DATE ISSUED: May 23, 2001 REPORT NO. 01-105

ATTENTION: Natural Resources and Culture Committee Agenda of May 30, 2001

SUBJECT: Mission Bay Park Boundary Survey

## **SUMMARY**

THIS IS AN INFORMATION ITEM ONLY. NO ACTION IS REQUIRED ON THE PART OF THE COMMITTEE OR THE CITY COUNCIL.

## **BACKGROUND**

On June 5, 2000, the Mayor and Council authorized the City Manager to enter into a contract with Project Design Consultants (PDC) for a boundary survey of Mission Bay Park. The purpose of the survey was to determine the precise area of the dedicated land and water inside the park, the land and water leasehold areas, and to determine if the City was in compliance with Charter Section 55.1, which limits leasehold development in Mission Bay Park. The total cost of the survey was approximately \$468,000.

PDC completed the survey calculations on October 5, 2000. During the course of the survey it was determined that several areas within Mission Bay Park had not been dedicated as parkland. These parcels, totaling 26.84 acres, were historically considered part of Mission Bay Park and maintained as parkland. An ordinance dedicating these acres was adopted by the Mayor and Council on November 14, 2000. As part of the introduction of this ordinance, the Mayor and Council directed that the Manager return to Committee for a discussion of the policy issues associated with the results of the survey.

## **DISCUSSION**

## **Survey Methods**

The exterior boundary of Mission Bay Park is defined by metes and bounds land descriptions contained in dedicating ordinances approved by the City Council. Lease parcel boundaries are defined by descriptions contained in lease agreement documents. The survey team researched these documents, together with numerous record survey maps, survey field notes, private survey records, and court cases referenced in the these documents which define the legal evidence of the Mission Bay Park and lease parcel boundaries. Field survey crews searched on the ground for physical evidence of boundary locations. This physical evidence most commonly consisted of property corner monuments but also included the mean high water line, historic mean high water lines, retaining walls, and other identifying features.

The most modern technologically advanced equipment was utilized to measure the positional location of all physical evidence of boundary locations found. This included Global Positioning Systems (GPS) and precise electronic total station survey instrumentation. The precision and accuracy standards for land surveys established by the American Land Title Association and the American Congress of Survey and Mapping (ALTA/ACSM) were met or exceeded. Final boundary line locations were set by evaluation of all evidence per accepted legal principles of boundary location. A record of survey map consisting of seventy-one (71) map sheets has been filed with the County Recorder and a final report has been submitted to the City. These documents detail in great depth the final results of the survey and are available for public inspection and review.

The legal principle for delineating and quantifying the area of land and the area of water within the tidal influenced areas of the Park are founded in the United States Supreme Court case of Borax vs. Los Angeles. This principle is also established and supported in numerous subsequent court cases, the California Public Resources Code, and as opined by the City Attorney's Office in a 1988 Memorandum of Law regarding this topic specifically as it applies to Mission Bay Park. All of the above-sited law establishes the Mean High Water Line as the delineating boundary between land and water in tidal areas. The Mean High Water Line is the height (or elevation) of the average of all high waters (tides) over an 18.6-year tidal cycle as established by the National Ocean Services (NOS), a division of the National Oceanographic and Atmospheric Administration (NOAA). The NOS establishes and Congress approves a National Tidal Epoch Datum approximately every nineteen (19) years.

To establish the current elevation of the mean high water line in Mission Bay Park, PDC installed tide gauges and established tide staffs in three locations within Mission Bay. An NOS Simultaneous Observation Method of calculation was used to transfer an 18.6-year tidal epoch datum (1999 epoch) from NOS's permanent tide station in San Diego Bay to Mission Bay. NOS staff reviewed the tidal datum survey procedures and calculations performed by PDC. NOS staff stated in an official letter that the methods and procedures utilized and the final mean high water values derived should be within anticipated levels of accuracy. PDC used a highly precise level of aerial photographic mapping to map the location of the 47-mile long mean high water line and ordinary high water mark line within Mission Bay Park. All

dedicated Park area above these lines was quantified as land and all dedicated Park area below these lines was quantified as water. These lines and areas are detailed in the record of survey and final report and are available for public inspection and review.

The legal principle for delineating land from water in non-tidal areas is the Ordinary High Water Mark. This principle was applied in the Park in the easterly most reach of the San Diego River (approximately the easterly 1,200 feet). From review of a series of historic survey maps of the San Diego River dating back as far as 1850, the character and nature of the San Diego River as mapped is very consistent with the results of this survey. These maps record a well-defined channel 100 feet to 200 feet wide, which typically divided into a main channel and several smaller channels as the River approaches the area of transition to tidal waters. The River has a long history of its changing course and of levies being constructed to control it. The first levy was constructed by the U.S. Army in the 1870s. The current Army Corp. of Engineers levies were constructed in the late 1940s. Historic maps consistently show a defined channel 100 feet to 200 feet wide even after the construction of any levy or any other man-made alteration of the San Diego River. This method of mapping the San Diego River appears to be consistent with way the City has historically mapped the River and quantified land and water areas. The City Mission Bay Park Lease Parcel Map, dated March 1982, delineates land from water in the same manner as this survey.

From a review of the 1982 Mission Bay Park Lease Parcel Map, statements made in a 1988 Memorandum of Law regarding the inaccuracy of existing surveys, and knowledge of the 2-foot contour interval accuracy aerial mapping used by the City in the late 1960s to quantify areas in the Park, it is likely that the City's survey staff could not map the mean high water line within the marshland near the Campland lease parcel due to the extremely flat nature of the area, lack of sufficiently accurate elevation data, and the limitations of the existing survey technology. On the 1982 Lease Parcel Map, a mean high water line was drawn completely around this area where, in this present survey, we have accurate elevation data and the technology to map the mean high water line in its true location. This provides some explanation as to why the City previously quantified an area of marshland within the park boundaries. However, this does not provide a full explanation or location of the source of the area previously identified as marshland because the area in question near the Campland leasehold does not contain 134 acres. Additionally, the 1982 Lease Parcel Map does not delineate the location of the 134 acres of marshland. The only reference found to marshland is by table on said Lease Parcel Map.

