3.4 Jurisdictions

Figure 3-6 shows the city jurisdictions, special planning areas and community planning areas within the Placer County portion of the watershed. The three city agencies are the City of Roseville, City of Rocklin, and the Town of Loomis. These three jurisdictions have expended varying degrees of effort towards open space planning within their limits. Of these three, the City of Roseville has the most extensive policies directed towards open space and trail connections contained within its General and Specific plans. Three specific plan areas determine policy for sections of Cirby Creek, Miners Ravine, Strap Ravine and Secret Ravine: Stoneridge, Northeast Roseville, and Southeast Roseville. The North Central Roseville Specific Planning area borders the watershed on the northwest near the junction of Highway 65 and Interstate 80, and also contains some policies applicable to planning along Dry Creek and Antelope Creek.

Outside of the City jurisdictions, Placer County has goals and policies contained in its General Plan as well as Community Plans for Horseshoe Bar/Penryn, Granite Bay and Dry Creek West Placer. Additionally there are areas of the watershed that are outside of the community planning zones that are regulated by the General Plan and other applicable County zoning ordinances. The Horseshoe Bar/Penryn and Granite Bay plans are particularly important in that they regulate land use and development in the upper watersheds of the Dry Creek tributaries. The streams in these areas are generally less impacted than in the lower watershed so are more vulnerable to development, which is more likely to occur in these areas in the next 10 years given current population projections and the average lot sizes in the upper watershed.

One of the major challenges in planning the Dry Creek Greenway is developing goals and policies that support the visions for Greenway yet are consistent with the general, specific and community plans of the various agencies. It is critically important in a watershed that encompasses multiple jurisdictions to create a plan that can be supported, and perhaps even adopted, by all of the jurisdictions in the watershed.

3.5 Population Centers

Population in the watershed largely follows city. special planning area and community planning area jurisdictional boundaries. The highest population density occurs in the population centers of Roseville, Rocklin and Loomis (Figure 3-7). Granite Bay has the highest population density in the unincorporated County. Within Roseville, the Southeast and Infill specific planning areas are the most populous. According to the 2000 census, the Stoneridge and Northeast areas were sparsely populated, but that has largely changed in the last three years, although the Northeast area contains a significant amount of land zoned Business Professional and Highway Commercial.

3.6 Land Use

Land use in the watershed includes general and light industrial; business professional; regional, community and neighborhood commercial; public/quasi-public; high, medium and low density residential; agriculture; parks and recreation; and open space (Figure 3-8). The industrial lands primarily follow the railroad lines to the north of Interstate 80. Commercial properties are also in this zone, as well as along Highway 65, Douglas Boulevard, the Roseville Automall area (in Northeast Roseville), and southwest of the Granite Drive-Sierra College Boulevard intersection in Rocklin. Business professional land

uses are largely in Northeast Roseville near Douglas Boulevard and along the Highway 65 corridor. The majority of the unincorporated County is low density or rural residential (defined as 4 dwelling units per acre or less). This is especially applicable to the upper watershed.

