



City of Santa Barbara
Airport Department
Memorandum

DATE: March 19, 2014
TO: Airport Commission
FROM: Hazel Johns, Acting Airport Director *HJ*
SUBJECT: Goleta Slough Mouth Opening

RECOMMENDATION:

That Airport Commission receive a staff presentation on the recent storms, impact to the airfield and Goleta Slough, and preventive actions taken.

Background

At 11:45 am on Friday, February 28, 2014 the Santa Barbara County Flood Control (Flood Control) opened the Goleta Slough Mouth at the east end of the Goleta Beach County Park parking lot. At 11:40 am, Flood Control had secured emergency permits from the California Coastal Commission and the United States Army Corps of Engineers (Army Corps) to alleviate an eminent threat to life and property presented by rising flood waters along San Pedro and Tecolotito Creeks. The water level gauge in the Slough reported an elevation of 8.8 feet above mean low water. The airfield begins to take on water at about 10 feet above mean low water, however the airfield storm drain system loses capacity starting at about 6 feet above mean low water.

Santa Barbara County Flood Control

In the 1980s, low oxygen levels in the Goleta Slough due to low rainfall levels and hot weather led to "fish kills;" suffocation of an entire water body's aquatic life. To avoid future fish kills the California Department of Fish and Game (now Department of Fish and Wildlife [CDFW]) requested that Flood Control mechanically open the Slough mouth within two weeks of closure. In 1992 this arrangement was legally permitted with a requirement to periodically submit for renewal.

In March 2011 Flood Control received permits to continue their Flood Control activities on the Airport. In May 2012 the California Coastal Commission approved the continued maintenance activities off-Airport, including the Goleta Slough mouth. However a permit from the Army Corps was not issued because of outstanding concerns about impacts to the federally endangered steelhead trout from the National Marine Fisheries Service (NMFS).

As a maintenance permit had not been issued, the Slough mouth was allowed to close naturally. On December 1, 2012 the combination of high water and projected rainfall

presented an imminent flood hazard. Because of the on-going permit issues, Flood Control staff did not want to apply for an emergency permit. Airport Staff completed the necessary requirements to secure an emergency permit and Flood Control breached the Slough mouth on behalf of the Airport. The high water mark was recorded a 7 feet above mean low water.

In March 2013, a breeding pair of federally-endangered steelhead trout was observed in Atascadero Creek by NMFS staff. Around this time the mouth closed again and the Goleta Slough slowly filled above 6 feet above mean low tide. Airport Staff observed a large increase in ducks and geese using the flooded, fresh water slough.

Siphon

Recognizing this as a safety hazard, the Airport again applied for an emergency permit to open the Slough mouth. Simultaneously the Santa Barbara County Vector Control District observed a massive increase in the mosquito population, including mosquito species known to carry West Nile Virus. Additionally the City of Goleta was attempting to begin their fish passage project in San Jose Creek but was struggling due to high water.

NMFS and the California Coastal Commission did not support the Airport's emergency application initially. As a secondary measure, the Airport proposed a siphon in place of a breach and to monitor both water level and bird behavior. The water level gradually lowered two feet in two weeks. This combined with continued migratory bird patterns resulted in a significant reduction in bird-aircraft strike hazard (BASH).

Biological Survey

In May 2013 a "Draft Jeopardy Opinion" prepared by NMFS on Flood Control's application was made available to Airport Staff. In response to NMFS data requests, the Airport solicited for qualifications of biological consulting firms, selecting Rincon Consultants in September 2013. Funding was secured and a contract was awarded in January 2014. Field surveys are currently underway.

Future Mouth Management

Following the detailed survey of endangered species, bird behavior, and hydrological function, the Airport will propose an adaptive management strategy to minimize risks from high water with minimum impacts to endangered species habitat. Airport Staff and consultants will work closely with NMFS, U.S. Fish and Wildlife Service, Flood Control, and the Goleta Slough Management Committee to formulate an initial strategy and identify monitoring programs to evaluate success.