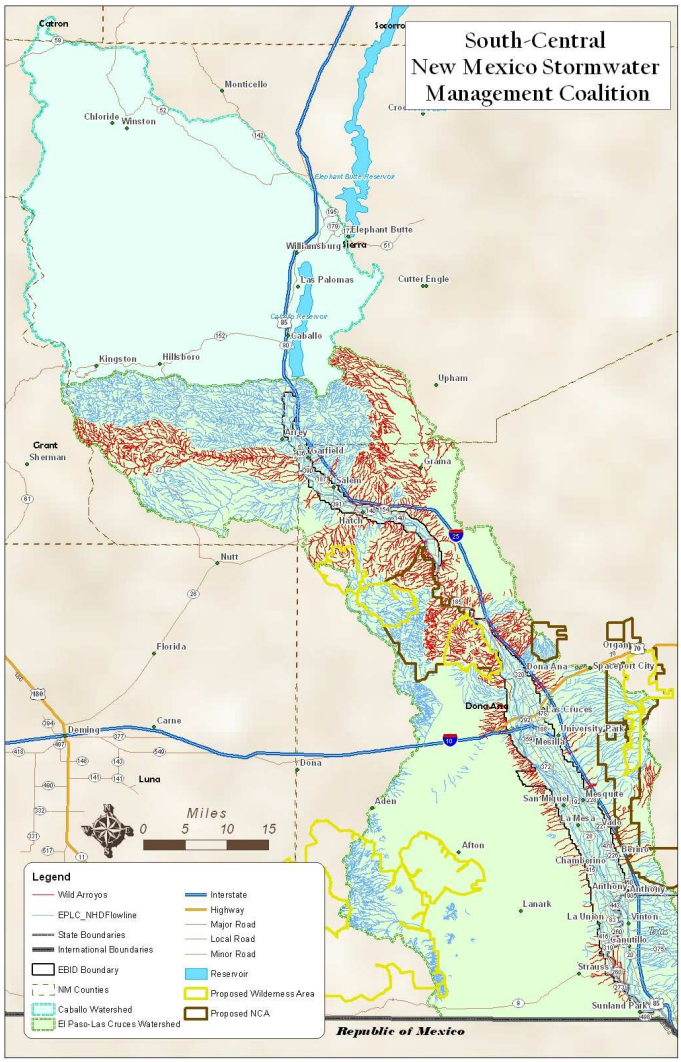
THE SOUTH-CENTRAL NEW MEXICO STORMWATER COALITION



The Need for Regional Stormwater Management in Southern New Mexico

Of the 2400 square miles in a watershed that stretches from Caballo Dam to the NM-TX state line, approximately 800 square miles, or one-third, of the acreage has no infrastructure to slow or stop stormwater. As a result, there is erosion of slopes, sediment dumping, and frequent flooding on highways, residential yards, farm fields, and city streets during severe weather events throughout the region which encompasses portions of Dona Ana and Sierra counties.

Existing dam infrastructure built in the 1960's that was originally constructed to protect farmland has now surpassed its engineered lifespan. Additionally, these flood control dams are now protecting urban and/or residential lands and there is currently no funding for rehabilitation.

Stormwater management is planned, funded, and implemented independently by a variety of public agencies in multiple towns, cities, and districts throughout the region. Recognizing that stormwater does not respect political boundaries, it has become evident that the needs of the region would be better managed regionally from a watershed perspective.

Regional Watershed Planning

Some local authorities charged with management of stormwater as part of their responsibilities to the public are collaborating to form a regional stormwater management and flood control entity. The first step was the development of a memorandum of understanding among parties who agree that their efforts to manage stormwater may be enhanced in part or whole through stakeholder's input and sharing of information and ideas, coordinated planning, consolidation of funding requests, and sharing of staff resources.

GIS data relating to watershed and stormwater management has been collected from multiple agencies and is stored in a central data clearinghouse. This provides the advantage of sharing and using the same important information for planning and management decisions and solutions by all stakeholders.

Bringing the various authorities together under a joint powers agreement (JPA) will be the next step, and allows for greater planning and development of stormwater projects and flood control within the

region, as well as recognition by the state of NM. As organized by the JPA, the Coalition will share staff time, resources, data, and documentation, and work to improve the effectiveness of stormwater management in the south-central region of New Mexico. The Coalition will develop a regional watershed mangement plan which will be utilized to collaboratively identify, plan, and implement projects.

Each participating agency shall have one Coalition board member as appointed by their respective governing body. The Coalition board of directors shall choose the normal operating officers from its members. The Coalition will be authorized to apply for, receive and utilize grants, loans, bonds, or other financial aid from any source approved by the Coalition board of directors. The Coalition will not take from the mil levy amounts of any of the participating agencies.

Identified Needs

Some of the ideas and needs informally discussed by the stakeholders at Stormwater Coalition meetings conducted since January 2010 include the following:

REGIONAL WATERSHED NEEDS

• *Identify existing infrastructure*	• *Regional Watershed Management*
• *Develop Regional Master Plans*	• *Updating and Maintenance of Flood Control Structures*
• *Design Flood Control Infrastructure from a watershed perspective*	• *Construction of Branch Aquifer Recharge Systems*
• *Construct Canals and Storm Drain Culverts*	• *Pumping Systems*
• *Safe Water Storage Reservoirs*	• *Water Filtration Stations*

REGIONAL WATERSHED MANAGEMENT INFRASTRUCTURE NEEDS

Street-water Storm Drains

- Prevent water from entering the River during storms to keep flood conveyance capacity available in the river channel
- Build Regulating Reservoirs to store water during runoff events and release it afterward, when it can be beneficially used
- Combination of large and small Reservoirs
- Pumping systems
- Large precast culverts to carry off stormwater
- Lined storm drainage channels
- Water filtration Systems

Arroyo Water

- Build Artificial Re-charge systems to carry good arroyo water to underground storage for later use
- Branched Aquifer Re-charge Systems (BARS)
- Runoff and Zone Collectors of surface runoff
- Hill slope Collectors and Transmission Lines
- Reduce heavy losses to Evaporation
- Groundwater extraction systems are already in place
- Arroyo use for Recreation / Environmental purposes

Maintenance of Infrastructure

- Maintain and rebuild old structures, dams, and levees
- Maintain problem Arroyos
- Upgrade/retrofit roads at Arroyo crossings
- Build bridges at restricted Arroyos
- Apply maintenance to new Aquifer Re-charge systems
- Sediment management and disposal
- Maintenance of new Recreation areas

For further information about the Stormwater Coalition, please contact Cliff Terry, Chairman at terryalcl.aol