Nine Elements of a Watershed Protection Plan

1. Identify the sources and causes of pollution
2. Estimate the necessary load reductions
3. Describe Point Source and Non-Point source management measures
4. Assess the technical and financial assistance needed
5. Design an informational/educational component
6. Develop a schedule of implementation
7. Set interim measurable milestones for progress
8. Establish criteria to determine load reductions
9. Create a monitoring component

Element 1: Identify Causes of Concern
- Point Source Pollution
  - Wastewater Treatment Plant Discharges
  - Industrial Discharges
  - Confined Animal Feeding Operations (CAFO)
- Non-Point Source Pollution
  - Stormwater
  - Agricultural Run-off
  - Sediment
  - Nutrients
  - Toxic chemicals

Element 2: Estimate Load Reductions
Load Reductions based on:
- SWAT model outputs
- Effectiveness of Best Management Practices (BMP) tied to land use and changes

Element 3: Nonpoint Source Management
Best Management Practices Implementation
- Structural
- Behavioral

Modeling:
- SWAT Modeling: Watersheds
- WASP Modeling: Reservoirs
- QUAL2E: Streams
North Central Texas Water Quality Project

Element 3: Point Source Management
• Infrastructure upgrades to WWTP’s
• Permitting programs
• Stormwater development planning

Element 4: Assess Technical and Financial Assistance Needed
**Technical:**
• TCE
• TCEQ
• SWCD
• USDA-NRCS
• TRWD
• TPWD

**Funding:**
• EPA
• TCEQ
• TSSWB
• USDA-NRCS
• Local Grants
• Local Government
• TRWD
• Others

Element 5: Design Education Component
• Mass Media
• Demonstration sites
• Meetings and workshops
• Onsite technical assistance
• Citizen monitoring programs
• Training and certification programs

Element 6: Develop a Schedule of Implementation
• Nonpoint source structural improvements
• Point source discharge (based on improved standards)
• Educational programs

Element 7: Set Interim Measurable Goals

**Watershed**
• Implementation of BMPs
• Reservoir
• Water Quality improvement

**Reservoir**
• Achievement of TCEQ Standards
• 303(d) status
Element 9: Create a Monitoring Program

Watershed
- Quarterly Water Quality Monitoring of Strategic Locations

Reservoir
- Quarterly Monitoring of Ambient Water Quality in Eagle Mountain Reservoir

Educational
- Behavioral changes resulting from education programs