

TEXAS GENERAL LAND OFFICE

Planning Studies Survey Results



Name	Title	City/Town	Affiliation, or on Behalf Of	Response
Jeff Taebel	Director, Community and Environmental Planning	Houston		Coordinating conservation efforts to enhance watershed resiliency – Land conservation and natural infrastructure practices can supplement existing resiliency efforts while providing additional ecosystem services. The proposed planning study topic is to provide for evaluation and regional coordination of conservation efforts among local governments and private parties to improve watershed-level resiliency of local communities.
Jeff Taebel	Director, Community and Environmental Planning	Houston		Mitigation alternatives for LMI communities seeking to maintain community integrity – Some housing recovery and flood mitigation measures may adversely impact community integrity and social resilience. The proposed planning study topic is to evaluate housing program options and approaches to enhance community storm resilience and recovery while also preserving community integrity and character.
Jeff Taebel	Director, Community and Environmental Planning	Houston		Watershed-level flood management coordination – Coordination among flood control managers in a shared basin can enhance overall planning and response. The proposed planning study topic is to provide for active regional facilitation and coordination of flood management entities through watershed-specific initiatives.
Gus Ruiz	Cameron County Commissioner Pct. 4	Cameron County	Augusto Sanchez Gonzalez. Natural Resources Coordinator	<p>County-Wide Real-Time Hydrologic Monitoring. Because of Cameron County's unique topography, prevalence of Resacas that significantly modify local drainage patterns, and extensive anthropogenic modifications to the regional hydrography through the construction of irrigation and drainage networks, engineered drainage modifications at the local level, even down to subdivision scale, can have significant impacts on the regional hydrology. Further, local control structures such as gate valves and drainage pumps are ubiquitous, as mechanisms for managing local drainage issues. Overlapping operational jurisdictions, such as irrigation districts with responsibilities for Resacas and the control of structures for maintaining their level for water supply and aesthetics, and drainage districts that operate gate valves and high capacity pumps for flood control, often work against each other. The limited coordination of these locally managed diversions and control operations have significant impact on regional hydrology that cannot be readily programmatically integrated into a regional hydrodynamic model. The combination of these factors necessitates real-time validation of any forecasting or hindcasting tools using observed data, more so than any other region in the LRGV.</p> <p>Cameron County has currently funded the operation of two (2) Real Time Hydrologic Stations (RTHS) placed in drainage ditches in the southeast portion of its watershed, with a third operational from other fund sources. RTHS should be placed strategically to provide both local flood early warning (along with structural control design development data as needed) at the catchment scale, and real-time intelligence regarding regional flow patterns influenced by significant Resaca systems and major drainage ditches and irrigation canals. A target regional network of approximately 25 RTHS in County-serviced areas augmented by a similar number funded by local jurisdictions will provide comprehensive real-time hydrologic and hydraulic intelligence for multiple purposes.</p>

TEXAS GENERAL LAND OFFICE

Planning Studies Survey Results



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Gus Ruiz	Cameron County Commissioner Pct. 4	Cameron County	Augusto Sanchez Gonzalez. Natural Resources Coordinator	<p>The investment needed in the deployment of this network includes the initial installation cost per RTHS and the recurring annual cost of maintenance. Return on Investment is assured from reduction in lives lost and property damages from flood reduction. Integration of County Hydrologic Knowledge into National Water Model The National Water Model (NWM) is a real-time hydrologic forecast tool that provides forecasts of in-stream discharge at over 2.6M locations across the coterminous United States. The NWM provides forecasts from 18-hour, typically used for flood emergency management, through 30-day, used more for planning and water-supply applications. The NWM relies on the National Hydrography Dataset (NHD) to form the basis of its hydrologic forecasts, along with various meteorological forecasts and other data. The accuracy of NWM's forecasts are directly related to the availability of local water intelligence to derive flow patterns from contributing tributaries and diversions.</p> <p>Despite the availability of the extensive drainage ditch, irrigation canal and Resaca network in the NHD, NWM forecasts in the LRGV are limited to the Rio Grande River itself, and the Arroyo Colorado. There are many contributing factors to the absence of forecasts within this significantly populated area, much of which can be ameliorated by augmenting NWM predictions with local, detailed hydrologic data (including that from real time sensors and local forecast models), and a more prescriptive definition of diversion and control operations (i.e. schedules and criteria for gate, valve and pump operations). In order to overcome the limitations of the NWM in Cameron County, a combination of coarse-grid (HUC12-HUC16) local hydrologic forecast models compatible with the NWM would need to be developed, along with a county-wide network of Real Time Hydrologic Stations to validate and auto-correct model forecasts for integration with the NWM, and eventual augmentation of hydrologic knowledgebase driving NWM predictions in the LRGV. Return on Investment is assured from reduction in lives lost and property damages from flood reduction. Revision of Current Building Codes to provide extra protection from rivering hurricane and coastal projects. Natural hazards present significant risks to many communities across the United States. Fortunately, there are measures governments, building owners, developers, tenants and others can take to reduce the impacts of such events. These measures—commonly called mitigation—can result in significant savings in terms of safety, prevent property loss and disruption of day-to-day life. The National Institute of Building Sciences Multihazard Mitigation Council (MMC) undertook a study in 2017 to update and expand upon the findings of its 2005 Mitigation Saves study on the value of mitigation.</p>

