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Restored wetlands and the floods in our future

By Andrew Gunther, October 26, 2015

The 1998 El Niño rains caused severe floods in the state, including this street in the Orange County town of Laguna Beach.

Despite the drought, now is the time to increase public support for flood protection efforts. One key to that is restoring our wetlands. The effect of El Niño and rising seas require the Bay Area to be prepared for flooding this winter and in the decades to come. Restored wetlands will provide vital protection from future damage.

We've been spared from violent storms such as Hurricane Patricia that just hammered Mexico. But our homes, businesses, highways, railroads, airports, groundwater basins, sewage treatment plants and other vital resources for the region's 7 million inhabitants are at risk. Even facilities on higher ground are vulnerable because many are linked economically to resources that are threatened. The Bay Area Council conservatively estimates $10 billion in damages from a single major storm.

The risk we face has many sources. Extreme storms, such as those driven by El Niño, produce intense rainfall that strains our aging flood control infrastructure. Global warming is heating up the ocean and melting glaciers and ice sheets, causing the water

level of San Francisco Bay to rise at an accelerating rate. Prior to 2000, we lost 85 percent of the bay wetlands (marshes and mudflats) that once buffered our shorelines from storm surges and high tides. In recent decades, the supply of silt that nourished and maintained our wetlands has declined dramatically.

We can reduce the risk. A landmark report from more than 200 scientists and other experts recently produced a set of recommendations on how.

The report (www.baylandsgoals.org) urges Bay Area leaders to build on previous efforts and accelerate progress toward the long-standing goal of restoring 100,000 acres of bay wetlands. By restoring these natural systems, we take advantage of "natural engineering" to protect our communities from floods. The proposed solutions also create public recreation areas and abundant wildlife habitat, filter bay water and preserve the iconic beauty that contributes to our quality of life and our tourist economy.

To achieve this goal, we must use silt to build up our wetlands over time as sea level rises. We can use the silt dredged from ports, flood-control channels and construction projects (when not polluted), to nourish wetlands growth. We can improve the natural flows of silt our streams deliver to the shore by considering our regional lands as one system from the hills to the bay, coordinating the activities of cities, counties and special districts.

But we must act quickly. Restored, healthy wetlands must be secured by 2030, before sea level rise accelerates, or the wetlands will not keep pace as bay waters rise.

In places where wetlands cannot provide the full solution, levees and sea walls will be necessary, either alone or in combination with wetlands.

Just as we have used our knowledge and foresight to make investments that reduce our vulnerability to earthquakes, we must also take action to address larger floods. We can do so using an innovative approach that generates multiple benefits, and provides a global example of how a coastal urban region can tackle climate change, extreme weather and rising seas. Scientists have provided guidance. Now we need the political leadership to act.

Andrew Gunther is the executive coordinator of the Bay Area Ecosystem Climate Change Consortium. He is joined in this opinion by other members of the Baylands Goals Steering Committee, which represents 21 nonprofits and agencies, including Beth Huning, coordinator of San Francisco Bay Joint Venture.

http://www.sfchronicle.com/opinion/openforum/article/Restored-wetlands-are-good-insurance-against-6588907.php?cmpid=gsa-sfgate-result