NOTICE OF OPEN MEETING OF THE SAN ANTONIO REGIONAL FLOOD PLANNING GROUP TECHNICAL SUBCOMMITTE

Region 12 San Antonio 10/20/2021

TAKE NOTICE that a meeting of the San Antonio Regional Flood Planning Group Technical Subcommittee as will be held on Thursday November 04, 2021, at 9:30 AM in-person at the San Antonio River Authority Board room, located at 201 W. Sheridan St. and virtually on GotoMeeting at https://global.gotomeeting.com/join/663811877. You may also dial into the meeting on your phone at +1 (872) 240-3212, access code: 663-811-877.

1. (9:00 AM) Roll-Call
2. Public comments – limit 3 minutes per person
3. Selection of Technical Subcommittee Chair, Vice-Chair, and Secretary
4. Discussion on Task 3 Goal Setting
5. Public comments – limit 3 minutes per person
6. Date and Potential Agenda Items for Next Meeting
7. Adjourn

If you wish to provide written comments prior to or after the meeting, please email your comments to cheller@sariverauthority.org or physically mail them to the attention of Caitlin Heller at San Antonio River Authority, 100 E. Guenther, San Antonio, TX, 78204 and include "Region 12 San Antonio Flood Planning Group Meeting" in the subject line of the email.

Additional information may be obtained from: Caitlin Heller, (210) 302-3293, cheller@sariverauthority.org, San Antonio River Authority, 100 E. Guenther, San Antonio, TX. 78204.

REGION 12

Regional Flood Planning Regional Standards – Task 3A

Preliminary input on Flood Management Practices

Purpose and Intent

1. Evaluate if a lack of, insufficient, or ineffective current floodplain management and land use practices, regulations, policies, and trends, allow, cause, or otherwise encourage increases to flood risks to both:
   a. existing population and property,
   b. future population and property.
2. Using future flood hazard exposure analyses, assess how much the 1% annual chance floodplain may change over time.
3. Make recommendations of forward-looking
   - floodplain management
   - land use recommendations
   - economic development practices and strategies.
4. Adopt region-specific, minimum floodplain management or land use or other standards that impact flood-risk that entities must adopt for FMEs, FMEs, or FMPs sponsored by that entity to be included in RFP.

NFIP Overarching Goals

Sec. 9-1. Statutory authorization.

The legislature of the state has in V.T.C.A., Water Code, Arts. 996, 1011, 1011a--1011k, 1015 and § 16.315 delegated the responsibility to local governmental units to adopt regulations designed to minimize flood losses.

Sec. 9-2. Findings of fact.

(1) The flood hazard areas of the city are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.
(2) These flood loses may be created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazards areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed or otherwise protected from flood damage.

Sec. 9-3. Statement of purpose.

It is the purpose of this chapter to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:
(1) Protect human life and health;
(2) Minimize expenditure of public money for costly flood control projects;
(3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
(4) Minimize prolonged business interruptions;
(5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
(6) Help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas; and
(7) Insure that potential buyers are notified that property is in a flood area.

Sec. 9-4. Methods of reducing flood losses.

In order to accomplish its purposes, this chapter uses the following methods:
(1) Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities;
(2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
(3) Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of flood waters;
(4) Control filling, grading, dredging and other development which may increase flood damage;
(5) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

Potential Higher Standards

Technical Criteria

Requirements for future conditions design
Requirement for detention
Update floodplains for Atlas 14
Stream setbacks or buffer zones
No adverse impact analysis
Increase design storm frequency for all infrastructure (ie require 1% Annual Chance for all infrastructure)
Evaluate shear stress and erosion

Regulatory

Adopt Local Floodplain criteria or extend floodplain analysis to smaller watershed limits
Setting Finished floor 1, 2, etc feet above 1% Annual Chance floodplain
Restricting reclamation/fill within floodplains
Eliminating floodways

REGION 12

Regional Flood Planning Goal Setting – Task 3B

Preliminary input on draft goals framework and statements

Purpose and Intent

The purpose of this task is to identify flood mitigation and floodplain management goals for the San Antonio River region. The overarching intent of the goals is "to protect against the loss of life and property" set out in the Guidance Principles in 31 TAC §362.3 to:

1. identify and reduce the risk and impact to life and property that already exists, and
2. avoid increasing or creating new flood risk by addressing future development within the areas known to have existing or future flood risk.

