

CHAPTER 4

PUBLIC FACILITIES & INFRASTRUCTURE

Vision Elements

Resilient Community

Diverse Housing

Economic Growth and Opportunity

Goals

In 2050

Harlingen aspires to foster a resilient community that supports its people through inclusivity, safety and robust support systems.

In 2050

Harlingen will offer diverse housing options to accommodate all income levels, life stages and family types.

In 2050

Harlingen will focus on creating opportunities for economic growth that benefit all residents and future generations.

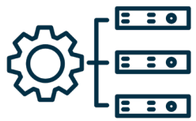
Objectives

- Strengthen public safety and emergency preparedness for natural disasters and community challenges.
- Implement strategies for long-term resilience to economic and climate-related challenges.
- Expand infrastructure for industrial and tech-focused industries.
- Invest in infrastructure improvements to attract new businesses and retain existing ones.



Public Facilities & Infrastructure Policies

As Harlingen continues to grow, investing in reliable, modern and resilient infrastructure is essential to maintaining a high quality of life and supporting long-term economic growth. Public facilities and utilities such as drainage systems, parks, libraries and civic buildings shape how residents interact with their city each day. These policies reflect what the community has shared as most important: safe and well-maintained infrastructure, accessible and welcoming public spaces, and a forward-looking approach that prepares Harlingen for future needs.



Strengthen & Maintain Essential Infrastructure

Ensure reliable water, sewer, drainage and transportation systems that meet current needs while supporting future growth and sustainability.



Expand & Modernize Public Facilities

Invest in parks, recreation centers, libraries and emergency services to enhance accessibility, promote inclusivity and improve overall community well-being.



Enhance Mobility & Connectivity Through Infrastructure

Invest in pedestrian and bike infrastructure, sidewalk networks and roadway upgrades to support safe, accessible and multi-modal transportation options citywide.



Build Resilient & Sustainable Infrastructure

Incorporate green infrastructure, renewable energy and climate-adaptive solutions to improve long-term reliability, efficiency and environmental sustainability.

What We've Heard So Far...

"We need improved drainage infrastructure to prevent flooding in neighborhoods and business areas."

"Updating water and sewer systems should be a priority as the city grows to ensure reliable services."

"We'd like to see safer options for walking and biking throughout the city and connections to parks."

"Consider investing in public safety facilities, like new fire stations, to keep up with the city's expansion."

"Funding should be allocated for improving the animal shelter and related services."

"City Hall needs to be expanded or replaced with a more functional building to handle growing city needs."

"Better roadway infrastructure and sidewalks are essential for ensuring safe mobility for residents."

"Efforts to improve water conservation and replace deteriorating utilities are necessary before they become environmental issues."

"Investment in beautifying public spaces and connecting areas with trails would make the city more livable."

Key Takeaways:

- Drainage improvements are a major priority, especially in neighborhoods and business areas that experience flooding.
- Water and sewer systems need upgrades to keep up with growth and maintain reliable service.
- Many residents want safer and more connected routes for walking and biking across Harlingen.
- Public safety services like fire stations and emergency response need more investment as the City expands.
- City Hall is seen as outdated and in need of expansion or replacement to meet future needs.
- Residents value clean and well-maintained public spaces, with support for beautification and trail connections.

Public Facilities/Infrastructure & Resilience Connection

Enhancing resilience in public facilities and infrastructure planning involves aligning development to strengthen the resilience of essential services and infrastructure. This leads to public facilities and infrastructure are capable of meeting the community's evolving needs effectively.



Public Facilities/Infrastructure

Redundancy

Harlingen's infrastructure network should maintain redundancy in critical facilities to ensure that natural or man-made shocks and stressors do not hinder essential services.

Flexibility

Public facilities in Harlingen should be designed to adapt to a variety of community functions, enabling easy repurposing for future needs.

Risk Mitigation

Harlingen's public facilities and infrastructure should be designed to withstand major hazards while providing relief from community stressors.

Green Infrastructure

Green infrastructure enhances resilience by managing stormwater, reducing heat and supporting sustainable urban development.

Maintenance

A plan for continuous and proactive maintenance of public facilities and infrastructure should be included in all development decisions.

Public Involvement

A resilient Harlingen requires active engagement with educated and prepared residents to foster a robust community partnership.

Public Facilities & Services

Public and community facilities play a pivotal role in fostering Harlingen's growth and development. These include essential public safety infrastructures such as police and fire stations, alongside community hubs like City Hall, libraries, parks and recreation centers. To meet the evolving needs of its residents, local authorities must strategically plan for facility development, ensuring critical services and quality-of-life amenities keep pace with the City's expansion. Partnerships with institutions like the Harlingen Consolidated Independent School District (HCISD) and other local organizations are vital in addressing shared challenges and maximizing community development opportunities.