TEXAS GENERAL LAND OFFICE

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Gus Ruiz	Cameron County Commissioner Pct. 4	Cameron County	Augusto Sanchez Gonzalez. Natural Resources Coordinator	<p>In the 2017 Interim Report (now incorporated into the 2018 Interim Report), the project team analyzed two areas of mitigation programs:</p> <ul style="list-style-type: none"> •Federal grants: The impacts of 23 years of federal grants made by the Federal Emergency Management Agency (FEMA), Economic Development Administration (EDA) and the Department of Housing and Urban Development (HUD), resulting in a national benefit of \$6 for every \$1 invested. •Beyond code requirements: Designing new structures to exceed select provisions of the 2015 International Building Code (IBC) and International Residential Code (IRC) and the adoption of the 2015 International Wildland-Urban Interface Code (IWUIC). This resulted in a national benefit of \$4 for every \$1 invested. More info https://cdn.ymaws.com/www.nibs.org/resource/resmgr/mmc/NIBS_MSv2-2018_Interim-Rep.pdf
Cathy Skurow	Mayor	Portland		<p>I strongly support studies regarding resilient housing solutions. Additionally, the City of Portland would not normally qualify for CDBG funding. That being said, drainage improvements within the City of Portland would improve drainage for watersheds outside our jurisdiction and these areas outside our jurisdiction may qualify for CDGB funds. Therefore, I support efforts to study entire drainage areas instead of areas that would qualify for CDBG funds.</p>
Barbara Canales	Nueces County Judge	Nueces County		<p>Nueces County in collaboration with the Conrad Blucher Institute for Survey and Science at TAMU-CC has developed a plan for a coastal monitoring program that will include both coastal measurements as well as development of inundation and runup forecasting tools to support data driven management of coastal resources along the barrier islands toward improving management practices that support greater stability and resilience of these coastal resources, particularly to storm damage. To illustrate the scope and concerns addressed by proposed program see the following answers to questions posed by the TGLO in the Survey email.</p> <p>1. Impact to Nueces County</p> <p>A. Severe Beach Erosion (post- storm recovery continues as of June 2020)</p> <ul style="list-style-type: none"> -Damage due to storm runup, including some of the largest surges of Hurricane Harvey on the backside of Mustang Island, before during and continuing after Hurricane Harvey -Erosion due to runup occurs during hurricanes and tropical storms but can be exacerbated following storms (recovery period) during peak seasonal high water inundation events that have increased in occurrence over last 10 years and can cause damage and interruption of access and services as significant as during storms. <p>B. Significant Damage to Public Coastal Infrastructure During/After Hurricane Harvey</p> <p>I.B. Magee Beach Park</p> <p>a. Extreme damages to Park Headquarters Building, total destruction to all 75 RV/Tint camping facilities, all supporting infrastructure in the park and all its affiliated facilities was destroyed, heavy damage to the maintenance building that supports the park and the section of beach in the park.</p>

