SAN JACINTO-BRAZOS
coastal basin

EXECUTIVE SUMMARY

The *Basin Characterization Report for the San Jacinto-Brazos Coastal Basin for Indicator Bacteria* presents data and makes recommendations for reducing bacteria levels in this project area, known as Basin 11. High levels of bacteria in surface water can increase the risk of illness during recreational activities.

This Executive Summary summarizes the report's findings and recommendations, and provides information about regional and state water quality education programs.

HIGHLIGHTS

- Population growth will increase the potential for pollutants from wastewater discharges and other sources in urban areas.
- Rural areas with on-site sewage facilities (OSSFs) and agricultural land use contribute to higher bacteria levels.

PROCESS

- Representatives from four counties, more than 50 cities, and many civic/social organizations in Basin 11 provided feedback and guidance for this report.
- Houston-Galveston Area Council (H-GAC) staff used comprehensive GIS mapping to produce modeling and data analysis to identify potential bacteria sources.
- Findings from this report will provide guidance to stakeholders and partners to take the next steps to improve water quality in the basin.

The full report can be found at h-gac.com/go/basin11.

FINDINGS & RECOMMENDATIONS

PROBLEM

- Part or all of the 22 waterway segments examined in the report* do not meet state standards for bacteria. Elevated bacteria levels are the most common impairment in Texas waterways.
- Rapid development, population growth, infrastructure issues, and land management techniques will continue to strain the health of waterways if proper management practices are not established and used.

POSSIBLE CAUSES

- Sanitary sewer overflows and improper releases from wastewater treatment facilities
- Improper and nonpermitted discharges to storm sewer systems
- Improper and illegal disposal by waste haulers
- Failing on-site sewage systems (septic systems)
- Animal waste from agricultural production, livestock, and feral hogs
- Improper pet waste disposal

RECOMMENDATIONS

- Enforce requirements of wastewater treatment and stormwater quality permits
- Restore and improve riparian buffers along waterways to filter pollutants from runoff
- Use fencing and alternative sources of water and shade on agricultural lands to keep livestock out of waterways
- Increase education about OSSF installation, inspection, and maintenance
- Increase education about proper pet waste disposal
- Continue to plan and implement water quality projects
- Continue, and possibly increase, professional and volunteer water quality monitoring and data collection

**Other segments in the basin do not currently have enough data for evaluation. Additional monitoring will be conducted.*

Basin 11 At A Glance

About **23%** of the 1-million-acre basin is covered with **open water.**

All waterways within the **flat, coastal basin** drain to Galveston Bay or the Gulf Intracoastal Waterway.

Local stakeholders are actively involved in **9 current water quality projects** in the basin.

