



Type (FMP/FME/FMS)	ID	Shown on Map?	Name	Description	Cost	Sponsor
FMP	133000006	Yes	Flood Warning System	Nueces County Drainage & Conservation District 2	\$ 465,500	TWDB FIF, Nueces County Drainage & Conservation District 2
FMP	133000007	Yes	County Wide Drainage Improvements	Nueces County Drainage & Conservation District 2 - Casa Blanca Drainage Improvements	\$ 809,600	TWDB FIF, Nueces County Drainage & Conservation District 2
FMP	133000008	Yes	County Wide Drainage Improvements	Nueces County Drainage & Conservation District 2 - Bosquez Rd. / Avenue J Drainage Improvements	\$ 2,453,716	TWDB FIF, Nueces County Drainage & Conservation District 2
FMP	133000009	Yes	County Wide Drainage Improvements	Nueces County Drainage & Conservation District 2 - Ditch "A" and Bluebonnet Drainage Improvements	\$ 1,311,320	TWDB FIF, Nueces County Drainage & Conservation District 2
FMP	133000024	Yes	Downtown Drainage Improvements Phase III - Project A	CoCC Downtown Study	\$ -	City of Corpus Christi
FMP	133000027	Yes	CULVERT & STORM DRAINAGE WORK7 MI N. OF WEST SH 44	TXDOT Road Project - 037310009	\$ 1,500,000	TXDOT
FMP	133000028	Yes	BRIDGE REPLACEMENT -BEACH AVENUE	TXDOT Road Project > 101016095	\$ 800,000,000	TXDOT
FMP	133000029	Yes No	DRAINAGE IMPROVEMENTS - CR 46 Coastal Texas Protection and Restoration Feasibility Study - SP1 – Redfish Bay Protection and Enhancement	This ER measure involves shoreline protection and restoration consisting of 7 A miles of rock breakwater, at a crest height of 7 ft (NAVD88) with 2H:1V side slopes and a base width of 46 ft, 391.4 acres of island restoration, and 1.4 miles of rock breakwater, at a crest height of 7 ft (NAVD88) with 2H:1V side slopes and a base width of 46 ft, 391.4 acres of island restoration, and 1.4 miles of oyster reef creation. A total of 3,500.5 AAHU would be created. The measure provides for the restoration of the Dagger, Ransom, and Stedman Island complex in Redfish Bay through the construction of breakwater along the unprotected GIWW shoreline along the backside of Redfish Bay and on the bayside of the restored islands. Additional protection is provided to the island complex through the placement of reef balls between the breakwater and island complex to create 1.4 miles of oyster reef. The breakwater and islands would protect submerged aquatic vegetation (e.g., seagrass) within Redfish Bay, and it is assumed that additional submerged aquatic vegetation will form between the breakwater and the islands and support coastal water birds.	\$ 60,000 \$ -	TX GLO
FMP	133000043	No	A Joint Erosion Response Plan for Nueces County and the City of Corpus Christi	The study "A Joint Erosion Response Plan for Nueces County and for the City of Corpus Christi 2012" lays out goals and approaches for erosion control, beach maintenance, improvement of safety, access and enjoyment of beaches, and increased education of residents and visitors about the beaches, it's dangers, and the importance of its maintenance. It would be beneficial to work towards determining a holistic solution to satisfy the goals of erosion control, beach maintenance, and improved beach access, while also providing funding solutions to enable the community to pursue as many of these goals as possible.	\$ -	Nueces County, City of Corpus Christi
FMP	133000062	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 07	Formalize procedures to gain authorized access to an existing regional Call Down system through City of Kingsville/Kleberg. The City of Bishop is located close to the border of Nueces and Kleberg Counties, near the City of Kingsville. Natural and other hazards impacting Bishop are likely to impact Kingsville, and vice versa. Kleberg County has recently entered into an Inter-local Cooperation Agreement with the City of Corpus Christi and Nueces County, operators of the METROCOM center, to obtain authorized access to various warning tools, including a Call Down system. Some expense is involved with maintenance and activation of the system, including long distance telephone charges. The parties have agreed in principle to provide access to the City of Bishop through the Kingsville/Kleberg County agreement. Formal agreement as to who is authorized to activate the system on behalf of Bishop, the specific procedures to be used, and what costs will be incurred remains to be finalized.	\$ 50,000	City of Bishop
FMP	133000063	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 08	Evaluate cost/benefit of implementing an outdoor warning siren system and present recommendations to local officials.No outdoor warningsiren system is currently available within the City of Bishop to alert residents to rapid onset natural hazards such as tornadoes, or other hazardous situation.	\$ 51,113	City of Bishop
FMP	133000064	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 18	A periodic inspection of over 71,400 linear feet (13.5 miles) of storm water runoff conveyance lines during mid-2003 indicated that some sections of the lines needed repairs. The structural integrity and functionality of these outfall lines are critical in preventing flooding and in improving water quality. There are eight major storm water outfalls that convey storm water runoff into Corpus Christi Bay. The purpose of this project is to perform needed repairs along sections of the major outfalls. Typical repairs will include: headwalls, wing walls, isolated structural repairs, damaged lateral lines that penetrate outfall, holes, joints, and spalls.	\$ 2,000,000	City of Corpus Christi
FMP	133000065	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 19	A periodic inspection of over 71,400 linear feet (13.5 miles) of storm waterrunoff conveyance lines during mid-2003 indicated that that two of the eight major outfalls needed replacement. The structural integrity and functionality of these outfall lines are critical in preventing flooding and in improving water quality. The purpose of this project is to replace the two outfalls: Brawner Proctor, and Gollihar.	\$ 5,000,000	City of Corpus Christi
FMP	133000066	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 20	The purpose of this project is to repair erosion and other damages to major drainage channels as a result of a heavy rain or other severe weather. A number of earthen ditches throughout the City have steep side slope (2:1) which makes them more prone to erosion of stream beds and slopes during a prolong and intense rain event. In order to make improvements which will stabilize the slopes and stream beds of major channels, an allocation of funds is earmarked for this project to be utilized on a priority basis on those ditches where erosion and slope failures becomes a serious and critical problem. The project will generally includes shaping, grading, flattening side slopes, seeding, adding concrete flumes or lined channels, adding storm water appurtenances such as inlets, pipes, and some minor right-of-way acquisitions as necessary.	\$ 3,000,000	City of Corpus Christi
