

# Modeling Water Issues in the North Bosque Watershed

## Background

This Project is one of six nationally selected studies as part of the USDA Conservation Effects Assessment Project Special Emphasis Watersheds. This project was started in FY2005. The Shuttle Radar Terrain Mapping (SRTM) 30 meter elevation data and Thematic Mapper (TM) Satellite data along with many of the new tools developed in an international World Soils Project funded by NGA are being used in this project.

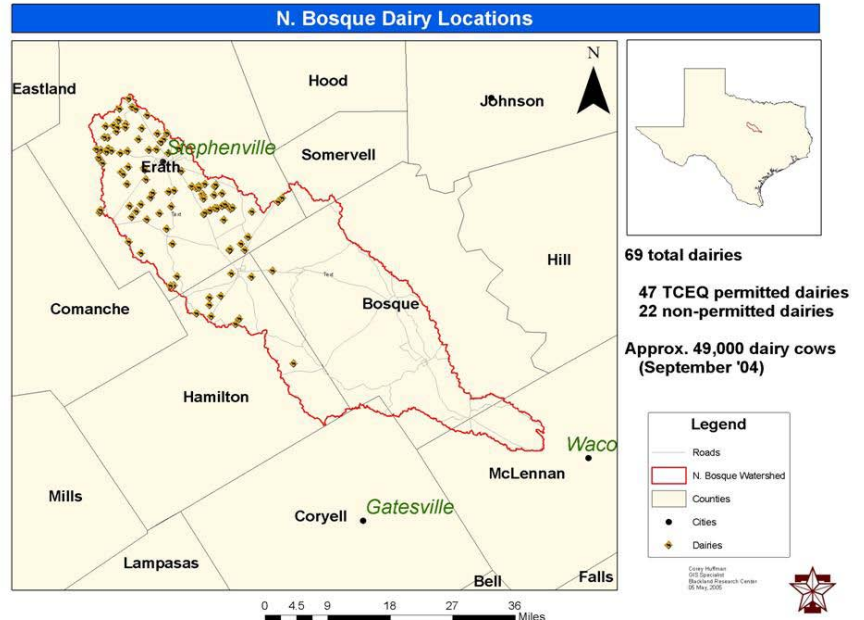
## Action

This program is studying the water quality and quantity problems in the dairy areas of the North Bosque Watershed and its impact into Lake Waco. The APEX (Ag Policy Environmental Extender) model is being used to simulate approximately 15,000 sub watersheds to address the development of whole farm plans under the USDA Farm Program EQIP guidelines and funding. Simulations using the following scenarios are being investigated in order to determine the effects of current practices and possible future practices.

- Current Conditions (installed practices)
- Past conditions (no practices, no dairies, no PL566 watersheds)
- Likely future conditions (approved-yet to be implemented practices)
- Possible future conditions (alternative mixes of practices sufficient to meet target loadings)

## Partners

USDA-NRCS, Temple  
Texas AgriLife Research  
USDA-ARS, Temple



## Contact

Paul T. Dyke  
Blackland Research and Extension Center  
Temple  
(254) 774-6059



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