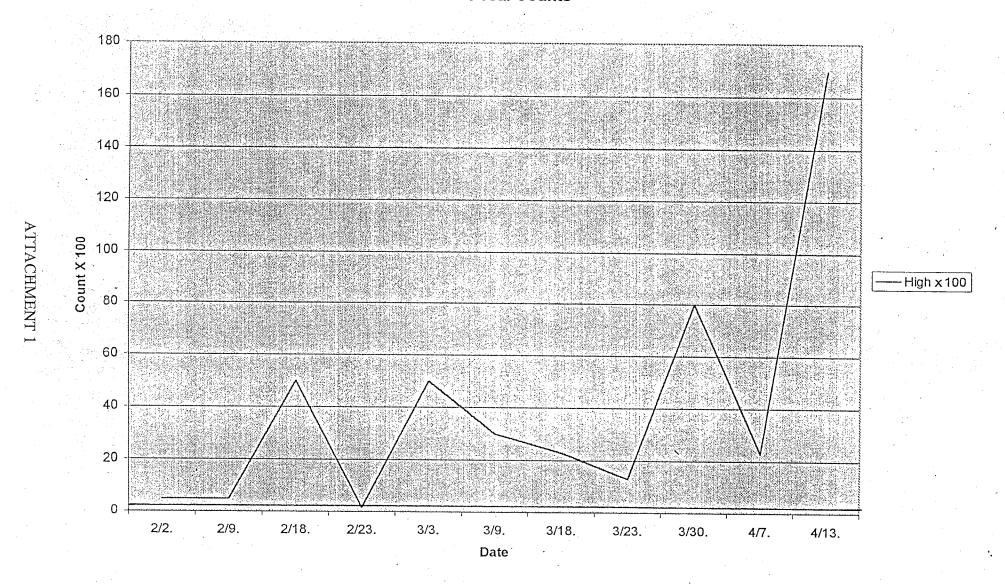
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Submitted by: Terri Williams
Deputy Director, Coastal Parks Division
(221-8910)

Attachments:

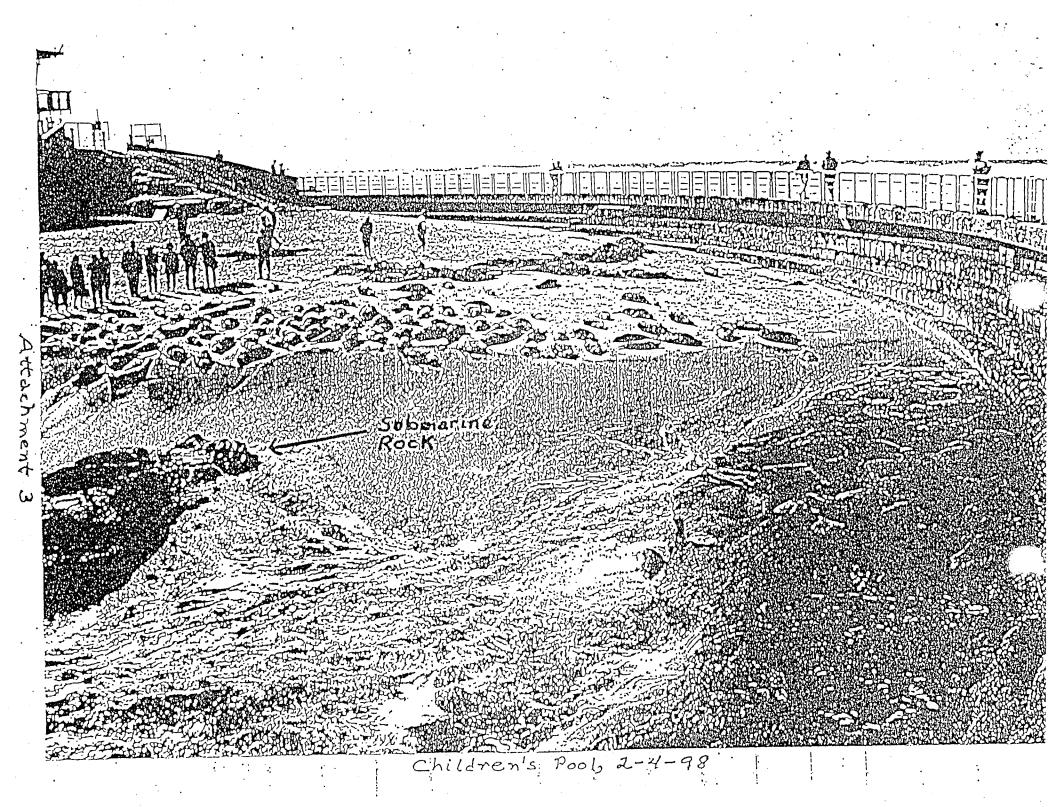
- 1. Chart of Fecal Coliform Counts
- 2. Photograph of 1931 Beach Width
- 3. Photograph of 1998 Beach Width
- 4. Chart of Signage

Fecal Counts





Children's Pool, 6-15-31



CHILDREN'S POOL SIGNAGE

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NAME & SIZE OF SIGNS	LANGUAGE ON SIGNS	LOCATION OF SIGNS	NUMBER OF SIGNS ON 2/18/98	NUMBER OF SIGNS AS OF 4/24/98
Warning Sign 18" x 36"	WARNING IT IS A FEDERAL OFFENSE TO DISTURB HARASS OR MOLEST SEALS STAY WELL BACK FROM THE SEALS	 1 - on jetty 1 - west side of lifeguard tower on ramp leading down to beach 1 - at base of stairs on west side leading down to beach 1 - at base of stairs on east side leading down to beach 	4	4
Seal Bite Sign 18" x 24"	SEALS BITE STAY BACK	4 - jetty1 - west side of lifeguard tower on ramp leading down to beach1 - at top of stairs leading down to beach	2	6
Seal Rock Reserve Sign 24" x 36"	SEAL ROCK MARINE MAMMAL RESERVE ENJOY FROM A DISTANCE	 1 - at base of stairs on west side leading down to beach 1 - at base of stairs on east side leading down to beach 1 - at top of stairs leading down to beach 	3	3

CHILDREN'S POOL SIGNAGE TABLE CONTINUED

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NAME & SIZE OF SIGNS	LANGUAGE ON SIGNS	LOCATION OF SIGNS	NUMBER OF SIGNS ON 2/18/98	NUMBER OF SIGNS AS OF 4/24/98
Contamination Sign English & Spanish 12" x 24"	DANGER CONTAMINATED WATER KEEP OUT	2 - jetty 1 - west side of lifeguard tower on ramp leading down to beach	0	6
		1 - at top of stairs leading down to beach		
		1 - at base of stairs on west side leading down to beach		
		1 - at base of stairs on east side leading down to beach		
Portable Contamination Sign English & Spanish 12" x 24"	DANGER CONTAMINATED WATER KEEP OUT	2 - on beach sand area	2	0
			11 SIGNS POSTED ON 2/18/98	19 SIGNS POSTED ON 4/24/98