

## 25. Conclusions and Recommendations

### 25.1. Conclusions

The Chico Creek Watershed is unique because portions of the watershed are still relatively undisturbed, but, because of its proximity to Colorado Springs and other metropolitan areas, this is expected to change. Most of the growth projected in this watershed is located in the northern portion.

Conclusions drawn from a review of the information contained in the plan include:

- Chico Creek Subwatershed is primarily rural, but several developments are proposed in the northern portion of the Upper Black Squirrel Subwatershed. This development is expected to increase wastewater needs.
- The primary source of drinking water is from groundwater wells that tap into the Upper Black Squirrel Creek alluvial aquifer.
- The Chico Creek Subwatershed is a large, biologically diverse area with large tracts of state school trust and federal-owned land. The subwatershed historically sustained an agricultural economy but is now threatened by fragmentation, development, and loss of water due to increased diversions and growth-related uses.

### 25.2. Recommendations

Continue the El Paso County Groundwater contamination study (2009). Assess and evaluate recommendations made through that study for implementation.

Evaluate the need and the funding possibilities of locating a water quality and streamflow monitoring station on Chico Creek (immediately above the confluence with the Arkansas River) and/or Black Squirrel Creek. The upper and middle portions of Black Squirrel Creek and Chico Creek are ephemeral streams; there is perennial flow only along the lower portions of Black Squirrel Creek and Chico Creek.

#### 25.2.1. Source Water Protection

Evaluate possible locations and needs for a well-head protection program in the Upper Black Squirrel Subwatershed. Recommendations and information collected through the CDPHE

Source Water Assessment Protection effort should be used in this evaluation. This will become a critical issue to address with the increased growth and reliance on the alluvial aquifer as a source of domestic water supply.

#### **25.2.2. Stormwater and Urban Runoff**

Stormwater detention, retention ponds, or other BMPs should be utilized to minimize flooding, maximize infiltration, and minimize water quality impacts from impervious surface contaminants. Detention ponds should also be designed as an amenity for development projects and other purposes.

#### **25.2.3. Watershed Plan**

Evaluate the need to develop a watershed plan for the Chico Creek Watershed based on the EPA's nine watershed planning elements.

#### **25.2.4. Onsite Wastewater Treatment Systems (OWTS)**

The possibility of increased nutrient loading into surface water or groundwater should be assessed, especially in critical areas where poor soils and high-water tables contribute to septic system failure. This analysis will help evaluate if residential and commercial property should be connected to a central wastewater service.

A map should be prepared that indicates areas where OWTS should not be located. The map should show the following components:

- Location of OWTSs and monitoring and drinking-water wells within El Paso County;
- Location of failed OWTS;
- Facts influencing the design and location of OWTS.

Similar recommendations are also made for Park and Teller Counties.

#### **25.2.5. Wastewater Treatment Plants**

Evaluate the possibility of future wastewater treatment plants and expansion of existing wastewater treatment plants in areas of existing and projected growth and proximity to areas currently served by OWTSs.

### **25.2.6. Water Quality Management Association**

An Upper Black Squirrel WQMA should be formed to serve the Upper Black Squirrel Subwatershed, based on the boundaries of the Upper Black Squirrel Subwatershed. This is critical because of the significant current growth and planned future growth in this watershed and the effects this will have on current and future wastewater services provided in the area. The Upper Black Squirrel WQMA would have authority to review all site applications for new or modified wastewater facilities or interceptors. Currently, these are being reviewed by the Lower Fountain or Upper Monument WQMA. The WQMA should be established with the cooperation of the Lower and Upper Monument WQMA, and the initial members should consist of:

- 4-Way Metropolitan District
- Sunset's Ellicott Springs
- Paint Brush Hills Metropolitan District
- Cherokee Metropolitan District (Due to service area boundaries and legal ties, Cherokee is also a member of the Lower Fountain WQMA.)
- Ellicott School District
- Falcon Highlands Metropolitan District
- Meridian Service Metropolitan District
- Woodmen Hills Metropolitan District (Currently a member of the Lower Fountain WQMA but will change when Upper Black Squirrel WQMA is formed.)
- El Paso County Board of Commissioners

Future proposed districts or developments impacting the watershed should also be reviewed to for inclusion on this list. Once this WQMA is established, it will also be responsible for review and coordination of permits affecting areas immediately outside the watershed such as the towns of Calhan and Ramah.

Until a WQMA is established, the Lower Fountain WQMA will be responsible to review any site applications in this area.