

# APPENDIX E. MITIGATION STRATEGY SUPPLEMENTARY DATA

This appendix summarizes additional activities and resources provided to plan participants to support the update of the mitigation strategy.

### E.1 2018 Goals and Objectives Review

Fort Bend County's planning documents and recent policy changes were reviewed and discussed with the Planning Team to help inform the review and update of the goals and objectives. Table E-1 and Table E-2 summarizes the Planning Team review and evaluation of the 2018 HMP goals and objectives. Table E-3 and Table E-4 summarize the goals and objectives for the 2023 HMP update.

### Table E-1. 2018 Goals Evaluation

| 2018 Goal  | 2023 Goal Evaluation<br>(Keep? Change? Add<br>another goal?) |
|--|--|
| Goal 1: Educate and inform citizens regarding potential emergency situations related to natural hazards, including those resulting from groundwater depletion.   | Change   |
| Goal 2: Decrease the risk to life and property through planning, preparing, and mitigating.  | Change   |
| Goal 3: Perform projects that reduce the impact of natural hazards in order to increase resiliency and enhance the ability to recover.   | Keep as is   |
| Goal 4: Enhance coordination between local, county, state, and federal agencies by understanding the impact of hazards in Fort Bend County and developing policies and strategies to effectively manage and reduce risk. | New  |
| Goal 5: Support continuity of operations pre-, during, and post-hazard events including support of community lifelines and critical facilities.  | New  |

### Table E-2. 2018 Objectives Evaluation

| 2018 Objective   | 2023 Objective Evaluation<br>(Keep? Change? Add<br>another objective?) |
|--|--|
| Objective 1: Evaluate and improve safety & loss reduction codes/standards for hazards that affect Fort Bend County and its municipalities.   | Keep as is   |
| Objective 2: Develop and strengthen public/private partnerships between the County, non-<br>profits, and the business community.   | Keep as is   |
| Objective 3: Identify funding sources and increase awareness of funding sources to obtain funding for mitigation projects from a variety of federal, state, regional and local entities. | Keep as is   |
| Objective 4: Promote sustainable communities and hazard resilient development.   | Keep as is   |
| Objective 5: Promote the use of emergency notification systems and weather alert systems for all hazards.  | Keep as is   |
| Objective 6: Develop publications and information on all hazards that could potentially impact<br>Fort Bend County.  | Keep as is   |
| Objective 7: Incorporate hazard mitigation into community planning mechanisms, codes/ordinances, day-to-day operations, and projects.  | Keep as is   |
| Objective 8: Identify, protect, and assist socially vulnerable populations recover from hazard impacts.  | Keep as is   |
| Objective 9: Ensure continuity of operations of government, non-government, commerce, private sector, non-profit, and infrastructure.  | Keep as is   |
| Objective 10: Implement mitigation measures that promote the reliability of community lifeline systems.  | Keep as is   |





### Table E-3. 2023 Goals

2023 Goals Goal 1: Educate and inform citizens regarding potential emergency situations related to hazards.

Goal 2: Decrease the risk to life and property from hazards through planning, preparing, and mitigating.

Goal 3: Perform projects that reduce the impact of natural hazards in order to increase resiliency and enhance the ability to recover.

Goal 4: Enhance coordination between local, county, state, and federal agencies by understanding the impact of hazards in Fort Bend County and developing policies and strategies to effectively manage and reduce risk.

Goal 5: Support continuity of operations pre-, during, and post-hazard events including support of community lifelines and critical facilities.

### Table E-4. 2023 Objectives

2023 Objectives

Objective 1: Evaluate and improve safety & loss reduction codes/standards for hazards that affect Fort Bend County and its municipalities.

Objective 2: Develop and strengthen public/private partnerships between the county, non-profits, and the business community.

Objective 3: Identify funding sources and increase awareness of funding sources to obtain funding for mitigation projects from a variety of federal, state, regional and local entities.

Objective 4: Promote sustainable communities and hazard resilient development.

Objective 5: Promote the use of emergency notification systems and weather alert systems for all hazards.

Objective 6: Develop publications and information on all hazards that could potentially impact Fort Bend County.

