

Planning ahead mitigates flood risk for Los Angeles wastewater systems, roads, and lowlying communities

February 20 2014

Los Angeles, a metropolis perched on the edge of a coast, can expect to experience sea level rise of as much as two feet due by 2050 due to climate change, according to current projections.

In anticipation, a team from USC partnered with the City of Los Angeles to gauge the impact of the rising tides on local communities and infrastructure. The results, according to a report that was released today, are a mixed bag – but at-risk assets can be protected by proactive planning and early identification of adaptation measures, according to the report's authors.

"Some low-lying areas within the City's jurisdiction, such as Venice Beach and some areas of Wilmington and San Pedro, are already vulnerable to flooding," said Phyllis Grifman, lead author of the report and associate director of the USC Sea Grant Program. "Identifying where flooding is already observed during periods of storms and high tides, and analyzing other areas where flooding is projected are key elements in beginning effective planning for the future."

Other key findings from the report include:

- The city's wastewater management, storm water management and potable water systems are highly vulnerable to <u>sea level</u> rise.
- The Port of Los Angeles and the city's energy infrastructure



would be mostly unaffected by the rise in sea level due to a replacement schedule that will allow the city to prepare for future needs to change infrastructure.

- Projected flooding and erosion damage to roads along
- the coast could impede emergency services.
- Many cultural assets located along the coast, including museums, historic buildings and the Cabrillo Marine Aquarium, could face damage.

Residents of low-lying communities, such as San Pedro and Wilmington, as well as those with older buildings and high numbers of renters, such as Venice, would be most affected by flooding. In particular, the Abbot Kinney corridor and the fragile Ballona wetlands are at risk. But the region's wide sandy beaches, if maintained, can provide a valuable bulwark against higher waters, according to the report.

More information: The full report is available on the USC Sea Grant website:

www.usc.edu/org/seagrant/resea ... e_vulnerability.html.

Provided by USC Sea Grant Program

Citation: Planning ahead mitigates flood risk for Los Angeles wastewater systems, roads, and lowlying communities (2014, February 20) retrieved 16 May 2024 from <u>https://phys.org/news/2014-02-mitigates-los-angeles-wastewater-roads.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.