TEXAS GENERAL LAND OFFICE

Planning Studies Survey Results



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Barbara Canales	Nueces County Judge	Nueces County		<p>b. Nueces County Constables Precinct 4 building was completely destroyed from storm surge. c. Padre Balli Park Headquarters sustained significant damages Many of these facilities are still under recovery almost 3 years post Hurricane Harvey. Nueces County is applying fortified construction design standards where possible to exceed TDI wind requirements as well as improved resilient infrastructure to mitigate from future storm impacts.</p> <p>- Packery Channel- revetment failure and collapse from channel mouth to HWY 361 due to high velocity water flow during Harvey (models using current data explain mechanism causing failure) - Sub terrain utility exposure and damage at Packery Channel/HWY 361 due to storm inundation during Harvey (models using current data explain mechanism causing damage) - Damage of Corpus Christi ship channel jetties C. Interruption of Public Access to Beach and Public Infrastructure due to Damage and During Inundation Events (ongoing June 2020) - Public beach access was restored rapidly but Harvey's impact such as weakened infrastructure and impacted beach make the barrier islands of this area more susceptible to damage from future storms. Access to public buildings/facilities that support the I.B. Magee Park remains interrupted to this day due to complex recovery efforts. Public access to Padre Balli facilities has been restored although recovery/repairs is still ongoing. Public access and operations to the Nueces County Constable Precinct 4 has been reestablished through the use of modular buildings while a new facility is constructed.</p> <p>2. Long-Term Goals Establish a Monitoring Program (Nueces County Coastal Monitoring and Forecasting Program) to improve coastal resource management practices before during and after storms in order to maximize coastal resilience, mitigate related economic impact and have information for post damage claims. A. Measure/Document pre-storm annual baseline condition to allow scientific assessment and quantification of event damage and long-term changes B. Improvement of beach maintenance practices and proactive strategies through scientific assessment in order to improve stability during storm. Making the beach and dune complex as healthy as possible for pre-storm advantage C.Improvement of planning and maintenance of coastal infrastructure including structures and parking while accounting for future storms impact and increased inundation frequency due to storms of various intensities and tracks.</p> <p>3. Planning Studies to Assist Nueces County in Achieving Goals. A. Annual and seasonal coastal surveys, assessment of change and trend analysis B. Assessment of 5-year average and identification of influencing factors (maintenance practices, nourishment, storms) C. Real-time measurement of waves and currents in the nearshore of the Gulf of Mexico and inland waters to develop and operationalize forecasting in order to support proactive management.</p>

TEXAS GENERAL LAND OFFICE

Planning Studies Survey Results



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Barbara Canales	Nueces County Judge	Nueces County		<p>There are presently no long-term nearshore wave or current measurements along the Texas open coast. D. Real-time measurement of runup on Nueces County beaches in order to develop forecasting tool and estimate increasing frequency of runup to dunes, existing and planned structures 5. Development of "runup" forecasting tool so resource managers can A. Provide quantitative predictions including runup and extent of beach inundation to prepare in advance of small to medium storms with direct or indirect impact including right sizing resources B. Support beach management in order to increase stability and minimize future storm damage.</p> <p>Closing Comments: The proposed monitoring program for Nueces County has been in development to respond to the needs identified after Hurricane Harvey. CBI has completed short- and long-term studies validating the components proposed for this monitoring program through both the Packery Channel Monitoring Program and localized wave and current monitoring projects along the Texas coast. A full proposal and budget are available for review, and the Conrad Blucher Institute, our collaborating partner can begin work upon contract execution.</p>
Charles Kalkomey	District Engineer	Brookshire-Katy Drainage District	David Hunsucker, President Brookshire-Katy Drainage District	Drainage and infrastructure improvements on a watershed basis that will reduce flood losses to both private property owners and public infrastructure. A study to identify means of storing runoff to prevent the damages would be beneficial to the area.
Jeff Taebel	Director, Community and Environmental Planning	Houston		Optimizing regional detention basin capacity with coordinated use of innovative technologies – Existing public and private detention basins generally are not operated in a coordinated manner using innovative technological approaches, which would offer the potential of increasing the efficiency of their capacity for storm events. The proposed planning study topic is to evaluate the potential to implement smart technologies and networks to coordinate regional releases from detention basins, with a goal of improving available detention capacity prior to storm events, and minimizing downstream impacts during and after events.
Darren Hess	Director / EMC	Montgomery County	Co Judge Mark Keough	Drainage and Infrastructure improvement
Brenda Rutt	City Secretary	Stagecoach	Galen Mansee, Mayor	Drainage improvement
David S Brandon	Commissioner Pct. 3	Cleveland		Infrastructure Improvements; Roads and Bridges need to be brought into higher standards to carry more people to homesites and load capacity.
Christina Stover	Mayor	City of Iola		Drainage improvement
Joe Moudy	Director, Emergency Management	Lubbock	Mayor Dan Pope	Drainage improvement