3.7 Soils

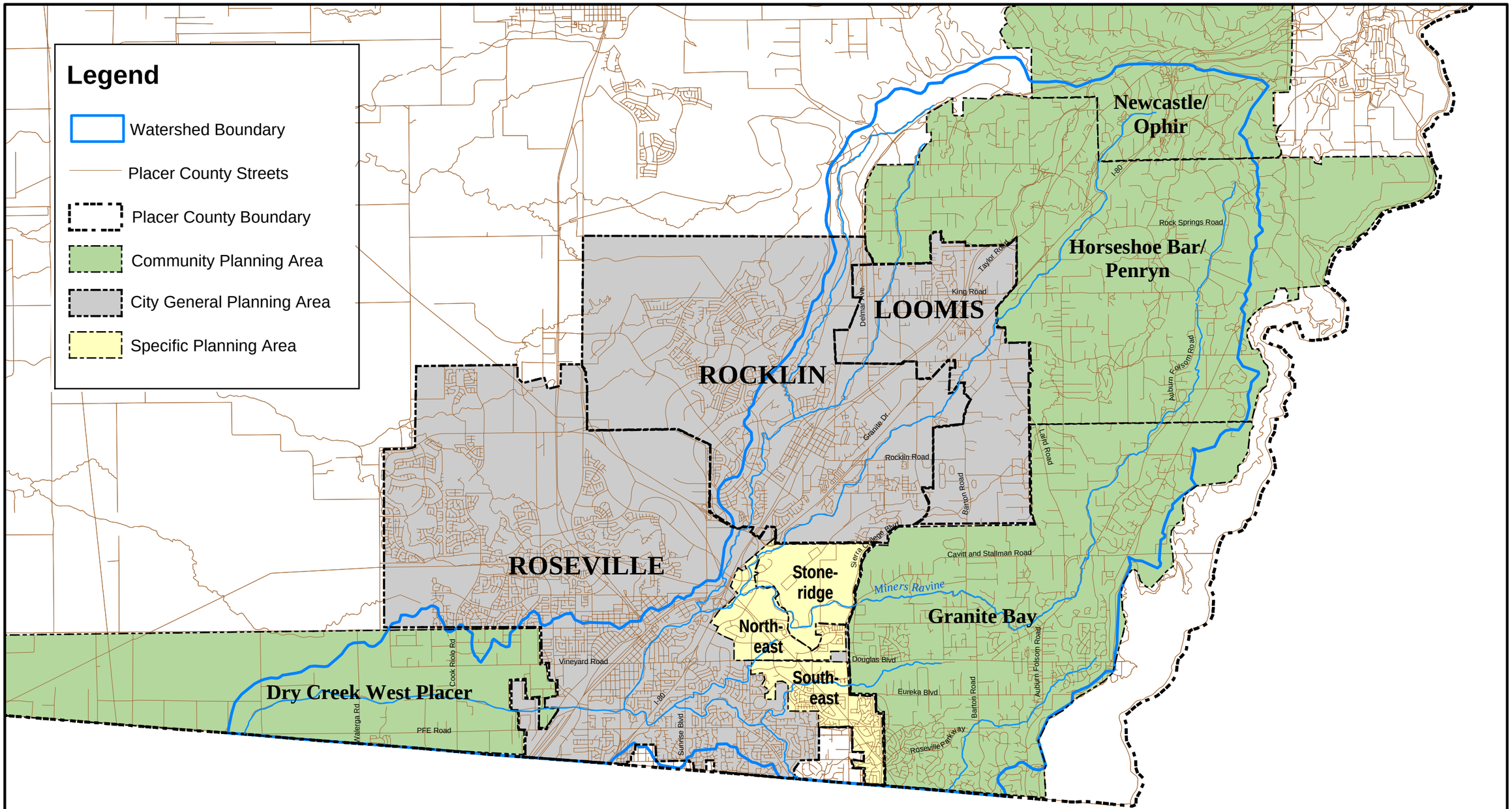
The soils in the northern or upper Dry Creek watershed near Penryn are generally well drained with low to medium runoff potential. Parent material for the soils consists primarily of granite or other andesitic conglomerates, with deeper soils forming along the ridge lines. Just south of the upper most watershed, near Loomis and Rocklin, the soils become dominated by Andregg Coarse Sandy Loam/Complexes which are moderately deep well drained soils formed on the rolling to steep slopes of the surrounding area.

Soils in the Roseville area begin to show higher runoff potentials and are less permeable than those in the higher elevations. This area is dominated by Inks Cobbly Loam/Complex, Cometa Loam/Complexes and other granite derived soils, the majority of which were formed from alluvium. Inks Cobbly Loam and Exchequer Very Stony Loam are soils in the Mehrten Volcanic formation. This formation forms a very hard layer underneath the surface, and combined with the shallowness of the soils, creates areas that are devoid of trees and dominated by grasslands. The Inks Cobbly Loam feature in the Northeast Roseville specific plan area exhibits these characteristics.