FMP	133000067	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 21	Having adequate and available drainage ROW is critical to developing drainage infrastructure to meet the demand for orderly growth and development within the City. Adequate ROW helps to prevent/minimize flooding, helps to facilitate maintenance, and allows potential for improving quality of storm water runoff. The purpose of this project is to provide funding for acquiring right-of-way (ROW) where needed in order to implement drainage problem solutions, such as ditch widening, erosion control, extending storm severs, providing easements, etc. During design, it is often required that additional ROW be provided for implementation of the project.	\$ 2,000,000	City of Corpus Christi
FMP	133000068	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 22	Flooding in the downtown area is a frequently recurring event, and a major concern for both citizens and businesses. In addition to a variety of private businesses, several local and federal public facilities are located within this area. The existing pumps date from 1948 and are potentially subject to failure. Replacing the pumps will minimize the probability of a future catastrophic failure.	\$ 800,000	City of Corpus Christi
FMP	133000069	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 27	The Oso Treatment Plant is situated in a location subject to flooding from coastal inundation. The wastewater lift stations are also vulnerable to flooding. The proposed improvements could include structural elevation and/or the installation of dikes, berms or other flood control devices.	\$ 160,000	City of Corpus Christi

Type (FMP/FME/FMS)	ID	Shown on Map?	Name	Description	Cost	Sponsor
FMP	133000070	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 28	Portions of the Greenwood wastewater treatment plant are located immediately adjacent to the La Volla Creek floodplain. Recent flood events have inundated various process units at the plant. Flood waters have come very close to damaging equipment in the electrical building which is critical to plant operations. This project would provide flood protection for the electrical building and would help to ensure that the plant remains in operation during flood events, and protect public health and welfare.	\$ 90,000	City of Corpus Christi
FMP	133000071	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 29	Lake Corpus Christi, which stores 242,241 acre-feet of water, was dedicated April 26, 1958 with the construction of Wesley Seale Dam. The Lower Nucces River Water Supply District built and owned the reservoir until the bonds were paid off in 1986 and the City of Corpus Christi assumed ownership. Wesley Seale Dam is located approximately 35 miles from Corpus Christi, Texas. This facility is used to store raw water that flows down the Nucces River from the northern part of the watershed. DuringMarch 2001, the Wesley Seale Dam north and south spillway stabilization project was completed. This \$22 million project included the installation of special equipment to monitor the stability of the dam structure. This equipment is presently being utilized as part of the City's overall dam monitoring plan. Information included in the program is obtained from equipment and flow measurements from piezometers, extensometers, relief wells, and sand drains. Inspections are conducted annually by an independent engineering firm, and a highly detailed inspection is scheduled for every three years.	200000-300000 annually	City of Corpus Christi
FMP	133000072	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 33	The Police Headquarters building is located in an area of downtown Corpus Christi that is vulnerable to street flooding. The automatic generator transfer switch is presently located in a control room on the ground floor of the building. If the switch isdamaged due to flooding, the Police Headquarters building, the 9-1-1 call taking/dispatch function, and the Metro-Com emergency alert and notification systems would be without electrical power, even if the auxiliary generator was undamaged.	\$ 36,000	City of Corpus Christi
FMP	133000073	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 41	This project pertains to coastal erosion of the bulkheading along the Corpus Christi Ship Channel, and the Municipal Marina. Ship traffic in the channel has consistently eroded the west side of the island. Existing bulk-heading in the Municipal Harbor has been undermined by the tides.	\$ 785,000	City of Port Aransas
FMP	133000074	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 49	Project is permitted and ready to go –just needs funding. Coastal erosion in Corpus Christi Bay is very high and if the project is not done soon, the entire island may erode away and would have to be rebuilt (or abandoned). Sunfish Island is an important bird sanctuary in the Corpus Christi area. An alternatives analysis and engineering design were conducted for Sunfish Island during CEPRA Cycle 2. Construction could not be done due to restrictions during bird nesting season.	500000 - 1000000	City of Corpus Christi
FMP	133000075	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 50	Prevention of further erosion of shoreline at Cole Park on Corpus Christi Bay through installation of groins and/or breakwaters. Cole Park is a high use park in Corpus Christi. The area behind the bulkhead is eroding and needs to be retrofitted.	500000 - 1000000	City of Corpus Christi
FMP	133000076	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 53	Nucces County finished a countywide Master Drainage Plan Study and developed the Master Drainage Implementation Plan as a guide for prioritizing and implementing the improvements identified as part of the study. The priorities outlined in the implementation plan are items which will have an immediate impact on storm water management for areas experiencing flooding problems. Nucces County is susceptible to flooding because some of its defined drainage ways and creeks are constricted by inadequate channel capacities, man-made barriers such as road and railroad embankments, irrigation canals, and because its flat topography and low soil permeability create poor drainage and pounding. Implementation Plan for Master Drainage Plan Nucces County, Texas December 2009 identifies major improvements which will be required throughout the county once future development occurs. The recommendations in the study provide a guide for the county in implementing a plan which will reduce flood damages through both structural and non-structural measures. Structural measures include enlarging existing channels, constructing new channels, enlarging bridge openings and constructing flood protection levees. Non structural measures include floodplain regulation, flood proofing, flood forecasting, on-site detention of storm water, clearing existing streams, and buyout and/or relocate structures in existing floodplains.	\$ 258,587,835	Nueces County