TEXAS GENERAL LAND OFFICE

Planning Studies Survey Results



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Sydney Murphy	County Judge	Livingston		Resilient housing, Economic Development, Improvement or programs for private roads; Many subdivisions that were built in the 1970's have private roads that are basically gone, residents have little to no access to property or money to repair. Homes are very old and subpar conditions.
Bob Brown	Mayor	Lufkin		Economic development, Homeless population
Dalessa Vardell	City Secretary	Dish	William Sciscoe, Mayor	Drainage Improvement, Economic Development, Infrastructure Improvements
Travis Askey	City Administrator	West Lake Hills	Mayor Linda Anthony	Drainage and Infrastructure improvements
Johnny Trahan	County Commissioner	Orange		We need a complete drainage study so that we can confirm the projects we have planned will have the intended result. Even though TXDOT has created many of our issues they would like a study before they mitigate the damage they have done.
L.D. Williamson	County Judge	Clarksville		Drainage improvements on county roads in low lying areas. Infrastructure improvements. Economic development to help expand our tax base.
Christina Stover	Mayor	City of Iola		Other efforts to mitigate risks and future damages.
Balis Dailey	Mayor	Grapeland		Drainage Improvements; Surge Protection; Economic Development; Infrastructure Improvement; and other efforts to mitigate risks and future damages
Cindy Woodard	City Secretary	Memphis	Joe Davis, Mayor	The City has areas that are prone to flooding so drainage improvement would be one area. Another is infrastructure improvement to our downtown area. In 2016, we had severe flooding that completely washed out a bridge in the south part of the city. Other areas of the city were also washed out, but if there were to have been storm water drainage in those areas the flood-ing damage would have not occurred.
Suzanne Schauman	Mayor	Bandera		Our Wastewater Treatment Plant is in the floodway of the Medina River. We are seeking funding to relocate it. There is also significant damage to the city's streets due to flooding and seasonal runoff. The Wastewater Treatment Plant was under water in 2015 and 2016 Floods. FEMA funds were used to repair the Indian Waters Well but we received no funds to begin the relocating the Wastewater Plant.

TEXAS GENERAL LAND OFFICE

Planning Studies Survey Results



Name	Title	City/Town	Affiliation, or on Behalf Of	Response
Chris Gonzales	Fire Chief/Manager (Jefferson County E.S.D. #1)	Beaumont	John Johnson (Board President - Jefferson County Emergency Services dist. #1)	Drainage improvement
Lamar Ozley	Finance Director	Groves		Drainage, disaster recovery, economic development, education. Jefferson county has been, continues and will continue to be affected by natural and man-made disasters due to the proximity to the coast and all the refineries in the area.
Woodrow W. Gossom, Jr.	Wichita County Judge	Wichita Falls		Drainage improvements. As a result of the severe drought, the 2015 floods gathered fallen trees and left a significant amount of blockage on private land in major and minor drainage systems.
Kirk Roccaforte	County Commissioner Pct. 3	Bridge City		Drainage improvements, including all components listed. Our county has suffered flooding from not only all disasters mentioned but also recent rain events not declared disasters.
John Mark Francis	Mayor	Deport		Deport would best benefit from economic development due to the low socioeconomic area, infrastructure improvement, as our infrastructure in some areas date back to the New Deal Programs under Roosevelt, and drainage improvement with resilient housing solutions.
C. D. Woodrome	City Secretary	Woodville	Mayor Cathy Bennett	Communications (including social media for the public), and functionality of FIRSTNET in the pines of East Texas for emergency services. The citizens of Ivanhoe do not have access to affordable internet. Internet connectivity for low income citizens is cost prohibitive. Use of Facebook has only become common since the 2016 flooding, and really useful to provide information to our citizens during Harvey.
Travis Ransom	Mayor	Atlanta		Economic development, infrastructure improvement, drainage improvement, storm water management; Excessive storm water created significant infiltration. Storm water also caused damage to roads and infrastructure where high flow created excessive deterioration of infrastructure.
Michael Leavitt	City Manager	Highland Village	Mayor Wilcox	Drainage, Infrastructure & Economic Development
Mark Henry	County Judge	Galveston County		Drainage improvement, surge protection, economic development, & infrastructure improvement; For Galveston County, Hurricane Harvey was a major producer of rainfall, upwards of 55". Causing disastrous and life threatening flooding. The proposed study would help in future mitigation, preparation, and life saving plans.
Tonya Roberts	City Administrator	Rice	Vickie Young, Mayor	Drainage improvements, infrastructure improvements, park drainage improvements, local disaster plans, GIS/mapping, community safe room/weather warning system.
Marie Garland	City Administrator	Meridian	Mayor Johnnie Hauerland	Drainage Improvement, economic development, infrastructure improvement and other efforts to mitigate risks and future damages.