Objective 7: Incorporate hazard mitigation into community planning mechanisms, codes/ordinances, day-to-day operations, and projects.

Objective 8: Identify, protect, and assist socially vulnerable populations recover from hazard impacts.

Objective 9: Ensure continuity of operations of government, non-government, commerce, private sector, non-profit, and infrastructure.

Objective 10: Implement mitigation measures that promote the reliability of community lifeline systems.

### E.2 MITIGATION STRATEGY WORKSHOP RESOURCES

On March 29, 2023 a Mitigation Strategy Workshop was held for all plan participants. The workshop was held virtually and was led by the contract consultant, supplemented by emails and phone calls between the County of Fort Bend and the contract consultant, for all participants to support the development of focused problem statements based on the impacts of natural hazards in the county and their communities. These problem statements were intended to provide a detailed description of the problem area, including its impacts to the municipality/jurisdiction; past damages; loss of service; etc. An effort was made to include the street address of the property/project location, adjacent streets, water bodies, and well-known structures as well as a brief description of existing conditions (topography, terrain, hydrology) of the site. These problem statements formed a bridge between the hazard risk assessment which quantifies impacts to each community with the development of actionable mitigation strategies. Resources available at the workshop and follow up discussions included the following to assist with the identification of mitigation alternatives and the development of the mitigation strategy workshops found in Section 9 (Annexes).

1. FEMA Local Mitigation Handbook





- 2. Public survey results
- 3. FEMA Mitigation action types (Table E 5)
- 4. FEMA Mitigation Ideas
- 5. FEMA Project Useful Life factsheet
- 6. Mitigation funding sources at the federal, state, and local levels (Table E 6)
- 7. FEMA Region 6 Funding Sources for Texas
- 8. FEMA Ecosystem Services

### E.2.1 Types of Mitigation Actions

A mitigation action is a specific action, project, activity, or process taken to reduce or eliminate long-term risk to people and property from hazards and their impacts. Implementing mitigation actions helps achieve the plan's mission and goals. The actions to reduce vulnerability to threats and hazards form the core of the plan and are a key outcome of the planning process.

The primary types of mitigation actions to reduce long-term vulnerability are:

- Local Plans and Regulations (LPR)
- Structure and Infrastructure Projects (SIP)
- Natural Systems Protection (NSP)
- Education and Awareness Programs (EAP)

### Table E-5. FEMA Mitigation Action Types

| Mitigation Type                             | Description  | Examples   |
|---|--|--|
| Local Plans and<br>Regulations              | These actions include government authorities,<br>policies, or codes that influence the way land and<br>buildings are developed and built.  | <ul> <li>Comprehensive plans</li> <li>Land use ordinances</li> <li>Subdivision regulations</li> <li>Development review</li> <li>Building codes and enforcement</li> <li>NFIP Community Rating System</li> <li>Capital improvement programs</li> <li>Open space preservation</li> <li>Stormwater management regulations and master plans</li> </ul> |
| Structure and<br>Infrastructure<br>Projects | These actions involve modifying existing structures<br>and infrastructure to protect them from a hazard or<br>remove them from a hazard area. This could apply to<br>public or private structures as well as critical facilities<br>and infrastructure.<br>This type of action also involves projects to construct<br>manmade structures to reduce the impact of hazards.<br>Many of these types of actions are projects eligible<br>for funding through the FEMA Hazard Mitigation<br>Assistance program. | <ul> <li>Acquisitions and elevations of structures<br/>in flood prone areas</li> <li>Utility undergrounding</li> <li>Structural retrofits</li> <li>Floodwalls and retaining walls</li> <li>Detention and retention structures</li> <li>Culverts</li> <li>Safe rooms</li> </ul>   |
| Natural Systems<br>Protection               | These are actions that minimize damage and losses<br>and also preserve or restore the functions of natural<br>systems.   | <ul> <li>Sediment and erosion control</li> <li>Stream corridor restoration</li> <li>Forest management</li> <li>Conservation easements</li> <li>Wetland restoration and preservation</li> </ul>   |