FMP	133000077	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 55	Residential flood buyout along Nueces River to reduce repetitive losses and potential loss of life attributed to a major flood event or dam failure. Residential development along the river in the unincorporated areas is a patchwork of substandard homes and development well below recommended base elevation for the 100 year floodplain. Most of the property owners are not insured and have had numerous repetitive loses. Additionally, this project will leverage existing partnerships with an interest in maintaining a clean, safe and reliable water supply for the City of Corpus Christi as part of the Nueces River Watershed Protection Plan. The Nueces River Authority, City of Corpus Christi, Texas Commission on Environmental Quality and Coastal Bend Bays and Estuaries Foundation support continued buyouts along the river to maintain open green space and to aid in removing environmentally undesirable structures responsible for runoff pollutants and raw sewage discharges. This program will be multi year and will leverage multiple funding sources and partners. There are currently 66 eligible properties in Nueces County for the Repetitive Flood Claims Grant. Approximately 15 residential properties are located within the unincorporated areas of the county and would be thefirst targeted for participation. Additional properties will be targeted as part of the less restrictive Hazard Mitigation Grant Program. The City of Corpus Christi failed to meet state water quality standards in November 2009 attributed to high levels of pollutants caused by runoff from heavy rain. As part of the necessary corrective actions, the City partnered to develop the Nueces River Matershed Protection Plan. This project will support the established mission and goals set forth in the plan to createenvironmentally friendly open space.	\$ 1,000,000	Nueces County, Precinct 1
FMP	133000078	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 65	Elevate and re-grade dilapidated roads. Many of the City's roads have sunk significantly and are a contributing factor to many of flood issues throughout the community. Repetitive flood damages have caused maintenance costs to be burdensome on the City. Upgrades from caliche to a more standard road surface would greatly enhance the ability of the road system to tolerate nuisance and reoccurring flooding. The City of Driscoll was first formed as a community in 1904 and was later incorporated as a Class C City in 1951. The City's infrastructure and buildings are very old and is located in an area that is very flat, causing it to be prone to flash floods. Aggressive debris control and flood-proofing is essential to mitigate against flooding. Over the past several years, there have been numerous flood events that have directly affected the City. The Coastal Bend will continue to be susceptible to very neavy rainfall and tropical weather events putting the City in a continuous battle to stay accessible and safe for its citizens. In addition to the alreadymentioned issues, travel near and through the community is including a very heavy highway that is also a critical hurricane evacuation route.	\$ 8,750,000	City of Driscoll

Type (FMP/FME/FMS)	ID	Shown on Map?	Name	Description	Cost	Sponsor
FMP	133000079	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 66	Conduct debris removal operations and incorporate drainage enhancements that will reduce the incidence of flooding. This will include upgrades to culverts and leveraging City and private maintenance of construction projects. This project will further be enhanced by the road elevation and re-grade project. The City of Driscoll was first formed as a community in 1904 and was later incorporated as a Class C City in 1951. The City's infrastructure and buildings are very old and is located in an area that is very flat, causing it to be prone to flash floods. Aggressive debris control and flood-proofing is essential to mitigate against flooding and hurricane winds. All citizens and business owners remain concerned about their health and public safety due to continuous flooding. Over the past several years, there have been numerous flood events that have directly affected the City. The Coastal Bend will continue to be susceptible to very heavy rainfall and tropical weather events putting the City in a continuous battle to stay accessible and safe for its citizens. In addition to the already mentioned issues, travel near and through the community is limited on a regular basis including a very heavily highway that is also a critical hurricane evacuation route.	\$ 325,000	City of Driscoll
FMP	133000156	No	Nueces County Hazard Mitigation - Corpus Christi Action #1	Seawall capital Imrpovement Project for routine maintenance and restoration.	\$ 5,500,000	City of Corpus Christi
FMP	133000157	No	Nueces County Hazard Mitigation - Corpus Christi Action #2	Construction of a new bulkhead in Corpus Christi Bay along the south side shoreline of Corpus Christi.	\$ 10,500,000	City of Corpus Christi
FMP	133000158	No	Nueces County Hazard Mitigation - Corpus Christi Action #3	Make improvements to the Salt Flat Levee System	\$ 3,000,000	City of Corpus Christi
FMP	133000159	No	Nueces County Hazard Mitigation - Corpus Christi Action #4	Make improvements to Power Street Pump Station	\$ 5,500,000	City of Corpus Christi
FMP	133000160	No	Nueces County Hazard Mitigation - Corpus Christi Action #6	Excavate silt and debris in Drainage Master Channel 31 caused by the erosion on sides and bottom of the Drainage Master Channel 31. Master Channel 31 was constructed in various phases in conjunction with the development in the area. The side slopes and bottom are severely eroded resulting in poor drainage and encroachment of ditch outside of the City right-of-way. This project will provide critical improvements to restore and improve the drainage profile and include erosion control measures such as side slope stabilization, soil treatment, vegetative cover and other best management practices. This project is planned in multiple phases as funding allows.	\$ 2,819,800	City of Corpus Christi
FMP	133000161	No	Nueces County Hazard Mitigation - Corpus Christi Action #7	Improvements to side slopes on Schanen Ditch to eliminate erosion problems. The existing profile of Schanen Ditch exceeds the recommended slope of 4:1 and maximum of 3:1. This is resulting in major slope stabilization failure in multiple areas near the Yorktown Bridge. Work to improve this ditch will include excavation/backfill to widen and create 3:1 side slopes with stabilization matting, new culvert and outfalls, riprap and ditch bottom improvements, sceding, irrigation adjustments, traffic controls, dewatering and other miscellaneous items. Construction of Phase 1 of this project has been recently completed and future phases will be completed to the extent that funding allows.	\$ 2,756,100	City of Corpus Christi
FMP	133000162	No	Nueces County Hazard Mitigation - Corpus Christi Action #8	This project will involve the improvement of La Volla Creek that crosses SH 357 (Saratoga BMvd). The project will provide 100-year capacity for conveyance to the Oso Creek. Phase 1 Channel improvements include the removal of vegetation from the channel North of Saratoga Boulevard and channel widening South of Saratoga Boulevard.	\$ 4,152,800	City of Corpus Christi
FMP	133000163	No	Nueces County Hazard Mitigation - Corpus Christi Action #13	Make improvements to the instrumentation system at Wesley Seale Dam. This project provides for improvements to the original instrumentation system including annual safety inspection, integration with O.N. Stevens WTP process controls, The Howell-Bunger Valve, the downstream sluice gates, and the dewatering system, in response to previous inspections and priority investment recommendations into the system. This project will protect the integrity of the Wesley Seale Dam system (1957), to provide for proper inspection and updated regulatory reports per TCEQ.	\$ 5,850,600	City of Corpus Christi
