

# **North Bosque River TMDL and I-Plan**

## **A Brief Overview**

**August 2020**





# Impairment and Report History

- 1992 – Listed as impaired on 303(d) List
- 1996 – Bosque River Advisory Committee formed
- 1998 – TMDL development initiated for excessive algae associated with high nutrients
- 2001 – TMDLs for phosphorus adopted (February)
- 2001 – TMDLs approved by EPA (December)
- 2002 – I-Plan approved by TCEQ (December)
- 2003 – I-Plan approved by TSSWCB (January)

# Public Participation

- Public participation in the watershed was robust
- TMDLs considered extensive data and several studies from the 1990s

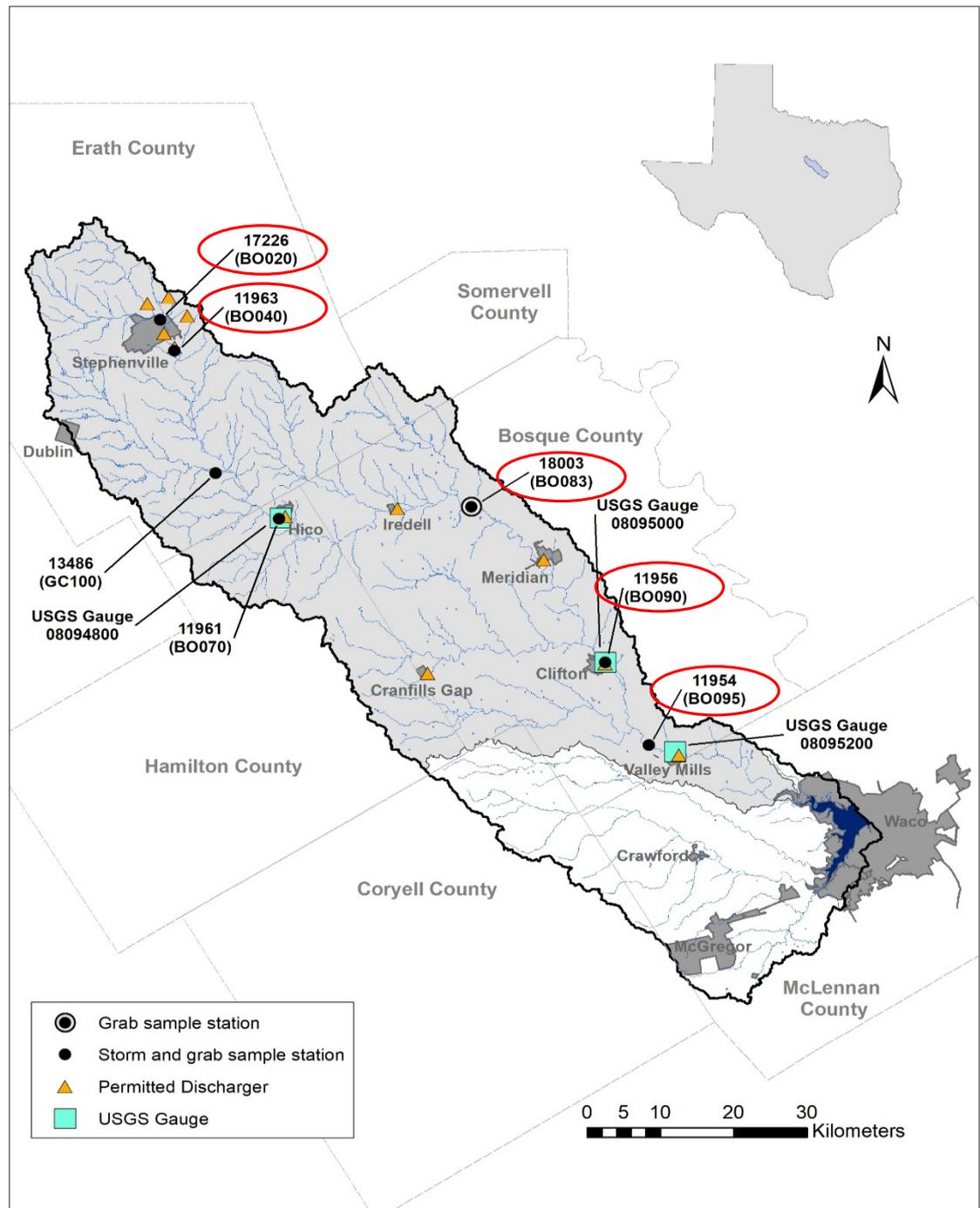


# North Bosque River TMDL

- Mandates an approximate 50% reduction in soluble reactive phosphorus (SRP)
- Establishes five index sites for monitoring and evaluation of goal attainment
- Targets concentrations of phosphate phosphorus ( $\text{PO}_4\text{-P}$ ) at about 0.03 mg/L as the river flows into Lake Waco
  - (Target concentrations vary with Index Site from 0.448 mg/L below Stephenville to 0.028 mg/L at Valley Mills)

# North Bosque Monitoring Stations

Index  
Stations  
circled in  
Red



# North Bosque River TMDL Reduction Goals

**Table 6. Average Annual-Average Soluble Phosphorus Concentration**

	Above Stephenville	Below Stephenville	Above Meridian	Clifton	Valley Mills
From 'Existing' scenario (ppb)	203.3	1,143.2	117.0	52.2	41.3
From 'TMDL-e' scenario (ppb)	114.2	448.1	54.5	30.3	27.5
% reduction	43.83 %	60.80 %	53.42 %	41.95 %	33.41 %

The decimal places shown in this table are artifacts of the estimation process, and should not be considered significant.

# North Bosque River TMDL — Phosphorus Sources

Two major sources of SRP:

- Wastewater Treatment Facilities
- Dairy Waste Application Fields



# North Bosque River I-Plan

- Identified four feasible measures to be implemented through six management strategies
- Defined specific water quality measures of success



# Questions?