TEXAS GENERAL LAND OFFICE

Planning Studies Survey Results



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Mike Wright	Mayor	Wolfforth		Infrastructure planning; Provide emergency backup power during power outage for emergency communication and water monitoring equipment as well as sheltering.
Yvette Barrera	City Engineer	McAllen	Jim Darling, Mayor City of McAllen	<p>Floodplain and SFHA mitigation efforts, transportation infrastructure improvements (major FM designated arterials were not passable may need to be elevated in sections), stormwater monitoring technology to provide early warnings at various locations.</p> <p>1. Improved drainage infrastructure is necessary to address various subdivisions that were flooded. Some of these impacted areas were developed prior to new drainage standards and are within low lying areas, so improved drainage systems may not address all needs; we would also benefit from resilient housing solutions. 2. Several major arterials (State roads) become impassable due to water from floodway overtopping the road. These roads lead to the Trade Zone and other industrial areas that service our City. The roads would benefit from being elevated at designated areas. 3. Early warning systems would assist with efforts to advise motorists to avoid certain roadways and take alternative routes. 4. Drainage improvements such as improved infrastructure assists to drain localized areas, but regional storm-water detention facilities would assist by providing additional capacity before water is introduced to the existing outfall. There are several impacted areas in the City where these RDF's would provide that benefit.</p>
Sally Palmer	Communications Coordinator	Port Aransas		For Port Aransas - resilient and affordable housing solutions, surge protection utilizing natural infrastructure, storm surge studies with increased channel depth planned, street infrastructure improvements to reduce flooding.
Edith Marvin	NCTCOG Director of Environment and Development	Arlington		<p>1) Long range comprehensive planning for large mostly undeveloped watershed areas that address growth and development before they occur, targeted at mitigation and flood prevention planning, that integrate transportation, stormwater, and natural/environmental infrastructure elements, distributing planning resources to communities for implementation, and encourage adoption of community policies and best practices that have a long-term effect on risk reduction and disaster-resistant infrastructure for the study area and for the area downstream that would also be impacted by the growth that is coming. 2) Expansion of building code updates, progressive flood damage prevention ordinances, and modernization of resiliency products and planning practices for areas that still have not adopted the most current codes and practices. 3) Improvements to Local Hazard Mitigation Plans that our agency has a history of coordinating. 4) Development and enhancement of other regional planning tools and datasets that help support the above 3 planning efforts.</p>

TEXAS GENERAL LAND OFFICE

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Name	Title	City/Town	Affiliation, or on Behalf Of	Response
Dennis Engelke	Grants Administrator	Lockhart	Hoppy Haden, Caldwell County Judge	Economic recovery following the pandemic/disasters. Resilient housing solutions -- providing supply of adequate mixed housing (new or refurbished). Land use planning. Grant writing and grant management training for communities. Emergency management infrastructure development -- EOC's, temporary housing/staging facilities, broadband communications, etc.
Andy Brauningner	Mayor		Mayor Andy Brauningner	Wastewater and stormwater treatment. Economic development. Drainage master planning. Huntsville has 8 watersheds and is in need of not only individual studies for each watershed, but also an overall master plan to move towards regional detention
Andy Brauningner	Mayor	Huntsville		Drainage and aging infrastructure
Jett Tullos	CPCB Coordinator			Resilient housing solutions
C. H. "Burt" Mills	Aransas County Judge	Rockport		Public education on methods of hazardous mitigation and risk deduction(Aransas County) possibly combine with design and implement outreach projects for special needs populations and tourist populations(RP); Create a county-wide wetlands preservation plan (all jurisdictions); Create a county-wide wetlands preservation plan (all Jurisdictions); develop and adopt a stormwater master plan (all jurisdictions); implement and asset management system (Aransas Pass). This may be something all jurisdictions could be interested in.; design and implement an open space plan and associated regs (RP, AP). Note this could be combined with the drainage plan and incorporate ecotourism. Aransas County could also be involved.; design and implement a coastal erosion study to id projects (AP); design and conduct an engineering study to address downtown flooding (RP); design and conduct a lighting vulnerability assessment study (RP); design and plan fiber-optic loop for region; regional drainage projects.
Robert Blaschke	County Judge	Refugio		Generally, any planning activities and document creation has traditionally included only the "why", "what", "where", and "when". What is left out of planning is "how" will the strategy or plan be "implemented". So, for a small rural county like Refugio, a type of study that could benefit our area would be to develop an implementation plan/model scaled to the respective rural capacity. For instance, Refugio County is part of a 3 county economic development strategy committee along with Jim Wells and Bee Counties. How mitigation initiatives get done in a rural county needs to be studied.