Harlingen exemplifies this collaborative approach through its city-funded fire department, which operates multiple stations to ensure fire safety, and its efficient EMS services for rapid medical response. By investing in modern infrastructure and maintaining strong relationships with external organizations, the City prioritizes accessible and inclusive resources for its residents. Through strategic planning and collaboration, Harlingen remains a vibrant, resilient community poised to adapt to the needs of its growing population.

Harlingen City Hall

Harlingen City Hall, located at 118 E. Tyler Avenue, serves as the central administrative hub for the City. Built in 1950, the facility oversees local governance, public records and community planning. As Harlingen grows, City Hall remains a vital space for civic engagement, hosting commission meetings, public hearings and key administrative operations.

Harlingen Public Library

The Harlingen Public Library, located at 410 '76 Drive is a modern facility that has been serving the community since 1993. It provides a wide array of resources, including books, internet access, educational programs and public meeting spaces. The library is a cornerstone for lifelong learning and community engagement for residents of all ages.

Harlingen Fire Department

The Harlingen Fire Department operates multiple stations, including Fire Station #1 at 1212 N. 1st Street and Fire Station #2 at 601 S. 77 Sunshine Strip. Established to serve a growing population, these stations are equipped with advanced firefighting tools and staffed by trained personnel. The department is dedicated to fire safety, emergency response and disaster preparedness across the City.

Harlingen Police Department

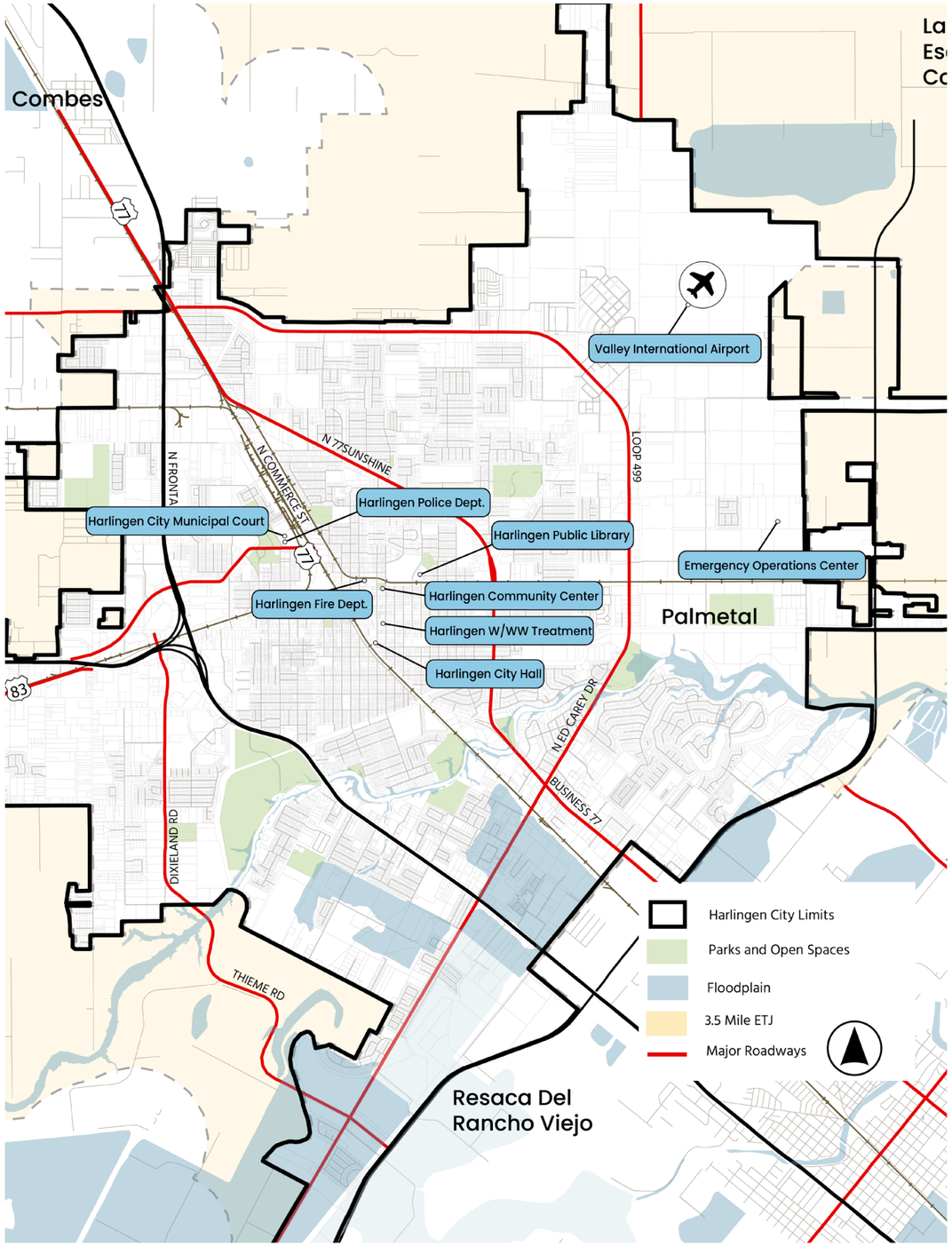
The Harlingen Police Department, located at 1018 Fair Park Boulevard, provides law enforcement services and ensures public safety for over 71,500 residents. With a history spanning over 100 years, the department is committed to crime prevention, community engagement and maintaining peace through patrol operations and investigative services. The headquarters also supports emergency communications and operational teams to enhance public safety across the City.