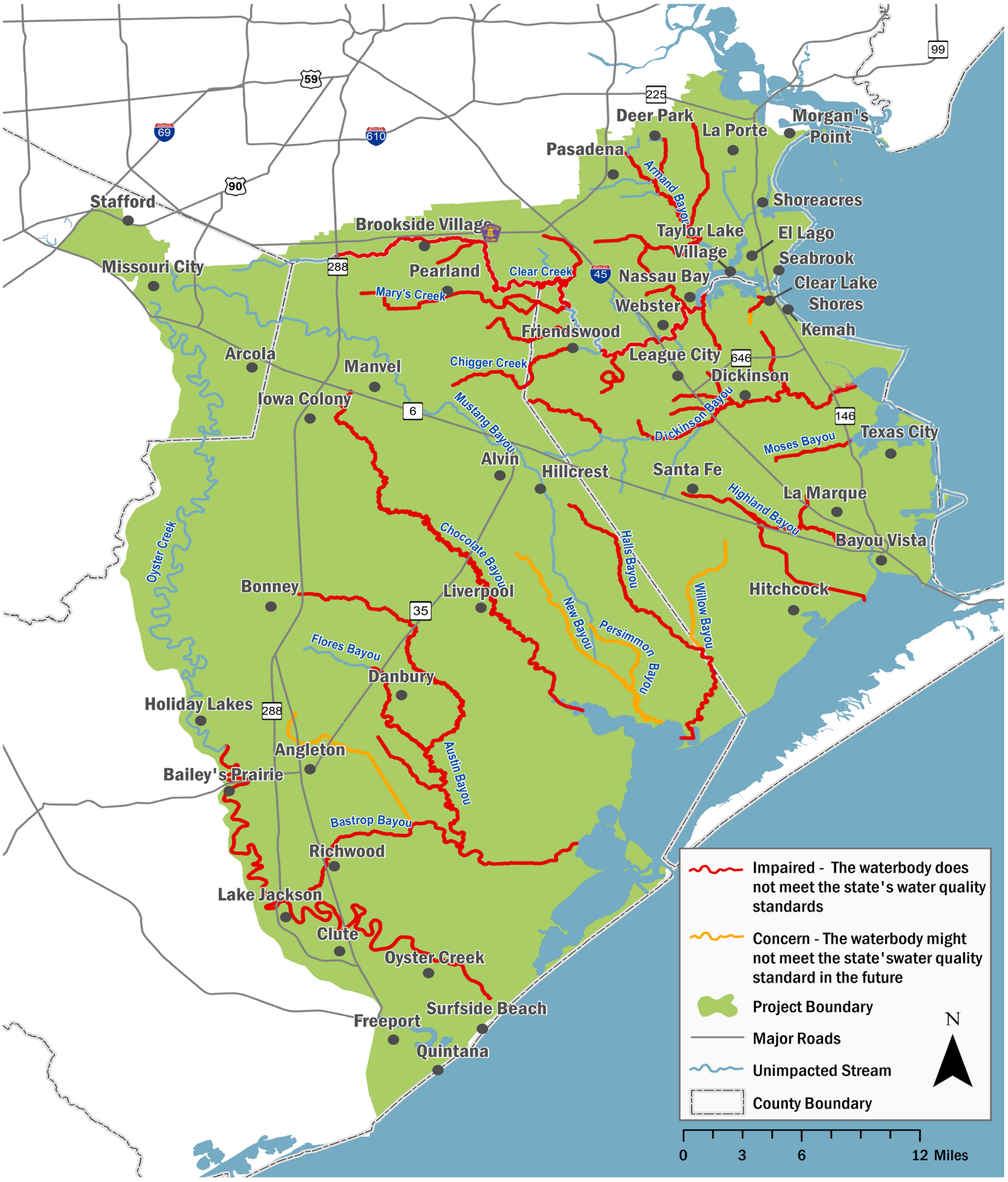
Agriculture accounts for **25% of land use** in the basin.

The basin has a diversified economy, supported by **major port and rail facilities.**

Recreation and ecotourism businesses promote fishing, birding, and boating.

One million people live in the basin, with growth projected to reach **1.6 million by 2040.**

BASIN 11 PROJECT AREA










WANT TO GET INVOLVED?

There's a lot of good work happening in Basin 11.

H-GAC TEXAS STREAM TEAM

A network of trained volunteers make frequent observations about the conditions in their waterways and conduct water quality testing. www.h-gac.com/texasstreamteam

TEXAS WATERSHED STEWARD PROGRAM

Local stakeholders learn about their watersheds, impairments and concerns, and steps to improve water quality through one-day workshops and online courses. http://tws.tamu.edu/

TEXAS A&M AGRILIFE EXTENSION SERVICE

AgriLife Extension provides programs that center on water quality, including watershed education, land practices, and OSSFs. http://agrilifeextension.tamu.edu/

LONE STAR HEALTHY STREAMS

Texas farmers, ranchers, and landowners review proper grazing, feral hog management, and riparian area protection through workshops and an informative website. http://lshs.tamu.edu/

ONSITE WASTEWATER TREATMENT TRAINING PROGRAM

Texas A&M AgriLife Extension Service's short courses and trainings educate homeowners and improve skills for installers, site evaluators, and designers of on-site sewage facilities. http://ossf.tamu.edu/

OSSF REAL ESTATE INSPECTION TRAINING COURSE

H-GAC's Texas Real Estate Commission-approved OSSF training course protects potential homeowners by training real estate agents and inspectors to identify failing OSSFs through visual inspection. www.h-gac.com/go/septic

www.h-gac.com/go/Basin11

This executive summary and its corresponding report was prepared by
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