FMP	133000164	No	Nueces County Hazard Mitigation - Corpus Christi Action #15	Make improvements to the side seals on the Wesley Seale Dam Spillway to maintain the spillway's integrity. The Wesley Seals Dam has 60 crest gates located in two separate spillways: the south spillway includes 27 gates and the north spillway includes 33 gates. Over the years, leakage from the side seals has increased and it has become significant at several of the gates. The water flow from the excessive leakage damages the concrete and encourages algae and other vegetative growth and leads to corrosion issues on the gates, metal appurtenances and reinforcing steel. This project provides for the necessary improvements including seal replacement, miscellaneous structural repairs and application of a protective coating system for the Dam.	\$ 22,800,000	City of Corpus Christi
FMP	133000165	No	Nueces County Hazard Mitigation - Corpus Christi Action #16	Build a floodwall along Corpus Christi Bay at the Science and Natural History Museum. Recommendation to construct a new floodwall (or a coastal structure) that would follow a "hypotenuse" alignment between the existing Promenade and the USACE Bulkhead. The project would also backfill the triangle to make it function more like a coastal structure. This would also provide additional land area for future use.	\$ 350,000,000	City of Corpus Christi
FMP	133000166	No	Nueces County Hazard Mitigation - Corpus Christi Action #17	Make improvements to the erosion on sides and bottom of Drainage Master Channel 31. Master Channel 31 was constructed in various phases in conjunction with the development in the area. The side slopes and bottom are severely eroded resulting in poor drainage and encroachment of ditch outside of the City right-of-way. This project will provide critical improvements to restore and improve the drainage profile and include erosion control measures such as side slope stabilization, soil treatment, vegetative cover and other best management practices. This project is planned in multiple phases as funding allows.	\$ 3,000,000	City of Corpus Christi
FMP	133000167	No	Nueces County Hazard Mitigation - Corpus Christi Action #24	Coastal Erosion Cole Park: Installation of groins and/or breakwaters to the areas behind the bulkhead to retrofit the areas that are eroding.	500000-1000000	City of Corpus Christi
FMP	133000200	No	Texas Coastal Resiliency Master Plan - R3-15	The project would include the construction of breakwaters along approximately 3,900 linear feet of shoreline at the Nueces River Delta to dissipate wave energy that is causing estuarine wetland loss. This project was permitted by the U.S. Army Corps of Engineers in October 2016 and the project is considered shovel-ready. Coordination is ongoing with the Port of Corpus Christis regarding the possibility of beneficially using dredged material in this area.	\$ 3,500,000	Coastal Bend Bays and Estuaries Program, Texas General Land Ofce

Type (FMP/FME/FMS)	ID	Shown on Map?	Name	Name Description		Sponsor
FMP	133000203	Νο	Texas Coastal Resiliency Master Plan - R3-23	The recommended improvements under this project include: • Repairing breaches in the ship channel revetment on northern Mustang Island; • Constructing living shorelines coming of the ship channel near existing rock revetments to protect mangrove habitat; • Rebuilding marsh and wetland habitat; • Repairing the Charlie's Pasture bulkhead that was damaged during Hurricane Harvey; • Repairing public access; and • Permitting this site for beneficial use of dredged material to elevate the land. There is a potential to leverage Federal Emergency Management Agency-Public Assistance funding for this project. The engineering work has been initiated	\$ 4,400,000	City of Port Aransas Port of Corpus Christi Texas General Land Ofce
FMP	133000204	No	Lower Nueces River Watershed Protection Plan - Riparian babitat Conservation Management Measures No. 1	Purchase of Properties	\$ 15,000	City of Corpus Christi and Counties
FMP	133000205	No	Lower Nueces River Watershed Protection Plan - Riparian	Acquisitions of Conservation Fasements (approximately 970 acres)	\$ 970.000	City of Corpus
FMP	133000212	No	habitat Conservation Management Measures No. 2 Nueces Delta Preserve Project - Building an educational Estuary Learing Center and Visitor Center	While the first priority of the Nueces Delta Preserve is habitat conservation, this unique location provides South Texas an important opportunity for puble education and better understanding of the delta's role as the transition zone at the water's edge. This vision includes an Estuary Learning Center and Visitor Center to be built on the Rincon Unit's highest ground near the Union Pacific Railroad and overlooking the delta. An observation tower and hillside amphitheater will be next to the existing classroom. A bunkhouse for visiting researchers will be nearby along with maintenance and support facilities. Hiking trails with improved rest areas and interpretive signage will allow visitors to venture deep into the varied delta habitats.	\$ 20,000,000	Christi/NRA/TALT CBBEP
FMP	133000213	No	Oso Creek Channel Bottom Rectification and Bank Stabilization Project	The Oso Creek Channel Bottom Rectification and Green Infrastructure Project would address a 12-mile section of Oso Creek channel from Greenwood Drive to Cayo del Oso including channel modifications to remove peaks and valleys, and implement bank stabilization, revegetation, and other green infrastructure techniques. It will advance long term resilience by enhancing capacity of stormwater system and improving water quality.	\$ 44,000,000	TWDB
FMP	133000214	No	Greenwood Plant Flood Mitigation Project	Greenwood Plant consistently floods and is in need of repairs. The proposed project would improve the infrastructure in and around the plant to prevent furture floods from impacting the plant.	\$ 5,000,000	City of Corpus Christi
FMP	133000215	No	Nueces County Living Breakwater project	The proposed project will improve the resiliency of the County and surrounding communities that sustained damage Hurricane Harvey. Select, key mitigation interventions are needed around the Bay to augment and leverage the range of shoreline stabilization and erosion control projects that have been constructed throughout the Corpus Christi Bay area to protect the communities from storm-related hazards. (This includes budget isstification for North Beach. Port Aransas and Indeside on the Bay).	\$ 99,856,214	City of Corpus Christi, Nueces County, CDBG
FMP	133000227	No	Upper Oso Creek/Channel A Robstown-Calallen area	Acquire right of way to widen & deepen existing drainage ditches.	\$ -	Nueces County
FMP	133000228	No	Upper Oso Creek	Acquire right of way to improve the flow of flood waters from the Robstown/ Calallen Area.	\$ -	Nueces County
FMP	133000229	No	Tributary No. 5	Acquire right of way to improve the flow of flood waters in the London Area.	\$-	Nueces County
FMP	133000230	No	County Road 6- North Carreta Creek Drainage Improvements	Restoration project to bring this section of North Carreta creek (located between CR6 and Meadowbrook Road) back to its original elevation as built by USDA Soil Conservation Service in 1960.	\$-	Nueces County
FMP	133000231	No	Belk Lane Street and Drainage Improvements	Road reconstruction and drainage improvements consisting of driveway culvert replacement and road side ditch regrading.	\$ -	Nueces County