Emergency Medical Services (EMS)

Harlingen EMS, based at 1422 Morgan Boulevard, has been serving the community since 1979, providing emergency medical care and hospital transport. Staffed by skilled paramedics and equipped with advanced life-support ambulances, EMS plays a crucial role in responding to critical situations and strengthening the City's healthcare network.

Valley International Airport

Located at 3002 Heritage Way, Valley International Airport spans 2,400 acres and features an 9,400-foot-long runway (18R/36L) which serves over 1,200,000 passengers annually, supporting commercial travel and cargo services. The airport is a vital economic engine for Harlingen, boosting regional trade and tourism.



Map 9. Harlingen Public Facilities and Services

Facility & Community Resilience

Harlingen's location in South Texas makes it vulnerable to multiple environmental hazards, including flooding, extreme heat, hurricanes and potential wildfire exposure. As the City modernizes its infrastructure, resilience must be a core principle to ensure critical services remain operational, residents stay safe and City resources are protected. To achieve this, Harlingen should prioritize redundancy, flexibility, risk mitigation, green infrastructure and maintenance in its resilient infrastructure approach. Redundancy ensures that critical systems like electricity, water and communication networks have backups such as generators, multiple water sources and redundant IT systems. This is especially important in flood prone areas where a single failure can disrupt citywide operations. Flexibility allows public buildings to serve multiple purposes under different conditions. For example, libraries and recreation centers can function as cooling centers or emergency shelters, with modular layouts and emergency supply storage, enhancing adaptability. Risk mitigation focuses on constructing infrastructure that addresses hazards such as floods, heat, tornadoes and wildfire by using elevated structures, wind resistant materials and power resilient designs, particularly in vulnerable areas like the Arroyo Colorado. Green infrastructure incorporates nature based solutions like bioswales, rain gardens, tree plantings and permeable paving to reduce environmental risks while improving stormwater management and public space quality. Finally, maintenance and planning are essential to long term resilience, requiring ongoing inspections and repairs for critical systems, as well as capital improvement planning to ensure infrastructure continues to function safely and efficiently.

Facilities and Services Recommendations

As Harlingen plans for the next 20 years of growth, it is important to assess the condition, location and availability of City facilities and supporting infrastructure. While many services are valued, feedback from residents and the community highlights gaps in coverage, aging infrastructure and unequal access. These issues are especially prevalent in areas experiencing rapid growth or those that have historically been underserved. The considerations below outline key facility and infrastructure priorities to support a resilient, inclusive and future-ready Harlingen.

Electrical Substation

An electrical substation was identified as a top concern, especially in areas near the Port of Harlingen. As Harlingen continues to expand its industrial base, reliable power will be vital to support manufacturing, logistics and port-related development. Additional substations or upgrades to existing systems will be necessary to meet future demand.

Broadband Easement Expansion

Limited access to high-speed internet, particularly in West Harlingen, creates challenges for education, remote work and economic growth. To address these issues, the City should focus on establishing broadband easements and collaborating with providers to achieve universal access, prioritizing low-income and outlying neighborhoods.

Improvements in West Harlingen

West Harlingen has faced consistent neglect, with insufficient investment in parks, lighting, sidewalks and digital infrastructure. Future improvements should focus on equitable facility distribution, including park upgrades, recreational courts and expanded trails along Business Highway 83. These efforts will create a more inclusive and well-resourced community.

Stormwater and Drainage Infrastructure

Flooding is one of the most frequently reported challenges in Harlingen, especially near schools and major roadways. Enhancing drainage systems, particularly on 13th Street, is crucial for improving public safety, safeguarding property and building resilience to the growing impacts of extreme weather conditions. This upgrade would address immediate concerns while preparing the City for future challenges.

Sidewalk and Trail Connectivity

Several areas in the City such as Ed Carey Drive, 13th Street and the Harlingen High School area lack continuous sidewalk infrastructure. Expanding sidewalks and building out a citywide network of off-street multi-use trails will improve safety and encourage active transportation.