| Mitigation Type   | Description   | Examples   |
|---|---|--|
| Mitigation Type<br>Education and<br>Awareness<br>Programs | Description<br>These are actions to inform and educate citizens,<br>elected officials, and property owners about hazards<br>and potential ways to mitigate them. These actions<br>may also include participation in national programs,<br>such as StormReady or Firewise Communities.<br>Although this type of mitigation reduces risk less<br>directly than structural projects or regulation, it is an<br>important foundation. A greater understanding and<br>awareness of hazards and risk among local officials, | <ul> <li>Radio or television spots</li> <li>Websites with maps and information</li> <li>Real estate disclosure</li> <li>Presentations to school groups or<br/>neighborhood organizations</li> <li>Mailings to residents in hazard-prone<br/>areas</li> <li>StormReady</li> </ul> |
|   | stakeholders, and the public is more likely to lead to direct actions.  | Firewise Communities   |





## E.2.2 Potential Mitigation Funding Sources

While it is important to recognize the mitigation strategies for Fort Bend County to help achieve the mitigation goals and objectives of the HMP, it is also important to provide sources for funding to implement these strategies. Table E-6 provides a list of programs, descriptions, and links for those seeking funding sources. Please note that this table is not intended to be a comprehensive list, but rather a starting point to help identify potential sources of funding for the identified mitigation strategies.

### **Table E-6. Texas Mitigation Funding Sources**

| Program  | Description  | Lead Agency | Website   |
|--|--|-------------|---|
| Federal  |  |             |   |
| Hazard Mitigation<br>Assistance (HMA)                                | Grants to provide funding for eligible mitigation activities that<br>reduce disaster losses and protect life and property from future<br>disaster damages – includes FMA, HMGP, PDM  | FEMA        | https://www.fema.gov/hazard-mitigation-<br>assistance   |
| Flood Mitigation<br>Assistance (FMA)                                 | Program Grants to States and communities for pre-disaster<br>mitigation planning and projects to help reduce or eliminate the<br>long-term risk of flood damage to structures insurable under the<br>National Flood Insurance Program  | FEMA        | https://www.fema.gov/flood-mitigation-<br>assistance-grant-program                            |
| Hazard Mitigation Grant<br>Program (HMGP)                            | Grants to States and communities for planning and projects<br>providing long-term hazard mitigation measures following a major<br>disaster declaration   | FEMA        | https://www.fema.gov/hazard-mitigation-<br>grant-program                                      |
| Building Resilient<br>Infrastructure and<br>Communities (BRIC)       | Supports states, local communities, tribes and territories to<br>undertake hazard mitigation projects by reducing the risks they face<br>from disasters and natural hazards. BRIC is a new FEMA pre-disaster<br>hazard mitigation program that replaces the existing Pre-Disaster<br>Mitigation (PDM) program.   | FEMA        | https://www.fema.gov/grants/mitigation/buil<br>ding-resilient-infrastructure-communities      |
| Public Assistance: Hazard<br>Mitigation Funding<br>Under Section 406 | Hazard mitigation discretionary funding available under Section 406<br>of the Robert T. Stafford Disaster Relief and Emergency Assistance<br>Act following a Presidentially declared disaster  | FEMA        | https://www.fema.gov/press-<br>release/20220328/fema-hazard-mitigation-<br>grants-404-and-406 |
| Assistance to Firefighters<br>Grant Program                          | The primary goal of the Assistance to Firefighters Grants (AFG) is to<br>enhance the safety of the public and firefighters with respect to fire-<br>related hazards by providing direct financial assistance to eligible fire<br>departments, nonaffiliated Emergency Medical Services<br>organizations, and State Fire Training Academies. This funding is for<br>critically needed resources to equip and train emergency personnel<br>to recognized standards, enhance operations efficiencies, foster<br>interoperability, and support community resilience. | FEMA        | https://www.fema.gov/welcome-assistance-<br>firefighters-grant-program                        |
| High Hazard Potential<br>Dams (HHPD)<br>Rehabilitation Grant         | The Rehabilitation of High Hazard Potential Dams Grant Program<br>(HHPD provides technical, planning, design, and construction<br>assistance in the form of grants to non-Federal governmental   | FEMA        | https://www.grants.gov/web/grants/view-<br>opportunity.html?oppId=316238                      |





