



Board Report

File #: RES 15-101, **Version:** 1

Approve Proclamation of Local Emergency due to the conditions of saltwater intrusion into groundwater sources and inundation near the Moro Cojo Slough, causing conditions of extreme peril to the safety of persons and property nearby. (ADDED VIA ADDENDUM)

RECOMMENDATION:

It is recommended that the Board of Supervisors approve a Proclamation of Local Emergency due to the conditions of saltwater intrusion into groundwater sources and inundation near the Moro Cojo Slough, causing conditions of extreme peril to the safety of persons and property nearby.

SUMMARY:

Beginning October 9th, 2011 a failure in the flap gate and culvert system underneath Moss Landing Road has led to saltwater intrusion in the Moro Cojo Slough. The culvert, which provides drainage and typically prevents saltwater from re-entering the system through the flap gate, cannot function as designed, and therefore currently is ineffective. While repairs have been made to the flap gate; based upon recent inspections, however, the threat of increased failure throughout the culvert as a whole is present if action is not taken immediately to remediate the situation.

Failure would result in extensive seawater intrusion into the area surrounding the Slough, impacting critical groundwater resources for local residents, including their animals. Prolonged exposure of increased salinity can impact water wells in the immediate area that provide potable water for multiple properties. Impacts to groundwater supplies would affect those who depend on these sources for drinking water.

Approval of this emergency proclamation will allow for temporary repairs to be made to the culvert system and for these temporary repairs to be maintained while a permanent solution is designed.

DISCUSSION:

The elevation difference between the ocean and the Moro Cojo Slough is typically 4-5 feet at high tide, and can reach even larger spans with the instance of a “King Tide”. This elevation difference, combined with the inability of the culvert to provide effective drainage, results in an additional threat of damage, both to Moss Landing Road and structures located nearby including critical utilities.

Seawater has been detected approximately 4 river miles upstream of Moss Landing Tide Gates. Until recently, the tide gates at the mouth of the Moro Cojo Slough allowed tidal mixing that supported brackish water environment.

The brackish water condition supports populations of federally endangered tidewater goby (*Eucyclogobius newberryi*) and California brackish water snail (*Tryonia imitator*), ranked S2 (State Imperiled, CNDDDB) to reside in the Slough. Additionally, the freshwater portions of the middle and upper watershed are known to support populations of federally and California endangered Santa Cruz long-toed salamanders (*Ambystoma macrodactylum croceum*), federally and California threatened California tiger salamanders (*Ambystoma californiense*), and federally threatened California red-legged frogs (*Rana aurora draytonii*) as documented in

the CNDDC (2015).

The elevated water levels within the slough poses a risk of flooding and threat to nearby homes, agricultural land, and additional sensitive habitats not inundated with seawater. The slough's increased water level decreases its capacity to take storm water from a 16 square mile tributary area resulting in economic losses due to flooding of homes and productive agricultural land within the Moss Landing.

The conditions of extreme peril warrant and necessitate the proclamation of the existence of a local emergency and immediate action to mitigate the effects of failure of the culvert system. Action by the Board of Supervisors as recommended herein will approve Proclamation of Local Emergency.

CAO and RMA-PW will update the Board of Supervisors periodically concerning the emergency and efforts to restore the full functionality of the culvert, protecting against saltwater intrusion into groundwater resources and inundation of the surrounding areas.

OTHER AGENCY INVOLVEMENT:

The mitigation efforts of the foregoing conditions affecting the Moro Cojo Slough include Monterey County Resource Management Agency; Planning Department and Monterey County Public Works Department, Water Resources Agency, Monterey County Health Department - Environmental Health Division, the California Coastal Commission (original jurisdiction for permit authority), Moss Landing Harbor District, US Army Corp of Engineers, US Fish and Wildlife Services, Water Board, and State Fish and Wildlife.

FINANCING:

This proclamation of local emergency will impact the General Fund in emergency contracts, engineering services, and overtime costs incurred by RMA-Public Works, which may be requested for reimbursement from the General Fund at the end of the fiscal year.

Approved by:

Nicholas E. Chiulos
Assistant County Administrative Officer

Attachments: Resolution, Proclamation for November 3, 2015