Indoor Recreation Center

An indoor recreation center is essential to support wellness and recreational needs for all age groups. It would offer versatile spaces, modern amenities and foster community engagement while enhancing economic development.

Public Safety Facilities (North Harlingen)

Concerns about crime and public safety were especially high in North Harlingen. A new police substation or shared emergency services center could help improve response times and increase police visibility. These investments should be paired with expanded street lighting and community outreach efforts.



Public Facilities Best Practices

As Harlingen grows and evolves, its public facilities must keep pace with the needs of a diverse, resilient and connected community. Facilities such as libraries, police and fire stations, recreation centers and city service buildings are not just operational assets, they are places where residents engage with the government, access essential services and build community identity. By applying best practices in facility planning, design and maintenance, Harlingen can ensure its public spaces serve current needs while remaining adaptable to the future. The following best practices offer guidance to align infrastructure investments with long-term goals for equity, safety, sustainability and quality of life.



Strategic Location and Equitable Access

Public facilities should be located to serve all areas of Harlingen equitably, especially neighborhoods that have historically lacked access to civic services and amenities. For example, West Harlingen has fewer public-facing facilities and amenities despite growing residential needs. Site selection should consider walkability, transit access, population growth trends and community input. The goal is to ensure that all residents regardless of where they live can access key services like libraries, parks, health centers and public safety buildings without significant travel barriers.



Flexible Design for Multi-Use Programming

Modern public buildings should be designed to accommodate a wide variety of uses, including community events, educational programs, emergency sheltering and recreation. Facilities like recreation centers, libraries and even fire stations can benefit from modular layouts, operable partitions and multi-purpose rooms that support both daily use and emergency operations. This flexibility not only maximizes the value of city investments, but also enables facilities to adapt to changing community needs over time.



Safety Through Design and Community Integration

Incorporating Crime Prevention Through Environmental Design (CPTED) principles into public facility design helps improve safety and community confidence. Well-lit paths, clear lines of sight, active frontages and secure access points reduce opportunities for crime while encouraging positive activity around facilities. Co-locating public safety buildings such as police substations near parks, schools or transit stops can reinforce safety in high-traffic public areas while building trust through community presence.



Resilience and Redundancy in Infrastructure

Nature-based solutions should be incorporated into public spaces to reduce flood risk and urban heat. This includes bioswales, rain gardens, tree plantings and permeable paving around civic buildings, parks and streets. These strategies not only manage stormwater and cool the environment but also create more attractive and usable spaces for the public.



Green Infrastructure and Environmental Performance

Public buildings and sites should integrate nature-based design solutions to manage stormwater, reduce urban heat and create welcoming environments. Features such as bioswales, rain gardens, shade trees, reflective materials and permeable pavement can be incorporated into civic plazas, parking areas, walkways and park-adjacent facilities. These elements not only support Harlingen's environmental goals, but also enhance the visual appeal and comfort of public spaces.



Accessibility and Universal Design Principles

All public facilities must prioritize universal accessibility, going beyond minimum ADA requirements to ensure all users can move freely and comfortably. Design considerations should include wide pathways, tactile guidance surfaces, accessible restrooms, shaded seating areas and multilingual signage. As the City's population ages and diversifies, universal design will be key to making civic spaces inclusive for people of all abilities, ages and backgrounds.



Planning and Preventive Maintenance

Sustainable public facilities require long-term investment not only in construction, but also in ongoing maintenance and renewal. Cities should develop and follow asset management plans that schedule routine inspections of HVAC systems, roofing, electrical, plumbing and other critical components. Preventive maintenance reduces emergency repairs, extends building lifespans and ensures public safety and functionality. Facilities budgets should include both capital renewal and operating costs to support year-round upkeep.



Community Partnerships and Co-Located Services

Cities can expand access to services by forming strategic partnerships with school districts, nonprofits, healthcare providers and regional agencies. For instance, a library branch could be co-located with a workforce training center, or a senior health center.



Water & Wastewater Systems

Existing Systems

The City of Harlingen's water system includes a network of pipes ranging from 6 to 30 inches in diameter, two water treatment plants (Downtown Water Treatment Plant and MFR Water Treatment Plant) and several pump stations and elevated storage tanks. The system provides clean and reliable water to more than 36,000 connections across the City. The water comes from surface water sources, and the system is designed to meet the needs of residents, businesses and industries. With projected population growth, the system is being evaluated for additional storage and pumping capacity to ensure long-term reliability and regulatory compliance.

The wastewater system consists of pipes ranging from 6 to 36 inches in diameter, a wastewater treatment plant (Harrison Wastewater Treatment Plant) and 61 lift stations. This system handles wastewater from over 32,000 connections, processing average daily flows and managing peak flows during wet weather events. Planned upgrades focus on reducing inflow and infiltration and expanding treatment capacity to handle future peak wet weather events effectively.