| Program   | Description  | Lead Agency                                | Website   |
|---|--|--|---|
|   | organizations or nonprofit organizations for rehabilitation of eligible high hazard potential dams.  |  |   |
| Fire Management<br>Assistance Grant<br>Program                          | Assistance for the mitigation, management, and control of fires on<br>publicly or privately-owned forests or grasslands that threaten such<br>destruction as would constitute a major disaster. Provides a 75%<br>Federal cost share and the State pay the remaining 25% for actual<br>cost.   | FEMA                                       | https://www.fema.gov/fire-management-<br>assistance-grant-program   |
| Disaster Housing<br>Program   | Emergency assistance for housing, including minor repair of home to establish livable conditions, mortgage and rental assistance   | HUD  | https://www.hud.gov/program_offices/public<br>indian_housing/publications/dhap  |
| HOME Investment<br>Partnerships Program                                 | Grants to local and state government and consortia for permanent<br>and transitional housing, (including financial support for property<br>acquisition and rehabilitation for low-income persons)  | HUD  | https://www.hud.gov/program_offices/comm<br>_planning/affordablehousing/programs/home<br>_/                           |
| HUD Disaster Recovery<br>Assistance                                     | Grants to fund gaps in available recovery assistance after disasters (including mitigation)  | HUD  | https://www.hud.gov/info/disasterresources  |
| Section 108 Loan<br>Guarantee   | Enables states and local governments participating in the<br>Community Development Block Grant (CDBG) program to obtain<br>federally guaranteed loans for disaster-distressed areas  | HUD  | https://www.hudexchange.info/programs/sec<br>tion-108/  |
| Smart Growth<br>Implementation<br>Assistance (SGIA)<br>program          | The SGIA program focuses on complex or cutting-edge issues, such<br>as stormwater management, code revision, transit-oriented<br>development, affordable housing, infill development, corridor<br>planning, green building, and climate change. Applicants can submit<br>proposals under 4 categories: community resilience to disasters, job<br>creation, the role of manufactured homes in sustainable<br>neighborhood design or medical and social service facilities siting. | ΕΡΑ  | https://www.epa.gov/smartgrowth   |
| Partners for Fish and<br>Wildlife                                       | Financial and technical assistance to private landowners interested<br>in pursuing restoration projects affecting wetlands and riparian<br>habitats  | U.S. Fish and Wildlife<br>Service          | https://www.fws.gov/partners/   |
| FHWA Emergency Relief<br>Program  | Fund for the repair or reconstruction of Federal-aid highways that<br>have suffered serious damage as a result of (1) natural disasters or<br>(2) catastrophic failures from an external cause   | U.S. Department of<br>Transportation (DOT) | https://www.fhwa.dot.gov/programadmin/er<br>elief.cfm   |
| Transportation<br>Investment Generating<br>Economic Recovery<br>(TIGER) | Investing in critical road, rail, transit and port projects across the nation  | U.S. DOT                                   | https://www.transportation.gov/tags/tiger-<br>grants  |
| Community Facilities<br>Direct Loan & Grant<br>Program                  | This program provides affordable funding to develop essential<br>community facilities in rural areas. An essential community facility is<br>defined as a facility that provides an essential service to the local<br>community for the orderly development of the community in a<br>primarily rural area, and does not include private, commercial or<br>business undertakings.  | USDA                                       | <u>https://www.rd.usda.gov/programs-</u><br><u>services/community-facilities-direct-loan-</u><br><u>grant-program</u> |