The lowest part of the watershed that is still located in Placer County has soils with widely varying physical properties. Along the streams within the floodplain Xerofluvents have formed which are well drained and tend to be stratified. The surrounding uplands consist of alluvium derived soils with pockets of Fiddyment Loam which are formed on low siltstone terraces. (Figures 3-9 and 3-10)

3.8 Wildlife Habitat Conditions

The flora and fauna found in the Dry Creek watershed are largely a reflection of soils, climate and land use. The Dry Creek watershed has a range of land uses, including residential, commercial, agricultural and recreational. Similarly, the soils range from relatively well-drained San Joaquin soils in agricultural use to fully built out urban areas with a very high degree of impervious surfaces. The Mediterranean climate is hot and dry in the summers and moderately cool with a moderate amount of precipitation in the autumn, winter and spring.



Source: City of Roseville General and Specific Plans, Placer County General Plan, 2003

JURISDICTIONS

FOOTHILL ASSOCIATES
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LANDSCAPE ARCHITECTURE

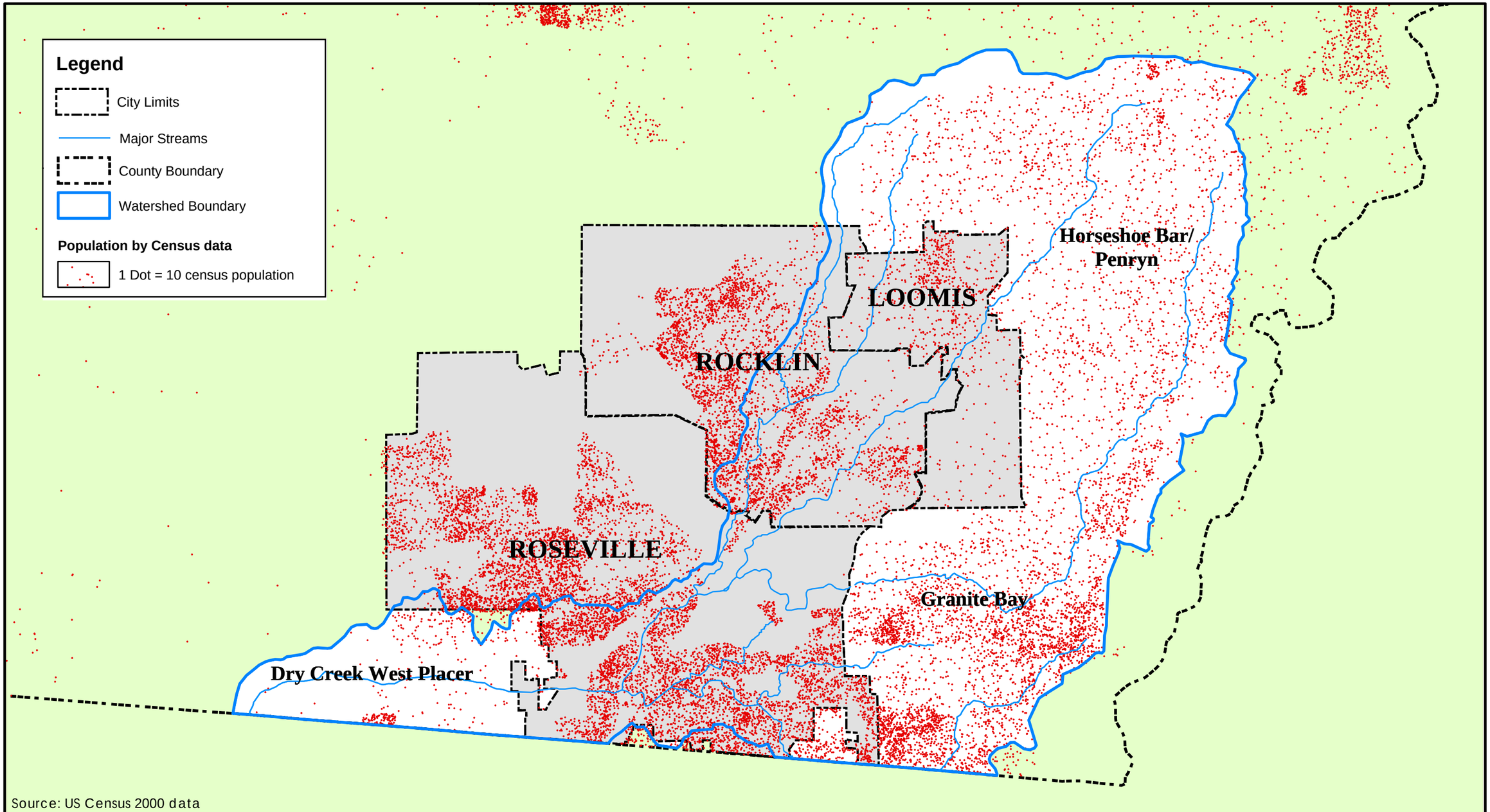
N

SCALE 1 0.5 0 1 2 Miles

DRY CREEK GREENWAY REGIONAL VISION

FIGURE 3-6

2-6 jurisdictions.mxd



CENSUS 2000 POPULATION CENTERS

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LANDSCAPE ARCHITECTURE

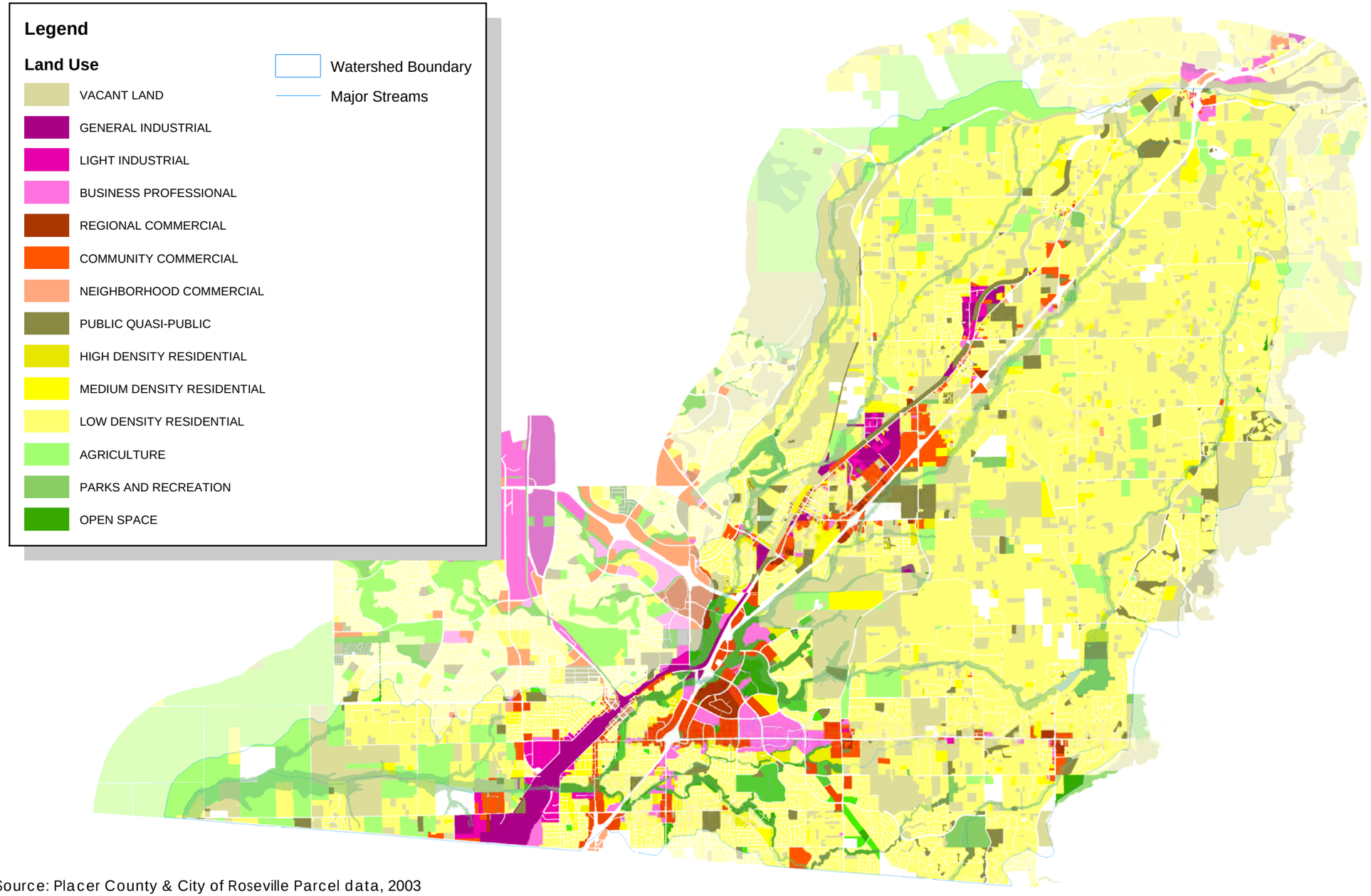
N

SCALE 1 0.5 0 1 2 Miles

DRY CREEK GREENWAY REGIONAL VISION