TEXAS GENERAL LAND OFFICE

Planning Studies Survey Results



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Tammy McDonald	City Treasurer	Palacios	Mayor Glen Smith	Street improvements; Flooding due to streets in disrepair
Glen Smith	Mayor	Palacios		Proper residential drainage is a critical issue in Palacios. Being located on the Tres Palacios Bay and next to the gulf, we are especially affected during tropical storms, hurricanes and during other periods of heavy rain. Another important issue to our small city is infrastructure improvement. With a population of barely 5,000, our annual budget leaves little room for the important improvements to our infrastructure that not only allows the city to properly sustain our citizens but to enhance our economic development efforts. Hurricane Harvey had a direct impact on our community. While Palacios did not receive the destruction that affected other gulf coast communities, the hurricane exacerbated already existing drainage issues and increased the timeline of several elements of our Capital Improvement Plan and our Hazard Mitigation Plan.
Patrick Rios	Mayor	City of Rockport		Drainage, affordable housing, economic development
Ricardo Villagrand	Community Development Director	Mont Belvieu	Mayor Nick Dixon	Region Wide Drainage Improvements would be most beneficial for our City.
Pedro Morales	Commissioner PI 2	Alamo		Drainage improvements
Tomas D Reyna	Assistant City Manager	Edinburg	Mayor Richard Molina	The City of Edinburg in the north side hub for the water flowing thru the City from the West part of Hidalgo County.
Michael Shoe	Director of Emergency Management	Georgetown	Judge Bill Gravell	Watershed study for the implementation of a county-wide flood monitoring program similar to what Hays County has in place.
Randy Cain	Alderman	Ingleside On The Bay		Resilient housing, surge protection; Ingleside On The Bay sits just 3 feet above sea level. We were directly impacted by the 4ft surge from Harvey and are frequent victims of nuisance flooding.
Cathy Skurow	Mayor	Portland		Drainage and infrastructure improvements
Mark Meuth	County Commissioner	Bastrop		Infrastructure and drainage improvements
Kristie Hadnot	Grants Manager	Huntsville	Andy Brauning, Mayor	Drainage improvements, Housing Resiliency Initiatives (renovations - rehabilitation - new construction), Economic development, Infrastructure Improvements, Traffic / Transportation Improvements, Emergency Shelter & Food Supply Initiatives; The previous disasters of the 2015/2016 floods and Hurricane Harvey adversely impacted various operational and functional community systems. A mitigation study to evaluate and to quantitatively assess the impacts could highlight the need and degree of improvements needed to bring all recommended impacted community systems up to par. Also, the study could serve as a roadmap to determine the best course of action to make each system better in functionality, operations, and resilient to future disasters.
James M Stinson, PE	General Manager	The Woodlands	Eric Hird, President of Woodlands Water Agency	Flood mitigation improvements for The Woodlands community; improvements have been identified to reduce home flooding and major transportation roadway closures. we need funding to proceed.