| Program                 | Description  | Lead Agency            | Website                                      |
|-------------------------|--|------------------------|--|
| Emergency Loan          | USDA's Farm Service Agency (FSA) provides emergency loans to help      | USDA                   | https://www.fsa.usda.gov/programs-and-       |
| Program                 | producers recover from production and physical losses due to           |                        | services/farm-loan-programs/emergency-       |
|                         | drought, flooding, other natural disasters or quarantine               |                        | <u>farm-loans/index</u>                      |
| Emergency Watershed     | Provide assistance to relieve imminent hazards to life and property    | NRCS                   | https://www.nrcs.usda.gov/wps/portal/nrcs/   |
| Protection (EWP)        | caused by floods, fires, drought, windstorms, and other natural        |                        | main/national/programs/landscape/ewpp/       |
| Program                 | occurrences  |                        |  |
|                         | Financial assistance to help plan and implement conservation           | NRCS                   | https://www.nrcs.usda.gov/wps/portal/nrcs/   |
| Financial Assistance    | practices that address natural resource concerns or opportunities to   |                        | main/national/programs/financial/            |
|                         | help save energy, improve soil, water, plant, air, animal and related  |                        |  |
|                         | resources on agricultural lands and non-industrial private forest land |                        |  |
| Emergency Management    | Assist local, tribal, territorial, and state governments in enhancing  | FEMA, U.S. DHS         | https://www.fema.gov/emergency-              |
| Performance Grants      | and sustaining all-hazards emergency management capabilities           |                        | management-performance-grant-program         |
| (EMPG) Program          |  |                        |  |
| Reimbursement for       | Provides reimbursement only for direct costs and losses over and       | U.S. DHS               | https://www.usfa.fema.gov/grants/firefightin |
| Firefighting on Federal | above normal operating costs.  |                        | g_federal_property.html                      |
| Property                |  |                        |  |
|                         | HSGP is composed of three interconnected grant programs including      | U.S. DHS               | https://www.dhs.gov/homeland-security-       |
| Department of           | the State Homeland Security Program (SHSP), Urban Areas Security       |                        | grant-program-hsgp                           |
| Homeland Security Grant | Initiative (UASI), and the Operation Stonegarden (OPSG). Together,     |                        |  |
| Program (HSGP)          | these competitive grant programs fund a range of preparedness          |                        |  |
|                         | activities, including planning, organization, equipment purchase,      |                        |  |
|                         | training, exercises, and management and administration.                |                        |  |
|                         | Matching grants to states and local governments for the acquisition    | National Park Service  | https://www.nps.gov/subjects/lwcf/index.ht   |
| Land & Water            | and development of public outdoor recreation areas and facilities      |                        | <u>m</u>                                     |
| Conservation Fund       | (as well as funding for shared federal land acquisition and            |                        |  |
|                         | conservation strategies)   |                        |  |
| Land and Water          | Funding to states, local and conservation organizations for outdoor    | U.S. Department of the | https://www.doi.gov/lwcf                     |
| Conservation Fund       | recreational development, renovation, land acquisition, and            | Interior               |  |
|                         | planning.  |                        |  |
|                         | Small Business Administration (SBA) provides low-interest disaster     | Small Business         | https://www.sba.gov/funding-                 |
|                         | loans to homeowners, renters, business of all sizes, and most private  | Administration (SBA)   | programs/disaster-assistance                 |
| USSBA                   | nonprofit organizations. SBA disaster loans can be used to repair or   |                        |  |
| OSSEA                   | replace the following items damaged or destroyed in a declared         |                        |  |
|                         | disaster: real estate, personal property, machinery and equipment,     |                        |  |
|                         | and inventory and business assets.                                     |                        |  |
| State                   |  |                        |  |
| Clean Water State       | The Clean Water State Revolving Fund, authorized by the Clean          | Texas Water            | http://www.twdb.texas.gov/financial/progra   |
| Revolving Fund (CWSRF)  | Water Act, provides low-cost financial assistance for planning,        | Development Board      | ms/CWSRF/index.asp                           |
| Loan Program            | acquisition, design, and construction of wastewater, reuse, and        |                        |  |
| Louirrogram             | stormwater infrastructure  |                        |  |





