

North Central Texas Water Quality Project

Setting Interim Milestones for Watershed Protection Plans

David Waidler
Watershed Coordinator
Texas AgriLife Research

TARRANT REGIONAL
WATER DISTRICT



North Central Texas Water Quality Project

Milestones

- Interim goals that mark progress toward an ultimate goal
- Realistic, obtainable
- Set to established timeline (short, medium, long-term)

North Central Texas Water Quality Project

Why Milestones?

- Allow for tracking of actions that watershed partners will take to achieve final goals
- Adaptable to changing conditions and results
- Gauge of project direction/ success
- Specific to work plan activities and priorities

North Central Texas Water Quality Project

Types of Milestones

- Administrative-Project planning and management
- Environmental- Results of watershed planning effort
- Social- Human impact of watershed management activities

North Central Texas Water Quality Project

Watershed Wide Administrative Milestones

- Planning/ Implementation Related
 - Stakeholder recruitment and retention
 - BMP selection and placement
 - Deadlines for WPP
- Funding
 - Funding secured for BMP Installation and E&O Implementation
 - Funding secured from multiple sources

North Central Texas Water Quality Project

Watershed Wide Environmental Milestones

- Reduction of Pollutant
 - Modeling
 - Ambient water quality monitoring
- Habitat Restoration
 - Reversion to pasture lands
 - Prevention or mitigation of land use changes
 - Preservation/ duplication of existing wetlands
- TCEQ/ EPA Recognition of Improvements
 - 303(d) list status
 - Narrative criteria met
 - Numeric criteria met

North Central Texas Water Quality Project



Watershed Wide Social Milestones

- Informational Message Developed
 - Watershed literacy and stewardship
- Target Audiences Reached
 - Ag producers, urbanites, youth, developers, etc.
 - Workshops, mass media, school science curriculum
- Documented Attitudes and Behavioral Changes Among Stakeholders
 - Follow up surveys
 - Public demand for watershed protection

