

Draft Proposal
Metropolitan Houston Regional Watershed Assessment

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The USACE, Galveston District (SWG) proposed partnering with Harris County Flood Control District (HCFCD) and the City of Houston on a Metropolitan Houston Regional Watershed Assessment (MHRWA), which is authorized under Section 729 of the WRDA 1986, as amended. A watershed study would lead to development of a watershed plan that recommends tools and a strategic course of action for achieving the desired conditions in the watershed.

The purpose of the assessment would be to:

- Characterize performance of the flood risk management features in the region as an integrated system of 22 watersheds,
- Understand how development patterns are affecting watershed hydrology across the system of systems, and
- Update the statistics of extreme precipitation events for systems simulation to explain current and future potential flooding problems.

The scope of the assessment is proposed to include:

- The network of reservoir dams, detention/retention basins, flood routing channels, and other similar flood risk management (FRM) features in the metro Houston region,
- The municipal drainage network that flows into the region's FRM system, and
- An analysis of floodplain management practices with associated discharges that feed into the municipal drainage network.

The intended outcome of the assessment would be to have a single document that:

- Governments at all levels can use for identifying prioritized partnering opportunities to pursue across available agency programs,
- Stakeholders can review and understand the results of the assessment, pursuant to the above-proposed purpose and scope, and
- Elected officials can use to engage constituents and governments at all levels in supporting prioritized FRM actions.

Example opportunities that could come from an assessment include:

- Identification of high priority improvements to FRM systems and connecting urban watershed municipal drainage network,
- Local government updating of flood plain management measures for developers, and
- Pursuit of new Water Resources Development Act (WRDA) authorities for USACE partnership with Non-Federal Sponsors (NFSs) (e.g., HCFCD, City of Houston), to advance investigations (50-50% FED/NON-FED cost share) for making construction recommendations to Congress, where the cost share would be 65-35% FED/NON-FED.

Section 729 project costs are shared 75% FED-25% NON-FED, with the NFS given credit for services in-kind and some other costs. This includes already planned analyses and studies by sponsor organizations that are considered relevant to the watershed assessment. The assessment is scalable up to a 3-yr, \$3 M product, pursuant to WRRDA 2014, Section 1001, without needing to seek an exemption from Higher Authority beyond those limits. An exemption may be necessary depending on the desired scope.

SWG received a Letter of Interest (LOI) from HCFCD to be the NFS on this assessment. The LOI is not a binding commitment. There is opportunity for other NFSs to submit LOIs, depending on regional interest. If we received a new start for the MHRWA, we would need to establish a cost share agreement with one or more NFSs, if there is continued NFS interest to proceed.

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