| Program   | Description   | Lead Agency                      | Website  |
|---|---|----------------------------------|--|
| Drinking Water State<br>Revolving Fund (DWSRF)<br>Loan Program      | The Drinking Water State Revolving Fund, authorized by the Safe<br>Drinking Water Act, provides low-cost financial assistance for<br>planning, acquisition, design, and construction of water<br>infrastructure.  | Texas Water<br>Development Board | http://www.twdb.texas.gov/financial/progra<br>ms/DWSRF/index.asp   |
| Rural Water Assistance<br>Fund (RWAF) Program                       | The Rural Water Assistance Fund (RWAF) is designed to assist small<br>rural utilities to obtain low-cost financing for water and wastewater<br>projects. The RWAF offers tax-exempt equivalent interest rate loans<br>with long-term finance options.   | Texas Water<br>Development Board | http://www.twdb.texas.gov/financial/progra<br>ms/RWAF/index.asp  |
| State Participation-<br>Regional Water and<br>Wastewater Facilities | The State Participation Program enables the TWDB to provide<br>funding and assume a temporary ownership interest in a regional<br>water, wastewater, or flood control project when the local sponsors<br>are unable to assume debt for an optimally sized facility. The<br>program is intended to encourage the optimum regional<br>development of projects by funding excess capacity for future use<br>where the benefits can be documented, and where such<br>development is unaffordable without state participation. The goal is<br>to allow for the "right sizing" of projects in consideration of future<br>needs. | Texas Water<br>Development Board | http://www.twdb.texas.gov/financial/progra<br>ms/SPP/index.asp   |
| Flood Infrastructure<br>Fund (FIF)                                  | FIF rules allow for a wide range of flood projects, including structural and nonstructural projects as well as nature-based solutions.  | Texas Water<br>Development Board | https://www.twdb.texas.gov/financial/progra<br>ms/FIF/index.asp#:~:text=Passed%20by%20th<br>e%20Legislature%20and,flood%20mitigation<br>%2C%20and%20drainage%20projects. |
| Texas Water<br>Development Fund<br>(DFund)                          | The Water Development Fund (DFund) is a state funded loan<br>program that does not receive federal subsidies and is not subject to<br>federal crosscutters. The DFund enables the Board to fund multiple<br>eligible components in one loan to our borrowers, e.g. an<br>application for funding of water and wastewater components can be<br>processed in a single loan.   | Texas Water<br>Development Board | http://www.twdb.texas.gov/financial/progra<br>ms/TWDF/index.asp  |
| Economically Distressed<br>Areas Program (EDAP)                     | The Economically Distressed Areas Program (EDAP) provides<br>financial assistance for projects serving economically distressed<br>areas where water or sewer services do not exist, or systems do not<br>meet minimum state standards.  | Texas Water<br>Development Board | http://www.twdb.texas.gov/financial/progra<br>ms/EDAP/index.asp  |
| Agricultural Water<br>Conservation Grants<br>Program                | The Agricultural Water Conservation Grants Program offers grants to<br>state agencies and political subdivisions – a county, city, or other<br>body politic or corporate of the state, including any district or<br>authority created under Article III, Section 52 or Article XVI, Section<br>59 of the Texas Constitution and including any interstate compact<br>commission to which the state is a party and any nonprofit water<br>supply corporation created and operating under Chapter 67 – for<br>projects that:   | Texas Water<br>Development Board | http://www.twdb.texas.gov/financial/progra<br>ms/AWCG/index.asp  |