Example: Hickory Creek Watershed



Example: Arroyo Colorado Watershed

Table 27: Milestones for Measuring Progress of the NCP Remedial Plan

Date	Milestone
August 2007	Finalize the NCP Remedial Plan (NCP RP) and the NCP Implementation Plan (NCP IP).
September 2007	Develop and implement the WPP for the NCP RP.
October 2007	Develop and implement the WPP for the NCP IP.
November 2007	Develop and implement the WPP for the NCP RP and the NCP IP.
December 2007	Develop and implement the WPP for the NCP RP and the NCP IP.
January 2008	Develop and implement the WPP for the NCP RP and the NCP IP.
February 2008	Develop and implement the WPP for the NCP RP and the NCP IP.
March 2008	Develop and implement the WPP for the NCP RP and the NCP IP.
April 2008	Develop and implement the WPP for the NCP RP and the NCP IP.
May 2008	Develop and implement the WPP for the NCP RP and the NCP IP.
June 2008	Develop and implement the WPP for the NCP RP and the NCP IP.
July 2008	Develop and implement the WPP for the NCP RP and the NCP IP.
August 2008	Develop and implement the WPP for the NCP RP and the NCP IP.
September 2008	Develop and implement the WPP for the NCP RP and the NCP IP.
October 2008	Develop and implement the WPP for the NCP RP and the NCP IP.
November 2008	Develop and implement the WPP for the NCP RP and the NCP IP.
December 2008	Develop and implement the WPP for the NCP RP and the NCP IP.
January 2009	Develop and implement the WPP for the NCP RP and the NCP IP.
February 2009	Develop and implement the WPP for the NCP RP and the NCP IP.
March 2009	Develop and implement the WPP for the NCP RP and the NCP IP.
April 2009	Develop and implement the WPP for the NCP RP and the NCP IP.
May 2009	Develop and implement the WPP for the NCP RP and the NCP IP.
June 2009	Develop and implement the WPP for the NCP RP and the NCP IP.
July 2009	Develop and implement the WPP for the NCP RP and the NCP IP.
August 2009	Develop and implement the WPP for the NCP RP and the NCP IP.
September 2009	Develop and implement the WPP for the NCP RP and the NCP IP.
October 2009	Develop and implement the WPP for the NCP RP and the NCP IP.
November 2009	Develop and implement the WPP for the NCP RP and the NCP IP.
December 2009	Develop and implement the WPP for the NCP RP and the NCP IP.
January 2010	Develop and implement the WPP for the NCP RP and the NCP IP.
February 2010	Develop and implement the WPP for the NCP RP and the NCP IP.
March 2010	Develop and implement the WPP for the NCP RP and the NCP IP.
April 2010	Develop and implement the WPP for the NCP RP and the NCP IP.
May 2010	Develop and implement the WPP for the NCP RP and the NCP IP.
June 2010	Develop and implement the WPP for the NCP RP and the NCP IP.
July 2010	Develop and implement the WPP for the NCP RP and the NCP IP.
August 2010	Develop and implement the WPP for the NCP RP and the NCP IP.
September 2010	Develop and implement the WPP for the NCP RP and the NCP IP.
October 2010	Develop and implement the WPP for the NCP RP and the NCP IP.
November 2010	Develop and implement the WPP for the NCP RP and the NCP IP.
December 2010	Develop and implement the WPP for the NCP RP and the NCP IP.
January 2011	Develop and implement the WPP for the NCP RP and the NCP IP.
February 2011	Develop and implement the WPP for the NCP RP and the NCP IP.
March 2011	Develop and implement the WPP for the NCP RP and the NCP IP.
April 2011	Develop and implement the WPP for the NCP RP and the NCP IP.
May 2011	Develop and implement the WPP for the NCP RP and the NCP IP.
June 2011	Develop and implement the WPP for the NCP RP and the NCP IP.
July 2011	Develop and implement the WPP for the NCP RP and the NCP IP.
August 2011	Develop and implement the WPP for the NCP RP and the NCP IP.
September 2011	Develop and implement the WPP for the NCP RP and the NCP IP.
October 2011	Develop and implement the WPP for the NCP RP and the NCP IP.
November 2011	Develop and implement the WPP for the NCP RP and the NCP IP.
December 2011	Develop and implement the WPP for the NCP RP and the NCP IP.
January 2012	Develop and implement the WPP for the NCP RP and the NCP IP.
February 2012	Develop and implement the WPP for the NCP RP and the NCP IP.
March 2012	Develop and implement the WPP for the NCP RP and the NCP IP.
April 2012	Develop and implement the WPP for the NCP RP and the NCP IP.
May 2012	Develop and implement the WPP for the NCP RP and the NCP IP.
June 2012	Develop and implement the WPP for the NCP RP and the NCP IP.
July 2012	Develop and implement the WPP for the NCP RP and the NCP IP.
August 2012	Develop and implement the WPP for the NCP RP and the NCP IP.
September 2012	Develop and implement the WPP for the NCP RP and the NCP IP.
October 2012	Develop and implement the WPP for the NCP RP and the NCP IP.
November 2012	Develop and implement the WPP for the NCP RP and the NCP IP.
December 2012	Develop and implement the WPP for the NCP RP and the NCP IP.

Example: Plum Creek Watershed

Table 28: Summary Table for New Key Elements of Proposed Control Measures (continued 3/3)

Category	Element	Estimated Financial Load	Technical and Feasibility	Characteristics	Timeline	Monitoring	Responsible Entity
Control	New structural BMPs (total cost ~\$1.5M, 10% of total BMP cost)	\$150,000	High	As required, high priority	2007-08	Annual BMP audits	COA
	Provide signposts for existing BMPs (total cost ~\$100,000)	\$100,000	High	As required, high priority	2007-08	Annual BMP audits	COA
	Develop Late Harvest Project (total cost ~\$1.5M)	\$1,500,000	High	As required, high priority	2007-08	Annual BMP audits	COA

Example: Upper San Antonio Watershed

Table 28: Summary Table for New Key Elements of Proposed Control Measures (continued 3/3)

Category	Element	Estimated Financial Load	Technical and Feasibility	Characteristics	Timeline	Monitoring	Responsible Entity
Control	New structural BMPs (total cost ~\$1.5M, 10% of total BMP cost)	\$150,000	High	As required, high priority	2007-08	Annual BMP audits	COA
	Provide signposts for existing BMPs (total cost ~\$100,000)	\$100,000	High	As required, high priority	2007-08	Annual BMP audits	COA
	Develop Late Harvest Project (total cost ~\$1.5M)	\$1,500,000	High	As required, high priority	2007-08	Annual BMP audits	COA

North Central Texas Water Quality Project



Watershed Wide Time Based Milestones

	1 to 3 years	4 to 6 years	7 to 10+ years
Administrative	Approval of WPP Securing of funding Finalization of work plan	Implementation of BMPs Funding for maintenance secured	Transition of watershed management to local authorities
Environmental	WQ Monitoring and modeling structure in place.	Demonstrated reduction in phosphorus	Removal from state 303(d) listing
Social	Finalize I/O plan Formalize relationships with target audiences	Documented changes in watershed literacy and public behavioral change	Established watershed programming in local schools, ag programs, and MS4 permitting