FIGURE 3-7

2-7 population.mxd



Source: Placer County & City of Roseville Parcel data, 2003

LAND USE

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LANDSCAPE ARCHITECTURE

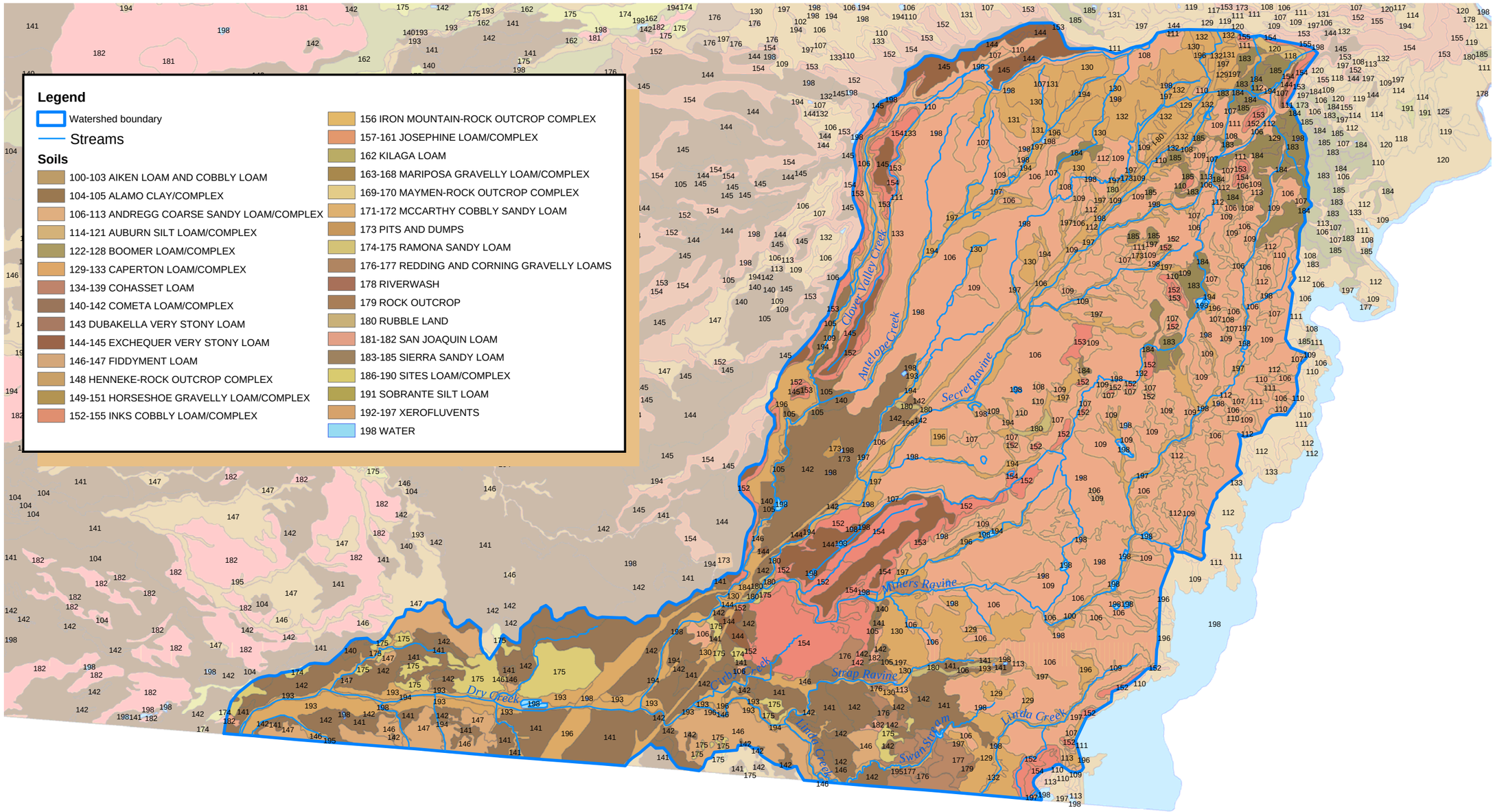
N

SCALE 1 0.5 0 1 2 Miles

DRY CREEK GREENWAY REGIONAL VISION

FIGURE 3-8

2-8 land_use.mxd



Source: USDA NRCS Soil Survey for Placer County, 1998

SOILS

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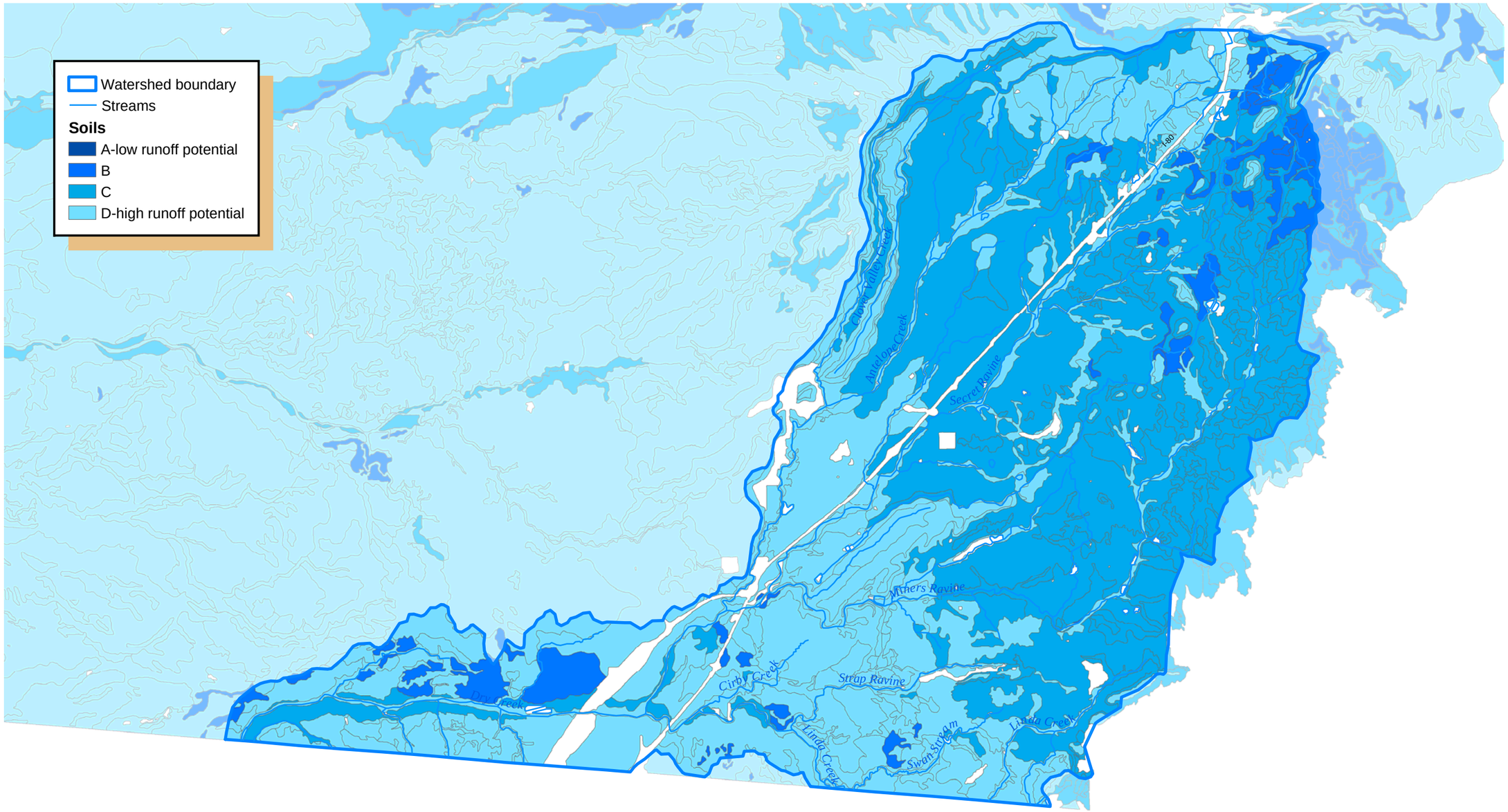
LANDSCAPE ARCHITECTURE

N

SCALE 1 0.5 0 1 2 Miles

DRY CREEK GREENWAY REGIONAL VISION

FIGURE 3-9



Source: USDA NRCS Soil Survey for Placer County, 1998

HYDROLOGIC SOIL GROUP

FOOTHILL ASSOCIATES
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LANDSCAPE ARCHITECTURE