Both the water and wastewater systems are maintained to meet current needs and are being upgraded to prepare for future growth. Harlingen Waterworks System (HWWS), the public water and wastewater utility for the City of Harlingen, most recently updated their Water and Wastewater Master Plan in March 2022. The improvements outlined in the plan aim to enhance system resilience, sustainability and efficiency, ensuring Harlingen's infrastructure can support its expanding population and economic development.



Harlingen Waterworks System Water Filtration Plant, 2024

Historical Water Demands and Wastewater Flows

Harlingen's historical water demands and wastewater flows provide insight into the system's operational performance and help project future needs. The water demands average 1.49 MGD (Million Gallons per Day), with peak flows reaching up to 2.55 MGD. Wastewater flows average 1.04 MGD, with peak wet weather events significantly increasing flow rates.

Figure 14. Harlingen Historical Water Demands

Year	Connections	Avg. Daily Demand (MGD)	Avg. Daily Demand (Gallons/ Connection/Day)	Max. Day Demand (MGD)	2Max. Day to Avg. Day Peaking Factor
2018	4,828	1.54	319	2.26	1.47
2019	4,910	1.49	303	2.14	1.44
2020	4,963	1.52	306	2.20	1.45
2021	5,094	1.30	255	2.55	1.96
2022	5,210	1.49	286	2.17	1.46
2023	5,333	1.60	299	2.45	1.53
Average	-	1.49	295	-	1.55
Max	-	-	319	2.55	1.96

Source: Harlingen Waterworks System Water and Wastewater Master Plan (2022)

Figure 15. Harlingen Historical Wastewater Demands

Year	Connections	Avg. Annual Daily Flow (MGD)	Avg. Annual Daily Flow (Gallons/ Connection/Day)	Peak Wet Weather Flow (MGD)	Wet Weather Peaking Factor
2018	4,615	1.03	223	4.31	4.18
2019	4,678	1.01	216	2.94	2.91
2020	4,714	1.02	216	3.70	3.63
2021	4,814	1.11	231	4.48	4.04
2022	4,896	1.04	212	2.38	3.25
2023	4,983	1.06	213	4.48	4.04
Average	-	1.04	219	-	3.60
Max	-	-	231	4.48	4.18

Source: Harlingen Waterworks System Water and Wastewater Master Plan (2022)

Water Demand and Wastewater Flow Projections

Water Demand and Wastewater Flow Projections for Harlingen

The City of Harlingen is anticipated to experience steady growth over the next few decades. To prepare for this, water and wastewater demand projections were developed using growth scenarios outlined in the master plan. These scenarios include projected compound annual growth rates (CAGR) of 2.5%, 5% and 6%. The projections are based on the current number of water and wastewater connections and estimated population increases.

Water Connections

Water demand projections were calculated by considering average daily water use, peak daily demand and peak hour demand. The average day rate reflects the daily amount of water used per connection and is key to estimating overall system needs. Maximum day demand identifies the highest water use day in a year and is critical for sizing treatment and storage facilities. Peak hour demand accounts for the largest one-hour use period and helps design pumping and transmission systems. Harlingen water system must be designed to handle these fluctuations efficiently. As the City grows, meeting both peak hour demands and maintaining a uniform and reliable water supply will require careful planning, including investments in system storage and transmission mains.

Wastewater Connections

Harlingen's water system is projected to grow steadily over the next decade, with increasing connections and rising demands. The system must handle higher average daily use, peak day demands and peak hour demands as population and development expand. Upgrades to water treatment plants, storage tanks and distribution lines will be essential to meet future needs. Ensuring reliable service will require strategic investments in system redundancy and capacity expansion. These improvements will help maintain compliance and ensure sustainability for Harlingen's growth.

Figure 16. Harlingen Water Connections

Year	2.5% Growth Rate	5% Growth Rate	6% Growth Rate
2024	36,985	38,012	38,400
2029	41,761	44,126	45,300
2034	47,118	51,236	52,890

Source: Harlingen Waterworks System Water and Wastewater Master Plan (2022)

Figure 17. Harlingen Wastewater Connections

Year	2.5% Growth Rate	5% Growth Rate	6% Growth Rate
2024	33,200	34,200	34,600
2029	37,500	39,800	40,500
2034	42,300	46,200	47,300

Source: Harlingen Waterworks System Water and Wastewater Master Plan (2022)

Figure 18. Harlingen Water System Design Criteria

Criteria	Value
Average Day Demand per Connection	310
Maximum Day to Average Day Peaking Factor	1.65
Peak Hour to Maximum Day Peaking Factor	2.00

Source: Harlingen Waterworks System Water and Wastewater Master Plan (2022)

Figure 19. Harlingen Wastewater System Design Criteria

Criteria	Value
Average Day Flow per Connection	225
Peak 2-hour to Average Day Peaking Factor	4.00