| Program   | Description  | Lead Agency                      | Website  |
|---|--|----------------------------------|--|
|   | <ul> <li>support agricultural irrigation conservation strategies<br/>in alignment with the state water plan.</li> <li>demonstrate agricultural water conservation best<br/>management practices.</li> </ul>  |                                  |  |
| Agricultural Water<br>Conservation Loan<br>Program          | Conservation projects that 1) improve water use efficiency of water<br>delivery and application, or 2) prepare irrigated land for conversion<br>to dry land farming, or 3) prepare dry land for more efficient use of<br>natural precipitation, or 4) purchase and install on public or private<br>property devices designed to indicate the amount of water<br>withdrawn for irrigation use, or 5) brush control activities conducted<br>under Chapter 203 of Agriculture Code, or 6) other conservation<br>projects defined by TWDB rules. | Texas Water<br>Development Board | http://www.twdb.texas.gov/financial/progra<br>ms/AWCL/index.asp              |
| Groundwater<br>Conservation District<br>Loan Program (GDLP) | The GDLP provides loans to finance the start-up costs of<br>Groundwater Conservation Districts. The program is authorized<br>under Water Code Chapter 36, Subchapter L, and governed by<br>TWDB rules Chapter 363 Subchapter H   | Texas Water<br>Development Board | http://www.twdb.texas.gov/financial/progra<br>ms/GDLP/index.asp              |
| State Water<br>Implementation Fund for<br>Texas (SWIFT)     | Affordable, ongoing financial assistance for projects in the state<br>water plan. Passed by the Legislature and approved by Texas voters<br>through a constitutional amendment, the SWIFT program helps<br>communities develop and optimize water supplies at cost-effective<br>rates. The program provides low-interest loans, extended<br>repayment terms, deferral of loan repayments, and incremental<br>repurchase terms for projects with state ownership aspects.   | Texas Water<br>Development Board | http://www.twdb.texas.gov/financial/progra<br>ms/SWIFT/index.asp             |
| Regional Flood Planning<br>Grants                           | Studies to evaluate and recommend the most feasible alternatives<br>to meet regional (two or more participating entities or service areas)<br>water supply and wastewater facility needs, estimate the costs<br>associated with implementing the recommendations, and identify<br>any institutional arrangements that may be necessary to provide<br>regional water supply and wastewater services. Regional systems<br>often have inherent operational advantages or economies of scale<br>over stand-alone systems.                        | Texas Water<br>Development Board | http://www.twdb.texas.gov/flood/planning/i<br>ndex.asp                       |
| Coastal Erosion Planning<br>and Response Act<br>(CEPRA)     | Since 2000, the Texas General Land Office's Coastal Erosion Planning<br>and Response Program has received \$62 million in state funding and<br>another \$62 million in matching funds from federal and local<br>governments, funding more than 200 coastal erosion projects.   | Texas General Land Office        | <u>https://www.glo.texas.gov/coast/grant-</u><br>projects/funding/index.html |
| Coastal Impact<br>Assistance Program<br>(CIAP)              | Will provide more than \$168 million to Texas. Funding comes from<br>the federal government as compensation for damages caused by<br>drilling in federal waters in the Gulf of Mexico.   | Texas General Land Office        | https://www.glo.texas.gov/coast/grant-<br>projects/funding/index.html        |
| Coastal Management<br>Program (CMP)                         | Awards approximately \$2.2 million annually in grants. CMP goal is to ensure the long-term environmental and economic health of the Texas coast.   | Texas General Land Office        | https://www.glo.texas.gov/coast/grant-<br>projects/funding/index.html        |