FMP	133000232	No	Rehabilitation of Ditch at County Road 14F	Topographic and hydrological study for improvement and regrading of Drainage ditch.	ş -	Nueces County
FME	131000001	No	County Wide Drainage Master Plan Study	Nueces County Regional Drainage Master Plan Study	\$ 2,700,000	TWDB FIF, Nueces County
FME	131000006	Yes	County Wide Drainage Master Plan Study	Nueces County Drainage & Conservation District 2	\$ 2,137,500	TWDB FIF, Nueces County
FME	131000019	Yes	Drainage Master Plan Study	Drainage Master Plan Study - Driscoll	\$ 150,000	TWDB FIF, City of Driscoll
FME	131000025	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 12	The Corps of Engineers studied the Cotula Reservoir site, located in the upper Nueces Basin, in the 1960's. Therecent Nueces Ravier Basin Reconnaissance Study identified a potentially down-sized version of this project, including a pipeline to divert water directly into Choke Canyon Reservoir. In addition to the flood damage reduction potential for Lake Corpus Christi and the lower river basin, this project would enhance the regional water supply by increasing water storage capacity, and reducing losses associated with downstream evaporation across an 81 mile braided reach.During Phase 1 of the Feasibility Study, existing data will be reviewed to estimate the flood damage reduction potential of the project::a. A preliminary hydrologic analysis to determine the portion of the volume of historical lower-basin floods that originate upstream of Cotulia will be performed.b.A review of existing map information of the Nucces River for a 25-mile reach downstream of the proposed reservoir to identify areas that could benefit from the potential flood damage reduction potential of the reservoir will be performed.c.Data from FEMA and other agencies on historical flood damages will be summarized.(Phase 2) Depending on the findings of the flood damage analyses, a daily flow flood model may need to be developed to evaluate the downstream flood barage reduction potential in terms of magnitude and frequency for the Cotulia Diversion Project.	\$ 269,000	City of Corpus Christi, Nueces River Authority
FME	131000026	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 13	The Nueces River Basin Reconnaissance Study identified a two-way pipeline project between Choke Canyon and Lake Corpus Christi, coupled with the off-channel storage and a high capacity pump station, for the dual purpose of flood control and increased water supply, through reduced channel losses.During the Feasibility Study, analyses will be performed to determine the potential flood damage reduction benefits of this project:a. A review of existing map information of the area along the Lower Nueces River below LCC will be performed to identify rares that could benefit from the potential flood damage reduction potential of the diversion facilities. Records of flood damages associated with historical events will be obtained.b.(Phase 2) A daily flood model to evaluate the downstream flood damage reduction potential in terms of magnitude and frequency for this project will be developed.c.(Phase 2) Analysis will be performed to determine the potential effects of coupling the pipeline with the off-channel storage and a high capacity pump station in order to manage Lake Corpus Christ istorage to better control incoming flood flows.	\$ 279,000	City of Corpus Christi, Nueces River Authority

Type (FMP/FME/FMS)	ID	Shown on Map?	Name	Description	Cost	Sponsor
FME	131000027	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 17	The Corpus Christi City Council approved the Storm Water Capital Improvement Program (CIP) for FY99-00 on July 20, 1999 (Ordinance No. 023703). Included were separate projects for drainage studies in specific areas of the City. The need to integrate these individual drainage studies into a consistent, uniform analysis became evident and was approved in Storm Water CIP for FY00-01, (Ordinance No. 024130). The City's use of master plans that date back to 1946, 1961, 1970, 1982, and 1988 resulted in the use of inconsistent criteria without an adopted level of protection policy. The separate projects are integrated into the FY00-01 Storm Water CIP as a Storm Water Plan Project. The Development of a comprehensive, updated, consistent Storm Water Master Plan based on an adopted Storm Water Criteria and Design Manual is necessary to respond to development, environmental issues and tobetter define and prioritize on going and future drainage capital improvement projects. The purposes of this project are as follows:a. Establish drainage criteria that reflects input from the different segments of the community (elected officials, developers, engineers, citizens, planning and zoning) and in the consensus process identify a "level of protection" for the City ba dadopted as a standard for the City 0.Adopt a drainage criteria and design procedure for designers to use in capital improvement projects and in the subdivision platting process of residential and commercial development. Establish policy statements or guidelines that are responsive to storm water quality, storm water pollution prevention requirements, development issues for use in future street and drainage project designd. Develop a master plan to implement the drainage criteria established to include updates of the existing areas and production of new master plan for other areas. The master plan will include the inventory of all outfalls and data necessary for the design process and will utilize criteria and reflects the characteristics of each master plan	\$ 2,000,000	City of Corpus Christi
FME	131000028	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 23	The Federal Emergency Management Agency's Multi-Hazard Flood Map Modernization Program will update and digitize flood hazard maps across the nation. The majority of theCity of Corpus Christi's FIRMs are nearly 20 years old. It is in the interest of the City and its residents for the maps, which determine flood insurance premiums, to be accurate and up-to-date. Other planning and hazard mitigation benefits are expected to accrue as well. FEMA has notified the City by letter dated July 15, 2004, that its contractor will be contacting the City within the next few months regarding the flood mapping effort. A key FEMA strategy is to form local partnerships for this purpose under the Cooperating Technical Partners program to leverage local resources. In addition to preparation for the contractor visit, the City will evaluate the feasibility of becoming a CTP partner.	\$ -	City of Corpus Christi, Nueces River Authority