Source: Harlingen Waterworks System Water and Wastewater Master Plan (2022)

Figure 20. Harlingen Projected Water Demands

Connections	Average Day Demand (MGD)	Maximum Day Demand (MGD)	Peak Hour Demand (MGD)
2.5% Growth Rate			
2020	13.89	23.26	46.52
2025	14.98	25.11	50.23
2030	16.16	27.13	54.25
2040	18.83	31.71	63.41
5% Growth Rate			
2020	13.89	23.26	46.52
2025	14.98	25.11	50.23
2030	16.16	27.13	54.25
2040	18.83	31.71	63.41
6% Growth Rate			
2020	13.89	23.26	46.52
2025	14.98	25.11	50.23
2030	16.16	27.13	54.25
2040	18.83	31.71	63.41

Source: Harlingen Waterworks System Water and Wastewater Master Plan (2022)

The table above illustrates Harlingen's projected water demands through 2040 based on varying growth scenarios. As connections increase, so do daily, maximum day and peak hour demands. These projections are essential for planning upgrades to the City's water treatment capacity, elevated storage and distribution systems to ensure reliable service and regulatory compliance as the community grows.

Figure 21. Harlingen Projected Wastewater Demands

Connections	Average Annual Daily Flow (MGD)	Peak Wet Weather Flow (MGD)
2.5% Growth Rate		
2020	5.97	23.88
2025	6.76	27.04
2030	7.65	30.60
2040	9.72	38.88
5% Growth Rate		
2020	5.97	23.88
2025	7.62	30.48
2030	9.72	38.88
2040	12.41	49.64
6% Growth Rate		
2020	5.97	23.88
2025	7.98	31.92
2030	10.68	42.72
2040	14.29	57.16

Source: Harlingen Waterworks System Water and Wastewater Master Plan (2022)

Water and Wastewater System Improvements

To meet future growth and ensure reliable service, the City of Harlingen must invest in targeted improvements to its water and wastewater infrastructure.

For the water system, key priorities include expanding treatment plant capacity, constructing additional elevated storage (such as the proposed Camelot tank) and replacing aging asbestos-cement pipelines. Improvements to high-service pumps and system redundancy, especially in areas like the Arroyo Colorado crossings are critical to maintaining pressure and reliability.

For the wastewater system, upgrades are needed at the Harrison Wastewater Treatment Plant to handle projected flows. Reducing inflow and infiltration, deepening lift station wet wells and upsizing pumps and force mains will help manage peak wet weather events and support continued development in growing areas of the City. These improvements will ensure that Harlingen's utility systems are capable, resilient and aligned with the City's long-term vision for growth and sustainability.

Utility Service Best Practices

As Harlingen plans for the next 20 years of growth, upgrading and managing utility services will be vital to supporting a high quality of life, attracting economic investment and enhancing community resilience. Public feedback has emphasized widespread concerns with aging infrastructure, energy reliability, flood risks, broadband access and stormwater drainage, particularly in West Harlingen and low-income neighborhoods. Best practices in utility planning emphasize integration, equity, sustainability and proactive maintenance. The following strategies reflect a tailored approach to utility service planning in Harlingen that is responsive to local challenges and aligned with modern infrastructure trends.



Plan Utilities with Equity and Growth in Mind

Utility infrastructure should be equitably distributed and responsive to both existing underserved areas and future development corridors. Areas like West Harlingen need focused utility upgrades, while growth near the port and major corridors must be supported with strategic investments. Coordinated planning across City Departments will ensure that utilities grow alongside housing, industry, and transportation improvements.



Embrace the One Water Approach

Harlingen should adopt a One Water approach managing all water resources holistically to maximize efficiency, improve resilience and reduce costs. By integrating drinking water, stormwater and wastewater systems, the City can explore options like rainwater harvesting, greywater reuse and green stormwater infrastructure. One Water supports long-term sustainability while preparing the City for drought and flooding challenges.



Implement Water Auditing for Efficiency and Accountability

Water auditing is a critical step toward understanding and managing Harlingen's water system performance. Regular audits help identify system losses (leaks, theft, or unmetered use), reduce non-revenue water and guide conservation efforts. Harlingen can adopt auditing standards provided by the Texas Water Development Board to assess both systemwide efficiency and water use in municipal facilities. Water audits also provide data that can inform targeted upgrades and community education programs.