TEXAS GENERAL LAND OFFICE

Planning Studies Survey Results



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Lori An Gobert	Mayor	Columbus		Economic development and infrastructure
David Licon, Jr.	Floodplain Admin / Engineer	Brownsville	Trey Mendez, Mayor of Brownsville	Drainage Improvement; our study would include all 5 resacas within our watershed and provide valuable data to our entire HEC-10 Watershed.
Emily Truman	City of Cedar Park Stormwater Program Manager	Cedar Park	Mayor and Council	Infrastructure improvement and drainage improvement
Gerald Lamberth	Citizen	Portland		Drainage Study
Patrick Rios	Mayor	Rockport		Drainage improvement, economic development, infrastructure improvement
Britni Van Curan	President of Economic Development/Mayor Pro- Tem	Pleasanton		Drainage improvements, economic development
David Douglas	Engineering Administrator	Liberty County	Judge Jay Knight	Liberty County will conduct a county wide drainage study and action plan. It is anticipated that this study and plan will have a cost of 10 million dollars. Liberty County's floodplain/floodway footprint is so massive and unique that it requires a study that is independent from other study efforts.
Lydia Moreno	City Secretary	Lyford	Mayor Jose G. Solis	Drainage improvement; infrastructure improvement; economic development; Comprehensive Plan to include infrastructure, economic development, and drainage improvement
Ben Medina	City Administrator	Rio Hondo	Gustavo Olivares, Mayor	Infrastructure improvements for damaged dams and culverts to find out the extent of the damage.
Aida Gutierrez	Town Administrator	Combes	Aida Gutierrez, Town Administrator	Drainage Improvements-joint efforts county wide-not just each individual cities/towns, we need overall county improvements
Ricardo Salinas	Mayor ProTem	Lyford		Regional Drainage. Our watershed needs to make retention ponds, reservoirs, lakes and laterals to manipulate the amounts of water that flows from beginning to end, the drainage system runs through several counties. Infrastructure for our rural towns/cities is of great need also.
Carolyn Dill	County Engineer	Bastrop	Paul Pape, Bastrop County Judge	The County needs to complete the regular periodic update of our Hazard Mitigation Plan. The proposed update would include all taxing entities within the County that wish to participate. New participants are expected to be the school districts and water control improvement districts. As the County was declared for all but one of the events above, the taxing entities have historical knowledge of mitigation actions needed for resilience. By having a current Hazard Mitigation Plan with well-scoped mitigation actions, the participants are eligible for certain types of grant funding including FEMA's Hazard Mitigation Grant Program.
Mel Hamner	Bastrop County Commissioner, Precinct One	Bastrop		Infrastructure and drainage improvements; Bastrop County and Precinct One have been continually impacted by flooding since the 2011 Complex Fire which increased impervious flow of water across valleys and into watersheds! Water studies done since 2011 and 2016 flooding events have revealed most culverts are at least 1/3 undersized for the cubic foot per second flows currently being experienced. This directly impacts the road surfaces. It continues through Hurricane Harvey and any high water event.

TEXAS GENERAL LAND OFFICE

Planning Studies Survey Results



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Brenda Rutt	City Secretary	Stagecoach	Galen Mansee, Mayor	Drainage improvement and other efforts to mitigate risks and future damages
John Moran	Citizen	Palacios		Comprehensive Stormwater Drainage Study to determine the best course of action to mitigate stormwater.
M Harris	Citizen	Palestine		Drainage basin studies and improvements, economic development, infrastructure improvement, and studies to mitigate flooding risks and future damages in rural communities. Funds for hydraulic and hydrology studies and drainage studies for projects in rural counties and cities are a challenge. This has been a hurdle for years and when attempting to complete a project in a town that addresses drainage, the studies needed for an engineer to design the appropriate project are cost prohibitive or ineligible for grant funds. Please consider the need for H & H studies and the similar studies needed for major drainage projects in a community as a component of the proposed improvements.
James Freeman	City Administrator	Hudson	Mayor Robert Smith	Drainage improvement and Infrastructure Improvement
Jimmy Kendrick	Mayor of Fulton	Fulton		Drainage, infrastructure improvements, surge protection, road repair due to water
Taylor Shelton	Public Works Dir.	Port Neches		Drainage, Economic Development, Infrastructure Improvements, Mitigation risk and future damages
Kay Roach	Mayor	Woodsboro		Water, Waste Water and Road - Infrastructure improvement and resiliency, economic growth, resilient housing, removal of substandard or unsafe buildings. Hurricane Harvey damaged water treatment plant & waste water treatment plant from non resilient planning and aged equipment. Both older homes and new homes were destroyed from the high winds of storm.
Jo Ann Ehmann	Mayor	Ingleside on the Bay		Drainage improvement and surge protection from storms. Part of our community is coastal and low lying so storms and excessive drainage from rains etc are an ongoing problem. We also have sewer lift stations in the flood zones but dont see a way to mitigate those at this time.
Ray Hernandez	President & CEO	Huntsville		Affordable Housing, economic development, infrastructure improvement
Armando Ocana	Mayor	Mission		Alternative modality for moving people to include walkability studies; The study will allow methods and ways to move people from a high risk area of flooding to a safe haven.
Terry Jeffers	Alderman at Large	Village of Jones Creek		The Brazos River near our town is like a snake and it comes out of it's banks at one of the snake turns an flows into our local creek (JONES CREEK). Then the creek rises and floods 100 homes in our town. The river needs to be straightened out (remove the snake turns) and possibly needs a levee to keep it in it's banks.
Bruce Robinson	Mayor	Sour Lake	Jack Provost, City Manager	Drainage and Infrastructure improvement