FME	131000029	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 64	The City does not currently have a clearly defined drainage plan and is only marginally affected by the county master plan. To improve drainage throughout the City of Agua Dulce, it is necessary to properly assess the community drainage needs and establish a local prioritization plan to serve as a guide to successful flood mitigation. All citizens and business owners remain concerned about their health and public safety due to continuous flooding. Over the past several years, there have been numerous flood events that have directly affected the City. The Coastal Bend will continue to be susceptible to very heavy rainfall and tropical weather events putting the City in a continuous battle to stay accessible and safe for its citizens. Agua Dulce is geographically situated in a manner that makes it highly susceptible to flooding. Runoff to the west directly flows into the City and has almost no ability to continue to drain out, backing up into the streets and private property throughout the community. Oneof the City's most critical facilities, the waste-water lift stations on both the east and west side has continually been affected and the City has a great amount of trouble keeping these facilities operable during flooding. In addition to the already mentioned issues, travel near and through the community is limited on a regular basis including a very heavily highway that is also a critical hurricane evacuation route.	\$ 200,000	City of Agua Dulce
FME	131000043	No	Nueces County Hazard Mitigation - Corpus Christi Action #9	The Federal Emergency Management Agency's Multi-Hazard Flood Map Modernization Program will update and digitize flood hazard maps across the nation. Most the City of Corpus Christi's FIRMsare nearly 20 years old. It is in the interest of the City and its residents for the maps, which determine flood insurance premiums, to be accurate and up-to-date. Other planning and hazard mitigation benefits are expected to accrue as well. The City of Corpus Christi is currently working through the appeals process of the map modernization	\$-	City of Corpus Christi
FME	131000044	No	Nueces County Hazard Mitigation - Corpus Christi Action #11	Corpus Christi Action #11 Proposed Action Build the Cotulla Reservoir in the upper reaches of the Nueces River which would include a pipeline to divert water directly into Choke Canyon Reservoir. The Corps of Engineers studied the Cotulla Reservoir site, located in the upper Nueces Basin, in the 1960's. The recent Nueces River Basin Reconnaissance Study identified a potentially down-sized version of this project, including a pipeline to divert water directly into Choke Canyon Reservoir. In addition to the flood damage reduction potential for Lake Corpus Christi and the lower river basin, this project would enhance the regional water supply exter storage capacity, and reducing losses associated with downstream evaporation across an 81 mile braided reach. During Phase 1 of the Feasibility Study, existing data will be reviewed to estimate the flood damage reduction potential of the portion of the volume of historical lower- basin floods that originate upstream of Cotulla will be performed. b. A review of existing map information of the Nueces River for a 25-mile reach downstream evapore reservoir to identify areas that couldbenefit from the potential flood damage reduction potential of the reservoir will be performed. c. Data from FEMA and other agencies on historical flood damages will be summarized. (Phase 2) Depending on the findings of the flood damage analyses, a daily flow flood model may need to be developed to evaluate the downstream flood damage roduction potential in terms of magnitude and frequency for the Cotulla Diversion Project.	\$ 445,000	City of Corpus Christi
FME	131000045	No	Nueces County Hazard Mitigation - Corpus Christi Action #19	Complete an assessment of the needed repairs and improvements on all 8 major and 100 minor stormwater outfalls that drain into Corpus Christi Bay. There are eight major storm water outfalls and more than 100 other outfalls that allow runoff to drain into Corpus Christi Bay. In 2003, 13.5 miles of these outfall structures were inspected and improvements and repairs were made to four outfalls. The purpose of this current project is toprovide an updated assessment, which may include the Brawmer/proctor and Gollihar outfalls and other outfalls of the initial assessment, and providing recommendations for repairs, improvements, and rehabilitation as necessary.	\$ 2,447,200	City of Corpus Christi
FME	131000046	No	Nueces County Hazard Mitigation - Corpus Christi Action #20	Complete a feasibility study of Oso Creek at the confluence of La Volla Creek to determine if any construction projects will help the creek conveyance capacity during high flow events. The drainage profiles of Oso Creek east of the La Volla Creek confluence show several constrictions that impact the base flood elevations upstream. This project will investigate the feasibility of the construction of additional creek conveyance capacity for high flow events. If the investigationshows a significant potential to impact the base flood elevation, then construction will be completed in those areas.	\$ 4,715,400	City of Corpus Christi
FME	131000047	No	Nueces County Hazard Mitigation - Corpus Christi Action #23	Map and assess the vulnerabilities the city may face for Coastal Erosion, Expansive Soils, Land Subsidence, and Wildfires. Improve data and mapping on specific risks for coastal erosion, expansive soils, land subsidence and wildfires. Use GIS to identify and map erosion areas, riparianlandslides, expansive soils and wildfires. Develop and maintain a database to track vulnerability and indicate where critical structures and any development is located in relation to the hazardousareas.	\$ -	City of Corpus Christi
FME	131000048	No	Nueces County Hazard Mitigation - Corpus Christi Action #27	Design and implement a dam breach study for dams in Corpus Christi.	\$ 200,000	City of Corpus Christi

Type (FMP/FME/FMS)	ID	Shown on Map?	Name	Description	Cost	Sponsor
FME	131000059	No	Texas Coastal Resiliency Master Plan - R2-20	An adaptive management hydrologic restoration study would look at the interactions of the physical systems that afect the hydrology in Nueces County, as well as the stakeholder interactions in the region. Work has been conducted on Nueces Bay freshwater infows via adaptive management plans of the Senate Bill 3 (80th Texas Legislature, 2007) Environmental Flows Process. Two current studies include: Using Comparative Long-Term Benthic Data for Adaptive Management of Freshwater Infow to Three Estuaries (Colorado-Lavaca, Guadalupe, and Nueces) and Infuence of Freshwater Infow Gradients on Estuarine Nutrient-Phytoplankton Dynamics in the Three Estuaries (Guadalupe, Nueces, and Upper Laguna Madre).	\$ 200,000	Coastal Bend Bays and Estuaries Program, Texas Commission on Environmental Quality, Texas A&M University- Corpus Christi, Nueces River Authority, City of Corpus Christi, Port of Corpus Christi Authority
FME	131000062	No	Indian Point Shoreline Erosion Project	A feasibility study was performed to assess methods to help protect wetlands, seagrass, and otherrelated aquatic and coastal habitat at Indian Point from erosion associated with shoreline retreat. Inaddition to the benefits of protecting valuable habitat, the project would also provide an increased level of protection to public infrastructure at Indian Point Park including a roadway, parking lot, and pier entrance. This feasibility study is intended as a precursor to development of a U.S. Army Corps of Engineers (USACE) permit application.	\$ 3,558,000	Coastal Bend Bays & Estuaries Program
FME	131000064	No	Petronila Drainage Improvements Feasibility Study	Hydrological and Topographic Study to provide drainage solutions to alleviate flooding within the residential subdivision, as well as the low areas north and south of the intersection of FM 665 with CR 67.	\$-	City of Petronila, Nueces County
