

SECTION 15

REGIONAL WATER QUALITY IMPLEMENTAION

15.1 General

Regional implementation will require county, city, district, and local officials to be engaged and committed to the success of the planning strategies. Caldwell County has an opportunity to create new development standards that include stormwater, landscaping, and natural resource protection before development growth escalates. Unmanaged development and lack of natural resources protection will permit further deterioration of waterways.

Preservation of the natural resources will be accomplished by developing stormwater management policies, development ordinances, regional cooperation, and funding.

15.2 Stormwater Management Implementation

Training and education of personnel at the management and staff level of the EPA's water quality and TMDL standards is necessary for understanding stormwater pollution. Technical staff reviewing and approving development permits need to have some knowledge of nonpoint source pollution and the effects if uncontrolled.

- Development of a Stormwater Management Manual – policy manual that covers principles in design and construction of permanent structural controls for stormwater runoff. Instruction to staff on policies and procedures to improve plan review. Having staff understand the design of low-impact and smart-growth developments can benefit developers and investors in planning.

- Water Quality Monitoring Program – test and monitor stormwater runoff and establish a database with results. The establishment of a database and mapping system can track and monitor development contributions to water quality.
- Water Quality Technical Committee – the committee role could be to develop standards for local governments such as:
 - Sampling methods
 - Monitoring of data collected
 - Establishment of database
 - Data management
- Stormwater Operations and Maintenance – management program to ensure proper drainage and pollutant removal efficiency. Inspection and maintenance of drainage structures and conveyance systems. Development of a plan for routine and remedial maintenance with an emergency containment plan in the event of a hazardous spill.
- Hazardous Household Waste Collection Program – provide accessible recycling centers or drop off locations for the disposal of hazardous household items.
- Agricultural Management Programs – provide tools for agricultural producers to remain profitable while protecting natural resources. Such tools could be:
 - On farm research and demonstration of BMP’s
 - Pilot projects that evaluate or transfer technology
 - Conduct interviews and collect data
 - Educate and increase awareness of local practices
 - Workshops on new technology

Additional management measures recommended for implementation in the Plum Creek Watershed Protection Plan have been included in **Appendix J**.

15.3 Development of Ordinances

Many cities currently have ordinances that monitor and control stormwater quality and quantity. Ordinances include:

- Stormwater Development Ordinance – management of runoff quality and quantity
- Illegal Stormwater Connection Ordinance – prevents illegal connections to stormwater systems
- Floodplain Development Ordinance – management of flood prevention and mitigation
- Buffer Ordinance – control of runoff near streams by listing the type of developments allowed near floodplains/streams/creeks and give buffer width recommendations for each type of development or land use
- Greenspace Conservation Ordinance – control of impervious cover development
- Tree Ordinance – control of tree canopy reduction for developments

15.4 Regional Agreement

An agreement established by local governments in Caldwell County will ensure that all entities are informed about the proposed regional practices and development of facilities. A Regional Compact has been included in **Appendix K**.

15.5 Funding

Funding to implement the recommended strategies requires community leaders to actively and rigorously apply for grants and search for monies available to

execute strategies. Local, state, and federal sources are expected to fully fund programs. The EPA, TCEQ, TWDB, the Natural Resources Conservation Service (NRCS) and additional Foundations and Partnerships offer possible funding sources.

- **Agriculture Best Management Practices (BMP) Loans**

Develop low to no interest loans to producers for BMP implementation and new technology that enhances animal agriculture. This option will need to be developed for Texas. Currently, the Virginia Department of Environmental Quality and Minnesota Department of Agriculture provide these funding services. Further investigation to develop this program is required at the state or county.

- **Agriculture Water Conservation Grants and Loans**

State agencies and political subdivisions of the state are eligible for the grants and loans made available to political subdivisions of the state, institutions of higher education, interstate compact commissions, and nonprofit water supply corporations (Chapter 69 of Water Code). Banks and farm credit system may apply for link deposit funds to make loans available to individuals.

- **Clean Water State Revolving Fund (CWSRF)**

The CWSRF provides funding for water quality projects that are associated with wastewater treatment, nonpoint source pollution control, and watershed and estuary management. Funds are available through full grants and low-interest loans with flexible terms for planning, acquisition and construction, wastewater treatment, stormwater and nonpoint source pollution control, and reclamation/reuse projects.

