The Dry Creek Parkway Recreation Master Plan

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County of Sacramento
Department of Regional Parks, Recreation and Open Space

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ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

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1.0 Introduction

Since 1990, Sacramento County has experienced population growth and related development at a rate that exceeds growth in the state as a whole[1]. This growth is occurring in the urban centers and the unincorporated rural communities as well. Businesses and individuals continue to locate in Sacramento County to enjoy a combination of benefits, such as affordable housing, quality schools, employment opportunities, and access to recreation and open space. The amenities provided by a variety of passive and active recreation opportunities and open space are very important components in determining the overall 'quality of life' enjoyed by residents of Sacramento County. It is a commonly acknowledged irony that while these amenities attract new residents, their quality and existence can be significantly threatened by the demand for building sites and the land use practices associated with development.

If residents are to continue enjoying the natural areas and open spaces that contribute so much to the quality of life in Sacramento County, it is critical that these resources be recognized and that plans to preserve and protect them are adopted as part of the development planning process. Sacramento County has acknowledged the value of the open space corridor that comprises Dry Creek Parkway for over 35 years. In 1965, the County General Plan designated the corridor as an "exclusive agriculture recreation reserve." This designation was reiterated in the first Rio Linda/Elverta Community Plan in 1971 and has been retained in all subsequent revisions to the General Plan and Community Plan, even as additional areas in the community were designated for residential development.

Popular support for protection of the Dry Creek corridor as a County open space and recreation resource began in the mid-1980's. The vision of the Dry Creek Parkway was proposed as a means to:

1) preserve open space and wildlife habitat in an urbanizing area,

2) provide and coordinate additional passive and active recreational opportunities in the North County area and,

3) provide critical flood control and conveyance capacity for the lower Dry Creek watershed.

The 1990 Rio Linda/Elverta Parks and Recreation District Master Plan recognized the need to protect the Dry Creek Parkway as a critical open space resource, and encouraged the County to pursue a strategy to plan for and maintain the Parkway. In August 1990, the Sacramento County Department of Regional Parks, Recreation and Open Space began development of the Dry Creek Parkway Recreation Master Plan. The Board of Supervisors appointed an Advisory Committee with representatives from the local community, equestrian groups, the Rio Linda/Elverta Recreation and Park District, and others. The plan was completed through the draft phase, but

[1] United States Census Bureau 1990 and 2000 Census data report 17.5% population growth for Sacramento County and 13.8% population growth for California overall.

funding shortages in 1992 halted completion of the plan. For the next eight years, resources for all County recreation projects, including maintenance of existing parks, were severely limited and no further progress was made on the Dry Creek Parkway Recreation Master Plan during this time.

In 1999, the County successfully competed for grant funding to resume and complete the Dry Creek Parkway Recreation Master Plan. Due to the amount of time that elapsed between the November 1992 Draft and resumption of the effort in 2000, the Draft plan required review and revisions to address the current conditions of the Parkway, the community, and new regulatory considerations. The Board of Supervisors appointed a new Advisory Committee in October 2000, with members representing the many diverse Dry Creek Parkway stakeholder groups. Several members of the 1990 Advisory Committee agreed to serve on this new committee, and provided very valuable historic context to the planning process. The Advisory Committee met regularly to review the Draft Master Plan and suggest revisions to make it consistent with current needs, regulations, and values. This Master Plan incorporates the essential elements of the initial draft plan with updated information about resources, community needs, and implementation strategies to make the long-standing vision of the Dry Creek Parkway a reality.

1.1 The Parkway Concept

Successful implementation and management of the Dry Creek Parkway will require a long-term cooperative relationship between Sacramento County, the local community, the City of Sacramento, Placer County and many other regional partners, as well as a shared commitment to a common vision. The following key Parkway objectives provide the conceptual framework for this vision and serve as the basis for the specific goals and policies outlined in this Master Plan. The Parkway shall be designed, implemented and managed to achieve these objectives in a balanced and sustainable manner.

The objectives of the Dry Creek Parkway are to:

1) preserve, protect, enhance, and interpret the natural and cultural resources of the corridor;

2) provide a natural, continuous open space corridor from Placer County to the Sacramento city limits, and form part of the 70-mile regional greenway loop;

3) retain the rural character of the surrounding Rio Linda/Elverta community;

4) allow for the integration of active and passive recreational uses that will have minimal impacts on the natural resources; and

5) preserve flood conveyance and capacity within the Dry Creek floodway.

1.2 Parkway Description

The Dry Creek Parkway is comprised of approximately six miles of open space and riparian corridor starting at the Sacramento/Placer County line and extending southwesterly along the two forks of Dry Creek to the Sacramento City limits at Ascot Lane (Figure 1). The Parkway passes through the unincorporated communities of Antelope, Rio Linda, and Elverta. The boundary of the parkway encompasses the area 175' beyond of the normal top of bank for the Dry Creek channel, as well as Cherry Island Soccer Complex, Cherry Island Golf Course, Gibson Ranch, and Northbrook Park (Figure 2). Existing land uses adjacent to the Parkway are primarily agriculture, rural residential, residential, recreation, and open space with several small commercial areas and public schools.

The Dry Creek Parkway is the last remaining major open space riparian corridor in the North County area. As such, it provides migration corridors, habitat, and forage for a wide variety of aquatic and terrestrial wildlife, including rare, threatened, and endangered species. In terms of overall biological productivity and richness, the riparian habitat within the Dry Creek Parkway compares favorably with the riparian habitat found on the American River Parkway. Adoption and implementation this Master Plan will facilitate preservation of these important natural resources as residential and urban development occurs in the surrounding communities.

The Dry Creek Parkway will also provide a combination of passive and active recreational opportunities for the surrounding communities and a significant addition to the linear trail corridor that currently includes the American River Parkway, the Ueda Parkway and the Sacramento Northern Bikeway. The Dry Creek Parkway will extend this corridor through northern Sacramento County to the Placer County line. Ultimately, it is anticipated that this greenbelt will be continued easterly through Placer County and the City of Roseville to the City of Folsom and link up with the eastern end of the American River Parkway. When these critical parkway segments are completed, a seventy-mile greenway trail loop will be created enabling residents and visitors to the Sacramento/Placer County area to enjoy a regional parkway with trail systems that will provide recreation and transportation options for pedestrians, bicyclists and equestrians. (Figure 3). The Dry Creek Parkway will also provide connections to a variety of other existing and planned County trail linkages in the Natomas, Rio Linda, Elverta, North Highlands, and Foothill Farms communities (Figure 4).

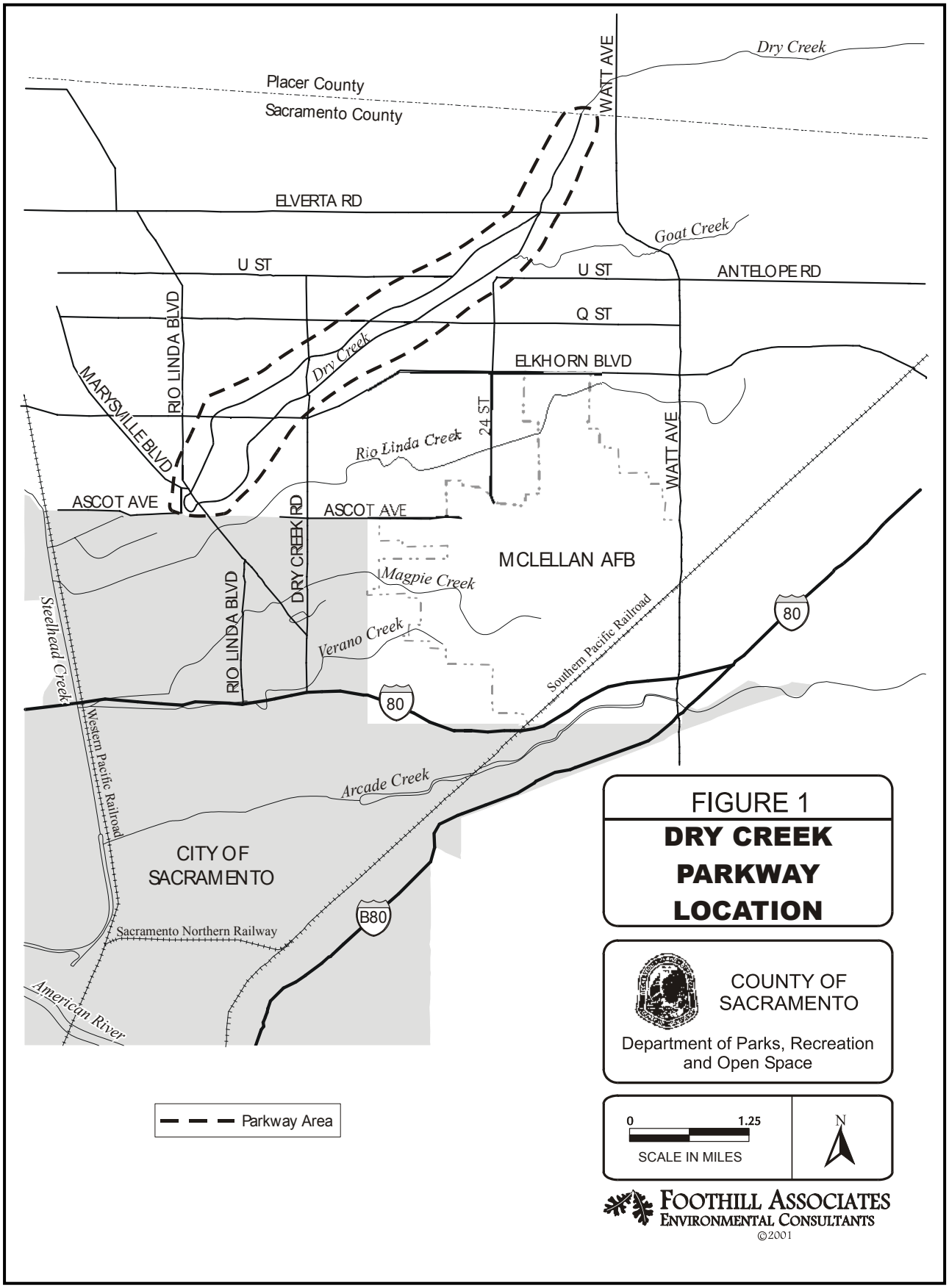

Figure 1 - Dry Creek Parkway Location

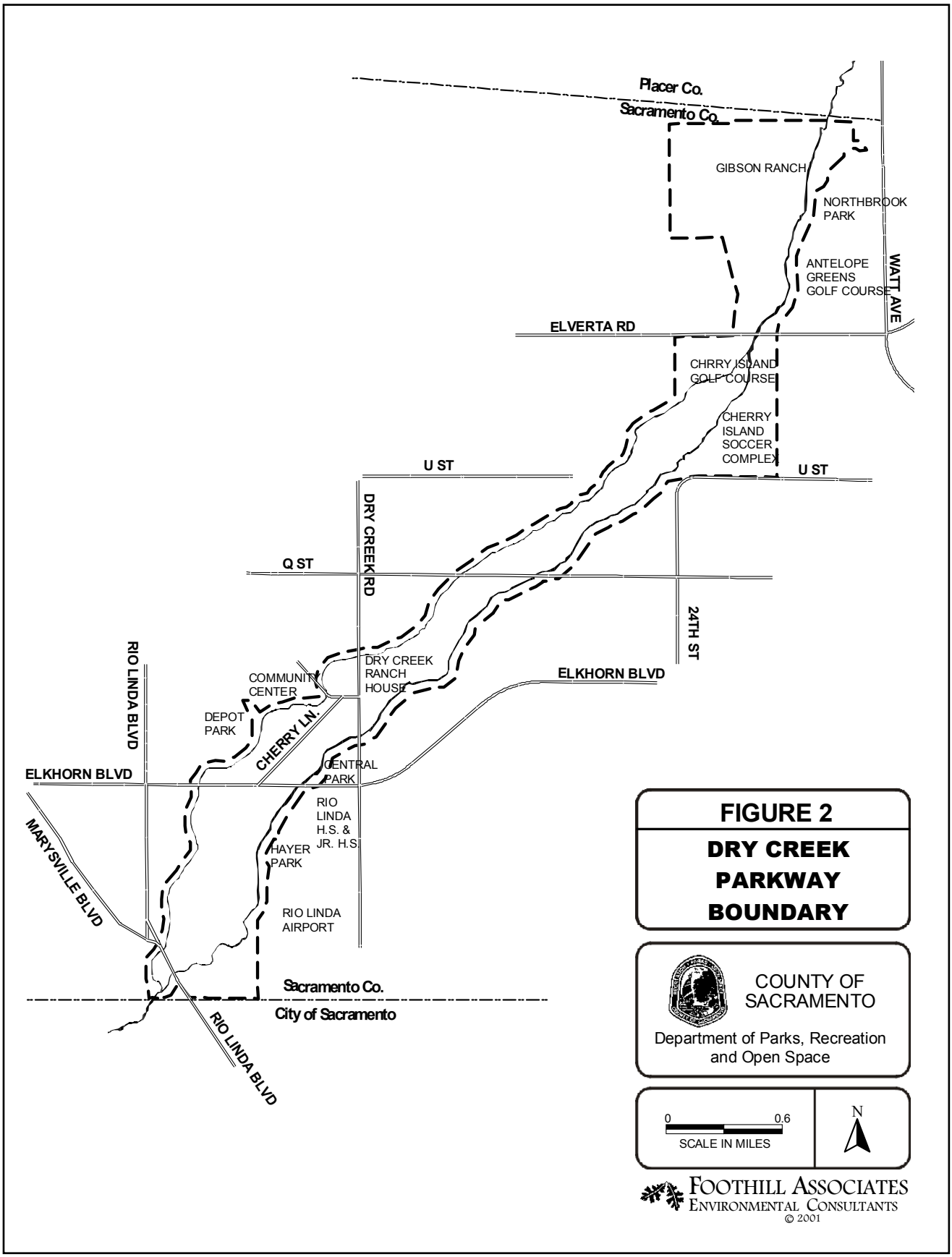

Figure 2 - Dry Creek Parkway Boundary

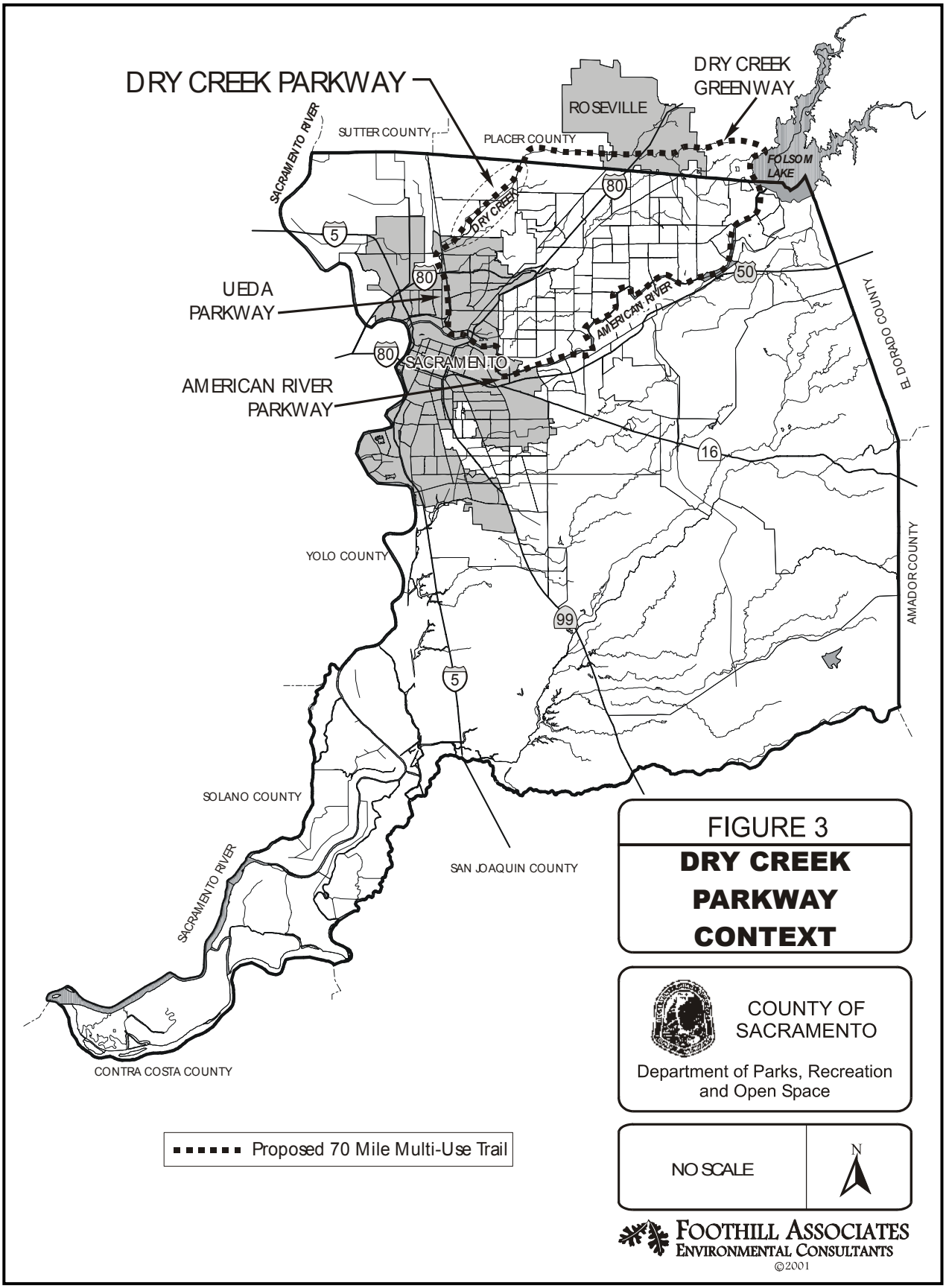

Figure 3 - Dry Creek Parkway Context

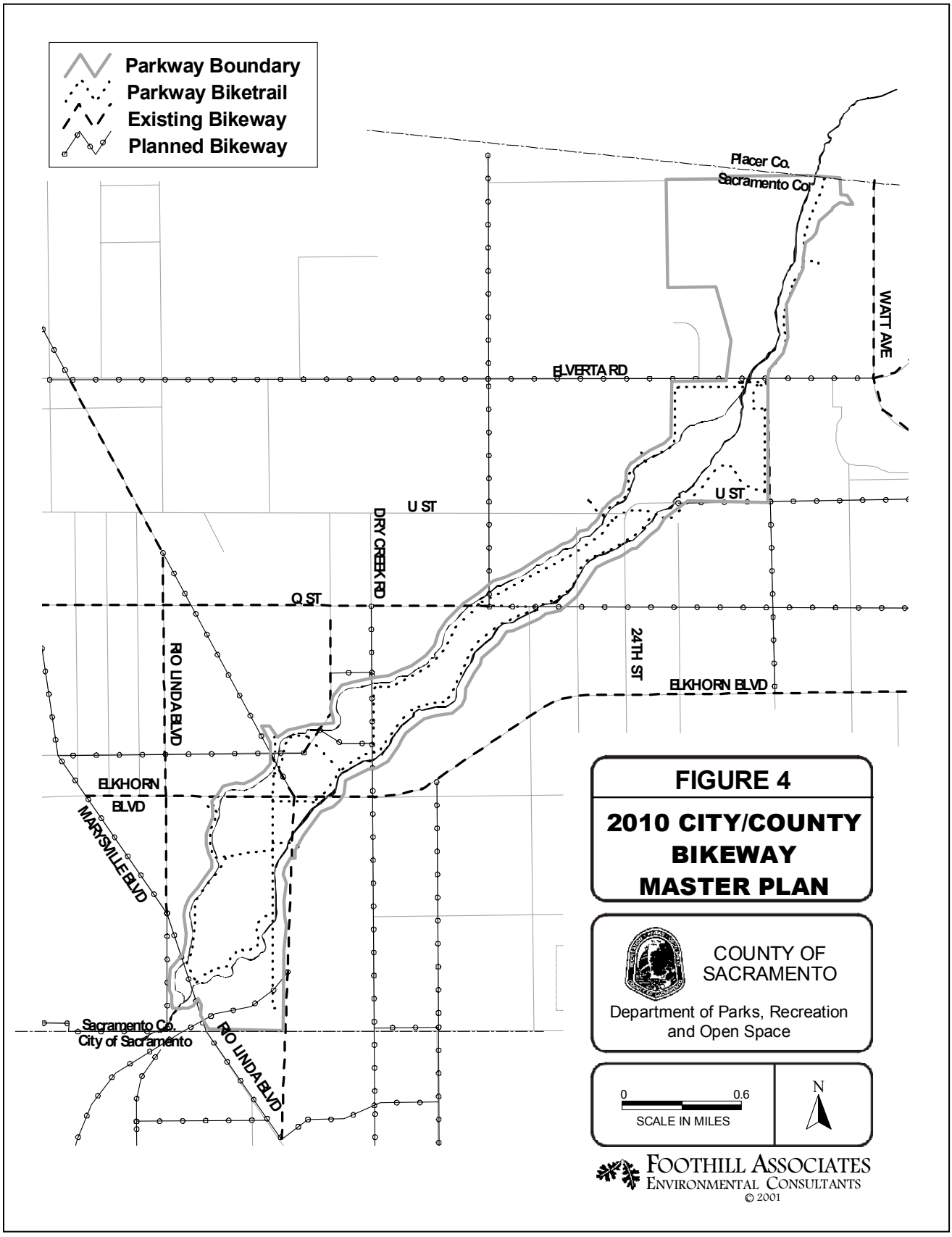

Figure 4 – City/County 2010 Bikeway Master Plan Connections

1.3 Purpose of the Parkway Plan

The Dry Creek Parkway Recreation Master Plan directs how future land use within the Parkway will occur consistent with the Rio Linda/Elverta Community Plan in order to protect, preserve, and enhance open space, wildlife habitat, opportunities for passive and active recreation, and flood control and conveyance capacity. All of these resources are important components of the Parkway vision. The purpose of the Master Plan is to establish an integrated approach to the management and operation of the Parkway that recognizes the multiple values offered by these resources. The plan provides guidance by establishing goals and policies, characterizing the resources within the Parkway to be protected, describing allowable land uses and activities, proposing amenities, and identifying specific implementation strategies. As future activities and projects for the Dry Creek Parkway are proposed, they will be evaluated for compliance with this Master Plan to make sure the vision of the Dry Creek Parkway is maintained for future residents and visitors to Sacramento County.

The Master Plan works in concert with several other planning tools to direct activities within the Dry Creek Parkway. The Sacramento County General Plan and the Rio Linda/Elverta Community Plan both provide policy direction related to recreation, open space, flood management, habitat protection, and other general planning considerations. The Rio Linda/Elverta Community Plan also includes a Dry Creek Parkway combining zone. The direction provided by these documents is incorporated in the Dry Creek Parkway Recreation Master Plan and more fully developed to address the specific considerations and circumstances of the Parkway. In addition, the Rio Linda/Elverta Recreation and Park District Master Plan addresses park facilities managed by this independent district, several of which are adjacent to the Dry Creek Parkway. The Dry Creek Parkway Recreation Master Plan guides parkway land use in a manner that is compatible and consistent with the management of the park district facilities. This synergistically enhances the overall value and benefit of both the Parkway and the park district resources.

While the Dry Creek Parkway Recreation Master Plan guides activities on both private and public land, it does not usurp existing private property rights or disallow existing uses that are permitted under the County's current zoning and land use ordinances, General Plan, and the Rio Linda/Elverta Community Plan. Any land use changes such as plan amendments or rezones, devlopment, or other activites that require discretionary County approval will be subject to the policies contained in this Master Plan.

1.4 Organization of the Parkway Plan

The Dry Creek Parkway Recreation Master Plan is comprised of five chapters, with supporting references and appendices. The first chapter provides the planning history of the Parkway, a description of the Parkway, and the conceptual framework that establishes the common vision for the Parkway.

The Goals and Policies for the Dry Creek Parkway are contained in the second chapter. This information provides specific guidance for future Parkway planning, design, implementation and management.

The third chapter contains an assessment of the various natural and recreational resources of the Dry Creek Parkway. This chapter addresses the importance of the Parkway for flood control, habitat for terrestrial and aquatic species, and a range of passive and active public recreation uses. Included in this section are a summary of the existing natural features found in the Parkway, and a description of the allowable land uses and recreation activities that are compatible with the Parkway objectives.