FME	131000065	No	Tierra Grande Subdivision Drainage Improvements Feasibility Study	Hydrological and Hydraulic Study to provide drainage solutions to alleviate flooding within the residential subdivision due to existing hydrological flow patterns from regional (off-site), upgradient (off-site), and local (on-site) runoff drainage areas flowing toward the center of the subdivision.	\$ -	Nueces County, Town of Tierra Grande
FMS	132000001	Yes	Improving Stormwater Management in Port Aransas	Improving Stormwater Management	168080	GLO CMP / City of Port Aransas
FMS	132000004	No	COASTAL BEND MITIGATION ACTION PLAN - RG-02	Implement 'All Hazards' NOAA Weather Radio (NWR) procedures for dissemination of emergency messages originating with local jurisdictions. The National Weather Service (NWS) will implement a new, centralized point of collection for non-weather related emergency messages broadcast over NWS systems. NWS expects to deploy the All-Hazards Emergency Message Collection System, HazCollect, in the summer and fall of 2005. HazCollect will provide an information technology interface between state and local systems, and the NWS Advanced Weather Interactive Processing System (AWIPS). HazCollect will provide a fast, reliable way to inject messagesinto the Emergency Alert System (EAS) and NOAA Weather Radio.	Low cost activity	Kleberg County, Live Oak County
FMS	132000005	No	COASTAL BEND MITIGATION ACTION PLAN - RG-04	Promote public awareness and use of NOAA Weather Radio (NWR) to receive 'All Hazards' warnings by distributing NWR literature, posting information on jurisdiction Web sites, hosting special events, and taking advantage of other opportunities as they arise. The National Weather Service provides weather-related hazards warnings to citizens, both through feeds to commercial media via the Emergency Pater System (EAS), and directly into homes, businesses, schools and other locationsthrough NOAA Weather Radio (NWR). Through the efforts of the Emergency Vanagement programs in both Kleberg and Live Oak counties, broadcast coverage has recently been completed for the Coastal Bend region through installation of transmitters near the communities of Riviera and Three Rivers. These transmitters will also enhance reception of the NWR signals in Jim Wells and Bee counties.	Low cost activity	Kleberg County, Live Oak County
FMS	132000011	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 11	The City of Bishop is subject to frequent episodes of inland flooding during heavy rainfall events. Nueces County Drainage District #3 is responsible for addressing drainage issues which may have impacts for the City of Bishop; however, there has been a lack of coordinated effort in the past. Additional flood control projects of interest to the City of Bishop; however, bis blockage on King Ranch property and the Carreto Creek project, including removal of silt and connection with the flood control project on King Ranch.	\$ -	City of Bishop
FMS	132000012	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 24	The Federal Emergency Management Agency (FEMA) Mitigation Division administers the National Flood Insurance Program (NFIP). To encourage participating communities to go beyond the minimum requirements for flood plain management, the Community Rating System (CRS) program classifies communities by awarding points for related activities. Corpus Christi has participated in the CRS program since 1991 and is currently rated as a Class 9 community, entitling its residents to a 5% discount on flood insurance premiums. This project is intended to improve its rating to a Class 8, thereby increasing the premium discount to 10% for Special Flood Hazard Areas (SFHAs).The CRS classes for local communities are based on 18 creditable activities, organized under four categories: (i) Public Information, (ii) Mapping and Regulations, (iii) Flood Damage Reduction, and (iv) Flood Preparedness. Other actions identified in this Mitigation Plan will have a direct bearing on fulfilling CRS requirements to qualify for the higher classification. This activity includes a comprehensive review of eligible activity requirements, identification of additional potential actions, monitoring completion of previously identified actions, and completing the application process.	\$ -	City of Corpus Christi
FMS	132000013	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 35	Evaluate eligibility for participation in National Flood Insurance Program (NFIP) Community Rating System (CRS) for the purpose of improving CRS rating to qualify policyholders for premium discounts. The CIty of Port Aransas currently has a rating of 10, which is automatically assigned to all communities participating in the NFIP. In order to qualify for a rating of 9, and entry into the CRS program, sufficient points must be scored in a variety of program areas. This activity is to investigate whether Port Aransas currently can achieve the required score, or can do so with improvement in its program areas.	\$ -	City of Port Aransas
FMS	132000014	No	COASTAL BEND MITIGATION ACTION PLAN - NU - 40	Identify opportunities to increase home and business owner awareness of hazards and use of mitigation for private property such as the City Web site and distribution of printed literature. The City of Port Aransas has a City Web site that can be updated to promote mitigation activities by residents and businesses; mitigation literature can be added to other emergency preparedness literature currently distributed annually.	\$ 1,000	City of Port Aransas

Type (FMP/FME/FMS)	ID	Shown on Map?	Name	Description	Cost	Sponsor
FMS	132000058	No	Nueces County Hazard Mitigation - Corpus Christi Action #5	The Corpus Christi City Council approved the Storm Water Capital Improvement Program (CIP) for FY99-00 on July 20, 1999 (Ordinance No. 023703). Included were separate projects for drainage studies in specific areas of the City. Theneed to integrate these individual drainage studies into a consistent, uniform analysis became evident and was approved in Storm Water CIP for FY00-01, (Ordinance No. 024130). The City's use of master plans that date back to 1946, 1961, 1970, 1982, and 1988 resulted in the use of inconsistent criteria without an adopted level of protection policy. The separate projects are integrated into the FV00-01 Storm Water CIP as a Storm Water Plan Project. The Development of a comprehensive, updated, consistent Storm Water Master Plan based on an adopted Storm Water Criteria and Design Manual is necessary to respond to development, environmental issues and to better define and prointize or going and futuredrainage capital improvement projects. The purposes of this project is as follows: a. Establish drainage criteria that reflects input from the different segments of the community (elected officials, developers, engineers, citizens, planning and zoning) and in the consensus process identify a "level of protection" for the City to be adopted as a standard for the City b. Adopt a drainage criteria and design procedure for designers to use in capital improvement projects and in the subdivision platting process offresidential and commercial development c. Establish policy statements or guidelines that are responsive to storm water quality, storm water pollution prevention requirements, development texisting areas and production of new master plan for other areas. The master plan to implement the drainage criteria established to include updates of the existing areas and production of new master plan for other areas. The master plan will include the inventory of all outfalls and data necessary for the design process and will utilize criteria and reflects the characteristics of each master plan	\$ 4,084,900	Nueces County