- **Economically Distressed Area Program**

The TWDB provides grants, loans or a combination for water and wastewater services in areas of economic distress where current facilities are inadequate to meet residents' minimum standards.

- **Environmental Quality Incentives Program (EQIP)**

The Environmental Quality Incentives Program (EQIP), implemented by the NRCS, offers financial and technical assistance for application of structural and management BMP's on agricultural land.

- **Drinking Water State Revolving Fund**

The Drinking Water State Revolving Fund (DWSRF) program awards capitalization grants to states to provide low-cost loans to public water supply systems for infrastructure needed to achieve or maintain SDWA compliance. These loans and additional subsidies are available for disadvantaged communities only. Community water system owners, political subdivisions of the state and private individuals are eligible to apply for the funding.

- **Environmental Educational Grants**

The Environmental Educational Grants provide funding for educational projects that enhance the public's awareness, knowledge, and skills to help people make informed decisions that affect environmental quality.

- **EPA Smart Growth Grants**

Limited grants are occasionally offered by the EPA to support activities that improve the quality of developments and protect human health and

the environment. Funding for the program ranges between \$2 and \$3 million with average grants in the \$15,000 to \$25,000 range.

- **Foundations and Partnerships**

Over 200 Foundations and Partnerships are listed in the National Council for Science and the Environment that can provide an additional source of funding. Numerous funding opportunities were also listed at the National Science Foundation.

- **Federal Clean Water Act Grant Program (Section 319(h))**

Under the Federal Act Grant Program, the USEPA appropriates funds to TCEQ to fund nonpoint source pollution management. Administered funds are used to assess nonpoint sources of pollution, provide education and outreach, develop and implementing watershed protection plans, implement nonpoint source portions of TMDL Implementation Plans, and implement both the technology-based and water-quality-based management measures contained in the coastal nonpoint pollution control programs.

- **General Revenues**

A fee based on the amount of runoff to tie into the local MS4 can be allocated through a development permit. Bond sales, development impact fees and stormwater user fee are other alternatives and options. Property taxes and sales taxes can also be a source of contribution.

Several bond types are currently available to provide financing. Depending on goals, tax situation and risk tolerance, the options available are: municipal, government, corporate, asset-backed, securities and international bonds.

Development impact fees can be applied at the application stage of development. Fees can be based on site acreage, location, and type of development.

Stormwater user fees can be assessed on a one time basis or annually depending on discharge rate and quality of runoff. Fees can be appropriated to fund O&M programs.

The general tax revenue fund may have available monies for to develop and/or maintain programs.

- **Privatization**

Privatization involves partnering with the private sector to plan, finance and develop, operate and maintain facilities for the public sector. Contracts outline the obligations and agreements of the responsible party.

- **Supplemental Environmental Project Program**

The Supplemental Environmental Project Program (SEP) provides funds collected through penalties and fines. Instead of applying monies to the State's General Revenue Fund, TCEQ will apply them toward remediation and improvements in the environmental quality of the region where the fines were collected.

- **Targeted Watersheds Grants Program**

The Targeted Watershed Grants Program funds are designed to encourage successful community-based approaches and management techniques to protect and restore watersheds. The awarded funds have been given on a competitive basis for water quality trading, agricultural best management practices, wetland and riparian restoration, nutrient management, fish habitat restoration and public outreach and education. The stakeholders of

the watershed organizations should include various types of community leaders from educational to political and non-profit affiliations.

- **Water Quality Management Plan Program**

The Water Quality Management (WQMP) Plan program is implemented by the Texas State Soil and Water Conservation Board (TSSWCB) for the development of a site specific plan. The TSSWCB determines the level of pollution prevention or abatement that is consistent with the state's water quality standards. The methods for meeting these standards include appropriate land treatment practices, production practices, management measures, technologies or combinations thereof.

- **Water Pollution Control Program Grants (Section 106)**

The Water Pollution Control Program funds ongoing water pollution control programs that include permitting, pollution control activities, surveillance, monitoring, and enforcement; advice and assistance to local agencies, and the provision of training and public information.