Specific concepts for the future development of the Parkway are illustrated in the fourth chapter. Concept plans are provided for the North, Central, and South segments of the Parkway, including recommended equestrian and paved trail alignments, staging areas, rest areas, restrooms, and picnic facilities. The interpretive program and potential mitigation opportunities for the Parkway are also outlined in this chapter.

The final chapter establishes procedures for how the Dry Creek Parkway will be implemented. These procedures address how parkway boundaries are to be protected, jurisdictional responsibilities, the planning and development process, pubic hearings, and plan reviews. This chapter also identifies the specific actions required to implement the Parkway according to the concept plans, and discusses potential project funding sources.

1.5 Environmental Review

The Sacramento County Department of Environmental Review and Assessment (DERA) has conducted a review of the Dry Creek Parkway Recreation Master Plan (Plan) pursuant to the California Environmental Quality Act (CEQA). The results of this review are contained in the Final Environmental Impact Report (FEIR) for the Dry Creek Parkway Recreation Master Plan, completed in May, 2003. The FEIR identified several significant but mitigatable environmental impacts associated with implementation of the Plan. The mitigation measures specified in the FEIR are herby incorporated into the Plan as the following environmental mitigation guidelines.

1.5.1 Land Use

Plan Consistency

1. The County of Sacrament shall amend the Rio Linda/Elverta Community Plan, and the Antelope Community Plan such that the Dry Creek Parkway overlay zone coincides with the boundaries of the proposed Master Plan, and includes those properties immediately adjacent to the proposed parkway.

2. The County of Sacrament shall implement the amended Dry Creek Parkway overlay zone by including it on zoning maps and within the Zoning Code.

1.5.2 Safety/Nuisance Impacts

Fire Safety

1. Emergency access shall be provided at 28th Street and at the corner of U Street and 24th Street at the direction of the Fire District.

2. Mile markers must be placed at each emergency access location.

3. New new fire hydrants shall beplaced at the Gibson Ranch Annex and at the corner of U Street and 28th Street at the direction of the Fire District.

4. It shall be the policy of the Master Plan to build all new bridges within the parkway with a 18,000 gross vehicle weight and be at least twelve feet wide.

5. Vertical clearance on access roads and bridges shall be 13' 6" or more to accommodate emergency vehicles.

Crime Prevention

1. The land use designation of the Limited Public Use area adjacent to the Gibson Ranch Annex shall be changed to Nature Study Area.

1.5.3 Biological Resources

Trail Placement

1. In areas where trail placement would degrade the environment over what can reasonably be mitigated, those segments shall be eliminated or relocated.

Valley Elderberry Longhorn Beetle (VELB)

1. Surveys shall be performed for elderberry bushes within 100 feet of any proposed facility to map and catalog each occurrence.

2. Elderberry survey maps shall be used to route proposed amenities away from bushes where possible.

3. Where activity occurs within 100 feet of elderberry bush mitigation shall be in compliance with federal regulation.

Wetlands

1. Biological surveys for the presence of wetlands shall be performed prior to construction.

2. When designating project locations wetlands shall be avoided giving vernal pool habitat a 250- foot buffer where possible.

3. All necessary permits shall be secured as required by the CDFG, U.S. Army Corps of Engineers, and/or U.S. Fish and Wildlife Service.

4. A habitat restoration plan shall be prepared to replace lost resources if it is not possible to avoid the loss or degradation of riparian habitat, wetlands and vernal pool areas.

Water Quality/Erosion

1. Where space and other constraints allow, trail routes shall be located at least 100 feet away from the top of the bank of the creek, in order to avoid highly erosive soils, sensitive ecological systems, and expensive trail repair due to flood damage.

2. All pedestrian trail construction should minimize removal of riparian vegetation and utilize natural features, lateral fencing and boardwalks to discourage public access to sections of streams not directly accessed by multi-purpose trails.

3. Unofficial trails that adversely impact sensitive areas and show signs of significant bank erosion shall be removed.

4. During construction best management practices (BMP's) for sediment control measures shall be followed. Post-construction restoration should emphasize bank stabilization and the utilization of native plants.

5. Best Management Practices (BMPs), such as stormwater filtration systems, oil/grit separators, detention ponds, buffering filter strips and silt barriers, shall be used for proposed facilities (i.e. parking lots, staging areas, etc.) where significant amounts of pollutants (oil, antifreeze, brake fluid, cleanser) and fertilizers (domestic animal droppings, lawn care products, etc.) have the potential to enter Dry Creek.

Potential Wildlife Disturbance

1. Where possible, rather than creating new Parkway facilities in undeveloped areas, existing facilities shall be used such as access roads, existing parks (Hayer Park, Central Park), and other County facilities that can be renovated or developed to make them attractive for public enjoyment.

2. Leash laws within the Parkway shall be enforced and noticed with signage.

3. A leash free area "Dog Park" shall be considered in Phase 1 implementation to provide dog owners a recreational area.

Nesting Raptors

1. A nest survey shall be performed if a project is to begin within the raptor-breeding season (March 1 to August 31). If nesting raptors are found take steps to avoid negative impacts on raptor nesting success, consistent with California Department of Fish and Game guidelines.

2. Maintain and encourage the present ratio of raptor foraging habitat to forested habitat, unless scientific studies of raptor foraging requirements indicate otherwise.

Tree Removal

1. Whenever possible, projects within the Parkway shall be designed to incorporate and avoid removal of existing native trees equal to and over 6-inches in trunk diameter and unique landmark trees equal to or over 19-inches in trunk diameter.
2. Parkway tree mitigation planting shall avoid the creation of native tree orchards. Tree planting shall be based on habitat improvement and restoration and the needs of native flora and fauna within the Dry Creek Parkway.

1.5.4 Drainage and Water Quality

Construction Impacts

1. Construction activities below top-of-bank (i.e. ordinary high water mark) should be limited to the period between May 15 and October 15 of each construction year.
2. Construction activities that occur between October 15 and May 15 above the top of the channel bank and within the 100-year floodplain will be limited to actions that do not result in a net decrease in floodplain and channel capacity (i.e. temporary stockpiling of construction materials, including vehicles, portable equipment, supplies, or excavated soil materials will be prohibited within the 100-year floodplain).

Long-term Impacts

1. Parking lots and staging areas in the floodplain shall be posted with signage stating "**Area Subject to Flooding".**

1.5.5 Traffic and Circulation

Trail Access

1. The proposed multi-purpose trail proceeding west from the north fork of Dry Creek south of Elkhorn Boulevard shall be re-designated from a 1st phase trail to 2nd phase trail, or delayed until Elkhorn Boulevard is constructed to its ultimate configuration on the south side to include sidewalks. At that time, signage shall be installed on Elkhorn Boulevard indicating that the sidewalk is the bikeway to eliminate riders traveling against traffic on the south side of the street. The trail alignment shall be moved to connect to Ashwill Court or Riverbelle Court.

2.0 Goals and Policies

The Dry Creek Parkway Recreation Master Plan (the Plan) is a policy document that establishes the planning framework for the future design, implementation, and management of the Dry Creek Parkway. The Goals and Policies in the Plan provide specific guidance on critical Parkway implementation issues so that all aspects of the Parkway development and operation will be consistent with the agreed upon Parkway concept.

Goal:

1.0 To develop Dry Creek Parkway as a valuable asset to both the community and the region.

Policies:

1.1 Actively maintain standards for the protection of public health, safety, and welfare, including flood control, security, and fire control.

1.1.1 Public safety within and adjacent to the Parkway shall be provided through design, development, and management activities guided by the Plan.

A. Where adequate, minimal lighting (one foot candle per square foot of surface) shall be provided to improve public safety. All lighting shall be directed down to minimize impact on the night sky and away from adjacent residential areas.

B. Barbecues and/or fire pits shall be located at a safe distance from combustible materials and where adequate water supplies are available for emergency response.

C. Emergency vehicle routes shall be established and their entrances barricaded to prevent use by non-emergency vehicles.

D. Public use areas shall be located and designed to accommodate ease of patrolling.

E. Trails and other proposed Parkway elements shall be sited to minimize conflict between Parkway users and adjacent landowners and to be compatible with flood control activities.

1.1.2 Emergency access and safety procedures are essential to the well being of the Parkway and its users, and shall therefore be accommodated to the extent feasible without compromising the goals and policies of the Plan.

A. Additional emergency vehicle access, other than that identified in the Plan, shall be as recommended by the Recreation and Park Commission, the

responsible Fire District, and the Sheriff's Department and approved by the Board of Supervisors and the State Reclamation as required.

B. Emergency vehicle routes shall be established and maintained to provide adequate horizontal and vertical clearance associated with trees and shrubs, and appropriate clearance at turn-arounds.

C. Selected pedestrian bridges shall be capable of supporting emergency and maintenance vehicles.

D. Mile markers shall be installed along the trails at regular intervals as feasible to aid in emergency response. Where appropriate, markers shall be visible from a helicopter.

E. Where appropriate, firebreaks, maintenance roads and/or trails shall be combined within the Parkway.

F. Where public access is to be accommodated, vegetation shall be located and maintained to ensure public safety. Dead vegetation shall be trimmed or removed to eliminate immediate fire danger. Where public safety is not an issue, dead vegetation shall be maintained to provide shelter for wildlife.

1.1.3 Levee protection and slope stabilization methods along the creek shall be used when there is a demonstrated need to protect the health, safety, water quality and welfare of the community. The use of these methods shall result in minimal damage to riparian vegetation, wildlife and habitat.

A. Where possible, levee protection and slope stabilization projects shall incorporate bioengineering alternatives to traditional-engineered solutions. A revegetation program shall be incorporated for all disturbed areas. The revegetation program shall enhance the aesthetic and natural value of the creek bank.

B. The erosion control program shall include measures to minimize damage to riparian vegetation, wildlife, and habitat. Rock and wire mattresses, gabions or wire mesh may be used where vegetation measures alone are insufficient. Such solutions shall include overplanting to restore vegetation in the area.

C. Environmentally damaging materials, such as rubble, gunite, cement, sandbags, bulkheads, fences, and tires shall not be used for permanent erosion control features.

1.1.4 Parkway facilities developed within the floodplain of Dry Creek shall be designed, developed, and managed to not impede storm water flow and conveyance capacity.

1.2 Encourage community support of the Parkway through the creation of special interest groups/organizations and special events such as:

- Friends of Dry Creek Parkway,

- Parkway Volunteer Patrol,
- Adopt-A-Creek Program,
- Equestrian Trail Patrol
- Creek and Parkway Clean Up Day;
- Annual Tree Plantings, and
- Restoration Programs.

1.2.1 Special programs shall be created to encourage and develop a community support system for the Parkway through the use of non-profit groups. Such groups include Sacramento Urban Creeks Council, Save the Sacramento River Trust, Sacramento Valley Open Space Conservancy, the Dry Creek Conservancy, the Dry Creek Watershed Council, Sacramento Tree Foundation, and the Rio Linda/Elverta Historical Society. The Adopt-A-Creek program administered by the Urban Creeks Council shall be incorporated into the Plan.

1.3 Provide opportunities and create mechanisms to educate the public on the value of the Parkway and open space corridors.

1.3.1 Develop educational outreach programs through local schools and special interest groups.

1.3.2 Establish nature study areas and an interpretive center to facilitate public education.

1.3.3 Develop a comprehensive interpretive program for the entire Parkway to provide for a continuous, integrated educational experience for visitors to all parts of the Parkway.

Goal:

2.0 To manage the Parkway in a manner that will preserve, protect, enhance, and interpret the diverse resources of the Parkway including archaeological and cultural resources, adequate flow of high quality water, anadromous and resident fishes, migratory and resident wildlife, habitat to support these species, diverse natural vegetation, and adequate channel capacity and conveyance to support flood control.

Policies:

2.1 Develop a comprehensive management plan to address planning, development, maintenance, and operations of the Parkway including the need to:

- Improve water quality to sustain natural fisheries,
- Enhance wildlife habitat and migration opportunities,
- Minimize conflicts between the natural habitat and public uses,

- Require the use of native/indigenous plant material within and adjacent to the Parkway whenever feasible,
- Establish management controls to encourage the protection of native plant and animal species and to eliminate the invasion of non-native plants and animal species, including cats, dogs and other domestic animals within the Parkway, and
- Preserve and protect archaeological and cultural resources.

2.1.1 Specific area plans shall be compatible with the recommendations outlined in the resource assessment included in this Plan.

2.1.2 All public use areas within the Parkway, including buildings, roads, parking lots, and turfed areas, shall be designed and located such that impacts upon native vegetation, water quality and wildlife habitat are minimized. Appropriate mitigation measures shall be incorporated into all projects to compensate for adverse impacts.

2.1.3 Phased plans with short and long-term measures for the restoration and enhancement of native vegetation and wildlife habitat, and the elimination of undesirable non-native vegetation shall be developed and implemented.

A. A list of trees, shrubs, and herbaceous plants native to the Parkway area and suitable for planting shall be developed by the Department of Regional Parks, Recreation and Open Space. This list shall include a designation of the appropriate plant communities and habitat for each species. Only plants on this approved list shall be planted within the Parkway, the exception being turfgrass and passive agricultural crops in permitted locations. (See Section 4.0 for a definition of passive agriculture.)

B. Native plants shall be reintroduced in areas of their natural occurrence that have been disturbed by past land use, except in sites of human historical value.

C. Non-native trees and shrubs, except those of historic value, shall be removed gradually in accordance with a long-range phasing plan. Priority shall be given to removal of those exotics that compete with native vegetation, or exotics that do not have food or nesting value for wildlife.

D. Grading, drainage into, placing of impermeable surfaces, parking of heavy equipment or vehicles of any kind, new irrigation installation, and planting within the dripline of existing native oaks shall be prohibited. Irrigated turfed areas shall be placed only in areas where there are no mature native trees that could be damaged by changes in the environment, such as summer watering.

E. The removal of vegetation within the riparian zone (floodway) within the Parkway shall not be permitted except when it is a threat to persons or property or contributes to the dangerous restriction of the conveyance of floodwater. Removal of vegetation will occur only when no feasible

alternative exists and shall be confined to the necessary minimum in order to protect natural riparian areas.

F. Proposed work upstream or downstream of the Parkway by other local, state or federal agencies which affects flood flows or water quality shall be consistent with these goals and policies.

G. If vegetation removal to convey floodwaters is necessary, then the flood control agency must prepare a vegetative management plan to be approved by the Board of Supervisors. The vegetative management plan shall foster the development of a mature overstory tree community and a grassland/sedge understory.

2.1.4 A long-range Parkway interpretive program shall be developed for interpreting existing and past ecosystems and historical values. This program shall include such features as: signs, exhibits, nature trails, guided walks and tours, publications and media, and research.

A. All signs (eg., interpretive, informational, directional, etc.) in the Parkway shall have consistency of design, color and materials and shall blend with the natural environment.

B. The design and placement of all signs shall consider access for people with disabilities.

2.1.5 Protection of the environmental quality and of the Parkway and public safety shall be the first priority management responsibilities.

A. A riparian protection zone shall be established to minimize erosion, to protect and create wildlife habitat, to protect and restore fisheries and other wetland and riparian values.

1. Whenever possible, a riparian protection zone shall be established at a width of 175' feet, as measured from top of bank landward or extend at least 40' beyond the riparian habitat, whichever is greater. This riparian zone (trees, shrubs, understory plants and grasslands) shall be maintained when it exists, enhanced where it is degraded or restored where none exists.

2. The justification of the 175 ft. width for the riparian protection zone is based on 60-80 feet of protection of the existing tree canopy and other vegetation, 20-30 feet of area outside the canopy for regeneration, 20-40 feet of additional grassland that can be mowed, if necessary, for fire protection, and a possible 25 feet for anticipated bank erosion due to increased water flows from expected urbanization of the watershed.

B. Activities prohibited in the riparian protection zone shall include the following:

1. Mowing or cutting of native vegetation, excepting as required for fire control, flood control, levee operation and maintenance, and public safety.
2. Structural modifications within the Parkway without approval by the Board of Supervisors.
3. Streambank or channel modification which, individually or cumulatively, would adversely affect water holding capacity, flood flow, streamside vegetation, and water quality or produce other adverse impacts.
4. Use of motorized vehicles, except as required for maintenance, repair, emergency response, or flood control.
5. Planting of vegetation other than streamside native species, except as required for levee stabilization when no suitable native alternative is feasible.
6. Use of herbicides except for maintenance of fire breaks, channel conveyance and levees.
7. Facilities for human use except trails, emergency/maintenance roads, and bridges that may pass through the zone.

C. Activities/improvements permitted in the riparian protection zones include:

1. Performance of emergency work necessary to protect life or property, including firebreaks.
2. Projects to improve fish and wildlife habitat, streamside vegetation, aesthetics, scenic views, environmental quality, and public access along designated trails.
3. Maintenance and enhancement of flood control projects, water channels for erosion control, water quality improvements, service roads, existing road improvements, fisheries production, and permitted public use facilities.
4. Recreation activities that do not have an adverse impact on the habitat or flood control value of the riparian protection zone.

2.1.6 All requests for subdivision of property or land use change of property adjacent to the Parkway shall require conditions (described in 2.1.5) as part of any entitlements, for resource protection and the creation of a riparian protection zone along the outer edge of the Parkway.

A. Each subdivision and land use change shall be examined individually to take into account existing conditions which may require adjustments to these requirements.

B. A 40 foot wide portion of the riparian protection zone adjacent to the private property will be dedicated and maintained as a fire break.

2.1.7 Potential archaeological and historical/cultural resources shall be preserved until they can be evaluated. A resource study shall be conducted so that appropriate decisions regarding protection and preservation of these resources can be determined. Cultural resources include historical and archaeological settings, sites, buildings, features, artifacts and/or areas of ethnic, historical, religious or socio-economic importance. Stewardship of these resources shall include the inventory, protection, and interpretation of the cultural heritage they represent.

2.1.8 Where appropriate, areas which have been damaged by flooding, active agriculture, urbanization, or other adverse conditions shall be reclaimed for use consistent with the Plan or restored to a naturalistic condition, as determined by the designated land use category.

2.1.9 Water flow in Dry Creek shall be maintained at adequate levels to sustain the integrity of the water quality, fisheries, riparian vegetation, wildlife, habitat, and other river-dependent features. Except for natural surface drainage, no new concentrated drainage or new piped drainage directly into the creek shall be allowed, unless necessary and authorized by County Department of Water Resources.

A. The natural topography of the floodplain shall be used to convey floodwaters where possible.

B. The natural topographic diversity of Dry Creek shall be maintained, where possible. This includes flood flow management involving channel enlargement. Such practices shall include meander sequences, low flow terraces, and secondary bypass channels.

C. Channel modifications for flood control purposes shall consider and demonstrate sensitivity toward environmental values, including riparian vegetation, wildlife habitat, and natural stream processes.

D. Channel realignment shall be pursued only when absolutely necessary to eliminate flood hazards and when alternative flood protection measures (e.g., levees, restored and created bypass channels) are not feasible.

E. In order to increase stream conveyance, the construction of secondary overflow channels is preferred to channelization. The construction of low terraces to accommodate widening of the channels shall be encouraged.

F. Channel modifications shall maintain riparian vegetation whenever possible. Modifications resulting in loss of vegetation will be mitigated on a 3:1 acreage basis or consistent with General Plan policies (whichever is greater) within or adjacent to the Parkway.

G. Discharge or drainage of pollutants into the Dry Creek Parkway channels shall be prevented or eliminated. All discharges into the creek must be in accordance with the County of Sacramento Stormwater Ordinance.

2.1.10 Detailed site-specific plans shall include analysis and resolution of site management needs in a manner consistent with this Plan.

Goal:

3.0 To provide opportunities for the protection, and enhancement of wildlife and habitat through the creation of a continuous open space corridor along Dry Creek extending from the Sacramento/Placer County line to the Sacramento city limits.

Policies:

3.1 Where opportunities exist, include compatible agricultural uses within the Parkway.

3.1.1 When appropriate, designate large open areas within the Parkway as passive agriculture. (See Section 4.0 for the definition of passive agriculture.)

3.2 Provide buffer areas within the Parkway of a width that is sufficient for screening views and disruptive noise associated with adjacent land uses and to screen sensitive habitat areas from public intrusion.

3.2.1 When possible, native grasslands and other open space areas shall be used as buffers between the Parkway and adjacent land uses.

3.2.2 Where appropriate, agriculture shall be encouraged in buffer zones between potentially conflicting land uses.

3.2.3 Adverse impacts to the Parkway due to adjacent land uses and activities shall not be allowed or shall be mitigated to the satisfaction of the County Board of Supervisors:

A. Within the floodplain, property line fencing must be consistent with established County Department of Water Resources policies, as described in the Local Floodplain Management Plan, 2001 and the State Reclamation Board.

B. Outside the floodplain, different fencing options may be considered. As conditions for allowing development along the Parkway, property owners will be required to install and maintain appropriate fencing abutting the Parkway. The following methods of fencing are allowed: split rail, open view field fencing; brick or masonry walls up to 3 ft., with an additional upper portion that provides an open view; or wrought iron. In all cases, fencing must be 6 feet high.

C. In order to preserve aesthetic qualities of the Parkway, new residential and appurtenant structures on properties adjacent to the Parkway shall be set back a minimum of 50 feet from the outer edge of the riparian corridor, and an additional 20 feet setback for each additional story.

D. Set back for new commercial structures or additions shall be a minimum of 100 feet beyond the Parkway boundaries for single story buildings and an additional 30 feet set back for each additional story thereafter.

E. All structures constructed adjacent to or within view of the Parkway shall be screened with appropriate trees and shrubs to soften the view from the Parkway. These plantings shall be within a conservation easement on the private property of 20 feet minimum from the Parkway property line.

F. Where possible, land use bordering the Parkway should favor public frontage rather than private frontage. As an example, roads running parallel to the creek are preferred to backyards or backsides of commercial buildings directly facing riparian protection areas.

G. No gates or other accesses will be allowed from private property into the Parkway.

H. If buildings are placed adjacent to the Parkway, the orientation of the buildings should be towards the Parkway, with landscaping that links the appearance of the buildings to the riparian landscape.

I. Adjustment or exceptions may be granted to any of the conditions as part of the development process, due to:

1. Special circumstances, such as parcel size, shape, topography, location of streams, or if the strict application of this ordinance is found to deprive subject property of privileges enjoyed by other properties in the vicinity.

2. The proposed modification will not allow:

    a) The diminishing of natural waterways by bank erosion, sedimentation or siltation.

    b) Development exceeding water quality criteria.

    c) Development increasing the likelihood of flooding of adjoining or downstream lands.

    d) Development causing or accelerating destruction of streamside habitat.

    e) Development determined to be detrimental to public welfare including property.

3.3 Examine mitigation opportunities for proposed on-site and off-site land uses compatible with the Parkway Plan. Where impacts to sensitive habitats cannot be avoided, lost habitat shall be replaced to the functionally equivalent values according to the following hierarchy: (1) on-site mitigation; (2) mitigation within the Parkway.

Goal:

4.0 To provide for public use and trail access opportunities compatible with the goals of the Parkway.

Policies:

4.1 Emphasize the integrated management of passive and limited active recreation within the Parkway.

4.1.1 All recreation activities within the Parkway shall be designed to minimize impact to the natural vegetation, wildlife, habitat and water quality and shall be compatible with natural resource protection.

4.1.2 Group activities shall occur in such a manner that the impact on the natural habitat, as well as other users in the Parkway, is minimized.

4.1.3 Any approved medium or large group activity conducted on any designed pedestrian trail, equestrian trail, or bicycle trail shall be coordinated to minimize the impact on the natural environment, or other Parkway users.

4.1.4 Picnic facilities shall be installed in appropriate locations and shall be limited in size to minimize the impact on the Parkway and other users.

4.1.5 Development of new organized game fields for active recreation shall not be allowed within the Parkway except in "Developed Public Use" areas designated on the Plan and as approved by the Board of Supervisors.

4.1.6 A variety of primitive and developed fishing access areas shall be developed.

4.1.7 Activities and public uses identified in this Plan as incompatible with the Parkway (see Appendix B) shall be prohibited.

4.2 Develop appropriate continuous facilities for bicycle, equestrian and pedestrian use throughout the Parkway compatible with open space and natural resource protection.

4.2.1 Horseback riding shall occur only on designated equestrian trails. Where possible, equestrian trails should be kept separate from bicycle and pedestrian trails. Where practical, trails should be combined with fire breaks and maintenance roads.