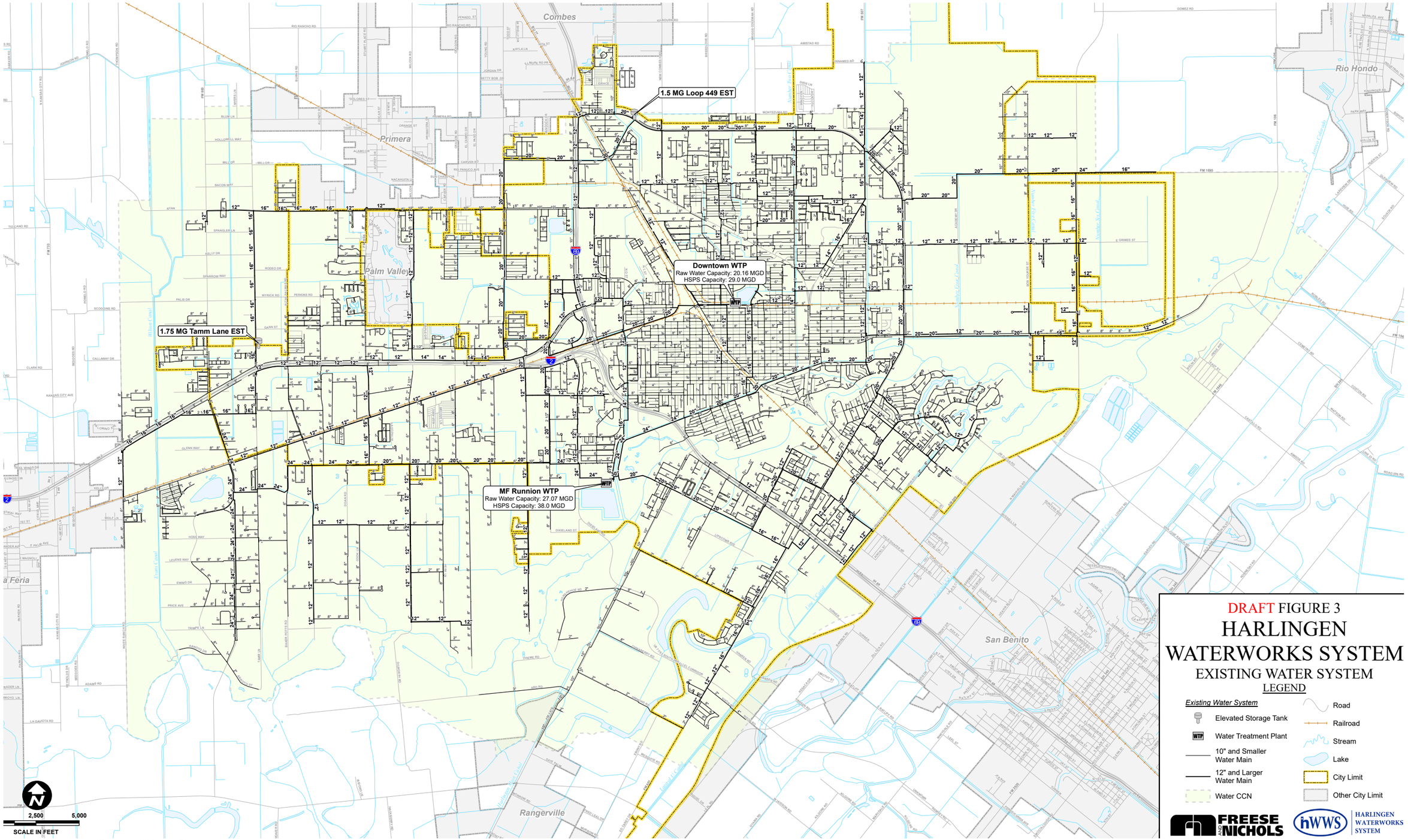
Strengthen Utility Resilience

Utilities must be able to withstand climate shocks and continue functioning during emergencies. This includes upgrading pump stations, wastewater systems and substations with backup power, elevated designs and redundancies. Infrastructure in flood-prone areas should be reinforced or relocated. Resilient utilities are critical for ensuring safety, economic continuity and rapid recovery.

