Approaches to Watershed Planning in Texas

Background

Water is used for various purposes, whether it is for drinking, swimming, fishing, irrigating or any other reason. To meet the needs of all these uses, the state is required by Section 303(d) of the Clean Water Act to set standards and put forth efforts to clean up waters that do not meet the standards. The Clean Water Act also requires states to compile a list of water bodies that do not meet the standards for these uses, known as the 303(d) List, and to update the list every two years.

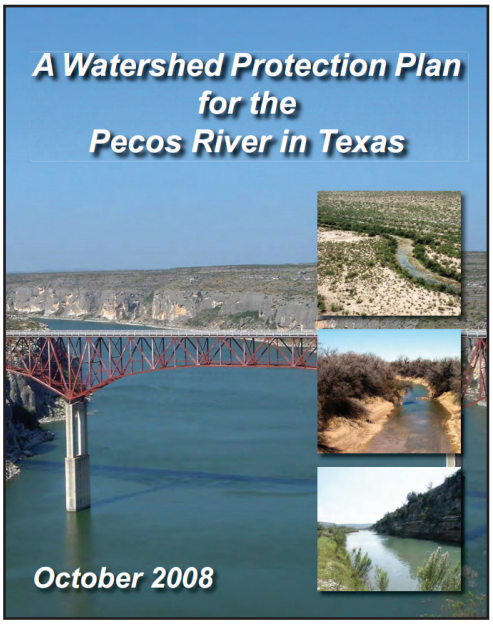
To address impaired water bodies, Texas utilizes a variety of methods that result in plans to restore water quality. Two of the most common methods for developing plans to restore water quality are 1) a Total Maximum Daily Load (TMDL) paired with an Implementation Plan (I-Plan) and 2) a Watershed Protection Plan (WPP).

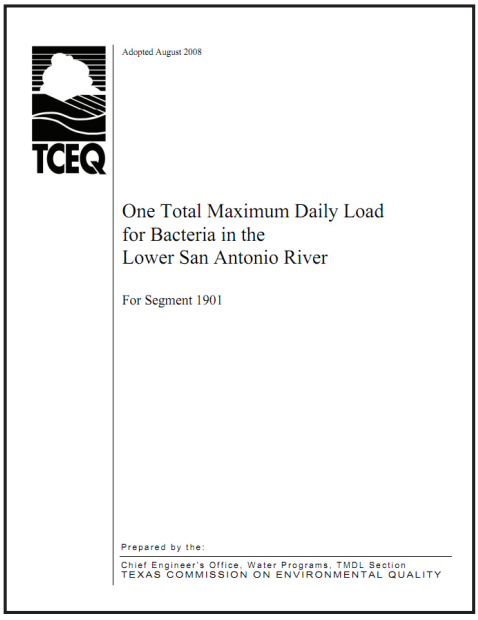
The process known as Watershed Action Planning is the approach taken to decide which method is most appropriate to restore water quality in an impaired water body. Through the Watershed Action Planning process, sound technical information is provided by partner agencies and stakeholders to support a recommendation of which approach is most appropriate in the specific water bodies identified. This document provides a brief description of the two most common options for addressing water quality concerns and attempts to compare these two different approaches without favoring one over the other.

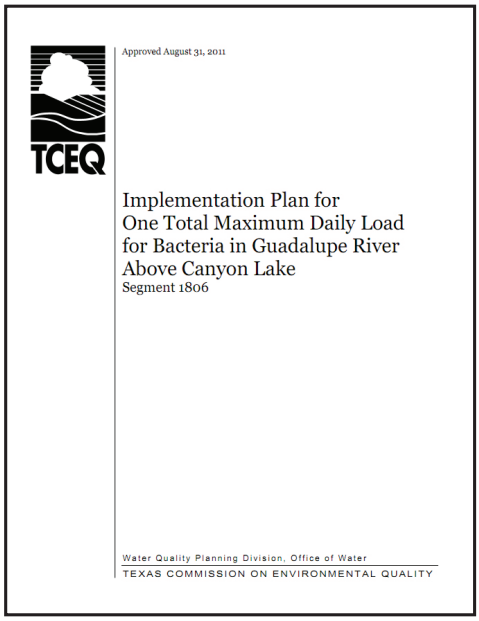
Description of WPPs and TMDL/TMDL I-Plans