4.2.2 Bicycle use shall be restricted to designated trails, roadways, and parking lots.

4.2.3 Paved bicycle trails shall provide adequate widths consistent with the City/County 2010 Master Bikeway Plan to accommodate shoulders for pedestrian use.

4.2.4 Hiking or pedestrian use shall be limited to designated trails.

4.2.5 Where resources are to be protected, access shall be restricted to avoid potential use conflicts.

4.3 Provide controls for the occurrence and type of special events determined as appropriate within the Parkway.

4.3.1 Special group activities that may occur on designated trails shall be limited to organizations with public and civic interests, such as non-profit and charitable groups.

4.3.2 Active recreation special events shall occur in Limited Public Use or Developed Public Use areas only.

4.4 Provide access to the Parkway and its facilities for people with disabilities.

4.4.1 Parkway facilities shall be designed at a minimum to accommodate access for people with disabilities as required by the Americans with Disabilities Act of 1990.

4.5 Provide appropriate linkages to other County and non-County facilities including equestrian and bicycle trails, bicycle lanes, pedestrian access points, and transit stops.

4.5.1 The development of pedestrian, equestrian, and bicycle trails connecting with nearby communities shall be encouraged. Whenever possible, these connecting trails shall be located off-street.

4.5.2 Wherever possible, mass transit routes and stops shall provide public access to the Parkway.

Goal:

5.0 To obtain funding and develop partnerships to facilitate development and management of the Parkway.

Policies:

5.1 Identify and apply for appropriate local, state, and federal grant funds that would be usable on the Parkway.

5.1.1 The County, through the general fund, shall support the Parkway planning, facilities, personnel, and equipment necessary for interpretive and public access programs, in recognition that such programs are major components to positive resource management.

5.1.2 The County shall actively seek potential grant funds available through local, state, and/or federal sources to support the acquisition, planning, design, and development of the Parkway.

5.1.3 Contributions from various interest groups should supplement and enrich County-funded interpretive and public access programs, where possible.

5.2 Identify and incorporate appropriate revenue generating opportunities within the Parkway Plan.

5.2.1 Revenue generating activities identified as appropriate for the Parkway shall be encouraged to be included in the development and management of the Parkway.

5.3 Consider development and implementation of mitigation opportunities within the Parkway for mitigation of public projects.

5.3.1 To enhance or restore natural open space areas within the Parkway, development of mitigation opportunities shall be encouraged.

5.3.2 All mitigation projects within the Parkway shall be consistent with the Parkway goals and shall include provisions for stewardship roles and responsibilities.

Goal:

6.0 To establish realistic and sustainable development and management strategies for the Parkway.

Policies:

6.1 Identify maintenance and operations needs of the Parkway and provide appropriate means to meet those needs during development and long-term operation of the Parkway.

6.1.1 Site-specific development plans shall be prepared consistent with the long-term maintenance and operational needs of the Parkway.

6.1.2 Funding shall be sought to subsidize the maintenance and operations of the Parkway.

6.2 Prioritize specific development goals and create a realistic phasing program.

6.2.1 Planning and management activities within the Parkway shall be consistent with the goals, objectives, and policies of this Plan.

6.2.2 Specific development priorities shall be based on available funding and user demand.

6.2.3 Modification of this Plan or any of its components shall require the approval of the Board of Supervisors in accordance with the public hearing process.

6.2.4 The County of Sacramento Zoning and other applicable ordinances, the Rio Linda/Elverta and Antelope Community Plans, and the County General Plan shall be used when considering uses and activities not otherwise addressed in this Parkway Plan.

6.3 Incorporate safety mechanisms in the development and operations of the Parkway, including flood control, security, and fire control.

Goal:

7.0 To insure continued inter-agency and inter-departmental coordination and cooperation in support of the Dry Creek Parkway and development of the regional trail system within Sacramento County, the City of Sacramento, Placer County, and surrounding communities.

Policies:

7.1 Develop cooperative working relationships with public and private entities to ensure positive pursuit of the Parkway goals.

7.1.1 Actively work with the City of Sacramento, City of Roseville, County of Placer, State of California, City of Folsom, Rio Linda-Elverta Recreation and Park District, and other entities to develop a cooperative working relationship to create the trail linkages envisioned by the Parkway Plan.

7.1.2 Establishment of a voluntary Friends of the Dry Creek Parkway committee shall be encouraged. The committee may consist of concerned community members and representatives from agencies with an interest in the Parkway, including the Sacramento County Department of Regional Parks, Recreation, and Open Space, SAFCA and the Sacramento County Department of Water Resources. A broad range of Parkway stakeholders such as equestrians, bicyclists, hikers, youth sports organizations, educators, and local property owners shall be encouraged to participate in the committee. The purpose of the committee will be to review the development, maintenance, and operations of the Parkway and to make recommendations to the Board of Supervisors to ensure consistency with the goals and policies of the Plan.

7.2 Define governmental responsibilities.

7.2.1 Sacramento County agencies, departments, divisions, and organizations with special interest in Dry Creek shall maintain a cooperative planning and management effort to ensure the success of the Parkway.

A. The Sacramento County Department of Water Resources shall coordinate flood control improvements within the Parkway with the State Reclamation Board and SAFCA consistent with the goals and policies of this Plan.

B. The Sacramento County Department of Regional Parks, Recreation and Open Space shall manage the design, development and operation of the Parkway as defined in this Plan.

C. Input from the Sacramento Urban Creeks Council and other special interest groups shall be sought to ensure the preservation, enhancement and restoration of the creek channel.

D. The City of Sacramento, Department of Parks and Recreation, shall manage the design, development and operation of Hansen Ranch Park, and the Ueda Parkway trail linkage along Steelhead Creek and Robla Creek to the American River Parkway.

7.2.2 The Sacramento County Department of Regional Parks, Recreation and Open Space shall promote the Parkway concept and encourage inter-agency cooperation.

7.2.3 The Sacramento County Recreation and Park Commission shall be the primary advisory body to the Department Director and the Board of Supervisors on Parkway policies, development plans, management plans, public use and private land use comments.

7.2.5 All agencies with jurisdiction within the Parkway shall be encouraged to participate or assist in acquiring properties which will further the goals and policies of the Parkway Plan.

7.3 The Dry Creek Parkway will be planned and managed in a manner that is consistent with existing and future regional parkways, including the American River Parkway, the Ueda Parkway, and the Dry Creek Greenway, to provide a high-quality, integrated recreation and open space resource for the region.

3.0 Parkway Resource Assessment

The Dry Creek Parkway provides a variety of natural resources that benefit and enhance the local community and the region. These include diverse types of vegetation, habitat for aquatic and terrestrial wildlife, and flood conveyance and retention capacity. This Plan includes an assessment of these resources to better support the coordinated management of these resources with the recreational uses of the Parkway.

3.1 Biological Resources of the Parkway

A comprehensive biological resource assessment of the Dry Creek Parkway was done in 1992 as part of the initial Parkway planning effort. The findings of this assessment were field verified in 2001 to identify any significant changes in habitat conditions or special status species considerations. The revised resource assessment (Appendix A) provides information on vegetation, habitat, wildlife, creek channel characteristics, and the impact of hydrology and flooding on biological resources.

The biological assessment shows that the Dry Creek corridor is characterized by a high level of both plant and animal diversity. More than 90 species of plants were identified in the Parkway during summer and winter field visits, and it is likely that other additional species would be found during spring. Plants are a critical component in evaluating habitat value, and this biodiversity is an indication of a relatively healthy ecosystem that provides habitat for a broad range of species. In addition, the continuous corridor of natural open space provided by the Dry Creek Parkway further enhances the quality of this ecosystem by limiting the negative impacts of habitat fragmentation and development.

Wildlife

Many species of wildlife make their home in the Dry Creek Parkway, including birds, fish, and mammals. The most diverse animal group is the birds with over 70 species represented. Over a dozen species of wild mammals are commonly found in the Parkway as well. The riparian habitat along Dry Creek provides migrant birds with nesting sites, cover, and food. These conditions are vital to maintaining bird populations. The variety of open and sheltered habitats provided by the grasslands, crop lands and riparian areas are key to maintaining the biological diversity of both the bird and wildlife populations.

Fisheries

Water quality and quantity are important considerations in preservation of the biological resources in the Parkway. According to the State Department of Fish and Game and field surveys, at least 13 species of fish are commonly found in the reaches of Dry Creek that pass through the Parkway. About half of these are native, including steelhead trout and chinook salmon. These anadromous species must have adequate water in the creek channels during their

migration seasons to be able to swim upstream to their spawning grounds in upper Dry Creek. Excessively warm water, and the presence of surplus nutrients, pesticides and herbicides entering the creek from surface runoff can degrade the aquatic habitat.

Special Status Species

A search for rare and endangered species of plants and animals and threatened habitats was done using the California Department of Fish and Game Natural Diversity Data Base for the Rio Linda Quadrangle. Several sensitive species were listed for this area including great blue heron (*Ardea herodias*), great egret (*Casmerodius albus*), burrowing owl (*Athene cunicularia hypugea*), Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus caeruleus*), western pond turtle (*Clemmys marmorata marmorata*), giant garter snake (*Thamnophis gigas*), vernal pool tadpole shrimp (*Lepidurus packardi*), vernal pool fairy shrimp (*Branchinecta lynchi*), California linderiella (*Linderiella occidentalis*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), dwarf downingia (*Downingia pusilla*), legenere (*Legenere limosa*). Additionally, habitat for valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) may be found in the vicinity of the study area. Of these species, only the great blue heron and great egret were seen during the field assessment. A large rookery is located near the Hansen Ranch property that is used annually by great blue heron and great egret.

Swainson's hawk, a state-listed threatened species, and giant garter snake, a state and federally-listed threatened species, are found in the northern part of the county, especially to the west in the Natomas region. There are numerous records of Swainson's hawk nests within 10 miles of the Dry Creek Parkway area. There is an unconfirmed nesting site near the confluence of Dry Creek and Steelhead Creek (Furgo-McClelland, 1992). The Dry Creek Parkway could potentially be utilized by Swainson's hawk as both foraging and nesting habitat. Steelhead trout (*Oncorhynchus mykiss)* a federally-listed threatened species, also use Dry Creek as a migratory pathway and possibly as rearing habitat for juveniles.

Scientific Name	Common Name
Ardea herodias	Great Blue Heron
Casmerodius albus	Great Egret
Athene cunicularia hypugea	Burrowing Owl
Buteo swainsoni	Swainson's Hawk
Elanus caeruleus	White-tailed Kite
Clemmys marmorata marmorata	Western Pond Turtle
Thamnophis gigas	Giant Garter Snake
Lepidurus packardi	Vernal Pool Tadpole Shrimp
Branchinecta lynchi	Vernal Pool Fairy Shrimp
Linderiella occidentalis	California Linderiella
Gratiola heterosepala	Boggs Lake Hedge-hyssop
Downingia pusilla	Dwarf Downingia
Legenere limosa	Legenere
Desmocerus californicus dimorphus	Valley Elderberry Longhorn Beetle

Source: California Department of Fish and Game Natural Diversity Database, 2001

Table 1 - Dry Creek Parkway Special Status Species

Biological Resource Preservation

Careful planning for the Dry Creek Parkway will allow for the preservation of these valuable natural resources while accommodating the existing land uses and additional passive and limited active recreation uses. For example, appropriate agricultural land uses can support wildlife preservation. Grain crops and grazing/pasture lands are good foraging sources for animals and birds, especially raptors. The variety of open spaces in the Parkway, ranging from managed agricultural land, to developed parks, to natural riparian corridors is directly related to the high biological diversity of the Parkway (Figure 5). However, it is critical that management practices associated with these land uses be designed to preserve the Parkway resources. The use of herbicides, pesticides, and fertilizers on public and private property must be managed so that runoff into the creek is prevented. Key natural areas should be protected from unrestricted human access to avoid damage to vegetation, bank erosion, and disturbance of wildlife. Only those recreation activities and amenities compatible with preservation of the Parkway's valuable natural resources shall be permitted.

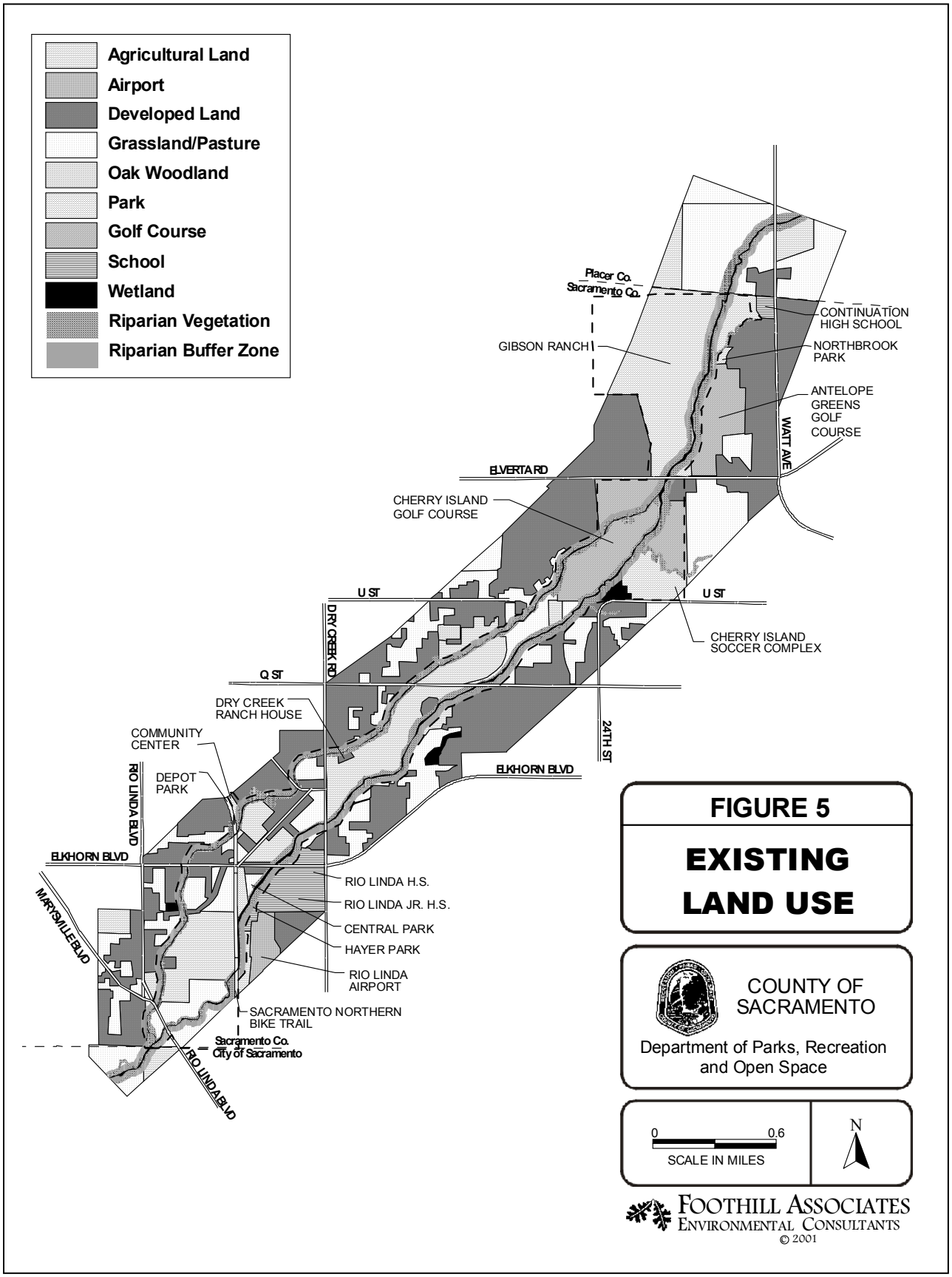

Figure 5 - Dry Creek Parkway Existing Land Use

3.2 Flood Control

The Dry Creek Parkway is located essentially at the mouth of the 116-square mile Dry Creek watershed. The headwaters of Dry Creek are located in Placer County near Penryn, Newcastle, and Granite Bay and in the Orangevale area in Sacramento County. Tributaries to Dy Creek include Antelope Creek, Clover Valley Creek, Secret Ravine, Miner's Ravine, Strap Ravine, Linda Creek and Cirby Creek. Below Elverta Road, Dry Creek splits into two channels. The Main Fork is to the south and carries flows year round. The North Fork, which is several feet higher than the Main Fork functions as an overflow channel. The flow in Dry Creek through the Parkway can vary dramatically with as little as 8-30 cfs in the driest months to approximately 16,000 cfs during the peak flow of a 100-year storm.

Flood History

Because of its location in the watershed, the Dry Creek Parkway potentially receives stormwater and other runoff from the entire watershed. The lower reaches of Dry Creek and its tributaries, including the section in the Parkway, have an extensive historical record of flooding, with flooding typically occurring between October and April. Nearly the entire Parkway is located within the 100-year floodplain (Figure 6), and much of the Parkway is subject to flooding in a 10-year storm event. The worst flood conditions occur when a period of intense precipitation follows prolonged rainfall that has saturated the soil.

Serious floods accompanied by property damage occurred in December 1955, April 1958, October 1962, December 1964, March 1983, February 1986, January 1995, and January 1997. The floods of 1983, 1986, and 1995 were the most severe and resulted in extensive damage. The areas most susceptible to damage in these events are the homes on Cherry Lane, and the homes and businesses along Elkhorn and Rio Linda Boulevards. Flooding also occurs from Elkhorn Boulevard to the Natomas East Main Drainage Canal.

Flood Management and Planning

The Dry Creek Watershed Flood Control Plan, prepared in 1992 for the Sacramento County Water Agency and the Placer County Flood Control and Water Conservation District (PCFCWCD), provided an analysis of hydrological and flood control issues for the entire watershed. Subsequent hydrologic studies were prepared for the Sacramento Area Flood Control Agency (SAFCA) Natomas Area Flood Control Improvements Project (1992), the NEMDEC West Levee and Robla Creek South Levee Improvements Project (1997), and the Lower Dry Creek and Robla Creek Levee Improvements Mitigation Project (1998). After the severe flooding in 1995, a coordinated effort including agencies from Sacramento and Placer counties convened the Dry Creek Hydrology and Hydraulics Peer Review Committee to update and revise the available hydrology information for Dry Creek. Conjunctive flood detention and stream restoration opportunities in the Placer County portion of the watershed were addressed in a recent study commissioned by SAFCA (Swanson, 2000). The most recent effort to address flooding in the Sacramento County portion of Dry Creek is found in the Sacramento County Local Floodplain Management Plan (Department of Water Resources, 2001).

Flood Control Measures

Since 1992, SAFCA has implemented several important flood control features in the Rio Linda area. These include construction of a levee on the north side of Dry Creek downstream of Rio Linda Boulevard and raising the south levee. Additional levee construction and raising of existing levees by SAFCA will provide further protection to areas in Rio Linda near the mouth of Dry Creek. Other potential flood control measures to address the flooding in the Rio Linda area are being considered jointly by SAFCA and the PCFCWCD. These include the construction of additional detention capacity upstream of the Parkway in Placer County, and ordinances that restrict the amount of runoff associated with new development. Placer County has adopted regulations that require new developments to retain storm water onsite to prevent an increase in peak flows associated with the runoff coming from additional impervious surface within the watershed. While on-stream detention is not planned for the Dry Creek channel within Sacramento County, new development in Placer County will not be allowed within the floodway if it will cause an offsite increase in the 100-year flood elevation.

Acquisition

SAFCA, the Sacramento County Department of Water Resources, and the Department of Regional Parks, Recreation and Open Space have undertaken a program in which homes located within the floodway that cannot be protected are being targeted for purchase and removal. The Local Floodplain Management Plan for Sacramento County identifies approximately 26 homes within the Parkway as repetitive loss properties. To date, flood mitigation measures have been implemented for 11 of these. The mitigation measures include buyout of 8 properties, and flood proofing, or raising structures above the flood elevation for the others. The County and SAFCA are continuing to pursue acquisition or elevation of the remaining repetitive loss properties. Five other properties in the floodway have also been acquired, and SAFCA and the County of Sacramento ultimately intend to pursue rezoning of the Dry Creek floodway as open space. Grant funds for additional acquisition are being pursued from the Federal Emergency Management Agency (FEMA). SAFCA, the Sacramento Valley Open Space Conservancy and the County have also developed conservation and flood easements for several Parkway properties located at the southeast corner of the Parkway. These recorded land rights restrict land uses in these areas in addition to any restrictions contained in the Parkway plan. The entities holding these easements will need to recognized as partners in developing future uses on these parcels. Figure 7 illustrates the existing area under public ownership within the Parkway.

Flood Management Policies for the Parkway

Sacramento County has adopted a number of policies that regulate development and land use management activities within the Dry Creek floodplain. These policies are found in various documents, including the General Plan, the Rio Linda/Elverta Community Plan, the Floodplain Management and Interim Floodplain Development Policies, and ordinances regulating stormwater, grading, drainage, and erosion control. The Local Floodplain Management Plan provides additional guidance including development policies that address buildable area, access, fill, fencing, pier foundations, levees, and easements. The Dry Creek Parkway Recreation Master Plan will be implemented in compliance with these policies, recognizing that maintaining

and enhancing the flood conveyance capacity of the Parkway is one of the guiding objectives for the Parkway concept.

Implementation Roles

Planning and implementation of flood control measures within the Dry Creek Parkway will be accomplished through the coordinated efforts of the Sacramento County Department of Regional Parks, Recreation and Open Space, the Department of Water Resources, the State Reclamation Board and SAFCA. SAFCA has primary responsibility to fund, design, construct, and maintain the proposed channel and levee improvements along Dry Creek. The Department of Water Resources implements and enforces countywide policies related to flood management, and provides annual inspections and maintenance of the creek and associated tributaries. Parkway floodplain management planning is shared by the Department of Water Resources and SAFCA. The Department of Regional Parks, Recreation and Open Space will include SAFCA and the Department of Water Resources in the design and review of proposed Parkway amenities and management plans to verify that Parkway implementation is consistent with their mutual flood control objectives.

