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AGENDA ITEM MEMO

BOARD MEETING DATE: March 3, 2026

TO: Board Members

THROUGH: Bryan McMath, Executive Administrator
Kathleen Ligon, Assistant Executive Administrator
Ashley Harden, General Counsel
Georgia Sanchez, Chief Financial Officer
John T. Dupnik, P.G., Deputy Executive Administrator, Water Science and Conservation
Sam Hermitte, Assistant Deputy Executive Administrator, Water Science and Conservation

FROM: Dena Green, P.E., CFM, Director, Flood Science and Community Assistance

SUBJECT: Identification of flash flood prone areas within the 30 counties identified in Senate Bill 3

ACTION REQUESTED

Consider approving the identification of areas that have a history of consistent or severe flooding, or are at risk of flash flooding, and may warrant the installation, maintenance, and operation of one or more outdoor warning sirens within the 30 counties affected by Senate Bill 3.

BACKGROUND

In response to the devastating July 2025 floods, the Texas Legislature passed several bills aimed at improving Texas' preparedness for future flood events, including Senate Bill 3 (SB 3), relating to outdoor warning sirens in flash flood-prone areas. Governor Abbott signed SB 3 into law on September 5, 2025.

SB 3 charges the Texas Water Development Board (TWDB) with identifying flash flood-prone areas within the 30 counties included in the disaster declaration issued by the Governor in July 2025 that have a history of consistent or severe flooding and warrant outdoor warning sirens. The bill requires the appropriate municipality or county within those areas identified by the TWDB to install, maintain, and operate an outdoor warning siren system, which includes all components essential to the system's functionality. The TWDB may not approve future financial assistance, other than financial assistance for an outdoor

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warning siren system, for a city or county until the city or county certifies that it is in compliance with this requirement.

KEY ISSUES

Subsequent to the passage of SB 3, the TWDB began work through a contractor to identify areas with a history of consistent or severe flooding that may warrant the installation of one or more outdoor warning sirens. This process incorporated multiple physical, hydrologic, land cover, and meteorologic factors into a Flash Flood Hazard Index to identify areas with the highest likelihood of flash flooding. This information was validated by comparing it with existing flood hazard models and maps, as well as historical flood data. The index was combined with data used to estimate where human exposure during a flash flood may occur. This included data such as population estimates, building footprints, locations for camps and campgrounds, and parks within the 500-year (0.2% annual chance) floodplain as delineated in TWDB's 2024 "Floodplain Quilt." The combined index and potential for exposure to life and property was utilized to identify provisional flash flood hazard risk areas throughout the 30 counties included in SB 3.

The TWDB and its contractors have developed an online mapping tool that identifies the flash flood hazard risk areas. These areas may warrant the installation of one or more outdoor warning siren systems based on additional consideration and input from the local communities based on their knowledge and experience. Local communities are more familiar with the on-the-ground data necessary to decide whether an outdoor warning siren system is warranted in an area. The TWDB and its contractors can identify certain flash-flood-prone areas based on available data and mapping but cannot know actual conditions in those areas at the same level of detail as local experts.

In determining whether an area warrants an outdoor warning siren system, it should be noted that outdoor sirens may not be loud enough to be heard indoors in all areas, though they may be useful when operated in conjunction with other alerting methods to warn people who are indoors. In determining appropriate specific locations for outdoor warning sirens, counties need to consider where people congregate (especially outside), whether the topography allows for a siren to be successful, whether there is adequate cell coverage whereby another notification method might be more successful, whether the buildings in the area are at risk of flooding with people inside, and other considerations.

The counties included in SB 3 may request revisions to the maps based on: (1) changed conditions, incorrect information, or information that was not readily available during development of flash flood risk area maps or (2) proper justification showing that an outdoor warning siren is not warranted in a particular area based on local knowledge. Some examples of proper justifications that an outdoor warning siren is not warranted in a particular location may be that only storage facilities exist in that area or another means of alerting would be more successful. (This list is not exhaustive and meant solely as example.)

This full process will include multiple steps. With this action, the Board will consider approving the provisional identification of areas that may warrant the installation of outdoor warning siren systems. Then, local communities can submit revisions and feedback to TWDB as appropriate. Then, the TWDB will update the maps based on that feedback. Once

an area has been finally identified based on local community feedback, the local communities are required to install sirens in those areas. Within those areas, the local communities will identify the particular location for sirens.

The identifications will be available as a mapping tool on our website at:

<https://arcg.is/1Cf4if3>

RECOMMENDATION

The Executive Administrator recommends approving the identification of areas in the disaster declaration issued by the governor in response to the July 2025 floods that have a history of consistent or severe flooding and may warrant the installation of one or more outdoor warning sirens.