



AGENDA MEMORANDUM
for the City Council Meeting of June 12, 2012

DATE: May 29, 2012

TO: Ronald L. Olson, City Manager

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RESOLUTION AUTHORIZING
PROVISIONALLY ACCREDITED LEVEE (PAL) AGREEMENT WITH
FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)
Corpus Christi Flood Protection System

CAPTION:

Resolution authorizing the City Manager, or designee, to execute a Provisionally Accredited Levee (PAL) Agreement with the Federal Emergency Management Agency (FEMA) for Scenario A1: Levee not in Federal System for the Corpus Christi Flood Protection System.

PURPOSE:

The purpose of the PAL is to continue to recognize the Salt Flats Levee and Concrete Flood Wall as a component of the Corpus Christi Flood Protection System as being accredited by FEMA for reducing flood risk and exposure for the 100-year level of protection (a one-percent possibility) storm event and assessing levee recertification requirements.

BACKGROUND AND FINDINGS:

The U.S. Department of Homeland Security. Federal Emergency Management Agency (FEMA) is currently working to prepare updated and revised Flood Insurance Rate Maps (FIRMs) for Nueces County, Texas. This study will produce Flood Insurance Rate Maps (FIRMs) and a Flood Insurance Study (FIS) for Nueces County, including the City of Corpus Christi. This restudy effort is part of FEMA's Risk Mapping, Assessment, and Planning (Risk MAP) program and reflects FEMA policy updates Post Hurricane Katrina and Hurricane Ike. In particular, FEMA's assessment methodology of storm surge analysis and wave run-up along coastal structures and levee systems are a new feature from past issued FIRM's.

The current issued FIRM's for Nueces County show the Corpus Christi Flood Protection System as accredited (reducing the flood risk) for the 100-year storm event. To be recognized and annotated on the updated FIRM's under the current remapping effort, FEMA requires that the earthen Salt Flats Levee System and the concrete floodwall adjacent to the Corpus Christi Museum of Science and History be recertified in accordance with 44 CFR 65.10 . FEMA has classified the Corpus Christi Seawall as a coastal structure, not a levee, and not subject to recertification as provided by 44 CFR 65.10.

ALTERNATIVES:

Four alternatives are offered:

1. Do Nothing - Submit written notice to FEMA of the City intent not to certify the Salt Flat's Levee System and adjacent concrete floodwall as a flood control structure.
2. New Flood Protection System - Submit written notice to FEMA of City intent not to certify the Salt Flat's Levee System and adjacent concrete floodwall as a flood control structures but proceed to investigate the design requirements of a new flood protection system for the downtown area. Construction costs of investigated improvements of this new flood protection system are unknown at this time, but are anticipated to be significant.
3. Enter into the PAL Agreement - Submit written notice of City intent to enter into a PAL Agreement with FEMA. With this notice in effect, the future revised draft FIRM's would show the levee as a PAL upon release. Over the next 24-month period, notice is given to our community that Salt Flats Levee and concrete floodwall levee certification verification is underway. It is anticipated that recertification verification may require some reconstruction/enhancements of the existing levee system infrastructure.
4. Enter into the PAL Agreement and Improve Coastal Structures - Submit written notice of City intent to enter into a PAL Agreement with FEMA, and proceed to consider future improvements to the Corpus Christi Flood Projection System, with emphasis on assessment of improvements to coastal structure and the seawall system to mitigate for wave action. Costs of improvements associated

with requisite improvements to the coastal structures including seawall wave action are unknown, but are considered to be significant.

OTHER CONSIDERATIONS:

If the City enters into a PAL Agreement, the upcoming revised draft FIRM's, levees will be labeled as PAL's during the 24-month period to notify map users that levee certification verification is underway. FEMA requires that documentation for certification of the levee system meeting 44 CFR 65.10 be provided by May 29, 2014.

Failure to recertify the Levee system could limit the City's future opportunity to positively influence flood insurance rates in our community if the City would later make improvements to the flood coastal structures or other components of the flood protection system.

Future infrastructure improvements to minimize the wave run-up along the seawall could reduce flood insurance rates in conjunction with levee and concrete flood wall certification.

CONFORMITY TO CITY POLICY:

Not Applicable

EMERGENCY / NON-EMERGENCY:

Not Applicable

DEPARTMENTAL CLEARANCES:

Storm Water Department
Development Services
Planning Department

FINANCIAL IMPACT:

Operating Revenue Capital Not applicable

Fiscal Year 2011-2012	Project to Date Expenditures (CIP only)	Current Year	Future Years	TOTALS
Line Item Budget				
Encumbered / Expended Amount				
This item		\$0.00		\$0.00
BALANCE				

Fund(s): N/A

Comments:

Urban Engineering is currently under contract to develop a Levee Certification Guidance Document, as part of the Salt Flats Levee System Improvements. The

purpose of this document is to investigate the structural integrity of the existing Salt Flats Levee as well as the impediments to certification of the Flood Protection System. This guidance document will provide alternatives and costs for potential improvements, and provide an action plan for Levee System Certification. Future costs associated with re-certifying the Levee System in accordance with FEMA requirements would be presented to City Council for consideration and possible appropriation of Type A funds.

City staff will schedule a workshop(s) with City Council and Type A Board to further address community impacts when FEMA publishes revised updated floodplain maps for public view and comment. FEMA's schedule for publication of updated FIRM's is unknown, but anticipated prior 2012 year end.

RECOMMENDATION:

City Staff recommends entering into the PAL Agreement with FEMA and proceed with alternative 3. Future wave action mitigation along the Corpus Christi Seawall could follow after anticipated infrastructure requirements of levee system recertification are known.

LIST OF SUPPORTING DOCUMENTS:

Location Map
Resolution
Letter from FEMA dated March 2, 2012