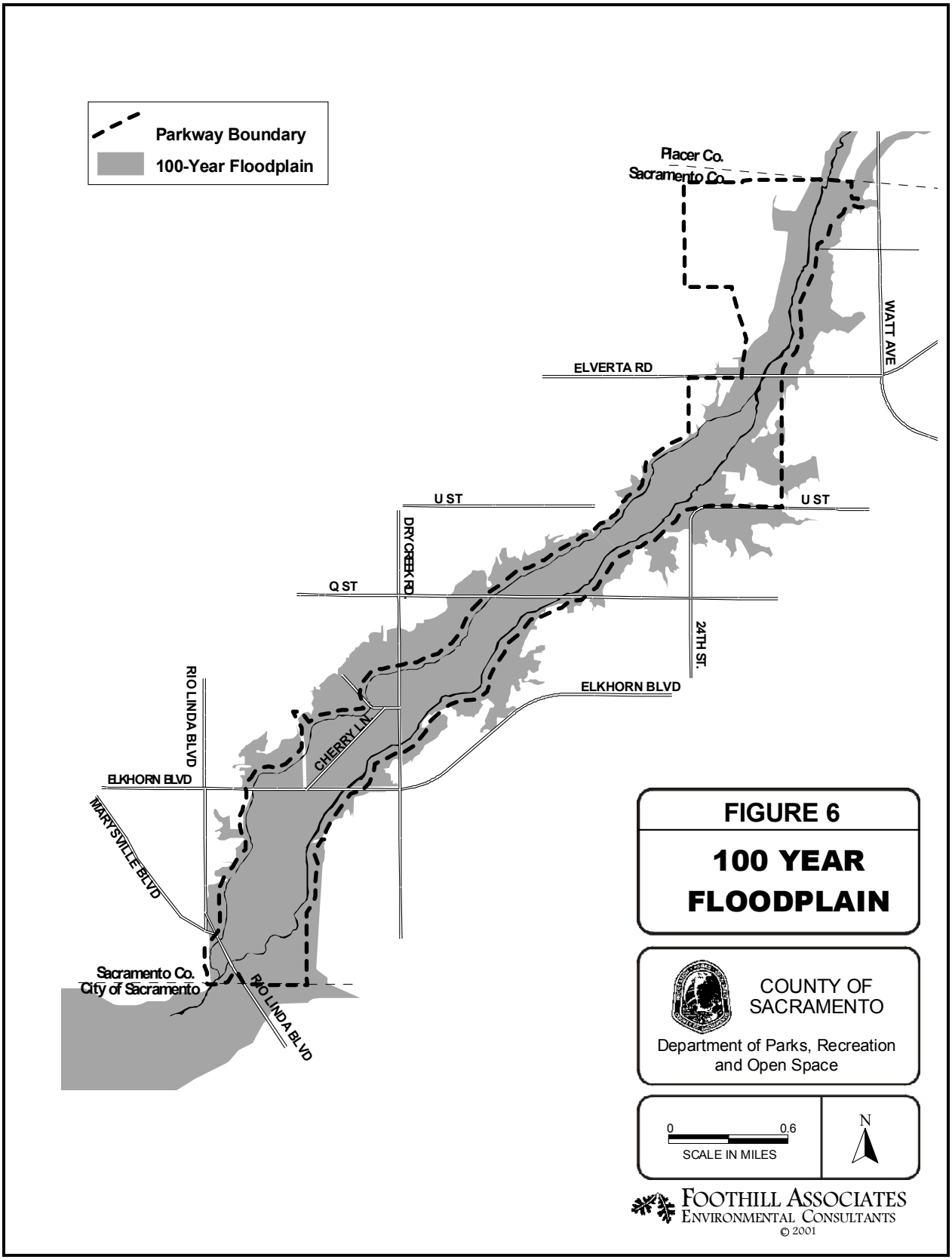

Figure 6 - 100-Year Floodplain

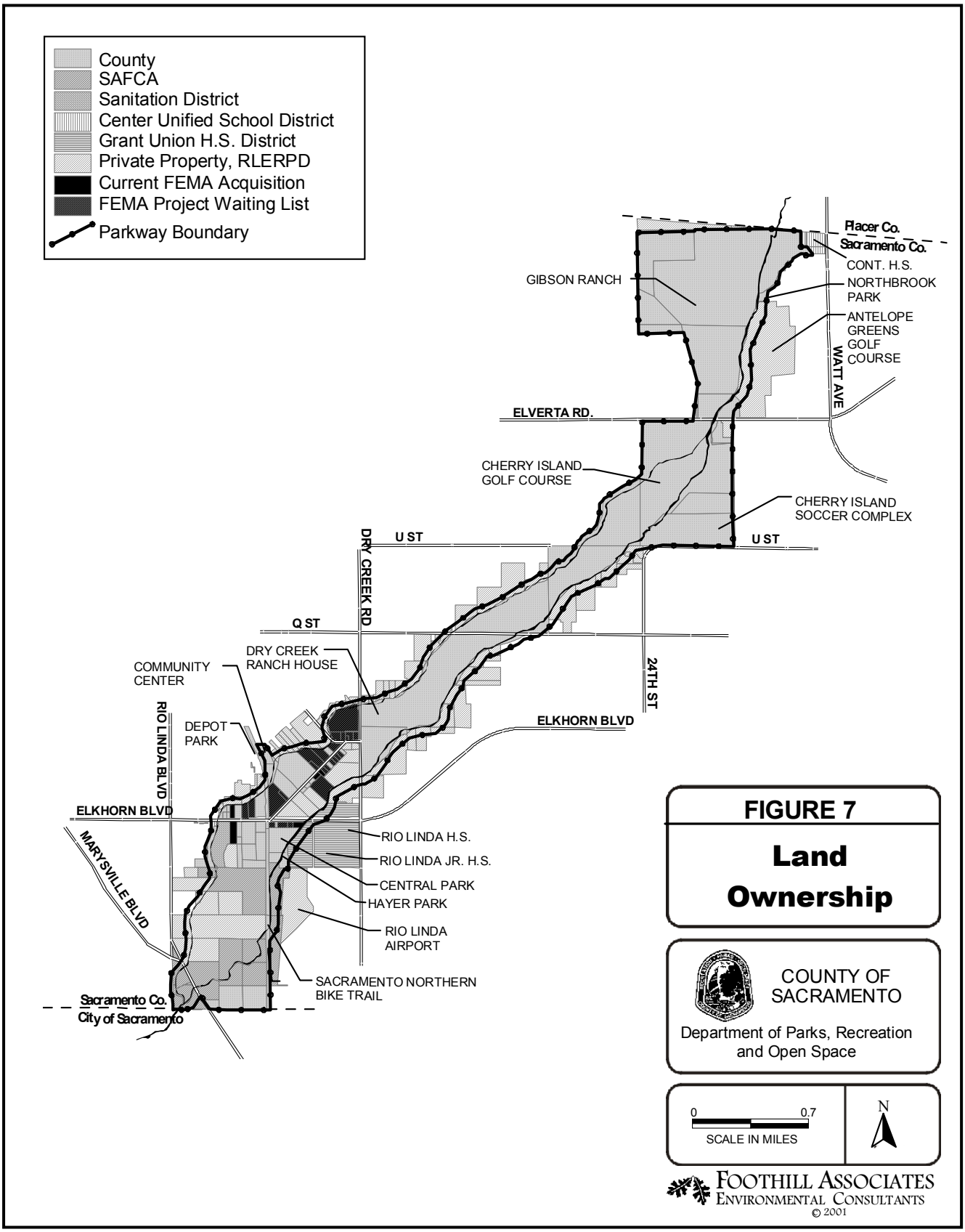

Figure 7 - Dry Creek Parkway Ownership

4.0 Public Uses of the Parkway

The multiple objectives of the Dry Creek Parkway include the preservation of natural resources, flood conveyance capacity, and the rural character of the Rio Linda/Elverta community while providing access for public recreation. The realization of these objectives requires careful consideration of which activities and land uses will be permitted within the Parkway. Because this Plan is intended to guide current and future Parkway planning and implementation decisions, it provides specific land use designations for areas within the Parkway and evaluates a number of potential recreation activities for their suitability within each designation. It should be noted that several conservation and flood easements are recorded on properties within the Parkway. Activities within these parcels are thus constrained by the terms of the recorded easements as well as the direction provided by the Dry Creek Parkway Recreation Master Plan. This Plan also provides guidance on how public access, trails, and public safety are to be addressed in the implementation of Parkway amenities and activities.

The discussion of public uses of the Parkway includes a number of terms related to recreation and planning that are widely used but have varying interpretations. These terms are defined below for the purposes of this Plan to insure that the intent of Plan is clear and that future Parkway planning decisions are consistent with adopted Parkway vision.

Passive Recreation

Passive recreation activities are those that can be performed by an individual or several people without the use of developed facilities or motorized recreation vehicles. Passive recreation is normally not organized and has minimal impacts on the natural environment and adjacent land uses. Examples include picnicking, hiking, nature study, and casual bicycling. This definition does not include bicycle racing and training, or use of all-terrain bicycles off designated bicycle trails.

Active Recreation

Active recreation activities usually include multiple participants and/or the use of developed facilities. Active recreation may include organized activities, spectator events, or the use of motorized recreational vehicles, and may have a potential for adverse impacts on the natural environment, other Parkway users, or adjacent land uses. Examples include golf, soccer, softball, and volleyball.

Group Activity

Most recreational activities permitted in the Parkway could involve a group. While Group Activities are a recognized use of the Parkway, they may conflict with the habitat goals and other Parkway uses depending on the type of activity and the size of the group. For this reason, groups will be defined as follows whether assembled for active, passive, competitive, or noncompetitive purposes: large group is defined as a group of over forty persons; medium group is defined as a

group of twenty-one to forty persons; and a small group is defined as a group of eleven to twenty persons.

Special Event

A Special Event is defined as an organized activity that is not normally provided for in the Parkway, but is permitted on the Parkway subject to issuance of a special County permit. It is also an activity without permanent adverse effects to the natural environment. Special Events shall occur only in specified areas (limited or developed public use area designations and specified trails) of the Parkway, and limited in frequency to avoid potential adverse impacts on the wildlife and natural environment. Examples include organized races, running or walking events, Ruby Jubilee, rodeos, major group picnics, and Easter Eggcitement. A Charitable Event is a type of Special Event in which the purpose of conducting such an event benefits a charity that has a 501(c) 3 or other charitable classification from the State or Federal governments and where all profits, if any, are donated to the charity.

Passive Agriculture

Passive Agriculture is defined as the cultivation of crops or fields which are compatible with adjacent riparian habitats and can be classified as open space. The methods and materials used in the cultivation of these crops should be suitable for providing foraging and nesting habitat to wildlife. Such crops or fields include wheat, barley, alfalfa, and pasture lands for seasonal grazing of livestock, and do not include vineyards, orchards, or truck crops.

Active Agriculture

Active Agriculture is defined as crops or fields not described above. Active Agriculture includes intense farming and grazing techniques, which could have adverse impacts to the natural environment by displacing raptors or other wildlife through reduction in available foraging and/or nesting areas and extensive use of pesticides, herbicides, and fertilizers, which can be detrimental to plants, wildlife, or water quality.

4.1 Parkway Land Use

Six general Land Use Categories have been developed to describe the allowed land uses within the Parkway. These land use designations are illustrated on the Parkway concept plans contained in Chapter 5 of this Plan (Figures 8, 9, and 10). Together the land uses describe a continuum from non-disturbed land to the most intensely developed land. The six categories are: Open Space Preserve; Nature Study Area; Agriculture; Historic/Cultural Resource; Limited Public Use; and Developed Public Use. The six land use categories are defined below.

Open Space Preserve

This designation is utilized for special areas that will be preserved as open space because they are valuable in their present or potentially restored natural state. Mitigation or restoration may

occur in this area. The Open Space Preserve designation does not necessarily imply public ownership or use, but encourages that the land remain undeveloped, using measures as necessary to accomplish its preservation. It is not the intent of this designation to regulate land uses allowed on private property in accordance with the appropriate zoning ordinance.

Nature Study Area

This designation is applied to special habitat areas that can sustain light to moderate foot or equestrian traffic on designated trails, but would be easily disturbed by heavy use. This includes those areas with special characteristics of flora, fauna, topography, and available surface water. This category is intended to permit only those limited activities and improvements that would not be detrimental to the environmental qualities or features. Nature Study Areas are to be set aside for study of the natural environment, and any proposed activities or facilities should be in agreement with the interpretive and educational policies of this Plan. Emphasis is on protection and restoration. Mitigation projects may occur in this area.

Historic/Cultural Resource Area

This designation is applied to areas for the purpose of preservation and interpretation of historical and cultural resources. Cultural resources include historical and archaeological settings, sites, buildings, features, artifacts and/or areas of ethnic, historical, religious or socio-economical importance. Public use near or upon known sites should be undertaken only when adequate security is available to protect the site and its resources. Permitted development and activities in this designation should avoid or minimize any adverse effects to such resources. For example, some areas may have limited public use due to the presence of resources that have not yet been evaluated or that are fragile; other areas may offer a multitude of educational and recreational opportunities. This land use designation can both preserve resources and provide community benefits by linking the present with the past in dynamic cultural resource management and historic preservation activities. The Dry Creek Ranch is included in the Historical/Cultural Resource Area designation.

Agricultural Reserve

This designation is applied to lands on which passive agricultural uses are determined compatible with open space values. Public trails may be allowed but will be limited to locations that do not conflict with agricultural operations or create public safety issues. Mowing, seasonal grazing, and watering practices shall be coordinated to enhance wildlife values. Areas designated as Agricultural Reserves may eventually be changed to the Open Space Preserve or Nature Study Area land use designation depending on the future economic feasibility of agriculture or the demand for other habitat or flood control uses.

Limited Public Use Area

The Limited Public Use Area designation is applied to lands on which passive recreation and some limited active recreation may take place without development of extensive facilities. The

Limited Public Use Areas generally have characteristics of topography, vegetation, and wildlife habitat which are conducive to controlled passive recreation, but are constrained from extensive development due to size, access, adjacent residential neighborhoods, the need to protect natural resources, or other special circumstances. Limited Public Use Areas may serve as buffers between developed recreation areas and more restrictive areas.

Developed Use Area

The Developed Use Area designation is the most intensive land use category, and is applied to areas able to withstand intensive development and heavy use. The purpose of the Developed Use Area is to identify areas appropriate for active recreational development so that more sensitive areas can be retained in their more naturalistic state. It is the intent of this Master Plan to restrict the Developed Use Area designation to those areas where such activities already exist. The Developed Use Area designation includes Gibson Ranch, Cherry Island Golf Course, Cherry Island Soccer Complex, Central Park and Horse Arena, and the Rio Linda/Elverta Community Center.

Developed Use Areas are expected to attract the largest concentration of users. If the level of public use in a Developed Use Area adversely impacts surrounding natural areas, it may be necessary at times to close or restrict use to avoid degradation of the natural resources and allow resource recovery and restoration. To minimize the necessity for such actions, activities may be restricted to certain areas, or the intensity of users in a particular area may be limited. The intent of this philosophy is to provide recreational opportunities for park users, but not at the expense of the natural environment.

4.2 Potential Recreational Uses

A variety of potential recreational uses and activities could occur within the Dry Creek Parkway. However, not all of these are compatible with the Parkway goals and policies. In addition, evolving recreation trends and changing community needs will generate new ideas for Parkway activities and facilities that will need to be evaluated for consistency with the Parkway vision. Appendix B provides a table showing many of the public uses that could be proposed for the Parkway, and criteria for evaluating how well the uses fit the Parkway vision. Comments are included to indicate potential adverse impacts on natural resources. The criteria used in this table, together with objectives, goals and policies in this Plan, help to explain why certain uses are appropriate for the Parkway and others are not. As additional uses are contemplated in the future, the criteria may be applied to determine which new uses should be incorporated into the Parkway and to eliminate those that are inconsistent with the goals and policies of the Parkway plan

Each potential activity is categorized as active or passive. Passive recreation uses generally requires less equipment, parking and infrastructure and involve fewer people than active uses. Activities are also analyzed as to their potential to generate revenue. Examples of such activities might include a horse rental concessionaire or charging a fee to vehicles upon entry into the Parkway. The potential for an activity to generate revenue is an important consideration because

future operation and development of the Parkway will be largely driven by available funding resources. Revenue-generating activities are discussed in more detail later in this section.

Many activities may potentially be in conflict with the adjacent landowners. An example of this type of activity would be an evening sporting event, which could be considered disruptive to neighbors due to glare from night lighting or crowd noise. However, a buffer zone can ease or eliminate a potential conflict associated with certain activities. Buffer zones may be natural barriers, a vegetative screen, or an expanse of open space that can help hide or muffle the visual or noise impact associated with a conflicting land use.

Habitat and wildlife can also be impacted by heavy use of an area. For example, a marathon could cause not only soil and grass compaction, but could also generate large, noisy crowds close to wildlife nesting areas. Therefore, the evaluation should consider whether an activity could have an adverse affect on the natural habitat.

The parking facilities required for a public activity must also be considered in the evaluation of potential uses. Public access corridors and parking, suitable for people with disabilities, are needed for safe and controlled entry into the Parkway. Consideration should be given to adjacent landowners and sensitive vegetation and wildlife habitat when determining access points. These access points and corridors shall be established with minimal impact upon the natural resources, whenever possible.

An additional criterion that applies to any anticipated human activity or use is the need for safety controls and access for emergency vehicles. Access for emergency vehicles may be limited in some areas and may therefore constrain the types of allowable activities.

4.3 Land Use Restrictions on Recreational Activities

Recreational uses that were determined to be potentially appropriate for the Dry Creek Parkway were then evaluated to identify which areas of the Parkway were suitable for the activity by land use designation (Table 1). For example, children's play areas require permanent play structures and access to parking. This activity is, therefore, to be allowed only in "developed public use" areas. Bicycling requires only paved trails, and when properly designed and managed, it has minimal impact on both habitat and adjacent property owners. Therefore this activity may potentially be allowed in all the Parkway land use areas.

These restrictions apply only to the development of new facilities within the Parkway and do not impact existing uses on private property that are allowed under the applicable zoning regulations.

Activity	Open Space Preserve	Nature Study Area	Limited Public Use Area	Developed Use Area	Agricultural Area	Historic or Cultural Resource Area
Amphitheater				•		
Arboretum		•	•	•		•
Archery Range			•	•		
Baseball				•		
Basketball				•		
Bicycling (Designated Trails)	•	•	•	•	•	•
BMX/All Terrain Cycling				•		
Boat Launch (Non-motorized)			•	•		
Boating (Non-motorized)			•	•		
Botanical Garden		•	•	•		
Camping (Approved Group - Day)			•	•		•
Overnight)			•	•		•
Chess/Checker Tables			•	•		•
Children's Play Area				•		
Community Center (Youth, Teen, Senior, etc.)				•		
Dog Park				•		
Dog Trials				•		
Equestrian Center				•		
Farmers' Market			•	•	•	•
Fish Hatchery		•	•	•		
Fishing/Small Piers		•	•	•		
Food Service (Mobile)			•	•		•
Food Service (Permanent)				•		
Football				•		
Frisbee Golf			•	•		
Hiking/Nature Trails (Designated)	•	•	•	•	•	•
Horse Boarding				•		
Horseback Riding (Designated Trails)	•	•	•	•	•	•
Horseshoe Pits			•	•		•

Table 2 - Activities Allowed in Land Use Areas

(continued on next page)

Activity	Open Space Preserve	Nature Study Area	Limited Public Use Area	Developed Use Area	Agricultural Area	Historic or Cultural Resource Area
Hot Air Balloons (Launch/Land)				•	•	
Kite Festival			•	•		
Memorial Grove		•	•	•		•
Native Plant Nursery				•	•	
Natural History Museum				•		
Nature Center Building			•	•		
Nature Study	•	•	•	•	•	•
Painting/Sketching	•	•	•	•	•	•
Photography	•	•	•	•	•	•
Picnicking (Group & Family)			•	•		•
Polo Field				•		
Portable Performance Stage			•	•		
Recreation Rental & Retail				•		
Restrooms			•	•		
Restoration/Mitigation	•	•				
Roller Skating/Blading (on paved		•	•	•	•	•
Shuffel Board				•		
Skateboard Park				•		
Skateboards (on paved trails)	•	•	•	•	•	•
Soccer				•		
Special Events Staging (bike races, triathalons, etc.)			•	•		
Special Use Facility (weddings, parties, etc.)				•		•
Swimming Pools				•		
Tennis Courts				•		
Trail Staging Area (unpaved)			•	•		
Volleyball				•		
Walking/Jogging	•	•	•	•	•	•

Table 2 - Activities Allowed in Land Use Areas

(continued from prior page)

4.4 Non-Recreational Uses of the Parkway

While the focus of the Dry Creek Parkway is to provide public open space for recreation, habitat value, and flood protection, certain commercial activities and public utility projects may be allowed that complement these objectives or address an essential pubic need.

Commercial Activities

Commercial activities which would be permitted to occur on the Parkway could be operated by a private concessionaire, a non-profit foundation, or by the County. Concessions are generally operated for a profit with the authorization of the landowner. Concessions are awarded to a business or an organization when a service can be performed more efficiently by such entities than by the County, or when the County does not want to compete against the private sector.

Commercial activities can be divided into two categories and should be consistent with the Plan:

1) Commercial Services include provision of services, such as garbage pickup, maintenance of grounds and structures, professional instruction, and rental and boarding of horses.

2) Commercial Sales include the selling of products, such as food and beverages, recreation equipment, "convenience items", and other merchandise.

The potential for other types of commercial activities to occur within the parkway is not limited to those mentioned above. However, all proposed commercial activities will be examined by the Sacramento County Department of Regional Parks, Recreation and Open Space and the Board of Supervisors to determine their value to the public and appropriateness to the Parkway. Although there are many potential commercial activities that could take place in the Parkway, most are inconsistent with the Plan's objective of retaining and restoring the natural habitat. These types of activities could, however, occur on adjacent private property, assuming there is proper zoning.

Public Utilities

Installation of any public utilities within the Parkway shall be consistent with the goals and policies of the Plan and require approval by the Board of Supervisors. The evaluation of proposed installations shall consider the impacts to the Parkway resources, as well as potential mitigating circumstances, such as revenues for Parkway maintenance or acquisition, and the value of such installations to the community. Potential impacts to be considered include, but are not limited to, diminished habitat value, recreational opportunities, and scenic value.

4.5 Revenue-Generating Activities

Fiscal constraints are realistic issues to be considered when creating a new park or parkway. The costs of maintaining and operating a Parkway can be high. In light of on-going competition for limited County resource, the inclusion of revenue-generating activities to offset long-term

maintenance and operations expenses in new development is critical. Appendix B lists some of the potential activities that may offer opportunities to generate revenue. The list below identifies additional revenue-generating activities appropriate to the Parkway:

1) Vehicle entry and trail use fee

2) Special youth fishing derbies at the Nature Center

3) Special Events facility rental at the Dry Creek Ranch and developed recreation sites for weddings and/or private parties

4) Bike Rental shop

5) Special Nature Center programs

6) Agricultural leases

7) Native plant nursery

All potential revenue-generating activities on public property within the Parkway must be approved by the Board of Supervisors and be consistent with the objectives, goals and policies of this Plan.

4.6 Public Access, Roads and Trails

Implementation of the Dry Creek Parkway will require a variety of access points, roads, and trails. It is important that these features be designed in a manner that will facilitate the recreational uses of the Parkway while minimizing the adverse impacts on habitat, wildlife, vegetation, water quality, flood conveyance, and adjacent land owners. For this reason, access points, roads, and trails should support multiple uses (pedestrians, bicycles and equestrians) where feasible.

The designation of where Parkway access points will be located and how they will be designed requires the consideration of several issues. These include: 1) balancing the needs of natural resource protection and recreation, 2) providing linkages to other trails adjacent to the Parkway, 3) providing appropriate public access controls, 4) ADA compliance, 5) safety, and 6) minimizing impacts to adjacent landowners. The above issues, in concert with the goals and policies of this Plan, shall be considered in the planning and development of all access points, roads and trails.

4.6.1 Access Points

There a number of different types of access facilities that will need to be provided for Parkway visitors to maximize the recreational opportunities of the Parkway. These include:

Pedestrian Access

Pedestrian access generally has few if any improvements, minimal signage, and leads to hiking trails or activity areas. Safety considerations include visibility of and adequate separation from vehicular traffic. Parking area is not normally provided.

Pedestrian/Bicycle Access

This access type can lead to combined pedestrian and bicycle trails or activity areas. The access point shall be designed to provide safe access and egress for both pedestrians and cyclists, including adequate visibility and passing width. Materials used to construct this type of access shall be all-weather and appropriate for the specific land use designation. Parking area is limited

Equestrian, Pedestrian, and Bicycle (Multi-Use) Access

This access type can lead to all trails and will meet the same requirements as the Pedestrian/Bicycle Access. Parking area is limited.

Emergency/Service Vehicle Access

This access type can lead to trails and activity areas, and parking areas may be required. Signage may be required for safe egress to public roads, and to indicate limited usage. Gates, bollards, or other access control devices may be used.

Parking

Parking can be accommodated either inside or adjacent to the Parkway in public facilities. Where possible, parking should be accommodated outside of the Parkway provided that safety and access needs can be addressed. Parking lots shall be appropriately located to minimize adverse impacts to the adjacent neighborhood. The parking lots shall be limited in size and the design shall be appropriate for the specific land use designation and accessible for Parkway visitors with disabilities.

Equestrian Staging

Equestrian staging areas should be provided along equestrian trails. The size of the area should accommodate safe loading and unloading of horses, ample turnaround space, and convenient on-site auto/trailer parking. These staging areas should include unpaved surfaces (e.g. turf or other), tethering and watering facilities, and defined boundaries for horse access.

Transit Linkages

Transit linkages and alternate modes of transportation shall be encouraged along the Parkway, including the coordinated planning of bus stops at major Parkway access points. Areas designated as capable of accommodating special events shall also have public transit linkages provided in order to ease on-site parking requirements.

Fishing/Boating Access

Fishing access can be located at strategic points along Dry Creek. Some access points shall be combined where vehicle access and parking lots are provided, and others shall be provided via pedestrian accesses. Conflict with other users within the Parkway should be minimal since optimal fishing conditions occur in early mornings and late evenings while the majority of other Parkway use occurs during the mid-morning to the mid-afternoon hours. The design of fishing structures at fishing access points may vary depending on available space and anticipated levels of use.

4.6.2 Roads

Motorized vehicular travel within the Parkway and not on designated public streets shall be strictly limited to maintenance, security patrol, and emergency use to protect life and natural resources. Paved roads shall be allowed, where appropriate, in "Developed Recreation Areas" only. These roads shall be paved, clearly marked, and maintained to restrict vehicles to authorized routes. Development of roads shall comply with the following:

1) With few exceptions, roads should not permit through passage between access points, except for maintenance and emergency use.