Overarching Goals

Potential overarching goals categories have been developed to guide the subsequent development of the Flood Management Strategies (FMSs), Flood Management Evaluations (FMEs), and Flood Mitigation Projects (FMPs) for the San Antonio Regional Flood Planning region. They build upon TWDB regional flood planning guidance and provide a comprehensive organizational structure for future strategy development to adequately provide for the preservation of life and property, while not negatively affecting neighboring areas. The overarching categories were selected to create a one to one connection with the Flood Management Strategy (FMS) types as outlined in the Data Submittal Guidelines. The proposed overarching goals include:

- Flood Education and Outreach (Education and Outreach)
- Flood Warning and Readiness (Flood Warning and Measurement)
- Flood Studies and Analysis
- Regulatory and Guidance
- Non-Structural Flood Infrastructure Projects
- Structural Flood Infrastructure Projects
- Funding

The six overarching goals are further detailed below and include specific goal statements which are measurable and achievable.

TWDB Submittal Requirements

As stated above, the region's goal statements must identify specific and achievable flood mitigation and floodplain management goals and the information listed below.

- Description of the goal
- Extent or geographic area to which the goal applies
- Residual risk that remains after the goal is met
- Measurement method that will be used to measure goal attainment
- Overarching goal category/ies

The preliminary goal statements were developed in a manner to set the stage for specific items that can be quantified and measured through subsequent state flood plan processes (including future discovery data collection processes) or through implementation of FMEs, FMSs, and FMPs, rather than high level goal statements associated with outcomes (e.g., reducing fatalities).

Benefits

Once the regional flood plan is complete, realization of the goals will occur through the implementation of the associated FMSs, FMEs, and FMPs established in this plan. Implementation of the goals will demonstrate progress towards the overall purpose and intent of this regional flood planning study and will provide a series of benefits to individuals, communities, and the overall flood planning region as a whole. The benefits are set in Table 3.1, below.

Table 3.1, Flood Planning Goal Categories and Benefits

Benefits / Overarching Goals	**Category 1** Flood Education and Outreach	**Category 2** Flood Warning and Readiness	**Category 3** Flood Studies and Analysis	**Category 4** Flood Prevention	**Category 5** Non-Structural Flood Infrastructure Projects	**Category 6** Structural Flood Infrastructure Projects
Protect life	◑	●	◑	◑	●	●
Protect infrastructure		◑	◑	●	◑	●
Protect property		◑	◑	●	●	●
Protect the environment	◑		◑	●	●	●
Protect/enhance water supply				◑	◑	◑
Sustain the economy		◑		◑	●	◑
Realize multiple benefits*				◑	◑	◑
Increase public awareness	●	●	◑	◑	◑	◑
Build community support	●	●	◑	◑		

◑ – *Potential benefit*

● – *Direct benefit*

** multiple benefits could include improved flood protection while improving water supply, increasing public recreation opportunities, etc.*

Specific Goal Statements

Category 1. Education and Outreach

Increase the amount of flood education and outreach opportunities to improve awareness of flood hazards and future participation throughout the flood planning region (FPR).

Specific Goal Statements	**Short Term (2033)**	**Long Term (2053)**	**Potential Measurement**
Increase the number of public stakeholder participants in the regional flood planning data collection (survey) process by X percent per each cycle.	TBD%	TBD%	Number of individual public stakeholders that respond to survey or comment on documents
Increase the number of entities participating in the regional flood planning process by X percent per each cycle.	TBD%	TBD%	Number of entities that respond to survey or comment on documents
Increase the number of public outreach and education activities to improve awareness of flood hazards and benefits of flood planning in the FPR by X occurrences.	TBD	TBD	Number of public service announcements (emails, social media, news blasts)

Increase the proficiency of floodplain managers across the region	TBD	TBD	Number of Public Agency Certified Floodplain Managers

Category 2. Flood Warning and Readiness

Improve the dissemination of information regarding early flood recognition and danger, emergency response procedures, and post-flood recovery actions.