| Program                        | Description  | Lead Agency                               | Website  |
|--------------------------------|--|---|--|
| Beach Maintenance              | Administered by the Texas General Land Office, typically allocates   | Texas General Land Office                 | https://www.glo.texas.gov/coast/grant-   |
| Reimbursement Fund             | \$750,000 per year to help communities maintain beaches.   |   | projects/funding/index.html  |
|                                | The Agricultural Management Assistance (AMA) helps agricultural  | Natural Resources                         | https://www.nrcs.usda.gov/wps/portal/nrcs/   |
| The Agricultural               | producers manage financial risk through diversification, marketing   | Conservation Service                      | main/national/programs/financial/ama/#   |
| Management Assistance          | or natural resource conservation practices. NRCS administers the   | (NRCS)                                    |  |
| (AMA)                          | conservation provisions while Agricultural Marketing Service and   |   |  |
|                                | Risk Management Agency implement the production diversification  |   |  |
|                                | and marketing provisions.  |   |  |
|                                | The Agricultural Water Enhancement Program (AWEP) is a voluntary   | Natural Resources                         | https://www.nrcs.usda.gov/wps/portal/nrcs/   |
| The Agricultural Water         | conservation initiative that provides financial and technical  | Conservation Service                      | detail/national/programs/financial/awep/?cid   |
| Enhancement Program            | assistance to agricultural producers to implement agricultural water   | (NRCS)                                    | <u>=nrcs143_008334</u>   |
| (AWEP)                         | enhancement activities on agricultural land to conserve surface and  |   |  |
|                                | ground water and improve water quality.  |   |  |
|                                | Conservation Innovation Grants (CIG) is a competitive program that   | Natural Resources                         | https://www.nrcs.usda.gov/wps/portal/nrcs/   |
|                                | supports the development of new tools, approaches, practices, and  | Conservation Service                      | detail/national/programs/financial/cig/?cid=n  |
| Conservation Innovation        | technologies to further natural resource conservation on private   | (NRCS)                                    | <u>rcs143_008205</u>   |
| Grants (CIG)                   | lands. Through creative problem solving and innovation, CIG  |   |  |
|                                | partners work to address our nation's water quality, air quality, soil   |   |  |
|                                | health and wildlife habitat challenges, all while improving  |   |  |
|                                | agricultural operations.   |   |  |
|                                | The Environmental Quality Incentives Program (EQIP) provides   | Natural Resources                         | https://www.nrcs.usda.gov/wps/portal/nrcs/   |
|                                | financial and technical assistance to agricultural producers and non-  | Conservation Service                      | main/national/programs/financial/eqip/   |
| The Environmental              | industrial forest managers to address natural resource concerns and  | (NRCS)                                    |  |
| Quality Incentives             | deliver environmental benefits such as improved water and air  |   |  |
| Program (EQIP)                 | quality, conserved ground and surface water, increased soil health   |   |  |
|                                | and reduced soil erosion and sedimentation, improved or created  |   |  |
|                                | wildlife habitat, and mitigation against drought and increasing  |   |  |
| Community                      | weather volatility.  | Tauca Davantus ant of                     |  |
| Community<br>Development Block | The primary objective of the Community Development Block Grant program is to develop viable communities by providing decent        | Texas Department of<br>Agriculture (TDA)  | https://www.texasagriculture.gov/GrantsServ<br>ices/RuralEconomicDevelopment/RuralComm |
| Grant (TxCDBG) Program         | housing and suitable living environments and expanding economic  | Agriculture (TDA)                         | unityDevelopmentBlockGrant(CDBG).aspx  |
| for Rural Texas                | opportunities principally for persons of low- to moderate-income.  |   |  |
| TOT RUTAL TEXAS                |  | Toyac Donartment                          | http://www.tdhes.state.tv.us/home.division/  |
|                                | The HOME and Homelessness Programs Division awards funds to assist units of general local governments, public housing authorities, | Texas Department<br>Housing and Community | http://www.tdhca.state.tx.us/home-division/  |
| HOME                           | nonprofits, and local agencies in the provision of assistance to low-  | Affairs (TDHCA)                           |  |
|                                | income Texans with a focus on housing and housing-related  | Analis (IDRCA)                            |  |
|                                | assistance and service.  |   |  |
|                                | The Nonpoint Source Grant Program awards funds to assist   | Texas Center for                          | https://www.tceq.texas.gov/waterquality/no   |
| Nonpoint Source Grant          | nonprofit organizations and Texas state agencies, to develop and   | Environmental Quality                     | npoint-source/grants/grant-pgm.html  |
| Program                        | implement Watershed Protection Plans.  | (TCEQ)                                    |  |





| Program                               | Description  | Lead Agency   | Website  |
|---------------------------------------|--|---|--|
|                                       | The TCEQ and the Texas State Soil and Water Conservation Board<br>(TSSWCB) administer federal grants for activities that prevent or<br>reduce nonpoint source pollution. Grants are awarded annually and<br>fund projects for up to three years. The TCEQ usually solicits grants<br>in the summer of each year. Opportunities to apply are published on   | Texas Center for<br>Environmental Quality<br>(TCEQ) | https://www.tceq.texas.gov/assets/public/co<br>mm_exec/pubs/sfr/068_12.pdf |
| Nonpoint Source<br>Management Program | this Web page and Electronic State Business Daily The grants are<br>made available through a federal program authorized under Section<br>319 of the Clean Water Act. See descriptions of active projects<br>funded through the TCEQ's Nonpoint Source Program (NPS).<br>Congress enacted CWA §319(h) in 1987, establishing a national<br>program to control NPS water pollution. Through §319(h), federal<br>funds are provided annually through the EPA to states for the<br>implementation of each state's NPS Management Program. Based<br>on Congressional appropriations, EPA allocates 319(h) funds by<br>formula to the states. The §319(h) funding in Texas is divided equally<br>between the TCEQ and the TSSWCB. Each agency independently<br>administers its portion of the grant. Each agency annually solicits<br>projects from collaborating entities across the state. Each agency<br>identifies priority areas and activities and ranking criteria for each<br>funding cycle based on this Management Program, the most recent<br>IR, and the WAP process. |   |  |