2) Vehicular accesses should be perpendicular to the creek rather than parallel where feasible.

3) Roads shall not cut through sensitive natural areas.

4) Use of non-public roads shall be limited to maintenance and emergency purposes. (See Section 4.7 - Public Safety)

5) All unnecessary existing roads on public property shall be eliminated and the areas restored.

4.6.3 Trails

This Plan envisions the Parkway as a unit bound together by the Dry Creek waterways and a system of equestrian, hiking and bicycle trails. The trail system proposed under this Plan is a key element in a 70-mile regional trail system connecting recreational resources managed by Sacramento County, Placer County, the City of Sacramento, the City of Roseville, and the State of California. As such, the trails within the Parkway should be designed to be consistent with commonly recognized standards for public trails. The City/County 2010 Bikeway Master Plan standards for bicycle trails shall be followed. In planning and designing trails for the Parkway, the following issues should be considered:

1) Compatibility of trail types as they affect public safety, aesthetics and the natural environment.

2) Appropriate trail surfaces, widths, and clearance.

3) Type of trail to accommodate need (i.e. multi-use trail versus specific use trail).

4) Combining emergency and maintenance roads with compatible trail types.

Following are the recommended specifications for the various types of Parkway trail types.

Equestrian Trails

Width:	6' Wide, minimum
Surface:	Dirt
Terrain:	Varied
Separate:	Yes

Pedestrian Trails

Width:	6' Wide, recommended; 3' Wide, minimum
Surface:	Variable, Dirt to paved (wheel chair accessible)
Terrain:	8%, maximum
Separate:	When possible

Bicycle/Pedestrian Trails

Width:	2-Way -- 12' minimum, with minimum 3’ D.G. shoulder for pedestrian use
Surface:	Paved
Terrain:	5%, maximum
Separate:	When possible
Speed:	15 MPH, maximum

Access for Disabled Persons

Access for persons with disabilities shall be provided whenever feasible. The disabled recreationist shall be offered a wide range of opportunities throughout the Parkway. The main routes to major facilities and/or events shall be accessible by people with disabilities. Such access shall consider adequate widths, appropriate grades, turning areas, landings, surface materials, and handrails. Proposed facilities and accesses shall conform to the Americans with Disabilities Act of 1990 (ADA).

Bridges

Several vehicular bridges presently cross the Dry Creek Parkway. Such structures include the Elverta and Elkhorn crossings. These bridges and their use affect the aesthetic and natural values of the Parkway. Impacts include noise, visual intrusion, pollution, damage to vegetation, and indiscriminate access. In the planning of any bridge widening or the installation of additional bridges across Dry Creek, impacts to the scenic and habitat value of the Parkway and the degradation of natural areas shall be key considerations. Mitigation shall be required to compensate for such impacts.

Non-vehicular bridges shall consider the same impacts associated with vehicular crossings. These crossings shall be designed to accommodate pedestrians, horses, bicycles, and maintenance/emergency vehicles.

4.7 Public Safety

Safety and security measures are an integral part of the planning, development, and management of the Dry Creek Parkway. These measures include activities of the park rangers, sheriff's patrols, and fire districts and are essential to the success and security of the Parkway, its users, and the surrounding community. As with all human uses and activities within the Parkway, public safety and security operations will be conducted in a manner sensitive to the goals and policies of the Parkway Plan, and in compliance with existing applicable local, county, state and federal regulations.

4.7.1 Emergency Vehicle Access

To minimize conflicts between emergency vehicle access, public vehicle access, and other users of the Parkway the designation of emergency and maintenance routes in areas closed to public motorized vehicular use is necessary. Development of emergency access and maintenance routes within the Parkway shall be consistent with the goals and policies of this Plan.

4.7.2 Fire Breaks

Fuel loads along the edge of the Parkway should be managed by creating shaded fuel breaks or fire breaks, on adjacent property for a distance of 40' away from the Parkway boundary, thereby reducing the opportunity for fire movement into and out of the Parkway.

Reducing the potential danger from fire within the Parkway and to the adjacent properties is essential due to the high fuel load in the Parkway especially during the dry periods of the year. . Shaded fuel breaks are achieved by thinning overstory trees and large shrubs to typically 10’ apart and eliminating grasses, low shrubs and other ladder fuels from under the trees. Shaded fuel breaks should be used in areas with existing mature trees or large shrubs to preserve habitat value and connectivity at the Parkway edge.

Fire breaks are created by periodic discing and/or clear-cutting of vegetation. They provide a completely cleared separation between structures and open space (grasslands) areas, parkway and adjacent property, as well as a division between grasslands, dense brush, and trees. Maintaining fire breaks includes reduction or the elimination of low hanging tree limbs which hang over fire breaks and pose a potential hazard. The visual impact of fire breaks can be disturbing within a natural environment; however, to minimize such impacts, consideration should be given to combining fire breaks with maintenance/emergency routes, access roads, and trails. Controlled grazing of cattle, horses, sheep, and goats along the edges of the Parkway could help to reduce the fuel load in both shaded fuel breaks and fire breaks..

4.7.3 Water Access

Emergency access ways to the creek and ponds should be considered in the planning and development of the Parkway, and designed to be consistent with the goals and policies of this Plan.

5.0 Concept Plan and Programs

The three Concept Plans is this chapter present how the vision of the Dry Creek Parkway is to be implemented through the development of specific trails and facilities. The Concept Plans take the land use designation map one step further in illustrating the concepts for proposed facilities and amenities within the Parkway. These concepts are consistent with the goals and policies of the Parkway Master Plan.

The Parkway is divided into three sections: Dry Creek - North, the area starting at the Sacramento/Placer County line continuing south to U Street in Rio Linda; Dry Creek - Central, the area from U Street to Dry Creek Road; and Dry Creek – South, the area from Dry Creek Road to the Sacramento City limits at Ascot Avenue.

Each section describes existing and proposed amenities and land uses. Additionally, the Parkway improvement and use descriptions identify potential opportunities and constraints associated with the use of the resources.

5.1 Dry Creek – North

Figure 8 illustrates the land use designations, trail alignments, and proposed amenities for the North area of the Dry Creek Parkway. The section of the Parkway has the greatest number of existing developed recreation facilities, but also has high quality riparian habitat and trail opportunities.

5.1.1 Existing Amenities

Gibson Ranch County Park

Gibson Ranch County Park is a ±400 acre existing regional park that is an equestrian center, working ranch, demonstration farm, and regional park. The park includes 100 acres of pasture, a polo/multiple-use field, and five miles of equestrian trails. Experienced riders may presently follow equestrian trails from Gibson Ranch to Dry Creek Ranch in the Dry Creek – Central section of the Parkway (see Existing Amenities, Section 5.2.1). Within the central core of Gibson Ranch are a country store, a ranch house, a bunkhouse, a large stable and barn, a blacksmith and carriage shop, numerous storage barns, paddocks, corrals, a horse arena and overnight facilities for camp programs. The park also contains group and family picnic facilities, restrooms, and a large fishing lake stocked by the California Department of Fish and Game with catfish year round and trout during the winter months.

The park operations are supported by the full horse boarding and care programs (±100 horses boarded). Gibson Ranch also offers guided trail rides (±5,000/year), pony and hay rides, a scout merit badge program, and a full school agriculture program that serves approximately 15,000 children annually. The park is also the site for an annual *ca.*-1863 Civil War re-enactment conducted under the auspices of the National Civil War Association.

Northbrook Neighborhood Park

The Northbrook Neighborhood Park provides active recreation opportunities for local residents and is managed by the Rio Linda-Elverta Recreation and Park District. The park is located south of the Gibson Ranch Annex and north of the Antelope Greens Golf Course. Northbrook Park is adjacent to the Dry Creek Parkway and offers access to the Parkway from the east.

Antelope Greens Golf Course

Antelope Greens is private daily public use 18-hole executive golf course located at 2721 Elverta Road, approximately ¼ mile west of Watt Avenue on the east side of Dry Creek. The course contains 4 artificial lakes, and amenities include a pro shop, restrooms and a snack bar. While Antelope Greens is not located within the Parkway boundary, its proximity contributes to the recreational potential of the Parkway.

Cherry Island Golf Course

Cherry Island Golf Course, operated by the Sacramento County Department of Regional Parks, Recreation and Open Space, is an 18-hole championship course located on the south side of Elverta Road across from Gibson Ranch County Park. The ±200 acre course includes a clubhouse equipped with a pro shop and restaurant, two practice putting greens, a driving range, five artificial lakes, and a large corporation yard.

The golf course includes the divergence of the north and south forks of Dry Creek. Design of the course includes play across both forks on several fairways (see Opportunities and Constraints, Section 5.1.2). Both forks support extensive riparian forests. Informational signs have been placed in strategically sensitive areas to educate the golfing public about the local environment.

The equestrian trail from Gibson Ranch County Park crosses beneath Elverta Boulevard and skirts the golf course along the east bank of the south fork of Dry Creek. The trail winds to 28th Street, where it parallels the existing streetside bike trail south to the Cherry Island Soccer Complex. Here the equestrian trail diverges from the bike trail alignment, crosses Sierra Creek, the north boundary of the Soccer Complex, and turns westerly away from 28th Street.

Cherry Island Soccer Complex

The Cherry Island Soccer Complex, located immediately southeast of the Cherry Island Golf Course, is owned by the Sacramento County Department of Regional Parks, Recreation and Open Space. The facility is managed and operated on a lease arrangement by the California Youth Soccer Association, District Six. The approximately 37-acre facility has ten soccer field sites, a restroom/snackbar, parking and overflow parking facilities, a group picnic shelter, and a wetland restoration area. The restoration area in the southwest part of the facility features a vernal pool complex constructed approximately 10 years ago, that is presently not under the auspices of a formal monitoring or management program. The equestrian trail from 28th Street follows the north perimeter of the Soccer Complex back to the south fork of Dry Creek, and follows the creek to the southwest.

5.1.2 Opportunities and Constraints

The Dry Creek - North stretch of the Parkway is a critical link in the regional concept of the Parkway. It provides trail connection opportunities to Placer County and Roseville, from the Northbrook subdivision to Gibson Ranch, to bike lanes along Elverta Road, and to the existing equestrian and bicycle trails along 28th Street.

A major constraint in this segment is the narrow corridor available adjacent to the privately owned Antelope Greens Golf Course. This approximately 40-acre corridor is actually part of the adjacent Gibson Ranch County Park and includes an existing equestrian trail that leads south to the Cherry Island area equestrian trails. The remainder of the available open space is limited and, therefore, offers little opportunity for recreational amenities other than the trail along the edge.

Development of Parkway trails within the Cherry Island Golf Course is constrained by active play across both Dry Creek forks at several locations, which would subject prospective trail users to the hazard of flying golf balls. The Hole 13 fairway crosses the south fork, and the Hole 14 fairway parallels the south fork in the upstream direction. Fairways for Holes 2, 9, 10, and 18 cross the north fork. Therefore trail development in this area will probably be limited to the existing alignments along 28th Street.

Other constraints include Elverta Road and the associated traffic and the potential for frequent flooding in this area. Design of proposed trails, crossings, and amenities must reflect consideration of these concerns.

5.1.3 Proposed Amenities

A Nature Study area is proposed for the Gibson Ranch Annex located south of the Sacramento/Placer County line, on the east side of Dry Creek. A small portion of this area immediately adjacent to the school property would be designated as Limited Public Use and designed to accommodate a 20-car/one-bus parking lot, several barbecues, a group picnic shelter, a restroom, a drinking fountain and a small turf area for day camping use. An easement access through the adjacent school property off of Watt Avenue is recommended to provide access to the area. A paved multi-use trail and an equestrian trail extend from the County line along Dry Creek to Elverta Road on the east side of the creek. An equestrian trail is also located on the west side of the creek. The equestrian and multi-use trails cross Elverta Road and proceeds arounds the Cherry Island Golf Course. A multi-use bridge crossing for equestrian, pedestrian and bicycle use is proposed near Northbrook Park to enable access to Gibson Ranch from the eastern side of the Parkway. Two additional multi-use bridges are proposed to provide crossings of the North and Main Forks at U Street, and to facilitate access to the soccer complex for residents in the neighborhoods to the west of the Parkway. The access point at U Street will be clearly signed to indicate it is not a through street and to prohibit parking for Parkway users. Both trails cross the proposed bridge over the North Fork and proceed southerly along the east bank.

A staging area is proposed adjacent to the south side of Elverta Road at the intersection with 28th Avenue, where there is an existing light-controlled pedestrian crossing. This area is designated

for Developed Use with a 12-car/trailer parking lot, a restroom, drinking fountains, watering troughs and hitching posts for horses, picnic tables and a small turf area.

The paved multi-use and equestrian trails continue past the staging area and then follow the creek channel around the north side of the Cherry Island Soccer Complex. Two rest areas are proposed along this section, both picnic facilities, and one with a portable restroom. The paved and equestrian trails continue across the proposed bridge over the Main Fork and then proceed south along the east bank of the North Fork. An additional equestrian trail is located on the west bank of the Main Fork.

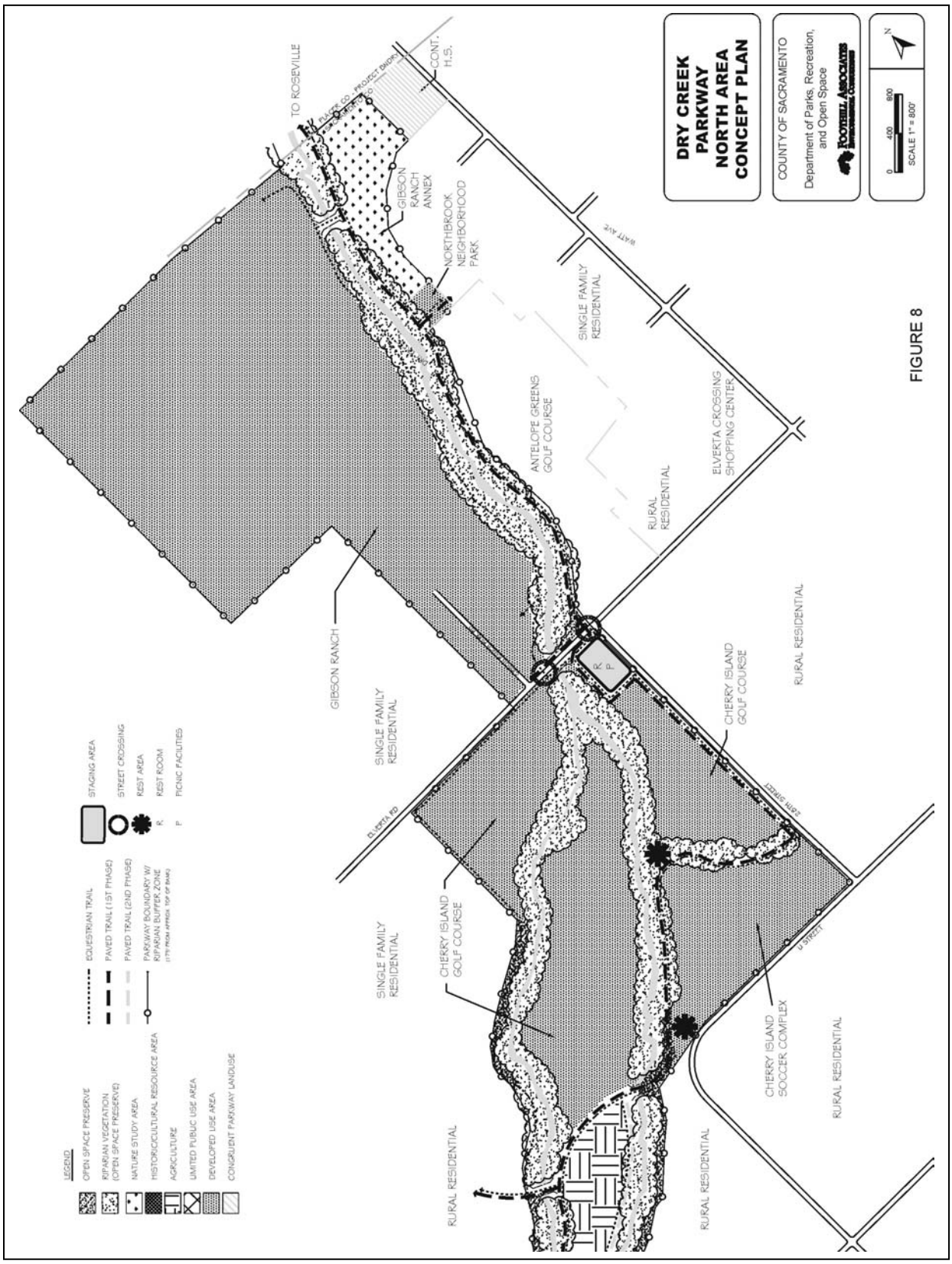

Figure 8 - Dry Creek Parkway North Concept Plan

5.2 Dry Creek - Central

The central section of the Dry Creek Parkway is characterized by open agricultural lands between the two channels and well-developed riparian vegetation along both channels. The land use designations, trails, and amenities for the central section are illustrated in Figure 9.

5.2.1 Existing Amenities

Dry Creek Ranch & Dry Creek Ranch House

On the north side of Dry Creek Road, the Rio Linda-Elverta Historical Society has leased approximately 35 acres from Sacramento County at the site of the Mormon House historical landmark. The Society has renamed the facility Dry Creek Ranch and is presently renovating the Dry Creek Ranch House for use as an historic museum. The restoration is approximately 90 percent complete, and the Society anticipates finishing the project by Summer 2002 (see Proposed Amenities, Section 5.2.3). Prominent among the programs and fund-raising events conducted at the facility is the Farm & Tractor Days festival held each year in mid-May.

5.2.2 Opportunities and Constraints

The Main Fork of Dry Creek is, in terms of environmental opportunities, the more richly vegetated waterway. Due to the presence of water throughout the year, most of the wildlife is found along this fork. The smaller North Fork, a seasonal waterway with relatively less developed riparian vegetation, is less sensitive to human impacts; but therefore offers diminished opportunities for wildlife viewing. The agricultural uses between the two forks offer some foraging and nesting habitat to a variety of animal species.

Residential parcels lie on the outer edges of the two forks. Whenever possible, the 175' riparian protection corridor will be pursued to ensure the preservation of both flora and fauna in this area. Where private dwellings are located within the 175' corridor, acquisition or a conservation easement should be negotiated between the property owner and the County to further the goals of the Plan.

Q Street, a main vehicular thoroughfare, bisects the Parkway. Trail crossings at this point should be coordinated with the County Department of Public Works. Equestrian and multi-use trail crossings should occur in the same location to avoid undue disruption of vehicular traffic. Where possible, road crossings should be developed under vehicle bridges.

Flooding between the two forks of Dry Creek is a frequent occurrence. Flooding will limit the type of amenities that can be included in these areas. The design of proposed amenities should consider this issue to control costs of long-term maintenance.

5.2.3 Proposed Amenities

The majority of this stretch is designated as Agriculture, with the area around the Dry Creek Ranch House designated as Historic/Cultural Resource. A rest area is proposed north of Q Street

on the east side of the West Fork. Three road crossings are needed: two at Q Street and one at Dry Creek Road. Where possible the multi-use paved trail users and equestrian trail users should utilize a combined crossing.

Trails in this section of the Parkway include a paved trail located along the east bank of the North Fork, with a spur running along Q Street to provide linkages to the residential areas east of the Main Fork. The paved trail runs past the Dry Creek Ranch House and then parallels the east side of Dry Creek Road where it meets the crossing. The main equestrian trail follows the paved trail, with an alternative equestrian alignment along the west side of the Main Fork. Both trails coincide at the Dry Creek Road crossing.

At the site of the existing Dry Creek Ranch House, proposed developments include pedestrian trails, restrooms, picnic tables and benches, and gardens. The Dry Creek Ranch facility will include a parking lot for the historic museum combined with a staging area for trail users.

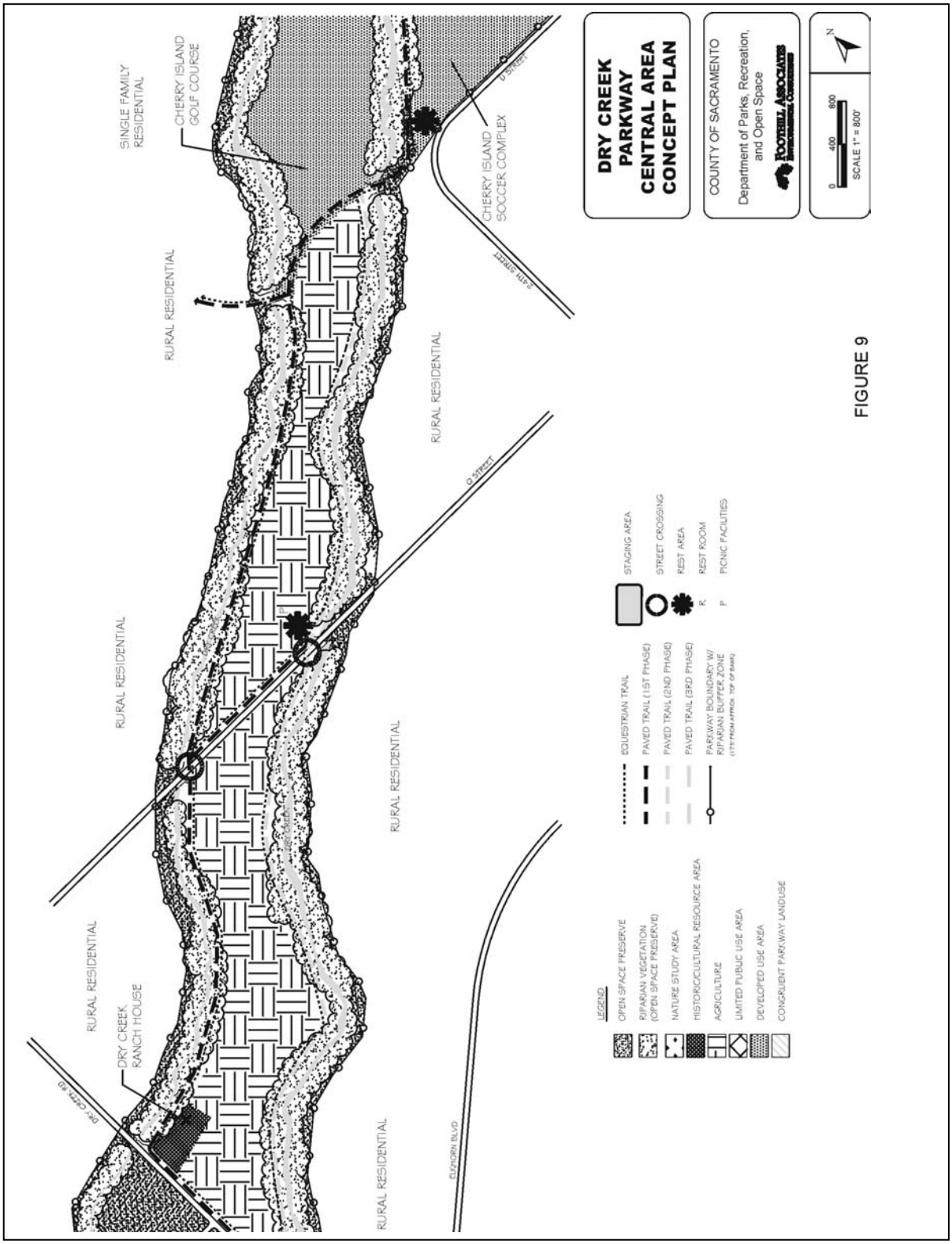

Figure 9 - Dry Creek Parkway Central Concept Plan

5.3 Dry Creek - South

The south section of the Dry Creek Parkway has the most diversity of existing land uses, including a significant number of residences and structures located in the flood way, agriculture, and some of the densest areas of native vegetation. The Parkway land use designations, trails, and amenities for this section are illustrated in Figure 10.

5.3.1 Existing Amenities

Depot Park

Depot Park, site of the historic Rio Linda train depot, is located on Front Street. Existing amenities include picnic areas and shelters, and a bike trail connection that leads south to the American River Parkway via the Sacramento Northern Bike Trail. The historic depot is being reconstructed as a Welcome Center and will be a duplicate of the original Rio Linda Sacramento Northern Train Depot and Station. The Welcome Center will have a restroom that can be accessed both from inside the building and outside by pedestrians and bicyclists.

