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Sent: Sunday, March 27, 2016 6:47 PM
To: dhardy@ampo.org; bkeyrouze@ampo.org; lboyagian@ampo.org; rfarbman@ampo.org; Amy Ford-Wagner; Randolph Sykes
Subject: State Floodplain Managers Policy, Now Law, Against HART Rail In Honolulu Flood - SLR Areas

Likely LAWSUIT against City and HART, not to mention non-compliance with ADA (disabled), AARP (Senior Citizens) and Transportation Equity (rights of low income workers to a reliable transit service)

Aloha,

The professional experts on flood zones issued very a strong and clear policy directive in 2011 against building Federally funded transit infrastructure in Flood Plains

(Flooding can be a result of rain, hurricane storm surge, tsunami or sea level rise. Since this policy paper was released- NEW FEMA flood maps were released, NEW Oahu Tsunami inundation maps were released, the President issued an even stronger Executive Order and signed into LAW the 2015 FAST Act. Clearly the ASFPM policy paper by professional experts had a great influence on 2015 Federal acts and Law.)

(Honolulu Politicians Have Avoided and Evaded Best Rail Construction Policy Practices, Federal Law, Jeopardizing Reliable Commuter Service, Harmed Disabled, Senior Citizen And Low Income Riders When The Rail System And Access Will Shut Down, Electrical Systems Explode, Sewage Floods Station Infrastructure And Transit Services Denied.)

http://www.floods.org/ace-files/documentlibrary/Whitepapers/ASFPM_Critical_Facilities_and_Flood_Risk_Final_Feb_2011.pdf

ASFPM Paper – Critical Facilities Page 1 of 12
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Critical Facilities and Flood Risk

This is a position paper prepared by the Association of State Floodplain Managers (ASFPM), a professional non-profit organization dedicated to reducing flood losses and protecting floodplain functions and resources in the United States, without causing adverse impacts to others.

QUOTES FROM ASFPM PAPER:

Federal agencies have contributed to the problem by directly building critical facilities or by funding states and localities (via grant programs) to build such facilities in flood hazard areas.

This is true even though the guidance for Executive Order (11988, Floodplain Management, issued May 24, 1977) directed agencies of the federal government to give special consideration to, and avoid supporting critical facilities and critical actions in, flood-prone areas. Examination of the implementing guidelines to federal agencies published by the U.S. Water Resources Council (WRC) and codified into federal regulation February 10, 1978, includes specific reference to critical actions and critical facilities.

The Order states that even a slight chance of flooding is too great for critical facilities and actions, so they should not be located in flood hazard areas if alternatives exist. The guidelines state that, “The minimum floodplain of concern for certain critical actions is the area subject to inundation from a flood having a 0.2 % chance of occurrence”, also known as the 500-year flood.

The Order faces challenges in implementation as a result of local and political pressure to develop in flood risk areas for short-term economic gain.

Flood maps do not reflect future flood conditions. NFIP flood mapping reflects only the flood that will occur based on existing, not future conditions. FEMA claims this is because the NFIP maps must reflect current risks for insurance rating purposes. The focus on existing watershed and floodplain conditions, rather than on future conditions, has resulted in critical facilities being located in what will be high flood risk areas after the watershed is developed, storms intensify, or sea level rises.

Thus, critical facilities are placed in areas inappropriate to support community resiliency and sustainability.

Extent of the Problem

When critical facilities in the United States are flooded, they not only sustain costly flood damage, but may also become inoperative and unable to fulfill their function in response and recovery. This can result in greater loss of life and human suffering, and means that it takes longer for the community to get back to pre-flood levels of functionality.

EXAMPLE: New Orleans and Hurricane Katrina, 2005

Transportation infrastructure to provide access to the facility was inoperable during the flood. Critical facilities could have been located at the highest locations in the city, elevated or flood proofed, with accessibility, in order to achieve operability, maximum flood risk reduction and community resiliency.

What are Critical Facilities and Critical Actions?

Transportation Systems: Those systems, and the supporting infrastructure, necessary for transport of people and resources (including airports, highways, railways, and waterways) during major disasters, including flood events up to the 500-year flood.

To further assist in determining if a facility is critical, the following questions

should be asked:

1. If flooded, would the facility add another dimension to the disaster?
3. Would the facility be operable during an extreme flood event (e.g., 500-year flood)?
5. If the services provided by the facility were disrupted by flood would the flood disaster result in even more damages and loss of life?

If the answer to any of these or similar questions is “yes,” then the facility is considered critical, and the action to place the facility at risk of flooding would be a *critical action*.

The impacts of the loss of function of critical facilities could include:

The inability to provide essential services.

Endangering large numbers of concentrated people, such as within emergency evacuation centers that cannot be accessed or serviced, or are otherwise at risk.

Adding to the hazard of the flood water itself, such as by pollutants from flooded wastewater treatment plants or toxic materials. (or exploding electrical vaults, etc.)

Minimum federal floodplain management standards for federal activities related to critical facilities come from Executive Order 11988, which guidance identifies the 500-year flood elevation as the minimum standard. The American Society of Civil Engineers (ASCE) Standard 24-05, and the International Building Code also provide minimum standards for some Category structures. Those standards, depending on the type of flood exposure, require protection to the 100-year flood elevation, plus up to three feet of freeboard or the “design flood elevation,” which ever is higher. Therefore, the “design flood elevation” for critical facilities, as referred to in this paper, is the higher of the 500-year flood elevation, or the elevation required by applicable codes and standards.

Action item:

Grant funds should not be available from any federal agency to construct any critical facility that does not meet the flood risk process/standards of the Floodplain Management Executive Order 11988.

This would connect community land use decisions to the flood risk cost and exposure of the federal taxpayers; meaning the facilities must be built in accordance with the Executive Order guidance or federal support is not available.