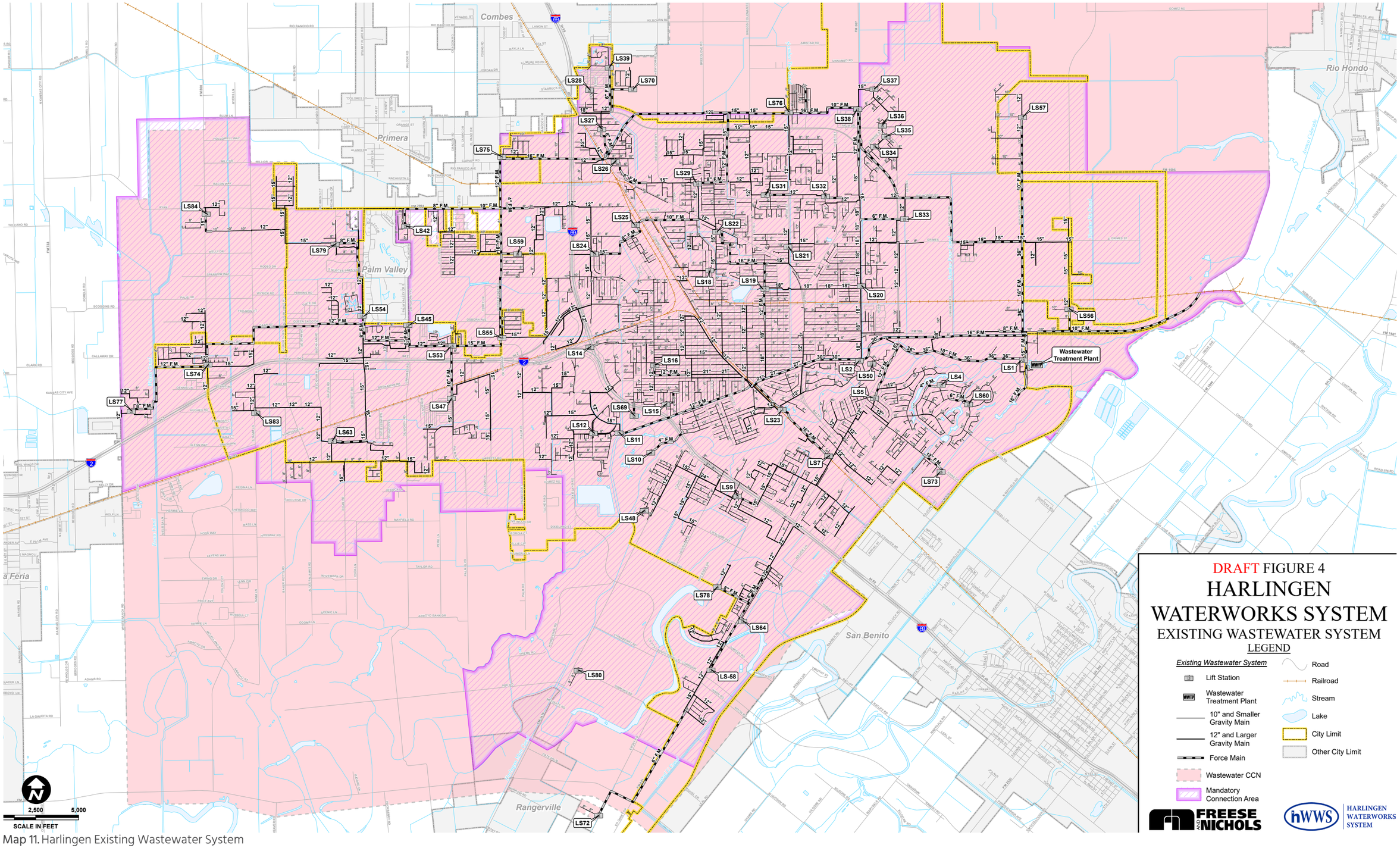


Modernize Energy Infrastructure

As industrial activity expands near the Port and other areas, the City should work with energy providers to install new substations and upgrade grid capacity. Harlingen can also encourage distributed generation, such as solar panels on municipal buildings to improve resilience and reduce energy costs.



Map 10. Harlingen Existing Water System



Map 11. Harlingen Existing Wastewater System

Drainage & Flood Management

Flooding is one of Harlingen's most persistent infrastructure challenges. The City lies within the Arroyo Colorado watershed, a critical drainage corridor that ultimately connects to Laguna Madre. Recent analysis through the HUC10 Drainage Report provides a detailed, basin-level understanding of current drainage conditions, recurring flooding hotspots and recommended improvements.

A resilient approach to drainage management requires both structural solutions that increase system capacity, and non-structural strategies that reduce long-term risk and integrate natural systems. Together, these actions support community safety, economic stability and sustainable growth.

Structural Solutions

- Detention Basins - Expand regional detention capacity to slow stormwater runoff and reduce peak flooding in low-lying neighborhoods.
- Pump Stations - Upgrade and expand pump infrastructure in flood-prone areas to provide timely relief during heavy storm events.
- Channel Improvements - Continue channel widening, deepening, and maintenance projects, in collaboration with TWDB and the U.S. Army Corps of Engineers, to increase conveyance efficiency along the Arroyo Colorado and tributaries.

Non-Structural Strategies

- Green Infrastructure - Incorporate rain gardens, bioswales, permeable paving and urban tree canopies into streets, parks and redevelopment projects to reduce runoff at the source.
- Zoning and Development Standards - Update zoning overlays and subdivision regulations to limit impervious coverage in sensitive drainage areas, and promote low-impact development practices.
- Asset Management- Establish a drainage asset inventory and maintenance program to monitor aging infrastructure, and prioritize repair and reinvestment.
- Stormwater Master Planning - Regularly update drainage and stormwater master plans to reflect growth patterns, climate projections and evolving community needs.