The Train Station Storage Visitor Center will be constructed on its original site and will also be a duplicate of its original design. This building will serve as an interpretive center for the Sacramento Northern Railroad with historic memorabilia and bike trail history. The Sacramento Northern Bike Trail will be extended 1.8 miles from M Street to Elverta Road

Rio Linda-Elverta Community Center

The Rio Linda-Elverta Community Center is located on the south fork of the Parkway at 810 Oak Lane. The Center houses the offices of the Rio Linda-Elverta Parks and Recreation District, and also contains meeting and activity rooms and a kitchen. On the grounds of the Center there are eight horseshoe pits, two shuffleboard courts, a tennis court, a basketball court, a children's playground and a parking lot.

Central Park

Central Park, owned and operated by the Rio Linda/Elverta Recreation and Park District, is located on the west bank of the Main Fork, at 820 Elkhorn Boulevard. Existing amenities include a lighted horse arena with grandstands, a lighted BMX (bicycle moto-cross) track, a composting/ environmental education facility ("Backyard Habitat," developed under the auspices of the Sacramento County Department of Waste Management and Recycling), a parking lot and a chemical toilet.

Roy E. Hayer Park

Roy E. Hayer Park, located across from Central Park on the east bank of the Main Fork, is a small facility with picnic tables, barbecues, a parking lot and restrooms. The park is, however, adjacent to the school district sports fields attached to Rio Linda Junior High and High Schools.

The school facilities include 3 baseball diamonds, 2 soccer fields, and a football field with a surrounding dirt oval track.

Hayer Dam

An old combination dam and bridge, erected more than 50 years ago, is located on the Main Fork at the southerly edges of Central Park/Hayer Park. The structure is dilapidated and in need of significant repair or replacement if it is to continuing functioning. Dry Creek is known to provide both salmon and steelhead habitat. If the dam or a replacement structure is retained, a fish ladder or some other means of passage for salmon and steelhead runs should be incorporated. Sacramento County and the Rio Linda-Elverta Recreation and Park District are working with the State Department of Fish and Game and other agencies to explore various options for the dam site, including rehabilitation or replacement, which would enhance spawning, and improve the fishery on Dry Creek. Presently the dam is operated seasonally to provide water to private water-ski lakes located near the Rio Linda Airport. The pool that forms behind the dam during the summer is also a visually appealing water feature.

Hayer Speedway

South of Roy E. Hayer Park is the Roy Hayer Speedway, operated by the Capital Quarter Midgets. Noise and exhaust from the speedway are detrimental to the habitat values of the adjacent Parkway, and the recreation experience of Parkway trail users. Sacramento County has recently acquired ownership of this property and will be phasing out the operation of the speedway over time in coordination with the development of Parkway amenities in the area. The County will assist in efforts to relocate the speedway outside of the Parkway before the termination of the current 5-year lease agreement.

Sacramento Northern Bicycle Trail

The paved Sacramento Northern Bicycle Trail is operated by the City of Sacramento and the Sacramento County Department of Transportation. It bisects the Dry Creek Parkway through this section and eventually connects with the Ueda Parkway and the American River Parkway.

5.3.2 Opportunities and Constraints

The existing amenities offer opportunities for enhanced selected development without further disturbance to the riparian corridor. Enhancements shall be consistent with the goals and policies of the plan.

The Sacramento Northern Bicycle Trail provides a critical link to the American River Parkway via the Ueda Parkway. The existence of the Sacramento Northern Bicycle Trail furthers the regional goal of creating a 70-mile trail loop by providing a connection to the American River Parkway, a major County trail and open space corridor.

Limitations for the creation of the Dry Creek Parkway's open space corridor occur on Cherry Lane, a fully developed residential street that lies entirely between the North and Main forks of

Dry Creek. Because of frequent flooding and the need to incorporate these areas into the Parkway, the County should eventually acquire these residential parcels. Flood hazards have been reduced, however, by the recent widening and raising of Elkhorn Boulevard near the end of Cherry Lane, which included the construction of a basin to intercept and channel flood flows beneath rather than across Elkhorn Boulevard.

South of Elkhorn Boulevard, along the east bank of the North Fork of Dry Creek, there are three abandoned sewage treatment ponds that may provide opportunities for wildlife viewing or for the development of fishing ponds or hatchery facilities. The ponds are surrounded by a levee system that could be utilized as a scenic trail loop. Unfortunately, the associated infrastructure (buildings, storage tanks, maintenance pits, etc.) contains attractive nuisances that would need to be eliminated before such a loop trail could be implemented. The treatment pond property is considered a non-conforming use with respect to the Parkway land use designations. It is the County's intention to acquire the land for Parkway uses at the earliest possible date.

Sacramento County, SAFCA, and the Sacramento Valley Open Space Conservancy have recently completed acquisition of property owned by the Hayer family, including the area just above the confluence of the two forks.

5.3.3 Proposed Amenities

The land use designations in the south area of the Dry Creek Parkway include three Open Space Preserves, two Nature Study areas, two Limited Public Use areas, Agriculture, and Developed Use areas at Depot Park and Hayer Park. The Open Space Preserves are located immediately west of Dry Creek Road, west of the Sacramento Northern Bike Trail, and between Rio Linda Boulevard and Ascot Avenue. One Limited Public Use area is situated between Cherry Lane and Depot Park, and flanked by Nature Study area on both sides. This is proposed as the site for a nature center which could be developed utilizing an existing barn located off of Cherry Lane. Proposed amenities associated with the nature center might include a 30-car parking lot, a native plant botanic garden with pedestrian trails, a fishing pond with small piers, a fish viewing platform, a native plant nursery, and a nature art/book store.

The second Limited Public Use area is east of Rio Linda Boulevard and adjacent to the Sacramento Northern Bicycle Trail. A staging area is proposed at this location, with restrooms and picnic facilities. A staging area is also proposed within the existing Developed Use area at the intersection of the Sacramento Northern Bicycle Trail and Elkhorn Boulevard.

The multi-use and equestrian trails, adjacent but separate, proceed from the Dry Creek Road crossing along the west bank of the Main Fork and then west on the north side of Elkhorn Boulevard. At the intersection with the Sacramento Northern Bicycle Trail, both trails either proceed north along the Sacramento Northern Bicycle Trail, or cross Elkhorn Boulevard. While an at-grade crossing is not optimal, it may be necessary due to the limited clearance below the Elkhorn Boulevard bridge.

From Elkhorn Boulevard, the paved trail coincides both north and south with the Sacramento Northern Bicycle Trail, while the equestrian trail divides into two branches. One is adjacent to the Sacramento Northern Bike Trail and the other is adjacent to the constructed flood basin.

About 1/4 mile down the Sacramento Northern Bicycle Trail, both the paved and equestrian trails split to provide the option of either crossing from the Main Fork to the North Fork or continuing south. A multi-use crossing is included to provide access across the Main Fork to Hayer Park. Both trails conclude at the staging area on Rio Linda Boulevard.

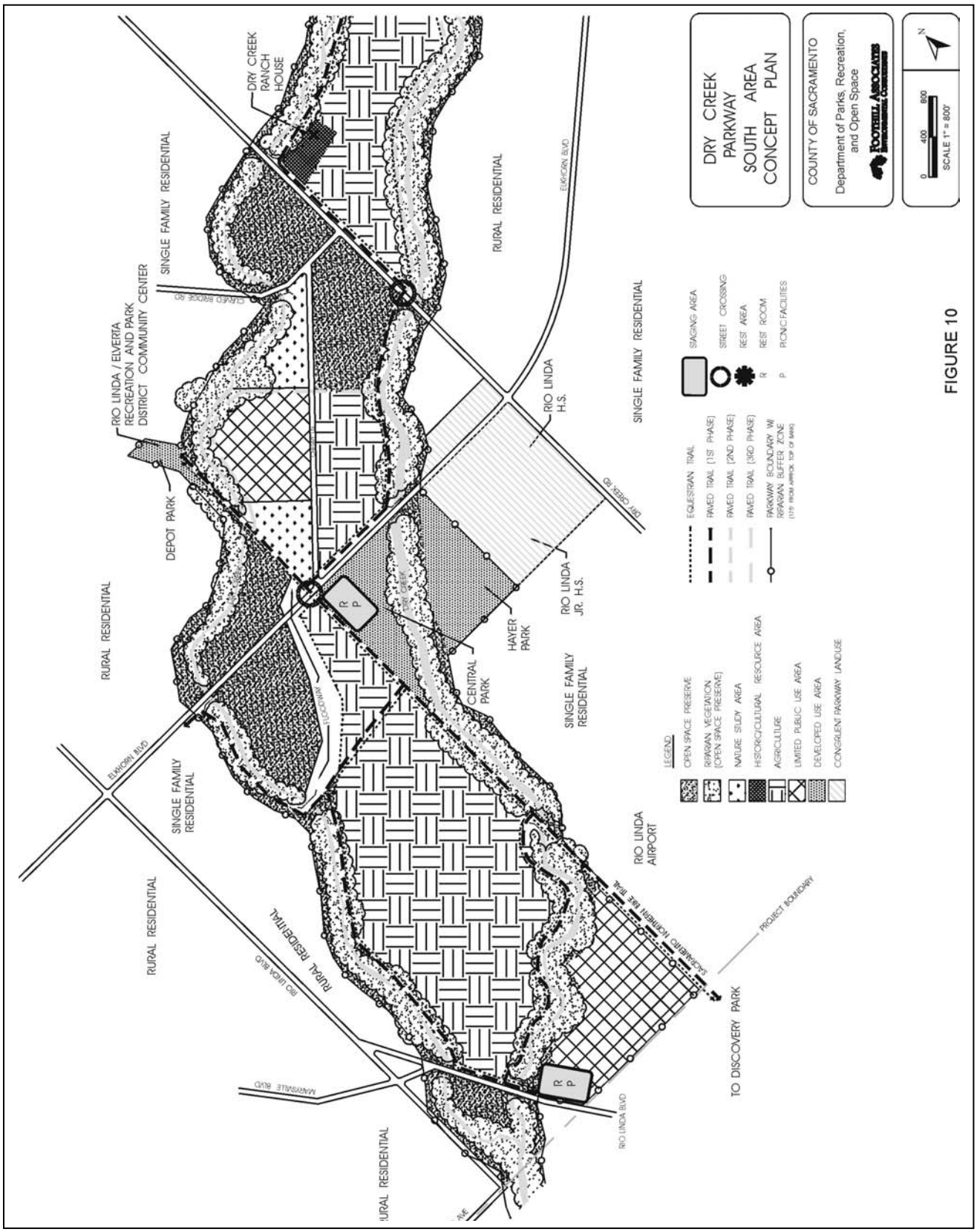

Figure 10 - Dry Creek Parkway South Concept Plan

5.4 Concept Sketches and Sections

The following sketches and cross-sections are intended to illustrate ideas discussed previously in this Section. The drawings are typical cross-sections and do not reflect site specific conditions. For example, post and cable fencing may be a safety hazard for equestrians and their horses. However, cable may be necessary in certain areas where the protection of sensitive habitats is necessary or where a separation between different users is necessary to alleviate conflict and to ensure public safety. Specific development plans and details should address such issues prior to construction.

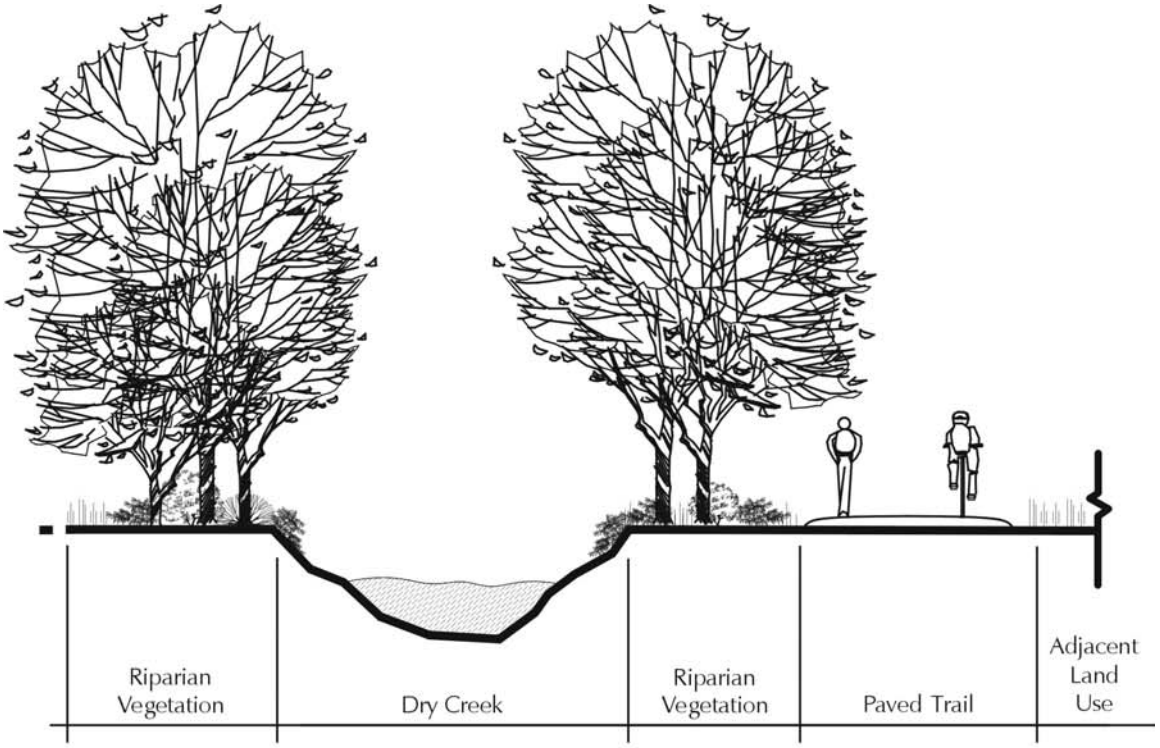

Figure 11 - Typical Multi-use Trail Section

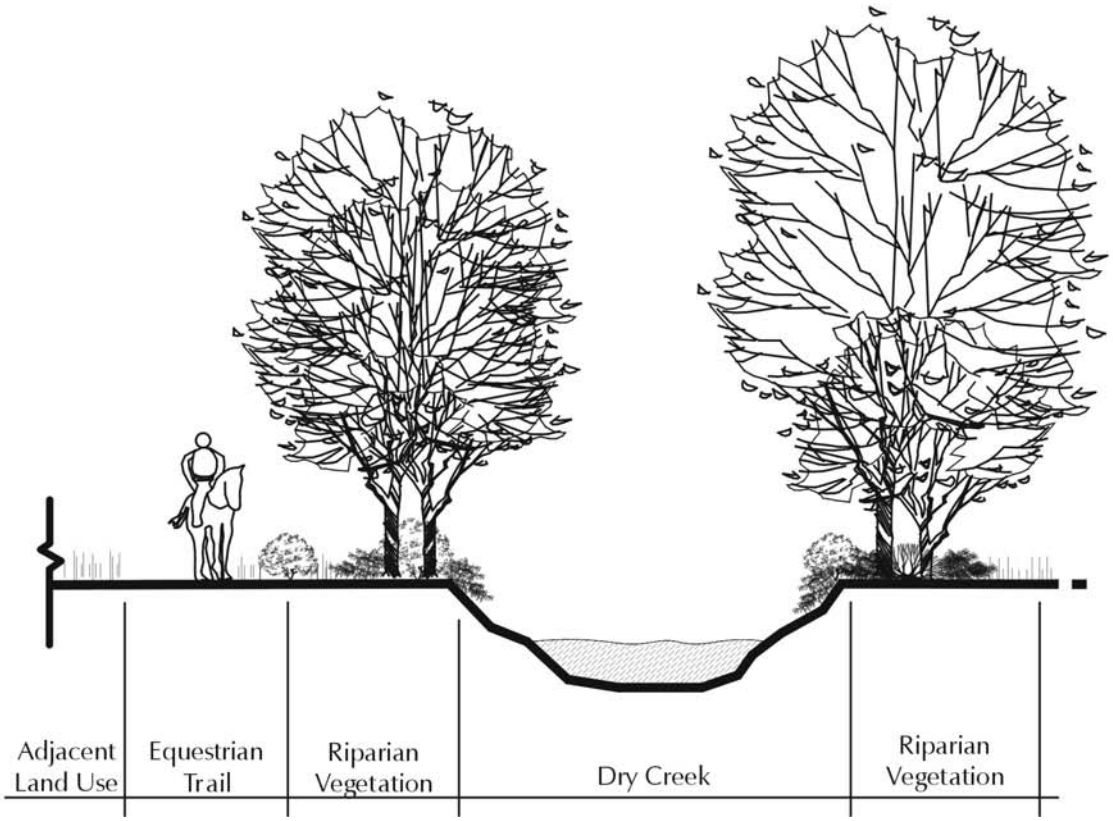

Figure 12 - Typical Equestrian Trail Section

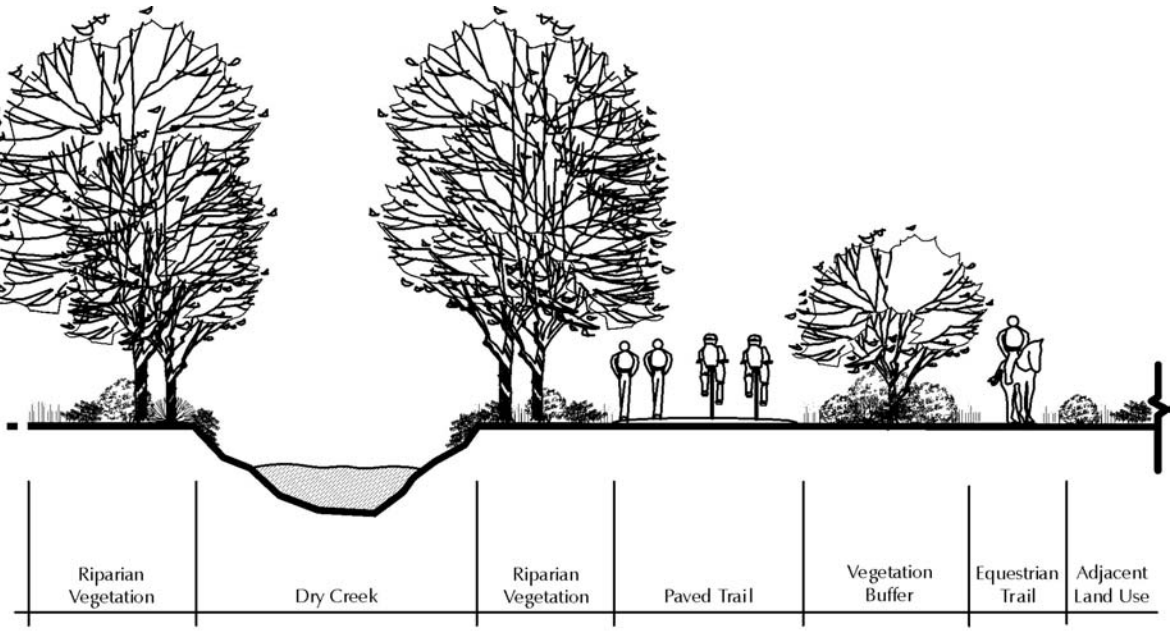

Figure 13 - Typical Side-by-Side Trail Section

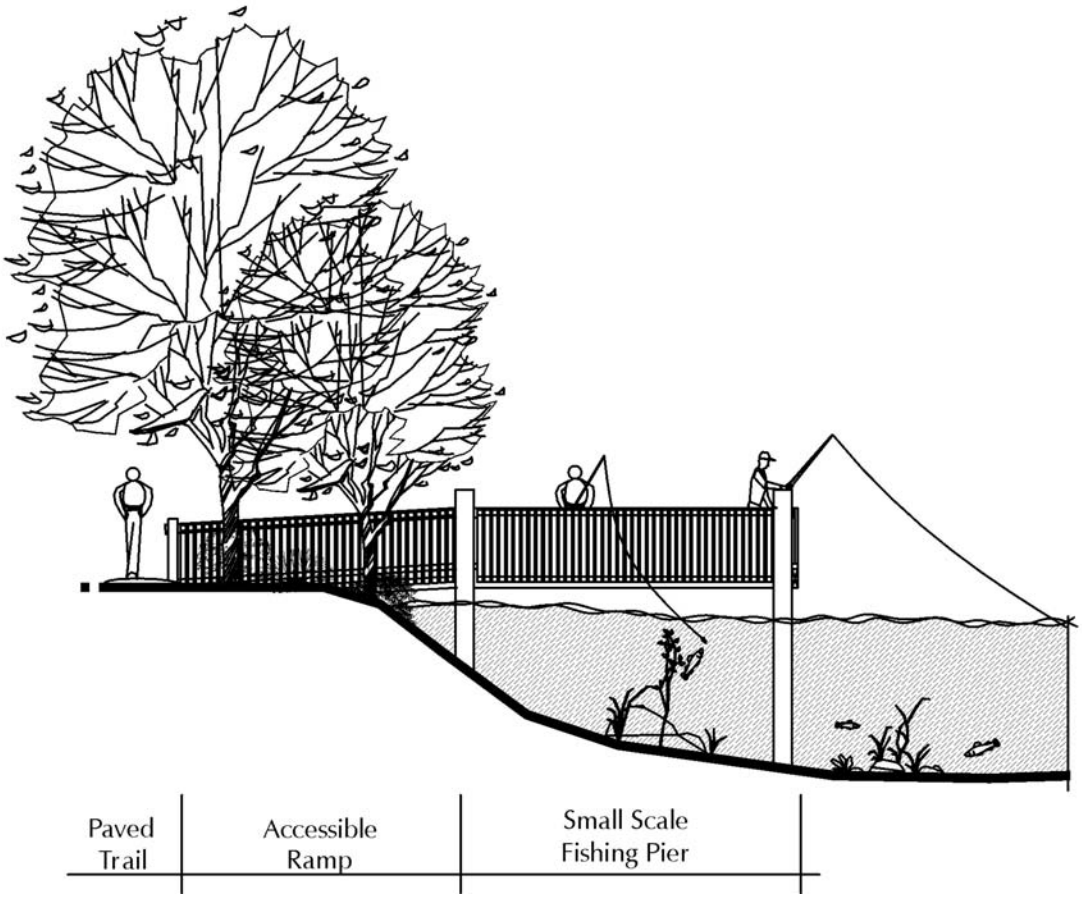

Figure 14 - Small Scale Fishing Pier

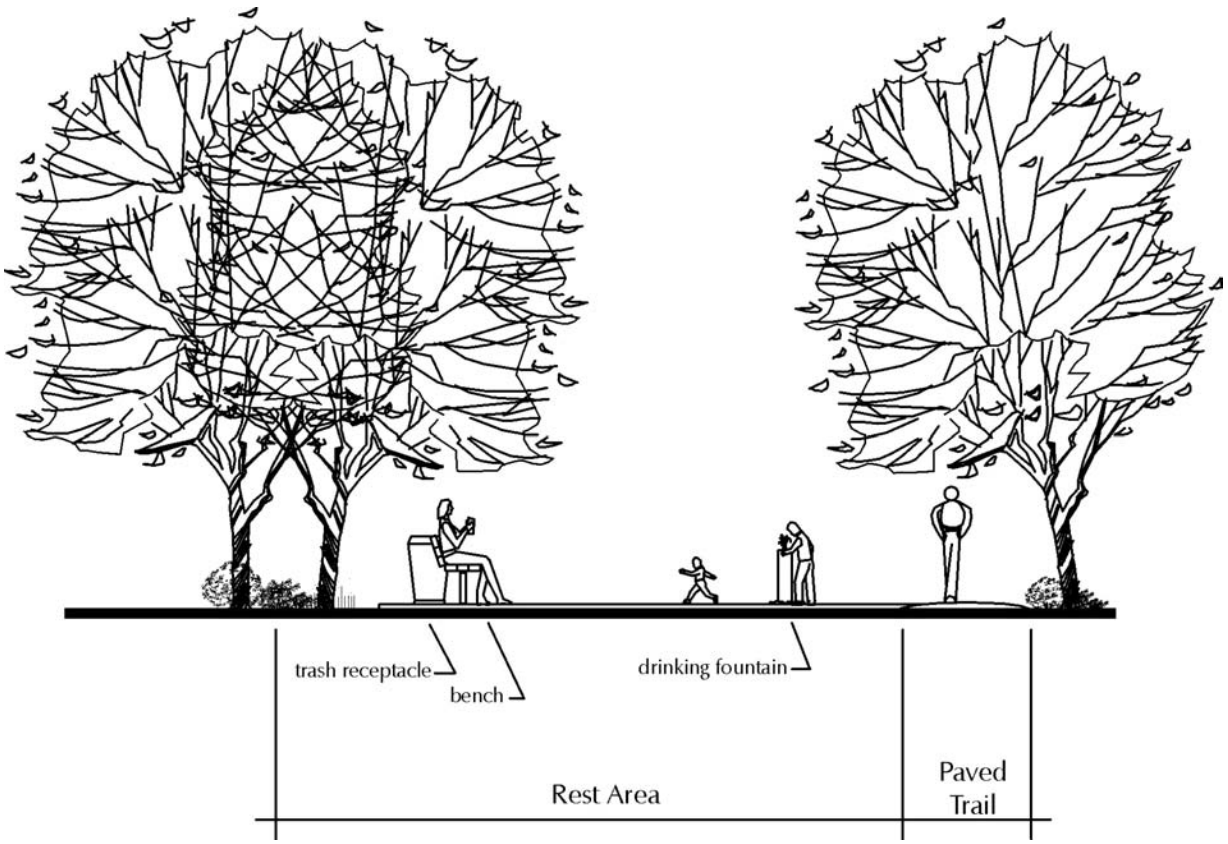

Figure 15 - Typical Rest Area

5.5 Interpretive Program

The Dry Creek Parkway will include a coordinated interpretive program in order to increase public awareness of the Parkway's many natural resources and stream channel dynamics, and to educate visitors about the balance between these resources and recreational uses. Water quality and conservation, floodplain management, freshwater ecosystem functions and values, urban development, and agricultural practices are some of the many topics that could be addressed by such a program. The goal of the Parkway's interpretive program is to both educate visitors and involve them in the stewardship of the Parkway.