Specific Goal Statements	Short Term (2033)	Long Term (2053)	Potential Measurement
Support the development of a regionally coordinated warning and emergency response program that can detect the flood threat and provide timely warning of impending flood danger.	Initiated	Maintained	TBD
Increase the number of flood response measures utilized by regional entities by X percent per each cycle.	TBD%	TBD%	Number of response measures indicated by entities (flood warning systems, sirens, reverse 911, social media, etc.) as part of their survey response
Increase the number of flood gauges (rainfall, stream, reservoir, etc.) in the region by X gauges.	TBD	TBD	Number of gauges in the region
Increase the number of entities that partner with the National Weather Service to disseminate warnings	TBD	TBD	Number of entities
Increase the number of entities that use TV, radio, social media, and billboards to communicate flood warnings	TBD	TBD	Number of entities
Increase the number of entities that integrate the State flood warning system into their local capabilities and utilize the same data format	TBD	TBD	Number of entities

Category 3. Flood Studies and Analysis

Increase the number and extent of regional flood planning studies (FMEs) and analyses to identify flood risk and better prepare entities for implementing flood mitigation projects.

Specific Goal Statements	Short Term (2033)	Long Term (2053)	Potential Measurement
Increase the number of entities which utilize/adopt Atlas 14 (Volume 11) revised rainfall data as part of revisions to design criteria and flood prevention regulations by X percent. (region specific)	TBD%	TBD%	Number of entities that require use of Atlas 14 rainfall
Increase the coverage of flood hazard data in the FPR by completing studies to reduce areas identified as having current gaps in flood mapping by X percent.	TBD%	TBD%	Area of Flood Mapping Gaps polygon
Increase the number of entities that conduct detailed studies to update their FEMA Flood Insurance Rate Maps (NFHL/FIRMs/FIS) by X.	TBD	TBD	Number of entities that have detailed study (Zone AE/VE) floodplains
Increase the number of completed FMEs by X percent per each cycle.	TBD%	TBD%	Number of completed FMEs in the region

Increase the number of entities that study localized/urban flooding impacts by X.	TBD	TBD	Number of entities that conduct localized/urban studies
Increase the number of entities which have digital flood insurance rate maps (DFIRMs) by X.	TBD	TBD	Number of entities that have digital flood insurance rate maps (DFIRMS)
Decrease the average age of FEMA Flood Insurance Rate Maps (NFHL/FIRMs/FIS) by X years.	TBD	TBD	Regional average age of FEMA mapping
Increase the number of entities which have identified and regulate local floodplains.	TBD	TBD	Number of entities that regulate local floodplains.

Category 4. Flood Prevention

Increase the number and extent of protective regulatory measures and programs to limit future risk and reduce flood damage in the flood planning region.

