COUNTY OF SAN MATEO

Parks Department





DATE: May 27, 2014

COMMISSION MEETING DATE: June 5, 2014

TO: Parks and Recreation Commission

FROM: Ramona Arechiga, Natural Resource Manager

SUBJECT: Daly City Dunes

RECOMMENDATION:

Review and recommend to the Board of Supervisors acceptance of a donation of 3.23 acres of real property known as the Daly City Dunes, APNs 003-460-280 and 003-404-070.

BACKGROUND:

This report briefly covers the information obtained from Fugro Consultants, INC, (Fugro), the firm that conducted a Geologic Hazards Assessment (Assessment) on the Daly City Dunes parcels. The report will also describe the status of San Francisco Lessingia, an endangered plant species, found in these two parcels and adjacent parcels.

DISCUSSION:

Geologic Hazards

The two parcels being considered for acquisition would add 3.23 acres to San Bruno Mountain State and County Park. The Fugro Assessment reviewed available reports, maps, and photos, including aerial photos, dating back to 1935. Reports from the US Geological Survey, California Geological Survey (CGS), and the County of San Mateo were integrated into the technical memorandum. Neither parcel is part of the seismic hazard mapping, part of the earthquake-induced landslides or liquefaction maps produced by CGS. Field reconnaissance was also conducted by a California Certified Engineering Geologist to confirm the presence of landslide activity or other geologic hazards on site.

In 2012, a water main break caused a debris flow onto the lower portion of APN 003-460-280. Daly City has since repaired the water main, stabilized the slope with jute and synthetic netting, straw wattles, and reseeded the parcel.

The primary factors to consider concerning slope stability include activity and development upslope of the parcels, activity and development downslope of the parcels, and the geology beneath the parcels. At this time no activity or development either upor downslope are negatively affecting the stability of the parcels under consideration.

The soils and their parent material are highly erodible, especially in extended periods of rain resulting in runoff or improperly diverted runoff systems (similar to the 2012 main break). The Parks Department is operating on the assumption that Daly City properly engineered and provided adequate subsurface drainage below the repair of the 2012 water main break. Provided the above assumption is true, a similar event is unlikely.

The additional factors concerning activity and development are important considerations. There are potential plans for development upslope of these parcels. Development of upslope or adjacent parcels has the potential to destabilize the slope if not engineered properly. This is a serious consideration for Daly City and the County.

Conservation of a rare plant and its habitat

The San Mateo County's General Plan defines and provides guidance prioritizing the protection of sensitive habitat and rare species that are threatened by development activities or other land uses. A rare plant found on these parcels is the San Francisco Lessingia (*Lessingia germanorum*) which has lost over ninety percent of its natural habitat. Lessingia once occurred throughout the San Francisco peninsula and now is restricted to seven locations in the Presidio and the dunes area under consideration in Daly City.

This species is primarily threatened by development since it depends on vegetation gaps on old sand dunes (dunes with old relic parent material). Sand dune ecology depends on movement and the gradual movement of dunes over time changes the vegetation patterns, creating those ideal gaps for Lessingia to establish. However, sand dunes in San Francisco have largely been developed and few dunes have not been colonized by the invasive ice plant (*Carpobrotus* spp.) that was once used to stabilize dune habitat. Additionally, development brings people and the very real damage of trampling to this understated annual forb cannot be overlooked. There are a host of other threats including scrub conversion, loss of pollinators, climate change, and further fragmentation of the existing habitat to name a few.

Upon review and consideration, staff requests the Commission recommend to the Board of Supervisors acceptance of the parcels outlined in this report for their unique habitat and the opportunity to protect San Francisco Lessingia, a federally and California listed endangered plant species (ESA and CESA). This rare habitat offers to expand San Bruno Mountain habitat to include some of the last remaining sand dunes with native habitat persisting in the bay area. If acquired, the Department would partner with San Bruno Mountain Watch to continue to enhance and restore the native dune plant community.

If the County acquires these parcels, we must be prepared to review any potential planning or development activity on parcels both up- and downslope from the parcels under consideration including those directly adjacent. The development of any of the surrounding parcels has the potential to negatively affect the stability of the entire slope as well as the protection for the San Francisco Lessingia that this acquisition would provide.

FISCAL IMPACT

Staff estimates \$5,000 for costs associated with acquiring land ownership including a title report and insurance, and necessary recording documents.