5.5.1 Interpretive Components

The components of an educational/interpretive program may include environmental education centers, signs, exhibits, nature trails, guided walks and tours, publications and other media, research, and evaluation of program effectiveness.

Environmental Education Centers

Environmental education centers may be day-use and/or resident facilities. Such facilities typically have an on-going environmental curriculum administered by qualified environmental professionals and occupy or manage significant land or real property. Gibson Ranch County Park, the Rio Linda-Elverta Community Center, the Dry Creek Ranch, and the proposed nature center off of Cherry Lane may be able to offer some component of a distributed environmental education center within the Parkway.

Signs

Signage should direct visitors to points of interest and explain features. Signs are also essential to make visitors aware of rules and regulations for proper conduct and resource protection by informing visitors of what they can and cannot do, e.g. signifying restricted areas, informing the public of the value of special status species, outlining the catch and release program, identifying mile markers, etc. All signage should be coordinated as part of an overall Parkway signage plan to make sure that elements such as lettering, symbols, and graphics are consistent and easily understood.

Exhibits

Interpretive exhibits will introduce visitors to various natural and historical features. Exhibits should range from major museum displays to small interpretive waysides located at appropriated intervals throughout the Parkway. A variety of exhibit formats will be developed to appeal to diverse age groups and to provide a comprehensive interpretation of the Parkway.

Nature Trails and Guided Tours

Nature trails and guided tours combine a recreational activity with a directed learning experience. Educators will find that the Parkway is an outdoor laboratory that can supplement the formal indoor classroom. Docent lead tours should be provided for all grade levels and for all age groups. Docents should be adequately trained, and may include volunteers, staff associated with the Sacramento County Department of Regional Parks, Recreation and Open Space or the Rio Linda/Elverta Recreation and Park District, teachers, or other qualified individuals.

Publications and Media

Brochures, handbooks, maps and other publications will be part of the interpretive program to help promote appropriate uses of the Parkway and to educate visitors. In addition, the Parkway will be promoted through the local and regional media, including announcements of special events, calendars of regular activities, and features focused on natural and cultural resources.

Research

Knowledge of the Parkway's natural, historic, and cultural resources could be expanded through a focused effort to encourage documented research and to provide a coordinated archive of information. The Dry Creek Ranch and the proposed Nature Center on Cherry Lane could serve as repositories for historic photographs, artifacts, and research records. Research activities should be encouraged among a broad base of Parkway users, including projects in the local schools, graduate student research projects, and citizen-based monitoring activities. Assessments that have already been conducted or are ongoing, such as those by the Department of Fish and Game, SAFCA, Sacramento County, and Dry Creek Watershed Group should be compiled or abstracted, along with the anecdotal knowledge of local residents

5.5.2 Long Range Interpretive Plan

A long-range interpretive plan is essential to the future of an effective interpretive program in the Parkway. This plan should include both long-term and short-term goals. A basic interpretive program should serve all visitors regardless of their ability to pay for services. Special programs, classes and workshops could be provided and funded through fees. Encouraging environmental and educational groups to conduct educational programs in the Parkway would expand interpretive opportunities at little or no cost to the County.

As the interpretive program in the Parkway expands, care must be taken not to impact any one area. Walks, guided tours, and programs should be spread throughout the Parkway, covering all ecosystems and serving all segments of the community. Likewise, public access may be restricted from extremely sensitive areas or seasonally sensitive areas. Periodic evaluation of the various interpretive activities and elements will be necessary to ensure that the interpretive program is meeting the needs of all Parkway user groups and that it is focusing on the appropriate Parkway features.

Key elements of the Parkway's interpretive plan are discussed in Chapter 6 of this Plan, which addresses the proposed actions for implementing the Dry Creek Parkway.

5.6 Mitigation in the Parkway

Mitigation, as defined under California Environmental Quality Act (CEQA) Guidelines Section 15370, includes the following measures, usually considered in sequence:

(a) Avoiding the impact altogether by not taking a certain [development] *action or parts of an action.*

(b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

(c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

(e) Compensating for the impact by replacing or providing substitute resources or environments.

Any mitigation opportunities within the Dry Creek Parkway will be utilized strictly for Sacramento County public projects requiring mitigation that may be satisfied within the Parkway in accordance within goals and policies of the Master Plan. Regulatory constraints and Parkway operational concerns may limit mitigation opportunities in the Parkway. In addition, construction or improvement of Parkway facilities requiring mitigation will have highest priority for mitigation opportunities within the Parkway.

6.0 Implementation

The implementation of the Dry Creek Parkway will be a long-term process involving the coordinated efforts of Sacramento County with many other agencies, community organizations, and individuals. The resources required will be substantial and will necessitate a phased approach to implementation. In addition, the County will need to implement new planning and public review procedures to make sure that land use and activities within the Parkway are consistent with the objective, goals, and policies of this Plan.

This section of the Plan provides guidance for a number of key implementation issues, including procedures for analyzing and determining Parkway boundaries, jurisdictional responsibilities, the planning and development process, opportunities for public hearings on proposed Parkway actions, and the review and approval process for such actions. An action plan is also included that provides specific recommendations for the priority improvement and planning tasks that must be initiated to implement this Plan.

6.1 Parkway Boundaries

The goals and policies of this Plan and the Rio Linda/Elverta Community Plan establish guidelines and provide justification for delineating the outer boundaries of the Parkway. The Parkway boundary includes the Dry Creek channels, the land between the channels, a 175' riparian protection zone or corridor as measured from the top of the creek bank, as well as other public lands outside of but adjacent to the riparian protection zone. While the Parkway contains a significant portion of the 100-year floodplain, its boundaries are not identical with either the 100-year floodplain or the FEMA defined floodway.

Throughout the length of the Parkway many existing structures, mainly residential dwellings, lie within the 175' corridor. When a subdivision requests to split a lot or a change of ownership occurs, the parcels located with in the Parkway boundary should be reviewed on a case-by-case basis. Where the 175' corridor presents an undue hardship on the Owner or leaves the remainder of the parcel unusable, a smaller conservation easement should be negotiated between the Owner and the County. The conservation easement represents a compromise between the goals and policies of the Plan and the needs of the private landowner.

6.2 Jurisdictional Responsibilities

The following entities play a key role in the implementation of this Plan.

Sacramento County, Department of Regional Parks, Recreation and Open Space

Except for flood control, the primary entity responsible for the administration and management of the Dry Creek Parkway is the Sacramento County Department of Regional Parks, Recreation and Open Space. The Parkway includes all Dry Creek corridor lands acquired by the County between the Placer/Sacramento County line and the City of Sacramento limits, the land between

the North Main Forks of Dry Creek, and the outside riparian protection corridor of 175'. The Department acts on the direction of the County Board of Supervisors and on the advice of the Recreation and Park Commission..

Administration and management of the Parkway includes the preparation of proposed specific development plans and implementation schedules. Such planning measures will be reviewed by the Recreation and Park Commission, and are subject to approval by the Board of Supervisors. The planning measures must be consistent with the goals and policies of this Plan.

The Department is also responsible for providing park ranger peace officers within the Parkway. Their authority includes the control of people and their activities, and the enforcement of laws and Parkway rules and regulations.

Sacramento County Planning Department

The Sacramento County Planning Department's primary responsibility is to aid in the development and monitoring of long-range policies for the Parkway. The Department is also responsible for the administration of land, policy, and development review for properties within or adjacent to the Parkway, and for those properties that could have an effect on the Parkway.

Rio Linda/Elverta Recreation and Park District

The Rio Linda/Elverta Recreation and Park District is responsible for providing neighborhood and community parks, leisure services, and programs for Rio Linda and Elverta residents.

State Water Resources Control Board

The State Water Resources Control Board has overall responsibility for the administration of water rights and for water quality control in California. As such, it is in the primary permitting agency for the appropriation of water from the Dry Creek. The State Board also acts as general overseer and reviewer of the actions of the Regional Water Quality Control Boards.

Flood Control Agencies

There are four agencies potentially involved with flood control issues in the Dry Creek Parkway. These are the California State Department of Water Resources, the State Reclamation Board, the Sacramento Area Flood Control Agency (SAFCA), and the Sacramento County Department of Water Resources.

These agencies are responsible for flood control along the creek, including downstream of the Parkway. The State Reclamation Board is the state agent primarily responsible for flood control over all levees and any development within the creek floodway that might affect flood flows. The State Water Resources Control Board administers all water flows and water rights within the State where riparian rights or other special legislation do not apply. SAFCA has primary responsibility to fund, design, construct, and maintain the proposed channel and levee improvements along Dry Creek. The Department of Water Resources implements and enforces

countywide policies related to flood management, and provides annual inspections and maintenance of the creek and associated tributaries. This Plan does not supersede the authority or responsibility of these flood management agencies.

State Department of Fish and Game

The State Department of Fish and Game has two primary responsibilities: the enforcement of State hunting and fishing regulations and maintenance of anadromous fish populations. Maintenance of fish populations is accomplished in a variety of ways, such as enforcing spawning closures, holding jurisdiction over streambed alterations, and operating any fish hatcheries.

U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers has jurisdiction over navigable and other waterways. The U.S. Army Corps of Engineers is a permitting authority for any development or activity which may affect the creek's floodway.

6.3 Planning and Development Process

The Dry Creek Parkway Recreation Master Plan guides planning and development for the Parkway in concert with the Sacramento County General Plan, which includes the Rio Linda/Elverta Community Plan. Planning and development in the Parkway must also comply with applicable CEQA and NEPA environmental regulations and other public permitting requirements. Figure 17 outlines the planning and development process for the Parkway.

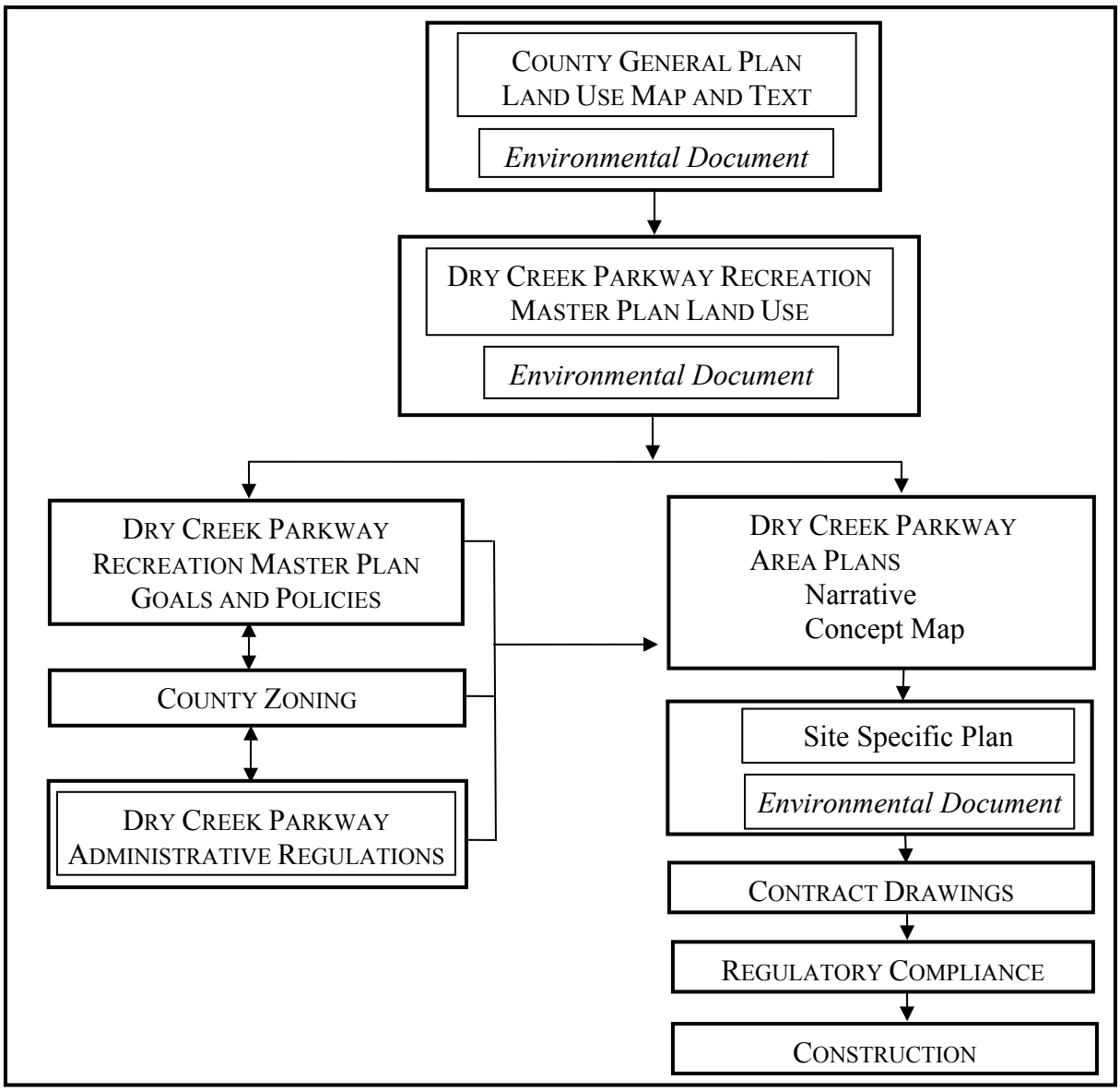

Figure 16 - Dry Creek Parkway Planning and Development Process

Sacramento County General Plan Land Use Map and Text

The Sacramento County General Plan, adopted by the Sacramento County Board of Supervisors, guides the general land use and development of Sacramento County. The Rio Linda/Elverta Community Plan (a part of the General Plan) addresses, more specifically, land uses and development within these communities. It contains ten guiding principles, three of which directly address the important role of the Dry Creek Parkway in the community. These principles are 1) call for public trail systems, 2) preservation and enhancement of natural areas, and 3) support for the Dry Creek Parkway as a major recreation resource and open space within the plan area. The Community Plan also contains policies to guide land use in a manner consistent with these principles. The Parkway Plan shall also be a component of the General

Plan. Normally, the General Plan need be addressed only when amending the Parkway Plan or when considering activities or facilities deemed to have a Country-wide impact.

Dry Creek Parkway Plan Land Use Designations and Text

The Parkway Plan translates the County General Plan into a more detailed plan that is specific to the Dry Creek Parkway. The Parkway Plan shall be adopted and amended by the Sacramento County Board of Supervisors. The Parkway Plan separates the Parkway into six general land use categories, and identifies general locations of trails, access, and other improvements. Chapter 4 of this Plan (Public Uses of the Parkway) which is a key component of this Plan identifies acceptable activities and facilities in the Parkway. This chapter identifies the appropriate land use categories in which these uses may be permitted, provided they are consistent with the area plan. This information should be consulted first in determining consistency with the Parkway Plan for any proposed activity or improvement.

Area Plans

An area plan has been prepared for each of the three sub-units of the Parkway as part of this Plan. These plans describe activities and facilities permitted or prohibited within their boundaries. The purpose in creating these three distinct steps is to allow for a degree of specificity that is commensurate with the level of activity that takes place in an area. Each activity and facility shall be consistent with the land use designation categories described in the Plan text, and no facility or improvement shall be installed or constructed unless consistent with the Plan. The Recreation and Park Commission shall review the area plans to determine the appropriateness of a proposed physical change in the Parkway.

There are three steps to completion of an area plan. The first is to prepare a narrative that describes the location, boundaries, natural and man-made features, general purpose of the area, opportunities and constraints for use, and the permitted and prohibited activities and facilities. The second step is to draw a concept map that shows land use designations, generalized locations of facilities and natural features, such as picnic areas, parking areas, access, trees and landscaping. The land use map is not required to show precise locations or size of structures, but must show approximate area to be devoted to each general use. The first two steps are contained with in this Plan.

Site Specific Plan(s)

The final step is to prepare specific site plans. These plans replace the portions of the concept map that they address. The site specific plans indicate the precise location, size, and configuration of the facilities and significant natural features parking spaces, and capacity of facilities. Elevation and perspective drawings may be incorporated into the site plans as well to illustrate the scale or appearance of a proposed facility. The specific site plans may be adopted as a whole or in phases, consistent with the concept map. Prior to construction or implementation, site specific plans must comply with applicable CEQA and/or NEPA environmental review requirements.

Adoption or modification of an area plan or any of its components shall be consistent with both the County General Plan and the Parkway Plan. Adoption or modification of an area plan or any of its components shall be carried out by the Board of Supervisors in accordance with the public hearing process described in this Plan. Following adoption by the Board of Supervisors, project implementation may proceed through the County's standard process of preparing contract drawings, regulatory compliance, bidding and construction.

Zoning

The County of Sacramento has specific land zoning ordinances regulating uses in and around the Dry Creek Parkway. In addition the Rio Linda and Elverta Community Plan includes a Parkway (PW) combining designation that covers the area within the Dry Creek Parkway. This designation is used in combination with the County base zones in the Parkway and on adjacent lands which may have an impact on the preservation, or enhancement of scenic, recreation, fishing, or wildlife values along or near Dry Creek. The PW combining designation provides for the implementation of the policies of this Master Plan.

The County zoning ordinances complement the Parkway Plan. These zoning ordinances must be considered for properties regulated by these zones when considering uses and activities in the Parkway.

Administrative Regulations

The administrative regulations address the day-to-day details of Parkway management, consistent with this Plan. The administrative regulations direct appropriate courses of action for activities, such as group events, special events, ranger patrols, and permit fees, and should include mechanisms for implementing County ordinances affecting the Parkway. Issuance of use permits may be required in association with activities planned for new developments within the Parkway. These regulations are developed and administered by the Sacramento County Department of Regional Parks, Recreation and Open Space, and may be reviewed by the Board of Supervisors for consistency with the Parkway Plan.

6.4 Public Hearing Process

The Parkway Plan is a dynamic document, intended to be responsive to changes while maintaining its guiding principles over the years. The public hearing process provides the forum for considering changes to the Parkway in a manner consistent with these guiding principles.

Any proposed project within the Parkway, which is inconsistent with the goals and policies or land use categories of this Plan, may require an amendment to the Sacramento County General Plan, subject to public notification as required by State law and the County Comprehensive Zoning Ordinances at designated General Plan amendment hearings.

County of Sacramento Department of Regional Parks, Recreation and Open Space

The County of Sacramento Department of Regional Parks, Recreation and Open Space is responsible for managing the activities in the Parkway and protecting its facilities and natural environment. The Department is also responsible for planning the physical changes to the Parkway in accordance with this Plan. The Director is responsible for formulating recommendations to the Recreation and Park Commission, and is the technical staff to all public hearing bodies in matters relating to management of the Parkway. The Director may assign staff members to assist or represent him or her at public hearings.

County of Sacramento Planning Department

The County of Sacramento Planning Department is responsible for developing recommendations on zoning and policy issues affecting land or waters within or adjacent to the Parkway. The Planning Director is responsible for making recommendations to the County Planning Commission, and is technical staff for policy issues. The Planning Director communicates with the County Parks and Recreation Director in developing recommendations for the Parkway, and may present these recommendations to the County Recreation and Park Commission if the two Directors determine this course of action to be the most expedient. Otherwise, all presentations to the Recreation and Park Commission are made by the Parks and Recreation Director or the Director's designate. The Planning Director may assign members of staff to assist or represent the Director at public hearings.

County of Sacramento Recreation and Park Commission

The County of Sacramento Recreation and Park Commission is appointed by the Board of Supervisors to advise the Board of Supervisors and the Parks and Recreation Director on matters relating to parks and recreation in Sacramento County. All matters pertaining to the planning, policies, and management of the Parkway are first heard by the Recreation and Park Commission before being transmitted to the Board of Supervisors and the recommendations of this Commission are included in the transmittal. The Recreation and Park Commission holds regular meetings, which are open to the public, and the schedule and agendas are available from the Parks and Recreation Department.

County of Sacramento Board of Supervisors

The County of Sacramento Board of Supervisors is a governing board elected by the voters of Sacramento County. The Board is the ultimate authority for all matters related to the planning and management of the Parkway, unless otherwise indicated by this Plan. The Board of Supervisors meets regularly in the public session, all decisions of the Board are final, and may be overturned only by an appropriate court of law.

6.5 Review Process

To ensure consistency of the adopted Parkway Plan, all Parkway development or enhancement plans shall first be reviewed by the Recreation and Park Commission. The Recreation and Park Commission will make their recommendations to the Board of Supervisors. The Board will review the Commission recommendations and approve or disapprove the proposed development or enhancement plans.

6.6 Action Plan

To implement the goals and policies of this Plan, an action plan shall be adopted on annual basis. The action plan is a separate document that complements the Dry Creek Parkway Recreation Master Plan, and shall be prepared by or under the direction of the Department of Regional Parks, Recreation and Open Space. While the Parkway Plan is considered to be a five-year plan, the annual action plan contains tasks that are more specific and dynamic in nature; therefore, requires a more frequent review and update.

6.6.1 Review and Priorities

The Recreation and Park Commission is the appropriate hearing body to review and place priorities on the items listed in the action plan. The timeline for implementation of Parkway improvements will be determined by the Board of Supervisors and availability of funding. .

6.6.2 Recommended Actions

The following eight tasks are recommended for consideration in the initial action plan for the Parkway. Once the first action plan is prepared by the Department of Regional Parks, Recreation and Open Space, the plan will be reviewed and priorities assigned to the various tasks as determined by the Recreation and Park Commission.

1. Administrative Regulations

Develop administrative regulations for the purpose of regulating, as per the goals and policies of the Parkway Plan, the following:

- Group Activities
- Special Events
- Ranger Patrols
- Permit Fees
- Maintenance
- Other ordinances affecting the Parkway

2. Native Plant Restoration and Habitat Preservation

Assess the effects or value of non-natives, such as fig, plum, walnut, and almond within the Parkway, to decide if they should remain or be removed. Develop a long-term plan for the elimination of non-native trees and shrubs not deemed desirable so that removal takes place on an orderly basis. This plan shall be subject to public review and comment. Priority should be given to removal of those exotics that compete with natives, such as pampas grass, eucalyptus, and pyracantha. Non-native grasses, except in turfed areas, and non-native herbaceous plants should be discouraged if elimination is not feasible. Biological control of undesirable species should be considered. Any enhancement should incorporate the Plan goals and policies.

Preserve agricultural uses as they contribute to the open space values of the Parkway. Agriculture shall be confined to those areas designated on the Plan as appropriate.

Establish a native plant nursery within the Parkway to propagate stock for restoration programs. This nursery should be used for education and interpretation as well as a source for native plant stock. Plant stock should be developed from seed and cuttings taken from within the Parkway to preserve the genetic integrity of native Parkway plants.