Specific Goal Statements	Short Term (2033)	Long Term (2053)	Potential Measurement
Reduce the number of non-participating entities in the National Flood Insurance Program (NFIP) in the FPR by X.	TBD	TBD	Number of entities participating in the NFIP
Increase the number of participating Community Rating System (CRS) entities in the FPR by X.	TBD	TBD	Number of entities who are CRS participants
Increase the number of entities which regulate to the future conditions floodplains as part of new development and redevelopment by X.	TBD	TBD	Number of entities that require use of future condition flood risk
Increase the number of entities that have a dedicated municipal drainage charge, drainage district fee, or other continuous funding mechanism by X, to implement future FMEs and FMPs.	TBD	TBD	Number of entities with a drainage funding mechanism
Support the development of minimum stormwater infrastructure design standards applicable across the FPR.	Initiated	Enhanced	TBD
Reduce the number of communities that do not have floodplain standards that meet or exceed the NFIP minimum standards by X.	TBD	TBD	Number of communities participating and enforcing NFIP minimum standards
Increase the number of entities that have adopted higher standards (more stringent than NFIP minimum standards) by X.	TBD	TBD	Number of entities that regulate with higher standards
Increase the number of entities that have adopted regulations to reduce the risk from localized flooding by X.	TBD (establish baseline)	TBD (improve numbers)	Number of entities that require floodplain permits beyond the FEMA floodplain
Increase the number of entities which designate their floodplain management practices as "strong" in the regional flood planning process by X percent per each cycle.	TBD%	TBD%	Number of entities that indicate "strong" floodplain management practices as part of their survey response
Increase the number of entities which designate their level of enforcement of floodplain management as "high activity" by X percent per each cycle.	TBD%	TBD%	Number of entities that indicate a "high activity" level of enforcement of floodplain management practices as part

			of their survey response
Increase the number of entities which regulate to one or more feet above the BFE for existing 1% annual chance event (100-year) conditions by X per each cycle.	TBD	TBD	Number of entities that indicate BFE + 1 or more as part of their survey response
Increase the number of entities which provide alternate compliance options that allow or incentivize nature-based solutions to reduce future flood risk by X.	TBD (establish baseline)	TBD (improve numbers)	Number of entities that allow/incentivize nature-based solutions as part of alternate compliance
Increase the number of entities in the FPR that designate the 1% annual chance (100-year) floodplain on the entity's future land use plan by X.	TBD (establish baseline)	TBD (improve numbers)	Number of entities that delineate floodplains on land use maps
Percent with a documented, operational, and fully funded stormwater asset management plan and system	TBD (establish baseline)	TBD (improve numbers)	Number of entities with a stormwater asset management plan

Category 5. Non-Structural Flood infrastructure Projects

Reduce the amount of existing and future vulnerable properties within the FPR through property/easement acquisition, improved elevation and other flood proofing programs and initiatives.

Specific Goal Statements	Short Term (2033)	Long Term (2053)	Potential Measurement
Reduce the number of vulnerable properties (i.e. through property/easement buyouts, acquisitions, relocations, and/or structural elevation), with a special emphasis on those that have been repeatedly damaged by floods, in the FPR by X percent.	TBD%	TBD%	Number of NFIP repetitive-loss / severe repetitive-loss properties in region
Increase the number of acres of publicly protected open space by X as part of property buyouts, land conservation, and acquisitions to reduce future impacts of flooding.	TBD	TBD	Acreage of preserved land in region
Reduce the number of NFIP repetitive-loss properties in the FPR by X.	TBD	TBD	Number of NFIP repetitive-loss / severe repetitive-loss properties in region

Category 6. Structural Flood Infrastructure Projects

Reduce flood risk and mitigate flood hazards to life and property through the implementation of structural flood infrastructure projects.

Specific Goal Statements	Short Term (2033)	Long Term (2053)	Potential Measurement
Reduce the number of vulnerable critical facilities located within the existing and future 1% annual chance (100-year) floodplain by X.	TBD	TBD	Number of critical facilities located in the floodplain
Reduce the number of vulnerable roadway segments located within the existing and future 1% annual chance (100-year) floodplain by X.	TBD	TBD	Miles of roadway segments located in the floodplain

Reduce the number of low water crossings located within the existing and future 1% annual chance floodplain by X.	TBD	TBD	Number of low water crossings in region
Increase the number of nature-based practices as part of flood risk reduction projects by X.	TBD (establish baseline)	TBD (improve numbers)	Number of nature-based solutions in region
Increase the number of entities in the FPR that provide regional detention as part of an overall floodplain management program by X.	TBD (establish baseline)	TBD (improve numbers)	Number of entities that have a regional detention facility
Develop partnerships with TxDOT and other agencies to ensure that flood mitigation infrastructure is incorporated with new projects/developments	TBD	TBD	Number of partnerships documented through ILA