WPPs are locally developed, comprehensive plans that focus and coordinate activities and resources to manage water quality in a defined geographic area. They are a coordinated framework for implementing prioritized and integrated water quality protection and restoration strategies driven by specific environmental objectives. Through the WPP process, the State of Texas encourages stakeholders to holistically address all of the sources and causes of impairments and threats to both surface water and groundwater resources within a watershed. These plans give the decision making power to the local groups most vested in the plan's goals. A WPP assures the long-term health of the watershed with strategies of protecting unimpaired waters and restoring impaired waters by combining scientific and regulatory factors with social and economic considerations. For more information about WPPs in Texas, see www.tsswcb.texas.gov/wpp#wpp or www.tceq.texas.gov/waterquality/nonpoint-source/mgmt-plan/watershed-pp.html.

TMDLs are summary reports that describe the pollutant loading capacity of a water body and how that loading is allocated among point, nonpoint and background sources of the particular pollutant being addressed. TMDLs serve three main purposes: 1) they are a means to determine the maximum amount (load) of a particular pollutant that a water body can receive each day, and still both attain and maintain its uses; 2) they identify the sources that contribute to the loading of







Examples of a WPP, TMDL and TMDL I-Plan

the pollutants; and 3) they allocate the allowable load and determine the necessary reductions needed to the sources of the pollutant in the watershed. Additionally, a TMDL describes seasonal variations, addresses future growth, and includes a margin of safety to cover uncertainties.

Paired with a TMDL report is a TMDL **I-Plan** which is a locally developed plan describing measures to mitigate human-caused pollutant contributions to the 303(d)-listed water body. The TMDL I-Plan specifies regulatory limits for point source dischargers and recommends, through non-regulation, best management practices for nonpoint sources. Through the I-Plan, stakeholders coordinate activities and determine the best approach to address the listed parameter. This is done through locally driven meetings where management measures are identified by stakeholders, a schedule is developed, and monitoring continues. For more information about TMDLs and TMDL I-Plans, see www.tsswcb.texas.gov/tmdl or www.tceq.texas.gov/waterquality/tmdl/nav/tmdlprogramprojects.html.

Comparison of TMDLs/TMDL I-Plans to WPPs

TMDL/TMDL I-Plan	WPP
Goal: Improve water quality in rivers, lakes and bays	Goal: Improve water quality in rivers, lakes and bays
Define actions needed to reduce pollution and restore water quality	Define actions needed to reduce pollution and restore water quality
Provides estimated loading reductions	Provides estimated loading reductions
Results in automatic removal from 303(d) list	Can result in removal from 303(d) list through 4b process
TMDL approved by State and EPA TMDL I-Plan only approved by State	WPP acceptance by State and EPA (i.e., determination of consistency with nine-element guidance)
Can use simplistic or complex water quality models	Can use simplistic or complex water quality models
Uses existing data and includes some additional data collection	Uses existing data and includes some additional data collection
Focused on singular pollutant in most cases	Focused on multiple pollutants and water issues
TMDLs are set at full permitted flow allowing for more generous waste load allocations	End points and flow conditions must be consistent with EPA nine element guidance
TMDLs allow for aggregate Storm water allocations	EPA may require specific storm water allocations prior to deciding if WPP meets nine element guidance
Implementation of nonpoint source control measures currently voluntary • Lawsuit or changes in CWA could result in compulsory implementation	Implementation of nonpoint source control measures currently voluntary • Lawsuit or changes in CWA could result in compulsory implementation
Implementation of point source control measures currently compulsory	Implementation of point source control measures currently voluntary
Developed in cooperation with regional and local stakeholders	Developed in cooperation with regional and local stakeholders
Annual stakeholder meeting required following development to evaluate implementation progress	Quarterly stakeholder meetings generally held to drive implementation efforts
Implementation of measures eligible for grant funds	Implementation of measures eligible for grant funds

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