N

SCALE 1 0.5 0 1 2 Miles

DRY CREEK GREENWAY REGIONAL VISION

FIGURE 3-10

2-10 hydr soils.mxd

The plant communities are typically ruderal annual grasses and forbs in range lands and pastures, lawns and scattered native or non-native trees in parks, golf courses, school yards and other landscaped areas, mixed oak woodlands in upland and riparian areas, and smaller areas of emergent or scrub shrub wetlands, creeks, and open waters. Wildlife tends to locate in those areas where they can find the essentials of survival and reproduction, including foraging nesting and breeding habitats. Fish and other aquatic organisms may be found in those areas that are suitable in terms of water quality, cover, and other factors, and both fish and wildlife require the capacity to move freely between the resources that they utilize and, in some cases, to migrate beyond the watershed boundaries.

An example of an important combination of habitat types in the Dry Creek watershed would be a mature riparian forest in proximity to open grasslands. These habitat types provide surface water, cover for small mammals and deer, trees for raptors that may nest there, tree hollows for bats and cavity-nesting birds, and foraging opportunities for the hawks and owls that hunt open lands and for egrets and herons that hunt for fish and amphibians. Habitats that are compromised by breaks in connectivity, such as roads, or impaired by poor water quality will inevitably produce fewer numbers and types of flora and fauna.