FMS	132000059	No	Nueces County Hazard Mitigation - Corpus Christi Action #10	Corpus Christi has participated in the CRS program since 1991 and is currently rated as a Class 7 community, entitling its residents to a 15% discount on flood insurance premiums. This project is intended to improve its rating to a Class 5, thereby increasing the premium discount by an additional 10% for Special Flood Hazard Areas (SFHAs). Other actions identified in this Mitigation Plan will have a direct bearing on fulfilling CRS requirements to qualify for the higher classification. This activity includes a comprehensive review of eligible activity requirements, identification of additional potential actions, monitoring completionof previously identified actions, and completing the application process.	\$ -	City of Corpus Christi
FMS	132000060	No	Nueces County Hazard Mitigation - Corpus Christi Action #18	Utilize the city adopted "Developer Agreement" that the can use with developers to help cover the cost of installing over-sized stormwater drainage. Under the platting ordinance, the City of Corpus Christi participates with developers on utility construction for over-sized main stormwater lines. These funds may also be used to address development drainage concerns. This project will provide for the City's share of such projects, as necessary, up to the approved amount.	\$ 3,100,000	City of Corpus Christi
FMS	132000061	No	Nueces County Hazard Mitigation - Corpus Christi Action #21	Insurance Services Office, Inc. (ISO) is an independent organization that administers the Building Code Effectiveness Grading Schedule (BECGS) to assess "the building codes in effect in a particular community and how the community enforces its building codes, with special emphasis on mitigation of losses from natural hazards." The grading can influence the cost of insurance coverage in the community. Since its last assessment, the City of Corpus Christi has adopted the 2015 International Building Code and the 2016 International Residential Code for One and Two Family Dwellings, among others, and should be eligible for an improved grade. This activity includes scheduling a re-assessment and compiling the necessary documentation.	\$ -	City of Corpus Christi
FMS	132000062	No	Nueces County Hazard Mitigation - Corpus Christi Action #22	The City of Corpus Christi has seen multiple hazards occur within the years past. Most residents are heavily informed of what to do during heavy rains, tropical storms and hurricanes. However, there are multiple hazards that are not as frequent. The City will be working towards creating and disseminating a pamphlet(s) that will cover what todo before, during and after the following hazards: Extreme Heat, Lighting, Hailstorm, Hurricane and Tropical Storms, Windstorms, Tornados, Drought, Flood, Dam/Levee Failure, Coastal Erosion, Expansive Soils, Land Subsidence and Wildfires	\$ -	City of Corpus Christi
FMS	132000065	No	Texas Coastal Resiliency Master Plan - R3-26	Under this project, locations in the Coastal Bend area that have been identifed through existing habitat suitability index models would be selected to restore degraded oyster reefs. The project would include data collection and monitoring activities to assess the viability of future oyster reefrestoration efforts in the Coastal Bend bays.	\$ 700,000	Texas Parks & Wildlife Department Coastal Bend Bays and Estuaries Program
FMS	132000066	No	Nueces Delta Preserve Project - Land Acquisition	This master plan envisions that eventually most or all of the delta land identified here will be part of the Nueces Delta Preserve. This effort will follow the Texas tradition of working voluntarily with private landowners and other organizations to achieve a common conservation goal. This will be done over time through a combination of strategies to meet the individual needs of specific landowners.	\$ 1,500,000	CBBEP
FMS	132000069	No	County Road 18 Drainage Improvements	Inspection and Assessment of CR18 Drainage Ditch to evaluate the physical and operational conditions of the drainage system by conducting on- site visual and drone scanning inspections. Generate a report based on these inspections to provide Nucces County with a preliminary assessment report and recommendations that can be utilized to make an informed decision regarding plans and advancements for the improvement of the drainage ditch system	\$-	Nueces County

¹ Flood Management Evaluation (FME)- flood study of a specific flood prone area needed to assess risk

Flood Mitigation Project (FMP)- structural or non-structural project that when implemented will reduce flood risk, mitigate hazards to life or property. Includes nature-based solutions. 'No negative impact'

Flood Management Strategy (FMS)- proposed plan to reduce flood risk or mitigate flood hazards. Any action that a RFPG would like to evaluate and recommend that does not qualify as FME or FMP.

Public Comments

Comment Date	Flood Type	Flood Frequency	Most Recent Flood Event	Description
-	-	-	•	Laguna Shores Road. Constant flooding. Current road reconstruction project will fix some drainage issues. Not all - Flood Prone
-		-		Ayers Street at Tarlton Street
	-	-		Lipan Street at Coke Street
-	-	-		Caranchua Street at Coopers Alley
		-	•	North PAdre Island Drive at Leopard Street Baldwin Boulevard at Annos Street
	-	-		adumin bouleval at Agiles Siteet
				2000 Block of Molgan Avenue Haven Drive at McKingin Avenue
-	-	-		IH 37 t Carbon Plant Road
-	-	-		SH 286 at Holly Road
-	-	-		Rodd Field Road from South Padre Island Drive to Holly Road
-	-	-		Las Colonias Subdivision
7/13/2021	Building	Few_Occasions		
7/13/2021	Building			
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/12/2021	Building	Few_Occasions		
7/13/2021	Building	Few Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/12/2021	Building	Few_Occasions		
7/13/2021	Building	Few Occasions		
7/13/2021	Building	Few Occasions		
7/13/2021	Building	Few Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few Occasions		
7/13/2021	Building	Few Occasions		
7/13/2021	Building	Few Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/12/2021	Building	Few_Occasions		
7/13/2021	Building	Few Occasions		
7/13/2021	Building	Once		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few Occasions		
7/13/2021	Building	Once		
7/13/2021	Building	Few Occasions		
7/13/2021	Building	Few Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few_Occasions		
7/13/2021	Building	Few Occasions	May 19th	This area had heavy flooding and both creek beds were full to capacity. In the town we had water in some of our residents homes and the city had
7/15/2021	bunung		indy 15th	collapsed manholes and six collapsed sewer lines.
-	-	-	-	Widespread long-lived residential flooding of hundreds of homes above Calallen occurs. This requires residents to be evacuated. Roads into the flood prone areas flood for miles, cutting off large residential areas for weeks.