

Flood Mitigation and Floodplain Management Goals

One of the critical components of the inaugural State Flood Plan process was the development of flood mitigation and floodplain management goals. As such, the Lower Colorado-Lavaca Regional Flood Planning Group (RFPG) spent a significant amount of time and resources exploring values and discussing what they felt were the best goals for their region. This section identifies the flood mitigation and floodplain management goals for the Lower Colorado-Lavaca region.

As set out in the Guidance Principles in 31 TAC §362.3, the overarching intent of the region’s goals must be “to protect against the loss of life and property.” This is further defined 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.

The goals, when implemented, must demonstrate progress towards the overarching goal set forth by the state.

Goal Focus Areas

The RFPG adopted goals covering six focus areas. These focus areas were defined to create a one-to-one connection with the Flood Management Strategy (FMS) types as outlined in TWDB Data Submittal Guidelines.

The adopted goals will guide the development of the Flood Management Strategies (FMSs), Flood Management Evaluations (FMEs), and Flood Mitigation Projects (FMPs) for the Lower Colorado-Lavaca region. They build upon TWDB regional flood planning guidance and provide a comprehensive framework for future strategy development focused on reducing flood risk to people and property, while not negatively affecting neighboring areas.

The six goal focus areas include:

1. Flood Education and Outreach
2. Flood Warning and Readiness
3. Flood Studies and Analysis
4. Flood Prevention
5. Non-Structural Flood Infrastructure Projects
6. Structural Flood Infrastructure Projects

The six focus areas are further detailed below and include specific goal statements that are achievable, measurable, and time specific. Per Texas Water Development Board (TWDB) requirements and guidelines, the goals adopted by the RFPG must be specific and achievable and include the information listed below:

- Description of the goal
- Term of the goal set at 10 years (short-term) and 30 years (long-term)
- 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
- Association with overarching goal focus areas

Benefits

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

Implementation of the goals will demonstrate progress towards the overall purpose and intent of the regional flood planning process and will provide various benefits to individuals, communities, and the region as a whole. The types of benefits to be realized with implementation of the Lower Colorado-Lavaca Regional Flood Plan are presented below.

Table 3.X, Lower Colorado-Lavaca Region Flood Planning Goal Focus Areas and Benefits

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

○ – Potential benefit

● – Direct benefit

* Co-benefits which could be achieved through flood protection include improved water supply, increased public recreation opportunities, etc.

Lower Colorado-Lavaca Region Goals (14)

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) | Metric |
|--|-------------------|------------------|--|
| 1.1 Increase the number of public outreach and educational communications and activities conducted by the RFPG to improve awareness of flood hazards and benefits of flood planning in the flood planning region. | TBD | TBD | Number of public communications (emails, social media, news blasts, public service announcements, educational packets, etc.) |

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) | Metric |
|--|-------------------|------------------|---|
| 2.1 Increase the number of communities with warning and emergency response capabilities, or which participate in regional flood warning systems (e.g., LCRA Hydromet, City of Austin Early Warning System) that can detect flood threats in real time and provide timely warning of impending flood danger. | TBD | TBD | Number of communities with warning and emergency response capabilities (e.g., real time flood-gauge monitoring) |

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) | Metric |
|--|-------------------|------------------|---|
| 3.1 Increase the number of entities that have updated watershed models and floodplain maps to reflect current conditions, including as applicable Atlas 14 (Volume 11) revised rainfall data. | TBD | TBD | Number of entities that have updated watershed models and floodplain maps |
| 3.2 Increase the number of entities that have evaluated priority flood risk areas and flood risk reduction measures (e.g., alternatives analysis and preliminary engineering). | TBD | TBD | Number of entities that identify risk reduction measures |
| 3.3 Increase the number of entities that have digital flood insurance rate maps (DFIRMS) that reflect current conditions. | TBD | TBD | Number of entities that have digital flood insurance rate maps (DFIRMS) |

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) | Metric |
|---|---|-----------------------|---|
| 4.1 Increase the number of eligible entities that are participating in the National Flood Insurance Program (NFIP). | 100% participation by eligible entities | Maintain | Number of eligible entities that are participating in the NFIP |
| 4.2 Increase the number of entities that have adopted higher standards over and above NFIP minimum standards, including regulating to one or more feet above the Base Flood Elevation (BFE) for existing 1% annual change event (100-year) conditions. | TBD | TBD | Number of entities that regulate with higher standards (e.g., regulating to Base Flood Elevation (BFE) + 1 as part of regulatory framework) |
| 4.3 Increase the number of entities that have adopted regulations to reduce the risk from localized flooding. | TBD (establish baseline) | TBD (improve numbers) | Number of entities that have local drainage protection requirements in their development code |
| 4.4 Increase the number of entities which provide alternate compliance options that allow or incentivize nature-based solutions to reduce future flood risk. | TBD (establish baseline) | TBD (improve numbers) | Number of entities that allow/incentivize nature-based solutions as part of alternate compliance |
| 4.5 Increase the number of entities in the flood planning region that consider the 1% annual chance (100-year) floodplain on the entity's future land use plans and development regulations. | TBD (establish baseline) | TBD (improve numbers) | Number of entities that consider 100-year floodplains on land use maps and development regulations |

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) | Metric |
|---|-------------------|------------------|---|
| 5.1 Reduce the number of structures and critical infrastructure that are at high risk of repetitive loss through property/easement acquisitions, relocations, floodproofing and/or elevation. | TBD | TBD | Number of NFIP repetitive-loss / severe repetitive-loss properties mitigated by acquisitions, relocations, floodproofing and/or elevation |
| 5.2 Increase the acreage of publicly protected open space to reduce future impacts of flooding through property buyouts, land conservation easements, acquisitions, or other comparable means. | TBD | TBD | Acreage of preserved land 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) | Metric |
|---|----------------------|---------------------|--|
| 6.1 Reduce the number of structures and critical facilities that are at high risk of repetitive loss through the implementation of structural flood mitigation projects. | TBD | TBD | Number of NFIP repetitive-loss / severe repetitive-loss properties mitigated by structural flood mitigation projects |
| 6.2 Increase the number of entities that mitigate flood risk at vulnerable roadways or waterways (e.g., low-water crossings, irrigation canals). | TBD | TBD | Number of entities that mitigate low-water crossings or vulnerable roadways or waterways |

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