TEXAS GENERAL LAND OFFICE

Planning Studies Survey Results



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Glen Smith	Mayor	Palacios		<p>1. Drainage improvements are needed throughout the City. Over the years, the drainage requirements have outdistanced the City's ability to alleviate all the issues.</p> <p>2. Infrastructure improvement - With a limited budget, the City cannot accomplish all the improvements to its infrastructure in a timely manner.</p>
Melinda Strong	Mayor	Danbury		<p>Drainage and infrastructure are our two largest issues. Emergency Management issues are starting to become more relevant for the City of Danbury also. The City of Danbury's drainage issues became prevalent during Hurricane Harvey with about half of our town under water for days. Infrastructure was also impacted by the large amount of flood waters. Emergency Management was also in the forefront due to the need of generators as back-up power for lift stations.</p>
Bill Daugette	County Commissioner	Walker County		<p>Infrastructure Development, our county has several structures, such as bridges, culverts, and some roads, that have become undersized due to development and increased rainfall events. The need to upgrade these facilities is a priority for us.</p>
Charles L. Rogers	EMC	Columbus	Ty Prause - County Judge, Colorado County	<p>Infrastructure Improvements, economic development, drainage improvements, other efforts to mitigate risks and future damages; All the above events revealed weaknesses in our infrastructure with a focus on connectivity (internet, cell and landlines), communications (LMR and cell) and the impacts on numerous county roads and bridges. These events also re-exposed our lack of economic development that would assist in locally addressing identified gaps and assist in making the recovery timeline smaller. It exposed the drainage issues in the areas south of Interstate 10 that directly and indirectly impact the flow of rain and flood related run-off from City of Columbus and the unincorporated areas that directs run-off to the Colorado River basin. These events have shed light upon other areas that may impact the county in the future. The increase in new pipeline activities, changes in the numerous creeks and floodplain areas, the need of building codes in the unincorporated areas, the lack of monitoring of creeks and tributaries along the Colorado River, the massive changes to the Colorado River bed in and around the City of Columbus that makes all historic flooding data and event action levels used for protective measures obsolete, 2 breaches of the Colorado River back south of Altair that will change the direction of flood waters and may add a new threat to the City of Eagle Lake. Due to the lack of response from the Red Cross for sheltering, it has been determined that the need exists for a region-wide, multi-use shelter is needed in the Weimar area to address the immediate and short-term shelter/severe weather impacts for Colorado and the surrounding counties.</p>
Kenneth Weeks	County Judge	Newton		<p>Drainage improvement, economic development, and infrastructure are the most importance in my county because of the economic disadvantage county.</p>

TEXAS GENERAL LAND OFFICE

Planning Studies Survey Results



Name	Title	City/Town	Affiliation, or on Behalf Of	Response
Randy Cain	Alderman	Ingleside on the Bay		First, diversification of the coastal economy away from petrochemical-focused toward green-clean-marine jobs that will provide employment alternatives rather than the boom- and-bust cycle of oil and gas. Second, health-related studies concerning the benefit of Information Technology to provide care (eg Teledoc), the availability of providers (eg no hospitals in the county), and the long-term impact to health from the industrial growth (eg air and water pollution). Third, a study of the feasibility of developing a "farm-to-market" mentality and economy in the Coastal Bend Region of Texas. Fourth, a study of the true availability of broadband Internet in the Coastal Bend.
Briana Gallagher	Project Coordinator	Conroe		Drainage improvements, infrastructure improvements, detention/retention, watershed studies
Jeff Mason	Mayor	Lakeside	Bonnie Taylor, City Secretary	Drainage improvements
Jim Reed	Executive Director	Salado		Infrastructure
John Maresh	City Manager	Rosenberg	John Maresh, City Manager	Drainage improvements, economic development, infrastructure improvement
Sara Williams	Emergency Management Coordinator	Sinton	Judge David Krebs	Drainage improvements - our county is very flat and we suffer from overland flow (sheet flow) during large rain events, and have many 100 flood zones, and regulatory flood ways. We need a study to determine what drainage improvements would create the largest impacts and allow for continued development across the county, and lessen the impacts of flooding on our communities. Economic development - our small businesses are very important to our overall economic health, but they are very vulnerable to disruptions that come with large disaster, such as hurricanes. Many locally owned businesses did not reopen after Hurricane Harvey. A study to help us determine which types of businesses need the most help, what types of education is needed, and also what types of businesses tend to be the most resilient should be very helpful. We want to ensure that we continue to attract resilient businesses and help existing businesses to develop similar resilience.