

THE SOUTH-CENTRAL NEW MEXICO STORMWATER COALITION

The Need for Regional Stormwater Management in Southern New Mexico

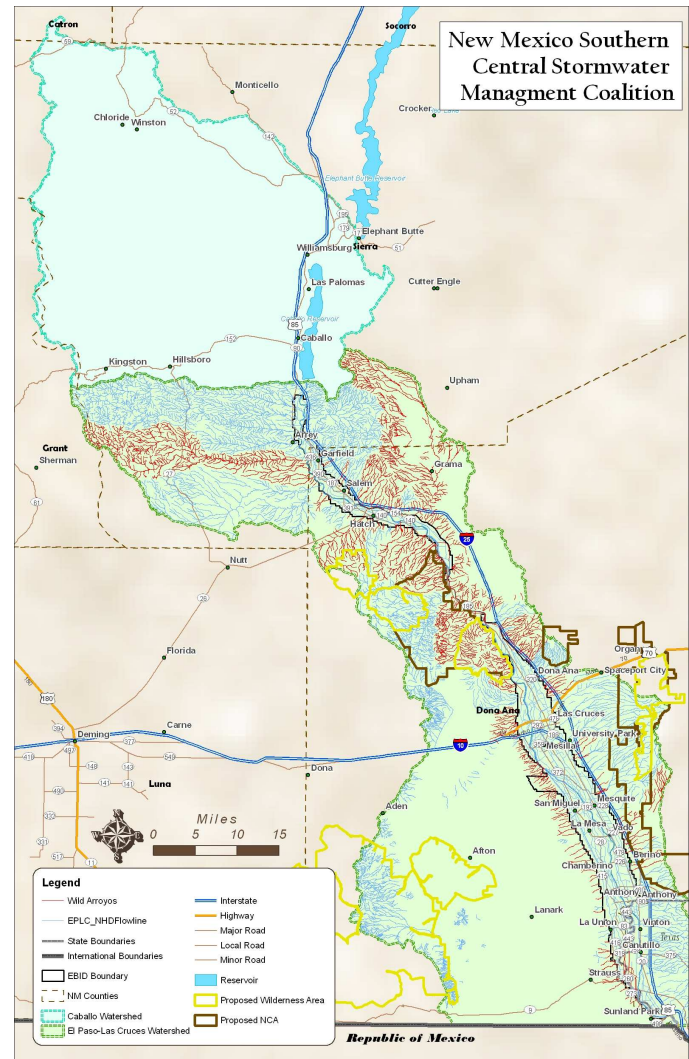
Of the 2400 square miles in a watershed that stretches from Caballo Dam to the NM-TX state line, approximately 800 square miles, or one-third, of the acreage has no infrastructure to slow or stop stormwater. As a result, there is erosion of slopes, sediment dumping, and frequent flooding on highways, 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. Formation of this entity will require a legislative act of State recognition which is necessary to leverage Federal and State and local funding for projects and programs in response to the need of the local



responsible parties participating. The coalition will share resources, staff time, data, and documents in order to encourage and facilitate the exploration and development of collaborative efforts to improve the efficiency and effectiveness of stormwater management in south-central New Mexico.

The first step has been 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.

No monetary expenses or expenditures are anticipated until State Legislative recognition is in place and the leverage opportunity and ability to place bond issues on the ballot for public vote is achieved. This entity will not reduce the current budgets or take from the mill levy amounts of any of the current responsible parties recommending action, conversely it may help in the overlay of plans needing funds.



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

<ul style="list-style-type: none"> • <i>Identify existing infrastructure</i> 	<ul style="list-style-type: none"> • <i>Regional Watershed Management</i>
<ul style="list-style-type: none"> • <i>Develop Regional Master Plans</i> 	<ul style="list-style-type: none"> • <i>Updating and Maintenance of Flood Control Structures</i>
<ul style="list-style-type: none"> • <i>Design Flood Control Infrastructure from a watershed perspective</i> 	<ul style="list-style-type: none"> • <i>Construction of Branch Aquifer Recharge Systems</i>
<ul style="list-style-type: none"> • <i>Construct Canals and Storm Drain Culverts</i> 	<ul style="list-style-type: none"> • <i>Pumping Systems</i>
<ul style="list-style-type: none"> • <i>Safe Water Storage Reservoirs</i> 	<ul style="list-style-type: none"> • <i>Water Filtration Stations</i>

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 Joe Delk, Chairman at 575-644-3082.