This survey was limited to quantifying the total dedicated land and water areas of Mission Bay Park, as these values are pertinent to Charter Section 55.1. Charter Section 55.1 limits the leasehold development of Mission Bay as follows:

#### Section 55.1: Mission Bay Park - Restrictions upon Commercial Development

Notwithstanding any other provision of this Charter to the contrary, the total land and water area of all leases in Mission Bay Park shall not exceed twenty-five percent (25%) of the total dedicated land area or six and one-half percent (6.5%) of the total dedicated water area respectively of the park without such lease being authorized or later ratified by vote of 2/3's of the qualified electors of the City voting at an election for such purpose.

Charter Section 55.1 does not address the quality of the land or water. Therefore, the scope of work for the survey did not include any effort to quantify different qualities of land, such as marshland, sandy beaches, turf areas, paved streets, or the area of developed or undeveloped land. Likewise, there were no efforts to quantify the area of water that was tidal versus non-tidal or fresh water versus salt water.

The Record of Survey was submitted to the County Surveyor for review and approval in November 2000. The County Surveyor has subsequently reviewed and approved the Record of Survey. The Record of Survey map was officially declared filed in early March 2001.

## **Survey Results**

The resulting dedicated land and water acreage in Mission Bay Park, including the additional 26.84 acres dedicated by Council, is summarized in the following table. The table also includes the pre-survey values that were referenced in the 1994 Mission Bay Park Master Plan Update.

Survey Category	2000	Pre-survey
	Survey	
Total Park Acreage	4235.280	4248.93 <sup>1</sup>
Mission Bay Park Dedicated Land Acres	1936.360	1887.02
Mission Bay Park Dedicated Water Acres	2298.920	2228.18
Commercial Leasehold Acres - Land	450.092 <sup>2</sup>	438.93
Non-Profit Leasehold Acres - Land	14.003	13.53
Total Leasehold Acres - Land	464.095	452.46
Commercial Leasehold Acres - Water	89.653	89.67
Non-Profit Leasehold Acres - Water	5.906	5.90
Total Leasehold Acres - Water	95.559	95.57

<sup>&</sup>lt;sup>1</sup> Includes approximately 134 acres designated as marshland.

# **Charter Section 55.1 Compliance**

The survey results confirm that the City is in compliance with the leasehold development restrictions imposed by Charter Section 55.1 and Council Policy 700-08. The status of the current level of leasehold development percentages in Mission Bay Park is summarized in the following table. The table also includes the limits and percentages historically cited by staff prior to the survey being conducted.

		Current Status	Pre-Survey Status
	Leasehold Development Limit (25%)	484.09 acres	471.76 acres
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N			

<sup>&</sup>lt;sup>2</sup> Includes a 2.5 acre leasehold expansion of Dana Inn approved by Council, November 2000.

D			
	Total Mission Bay Park Leasehold Acres -	464.095	452.46 acres
	Land	acres	
	Percentage of leased land under amended	23.9%	24%
	Council Policy 700-08 to include non-profit	(19.995	(18.8 acres
	leaseholds (Acres remaining under charter	acres	remaining)
	limit)	remaining)	
	Leasehold Development Limit (6.5%)	149.430	144.83 acres
W		acres	
A			
T			
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R			
	Total Mission Bay Park Leasehold Acres -	95.559 acres	95.57 acres
	Water		
	Percentage of leased water under amended	4.1%	4.3%
	Council Policy 700-08 to include non-profit	(53.871	(49.26 acres
	leaseholds (Acres remaining under charter	acres	remaining)
	limit)	remaining)	

## 1994 Mission Bay Park Master Plan Update (Master Plan)

Commercial and non-profit leasehold development included in the 1994 Master Plan that involve changes to existing leasehold acreage have been nearly completed. There are four projects included in the Master Plan that would involve changes to current leasehold sizes.

- 1) Quivira Basin This project will redevelop the Quivira basin leaseholds. While the Master Plan provides that the project could expand into an additional 10 acres, the proposed project will expand approximately 3.6 acres.
- 2) Bahia Hotel The Master Plan provides for a one acre expansion of the Bahia leasehold.
- 3) Dana Landing The Master Plan provides for a one acre expansion of this leasehold.
- 4) De Anza Harbor Resort Consistent with the Master Plan, the proposed project would decrease the size of the existing leasehold by approximately 17 acres.

Upon completion of the projects that would expand existing leaseholds, the total area associated with leasehold development in Mission Bay Park would be 469.695 acres. This figure remains significantly under the Charter limitation of 484.09 acres based upon the survey results, as well as under the lower limitation of 471.76 acres contained in the 1994 Master Plan based upon dated survey information and cited by staff prior to the completion of the recent survey. Therefore, the change in land associated with the recent survey results, as well as the additional acreage dedicated by Council, has not impacted the ability of the City to fully implement the Master Plan.

Furthermore, in the event the proposed De Anza Harbor Resort project is approved, the total area associated with Mission Bay Park leaseholds would drop to approximately 452.6 acres. The Master Plan also contemplates the conversion of approximately 20 acres of the Campland leasehold near the mouth of Rose Creek to wetlands upon expiration of the lease in 2017.

Respectfully subm	itted,		
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Tim C. Rothans	Appro vea:	George Loveland	
Management Assis	tant to the City	Manager	Senior Deputy City Manager

LOVELAND/TCR