Figure 3-11 shows vegetation types within the Greenway from the Placer Legacy database, and Figure 3-12 shows a California Natural Diversity Database (CNDDB) report for the watershed. Species of concern in the watershed include Valley Elderberry Longhorn Beetle (Linda Creek, Miners Ravine and Secret Ravine subbasins), California Linderiella (Linda Creek subbasin), Dwarf Downingia (Miners Ravine and Dry Creek subbasins), Vernal Pool Fairy Shrimp (Miners and Secret Ravine subbasins) and Western Spadefoot Toad (Antelope Creek subbasin).

3.9 Aquatic Habitat Conditions

Fish habitat varies considerably in streams that comprise the Dry Creek Watershed. Fall-run steelhead and chinook salmon have been observed on Secret Ravine[9], Miners Ravine[10], and Linda and Cirby Creeks[11]. A 1993 habitat evaluation of Dry Creek, Antelope Creek, Secret Ravine and Miners Ravine rates habitat from poor to excellent, with poor habitat occurring in the lower watershed and improved habitat occurring in the upper[12]. This study found Secret Ravine to have the best habitat, of the four streams studied, with gravel substrates and frequent riffles and pools. Cover was good on Secret Ravine and stream-flow was adequate throughout the year. Miners Ravine was rated as having good physical habitat, but low late summer flow levels. Beaver dams were noted as significant on upper Miners Ravine. Fish habitat along Antelope Creek was variable, recovering from construction of highways and bridges at the time of the report. Some good pools were noted, but sedimentation in the downstream reaches resulted in poor spawning habitat.

Sand was noted as the major problem on Secret Ravine for anadromous fish habitat[13]. Sand degrades habitat by burying spawning riffles, slowing water flow and making the

[9] Stacy K. Li, 1999.

[10] ECORP, 2003.

[11] Garcia and Associates, 2002.

[12] Vanicek, 1993.

[13] Li, 1999.

stream shallower, which warms water temperature. It also decreases aquatic food sources by limiting benthic macroinvertibrate habitat[14]. Li found seven major human-induced sources contributing to greater sediment loading of the stream: 1) bank erosion from a llama ranch downstream of Rock Springs Road, 2) stream-scour behind bank boulders upstream of King Road, 3) bank degradation along equestrian trails, 4) removal of vegetation through application of herbicides downstream of Loomis Regional Park, 5) degradation due to cattle upstream of Sierra College Boulevard, 6) off-road vehicle use, 7) development in Rocklin and Roseville without adequate use of BMPs. Most of these problems can be relatively quickly corrected, so it is unknown if these particular issues are still of concern in 2003; however, recent studies have indicated significant amounts of sediment are still present in the channel[15].

Habitat conditions for aquatic species in Linda and Cirby creeks have been classified as suboptimal; however, it was also noted that egg incubation and hatching has occurred successfully[16]. Water temperature was one of the limiting factors for salmonids during the warm seasons. Non-salmonid fish species identified on these creeks included Sacramento sucker, bluegill/green sunfish hybrid, hitch, Sacramento pikeminnow, mosquitofish and to a lesser extent spotted bass, largemouth bass, golden shiner, and black bullhead.

3.10 Recreation Resources

Recreational sites within the Dry Creek watershed include a number of public uses, including parks, golf courses, open space/greenbelt, streams and lakes, schools, recreational clubs and businesses, and wetlands/vernal pools, for their educational opportunities (see Figure 3-13). Schools, parks and open space are of primary importance in developing a plan for the Dry Creek Greenway, since these land uses are areas where people can access the Greenway as well as being major destinations for alternative modes of transportation such as bicycling. Children bicycling or walking between home, schools and parks should have a route that is separate from the road network as much as possible to improve safety, quality of experience and environmental education.

[14] Ibid.

[15] HDR, 2003.

[16] Garcia and Associates, 2002.