3. Interpretive Program

Adopt long-term interpretive plan with the following minimum components:

- A signage program that specifies the design, size, and location of signs in the Parkway, including directional signs for location of basic facilities, restrooms, exits from the Parkway, trail locations, picnic areas, emergency access points, identification signs naming points of interest, and signs indicating the rules and regulations at major points of entry. The sign program should also address the issue of vandalism.
- A comprehensive plan to identify the types and locations of exhibits and nature trails necessary to interpret the ecosystems and the periods of history presented in the Parkway. The proposed Cherry Lane Nature Center should be the central point for nature exhibits, library, and naturalist services. The feasibility of moveable exhibits should be pursued to expand the opportunities in programming.
- A folder containing a selection of Parkway information including map with points of entry, roads, trails, structures, and some description of the ecosystems and evidences of human history to be distributed to Parkway users. Additional publications should give more detailed information pertaining to natural and cultural history.
- A program to promote the Parkway and develop liaisons with radio, television, and the press to assure favorable and interesting coverage that help protect the Parkway.
- Workshops conducted through the year to provide on-going Parkway educational programs for the public. Local schools and colleges should be encouraged to use the Parkway for research and teaching and to share their results with the County staff. School districts should be encouraged to use the Parkway as an outdoor classroom.

The Department of Regional Parks, Recreation and Open Space should work with the Sacramento County Office of Education to provide resource materials for teachers.

In addition to the long-term interpretive plan, establish a Nature Center on Cherry Lane and support the historic museum and interpretive activities at Dry Creek Ranch.

4. Erosion Control

Amend the County of Sacramento Zoning Code Ordinances to include findings and development standards for proposed erosion control projects. A proposed amendment to be applied to parcels contained in the Rio Linda and Elverta Community Plan Parkway (PW) combining designation includes the following language:

"In reviewing the erosion control project, the local hearing body shall make the following findings if the project is to be approved:

- The project is necessary to the public health, safety, or welfare.
- The project protects and, to the extent possible, enhances the natural amenities of the Dry Creek Parkway.
- The project does not preclude or foreclose future recreation or open space potential in the Dry Creek Parkway.
- There are adequate provisions for maintenance and revegetation of the project area."

If these findings cannot be made, the project should not be approved. Projects that are approved should be subject to the following standards:

- Disruption to natural riparian vegetation shall be minimized. No native trees 6 inches in diameter or larger shall be damaged or removed, unless in imminent danger of collapse from erosion.
- The area disrupted by the project shall be revegetated in accordance with an approved vegetation plan utilizing an approved combination of native riparian trees, shrubs, and grasses.
- The slope and appearance of the project area shall be compatible with the naturalistic character of nearby slopes or creek banks.
- Where feasible, vegetation shall be used to prevent further erosion. Bioengineering techniques that are compatible with wildlife may be used where vegetative measures alone are insufficient, but the erosion control program shall include measures to minimize damage to riparian vegetation and wildlife, and to screen structural measures from public view by overplanting with vegetation. Riprap shall not be used unless no other method is feasible and slope, current, and existing native vegetation are favorable to providing substantial vegetative screening of the riprap. Rubble, gunite, cement, sandbags, bulkheads, fences, used tires, and similar materials or structures are prohibited.

Develop an educational program for the public to help control erosion on properties adjacent to erosion control projects by using proper irrigation, surface drainage, and vegetation.

5. Recreational Activities

Establish the staging areas, rest areas, and picnic facilities as shown on the three area Concept Plans, using the planning and development process described in the Plan (see Section 6.3).

6. Access and Trails

Establish the equestrian trail and the first phase paved multi-use pedestrian/bicycle trail as indicated on the three area Concept Plans.

7. Public Safety

Prepare an emergency access plan that identifies emergency vehicle access points with site specific plans for each access location.

8. Land Acquisition

Continue to pursue land acquisition of privately owned lands within the Parkway. Priority land includes the land between the two tributaries of Dry Creek, and land within the 175' riparian protection corridor, outside the two tributaries of Dry Creek. The riparian protection corridor shall be obtained through condition of land use entitlement, conservation or recreation easement, or Irrevocable Offer of Dedication (IOD).

7.0 Funding

Implementation of the Dry Creek Parkway will require considerable funding to pay for detailed planning, facility development, maintenance, and operations. A wide variety of potential funding sources and in-kind services must be pursed to support the Parkway including a general fund subsidy, grants, donations, sponsorships, volunteer services, user fees, concessionaire fees, and facility rentals.

The ability of the County to attract financial support for the Parkway is greatly enhanced by the diverse uses and resources of the Parkway. Grants, sponsorships, endowments, and donations can be pursued that are aimed at promoting education, alternative transportation, conservation, historic/cultural resources, agriculture, recreation, health, and community development. It is critical for the County to develop short and long-range strategies for aggressively targeting revenue sources for the Parkway.

Funding for the Parkway must be planned for two general purposes. The first is operating expenses, which are ongoing, somewhat predictable, and include maintenance, administration, programs, planning, and debt financing for land acquisition. The second category of expenditure is for major capital improvements. Capital costs are typically discretionary unless major equipment and facility replacement or renovation is required. Proposals for new development in the Parkway must consider the cost of future facility operation as part of the funding requirements for the project. It is important not to develop new facilities unless the financial resources are available to maintain them. While grant funds are typically available for capital projects, planning, and programs operational cost are rarely eligible for such resources. The Board of Supervisors should set a level of subsidy it is willing to commit to the Parkway from General Fund monies so there is a minimum guaranteed annual budget for Parkway operations and maintenance. The following are some of the funding sources that should be pursued for implementation of the Dry Creek Greenway.

7.1 Grants

Federal

1. **Department of Transportation Intermodal Surface Transportation Efficiency Act (ISTEA)**
   The Act allows a portion of the transportation funds to be used to build bicycle paths along federal-aid highways, roads, trails or parkways.

2. **Watershed Assistance Grants Program (WAG)**
   The Clean Water Action Plan calls for the creation of a dedicated source of funding to build the capacity of existing or new watershed partnerships to protect and restore their watershed. These partnerships would serve as national demonstrations or models of how to bring together diverse interests to achieve watershed protection and restoration and of how to

ensure diversity in watershed partnerships. The WAG program will make grants to local watershed partnerships to support their organizational development and long-term effectiveness. Grants area awarded for amounts between $1,500 to $30,000.

3. **Cooperative Endangered Species Conservation Fund**
   Granted by the U.S. Fish and Wildlife Service to a State agency with a cooperative agreement with the Secretary of the Interior to assist in the development of programs for the conservation of endangered and threatened species – including habitat protection, restoration, management and acquisition; and public education. Up to 75% of program costs may be received.

4. **Wildlife Conservation and Appreciate (Partnership For Wildlife)**
   Granted by the U.S. Fish and Wildlife Service. Available for actions to conserve fish and wildlife species and their habitats; and to provide opportunities for the public to use and enjoy fish and wildlife through nonconsumptive activities. Eligible for any fish and wildlife agency in partnership with State agencies and private organizations and individuals. Up to 33% of program costs may be received and private funding match required.

5. **Water Banks Program**
   Granted by the Department of Agriculture's Natural Resources Conservation Service, landowners are eligible for funds to conserve surface waters; preserve and improve wetlands and preserve important nesting, breeding and feeding areas of migratory waterfowl. Annual payments for 10 years will be made for $7 to $75 per acre.

6. **Wetlands Grants**
   Granted by the EPA's Office of Water, funds are available to States, local government and not-for-profit organizations to develop the capacity to protect, manage and restore wetlands and riparian resources. Minimum match of 25% of total project cost is required.

7. **North American Wetlands Conservation Fund**
   Granted by the U.S. Fish and Wildlife Service, funds are available for wetlands conservation projects to be matched one on one by U.S. non-federal dollars. Special consideration is given for migratory bird habitat and other key wildlife habitat. Beneficiary eligibility is available to any organization or individual.

8. **Urban Park and Recreation Recovery Program**
   Funded by the National Park Service, funds are available for the rehabilitation of recreation areas and facilities, demonstration of innovative approaches to improving recreation opportunities, and development of improved recreation planning. These grants are matching grants (50% Federal – 50% local).

9. **Recreational Trails Program**
   Granted by the Department of Transportation's Federal Highway Administration, this grant is available to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. A State agency must be dsignated by the Governor to receive the funds.

10. **Outdoor Recreation Acquisition, Development and Planning (Land and Water Conservation Fund Grants)**
    Grants provided by the National Park Service to acquire and develop outdoor recreation areas and facilities for the general public, to meet current and future needs. Not more than 50% of the project cost may be federally financed.

11. **Environmental Education Grants (EEG)**
    For grants provided by the EPA's Office of Environmental Education, funds are available to support projects to design, demonstrate, or dissenminate practices, methods, or techniques related to environmental education and training. Federal funds will not exceed 75% of the project cost.

State

1. **California's Department of Conservation Resource Conservation District (RCD) Assistance Program/Grants**
   This grant annually provides $120,000 to support conservation education and on-the-ground projects promoting conservation with landowners and communities within watersheds.Land restoration, fish and wildlife habitat enhancement, water quality conservation, and public outreach and education are all eligible actions supported with this grant. A 25% local match is required.

2. **State Lands Commission**
   Can acquire land through Land Bank funds and/or exchange.

3. **Department of Transportation**
   Proposition 116 - Bicycle trails funding.

4. **Resources Agency**
   State Environmental License Plate Funds - Grants are offered to state agencies, city or county agencies, or private non-profit organizations to support a variety of projects that help to preserve or protect environment. Eligible projects include acquisition, restoration or enhancement of resource lands and endangered species, and development of interpretive facilities. Projects are funded in one-year increments and each must be a separate, distinct project with a clearly defined benefit.

   Environmental Enhancement and Mitigation Program (EEMP)-Grants offered to local, state or federal agencies or non-profit entities to provide enhancement or additional mitigation related to eligible transportation facilities. Eligible projects include highway landscaping and urban forestry, acquisition restoration or enhancement of resource lands, and acquisition and/or development of roadside recreation opportunities. The program, established in 1989 (Section 164.56 of the Streets and Highways Code) provides funding from fuel taxes and weight fees.

5. **Department of Fish and Game**
   Inland Fisheries Division Grant Project provides funds for for fishery restoration work. Funds for this program come from a variety of sources.

   The Cigarette and Tobacco Tax Benefit Fund (Proposition 99) provides funds to restore fish habitat. The Commercial Salmon Stamp account provides funds for projects directed at

restoring salmon populations through habitat enhancement or fish rearing, and for projects designed to educate the public on the importance and the ecology of salmon. Anyone may apply. Action projects are preferred to studies, evaluations or monitoring. Funding levels are recommended by the Commercial Salmon Trollers Advisory Committee or the California Advisory Committee on Salmon and Steelhead Trout.

6. **Wildlife Conservation Board (Generally administers the Federal Land and Water Conservation Fund)**
   Proposition 19 (1984 Fish and Wildlife Enhancement Bond Act) provides funds to correct the more severe deficiencies in fish and wildlife habitat. Funds may be used only by public agencies to enhance, develop or restore flowing waterways for the management of fish outside the coastal zone.Proposition 70 funds are available for endangered species and for native trout habitat restoration.

7. **Department of Water Resources**
   Urban Streams Restoration Program offers grants for local street restoration projects for prevention of property damage by floods and bank erosion and to restore the natural value of streams. Under the Proposition 13 - Safe Drinking Water, Clean Water, Watershed Protection and Flood Protection Act, the grants can fund simple projects such as organizing volunteer help to monitor and clean up streams or can fund complex stream restoration work. Cities, counties, districts and nonprofit organizations may apply for grants. Small unincorporated community organizations or consulting firms may apply but must find a non-profit organization or a local government to sponsor this proposal. This grant program stresses community participation. Therefore, any proposal submitted by a government agency must be cosponsored by a logical local group with an interest in the problems or streams to be addressed by the proposal. Likewise, projects submitted by nonprofit organizations must be co-sponsored by an appropriate local agency.

8. **Department of Forestry and Fire Protection**
   The Urban Forestry Grant Program (Proposition 12 Tree Planting Grant) was created by the Watershed, Wildlife, and Parks Improvement Bond Act. Cities, counties, districts and nonprofit organizations may apply for grants. Eligible projects include planting trees along streets, in dedicated open space areas, and in public parking lots and school yards.

   Forest Stewardship Program - Funded by Federal dollars and administered by the State for private land owners only. Grants provided to protect, restore and improve wetlands and riparian areas to maintain water quality and enhance habitat. Eligibility is for private landowners as well as public jurisdictions. Small acreage from 20 to 299 acres of land.

9. **State Water Resources Control Board**
   The Nonpoint Source Pollution Control Program - Non-point sources (NPS) are the major cause of water pollution in California. As the state agency charged with protecting water quality in the State of California, the State Water Resources Control Board (State Board) is committed to promoting implementation projects that reduce NPS pollution in waterbodies of the State. The February 1987 amendments to the federal Clean Water Act (CWA) include Section 319, which establishes the framework for non-point sources (NPS) activities on the State level. The CWA provides funding for the states' NPS programs, including grants for NPS implementation projects. Implementation projects to reduce NPS loading from various

sources are eligible for grant funding. NPS implementation activities include demonstration projects, technology transfer, training, public education technical assistance, ordinance development, and other similar activities associated with control of NPS pollution. The amount of funds available is dependent upon Congressional appropriations.

Water Quality Planning - The State Water Resources Control Board provides water quality management planning grants to state, local, and regional agencies to address a wide variety of surface and ground water quality problems. These funds are provided by the federal government under Sections 205 and 604(b) of the Clean Water Act. These grants require a 25% non-federal match. The funding emphasis is on projects that focus directly on corrective or preventive actions for water bodies identified as "impacted" in the State's Water Quality Assessment. However, projects that focus on other water quality problems will also be considered. Projects which are primarily research-oriented will not normally be funded.

EPA's State Wetland Program Development
Under the Clean Water Act (CWA) Section 104 (b)(3), grants are given to various wetland projects include "multi-objective river corridor management" projects that address multiple use of rivers and adjacent areas, such as recreation habitat protection, water quality and open space. Funds available to assist states, and local government in implementing new programs relating to wetlands preservation and enhancement. Range of financial assistance for these project grants is generally $25,000 to $500,000.

10. Department of Parks and Recreation

Land and Water Conservation Fund - This program has funds available for the acquisition or development of neighborhood, community or regional parks or facilities supporting outdoor recreation activities. Eligible applicants include counties, cities, recreation and park districts, special districts with public park and recreation areas. This is a 50/50 matching program. The applicant is expected to finance the entire project and will be reimbursed 50% of the costs, up to the amount of the grant. The amount of funds available varies from year to year.

Riparian and Riverine Habitat Grant Program To provide funds on a competitive basis to increase public recreational access, awareness, understanding, enjoyment, protection, and restoration of California's irreplaceable rivers and streams. Includes the acquisition, development, or improvement of recreation areas, open space, parks, and trails in close proximity to rivers and streams. All projects must include a Riparian or Riverine habitat enhancement element and also provide for public access. The minimum is $20,000, and the maximum is $400,000.

Habitat Conservation Fund- This program provides funds for a variety of habitat conservation projects. Eligible applicants include counties, cities, cities and counties, or districts as defined in Subdivision(b) of the Public Resources Code. Eligible projects include: deer and lion habitat, including oak woodlands; habitat for rare and endangered, threatened and fully protected species; wildlife corridors and urban trails; wetlands; aquatic habitat for spawning and rearing of anadromous salmonids and trout species; and riparian habitat. This is a 50/50 matching program. The match must come from a non-State source.

Non-Motorized Trails Grant Program Eligible applicants include cities, counties, eligible districts, and elibible local agencies formed for park purposes, and federally recognized California Indian tribes. This competitive grant program funds the development,

improvement, rehabilitation, restoration, and enhancement of non-motorized trails and associated interpretive facilities for the purpose of increasing public access to, and enjoyment of, public areas for increased recreational opportunities.
Private

11. **The Conservation Fund - American Greenways Grant Program**
Provides grants in recognition of accomplishments in successful and creative approaches to developing California Greenways, particularly through overcoming obstacles and creative problem-solving. ($500 - $2,500)

12. **National Fish and Wildlife Foundation's Grants**
A private non-profit established by Congress in 1984, the foundation fosters cooperative partnerships to conserve fish, wildlife, plants, and the habitats on which they depend. The Foundation works with its grantees and conservation partners to stimulate private, state, and local funding for conservation through challenge grants. Through a challenge grant, each dollar awarded by the Foundation must be matched with one non-federal dollar. Projects that benefit multiple species, achieve a variety of resource management objectives, and/or lead to revised management practices that reduce the causes of habitat degradation. A special emphasis is placed on larger projects that demonstrate a landscape-level approach and produce lasting, broad-based results on the ground. Numerous grants would apply to the Dry Creek Parkway including "Bring Back the Natives", "Native Plant Conservation Initiative", and habitat conservation plans focusing on migratory bird populations.

7.2 Low Cost Services

Federal

1. **U. S. Department of Agriculture, Soil Conservation Service, Resource Conservation District**
Interest is in preserving site-specific plants. Will collect and propagate seeds if project approved by local Resource Conservation District.

State

1. **Conservation Corps**
Provides low cost services for brush clearance and trail building. Sponsor must provide materials, but Corps provides supervision and some tools, and crews often work alongside volunteers.

7.3 Other Services/Materials

Federal

1. **National Parks Service**
   Rivers and Trails Conservation Assistance Program - Under the National Center for Recreation and Conservation. The program provides technical assistance for corridor conservation plans, statewide assessments, conservation workshops, consultation and information exchange. Rivers & Trails staff work on the grassroots level with local citizens groups and state and local governments to revitalize nearby rivers, preserve valuable open space, and develop trail and greenway networks. All Rivers & Trails projects are locally led and managed, and begin with an invitation from local agencies and/or organizations to help.

State

1. **Department of Forestry**
   Sells low-cost native trees. Must be purchased in quantities of 10, habitat and erosion control, but not for landscaping. Can also provide discounts if jurisdiction provides own seed. Ordering requires advance planning for availability during proper season.
2. **Conservation Corps**
   Provides plant materials to any public agency at cost. Prefer 1 to 1-1/2 year lead time for preparation of plant materials. Planting projects do not have to have Corps workers. Department of Forestry and Fire Prevention
3. **Department of Forestry and Fire Prevention**
   Technical Assistance Program

Other

1. **Special Tax**
   The State constitution permits local governments to levy taxes for specific purposes if approved by a two-thirds vote of the electorate. The tax must also be authorized by state law. While cities have a broad choice of taxes which may be used in this manner, counties are much more restricted. A county may, however, use the transient occupancy tax (hotel/motel tax) for general or specific purposes. Some local governments in California earmark this tax or a portion of it for recreation and tourism activities. The County may wish to consider a new kind of broad tax that could raise park revenue with minor impact on any group of taxpayers. Legislative authorization might be required before such a tax could be presented to the voters.
2. **Benefit Assessment**
   Traditionally, benefit assessments have been used to fund specific Public Works facilities which directly benefit the property assessed and increase its value. Streets, sidewalks, and street lighting are examples of such facilities. Since Proposition 3 was approved,

assessments have been authorized by the Legislature for new facilities on a broader scale. In some cases, voter approvals are required which make the assessment differ little from a special tax. But in other cases, a vote is not required unless a certain percentage of affected property owners file protests. Evolution of the law will determine whether a County-wide benefit assessment to fund Parkway facilities maintenance and development could be implemented.

3. **In-Kind and Other Funding Sources**
   Private contributions of materials or equipment, volunteers and similar types of assistance are "funding" sources which should play a role in future Parkway maintenance, development, and interpretation. Community groups could assist with a variety of activities including patrolling, safety programs, maintenance, tree planting, vegetation management, and docent tours.

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Appendix A – Dry Creek Parkway Resource Assessment

THE DRY CREEK PARKWAY

A RESOURCE ASSESSMENT

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October, 1992

and

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DRY CREEK PARKWAY: A RESOURCE ASSESSMENT

1.0 PROJECT AND STUDY AREA

The Dry Creek Parkway is located in north central Sacramento County. It encompasses a stretch of Dry Creek from Gibson Ranch at the Placer County line to the Sacramento city limits at Ascot Avenue. The Parkway primarily includes the area between the North and South Forks of Dry Creek, and a 175'stream bank/riparian protection zone on the outside banks. Dry Creek is part of a the 116 square mile Dry Creek Watershed with headwaters in Placer County and certain parts of Sacramento County, including Antelope Creek, Clover Valley Creek, Secret Ravine, Miners Ravine, Strap Ravine, Linda Creek, and Cirby Creek. Below Ascot Road, Dry Creek flows to Steelhead Creek and from there enters the Sacramento River near its confluence with the American River.

Dry Creek Parkway is an important open space resource ideally suited for passive recreational opportunities. The Parkway will serve local residents in the Rio Linda/Elverta community, and will provide an important link in a 70-mile regional trail system that includes the American River Parkway, the Ueda Parkway, the proposed Dry Creek Greenway, and Folsom Lake State Park.

The Dry Creek watershed is developing rapidly. From 1990 to 2000 the population grew by more than 60 percent, from approximately 90,000 to more than 150,000 people. Much of the growth has been the result of converting agricultural or rural lands to urban or residential uses. While about 85% of the watershed is located in Placer County, including the cities of Roseville and Rocklin, and the Town of Loomis, the mouth of the watershed is in Sacramento County. The Dry Creek Parkway is formed of the six miles of creek upstream of the mouth and receives stormwater runoff from nearly all of the watershed area.

Prior to 1990 there was little coordinated resource management along Dry Creek. The Sacramento County Natural Streams Plan Summary (1980) discussed several north and east county streams, but did not include Dry Creek. The Draft Conservation Element of the County of Sacramento General Plan (1990) included a section on urban streams, but highlighted only Morrison Creek, Elder Creek, and Laguna Creek. The County's Division of Water Resources proposed Floodplain Development Policies (1991) outlined a number of creeks needing floodway planning, including Dry Creek. A Draft Report on the Dry Creek Watershed Flood Control Plan outlined general hydrological problems for the entire Dry Creek watershed. Studies by Montgomery and Associates (1992) and Furgo-McClellan (1992) addressed flood control concerns for the entire Dry Creek watershed. In 2000, Swanson Hydrology prepared a study for SAFCA addressing both flood detention and stream restoration feasibility for the Placer County portion of the watershed. The Local Floodplain Management Plan for the County of Sacramento, completed by the Department of Water Resources in 2001, includes a discussion of flood issues and proposed solutions for Dry Creek as one of the five major watersheds in Sacramento County.

The study area for this resource assessment begins south of the Placer county line at Gibson Ranch Park and ends at confluence of the North and South Forks near Ascot

Avenue. The area includes the Dry Creek channels and adjacent land areas approximately ½ mile outside of the channel. Detailed field assessment was focused on the channel, while a generalized analysis of aerial imagery was used to classify adjacent lands. The channel analysis is divided into thirteen distinct reaches according to differences in habitat or resource conditions. Appendix I to this report contains detailed descriptions of the resources associated with each of the thirteen reaches. Information for this assessment comes from field surveys conducted in 1992 and 2000, from published reports, and personal communication.

2.0 TOPOGRAPHY

The headwaters of Dry Creek are found at elevations of 990'-1,200' in the foothills of the Sierra Nevada. The lower area is perched at an elevation of approximately 30' on the floor of the Sacramento Valley near the confluence with Steelhead Creek. The topography within the study area is generally very flat, with elevations ranging from 75'-80' at the Placer county line to approximately 35'-40' near Ascot Avenue. Immediately above the study area, the Dry Creek watershed is characterized by moderate slopes and relief. Downcutting by Dry Creek results in a channel/upland relief of 10'-12' on the outside banks of the upper reaches, to 3'-6' in the lower stretches.

3.0 SOIL

Soils within the study area are either mostly deep alluvial materials or are moderately deep materials located on higher terraces. They are fine to moderately coarse in texture, have moderately low runoff potential, and have moderate infiltration rates when thoroughly wetted (Montgomery, 1992; Soil Conservation Service, 1991). According to the SCS, the most common soil-type is described as "Liveoak sandy clay loam, 0 to 2 percent slopes, occasionally flooded". This is the predominant soil type within the two forks of Dry Creek. This is a very deep, well drained, alluvial soil derived from granitic rock. Permeability is moderate, water availability is high, effective rooting depth is 60 inches or more, runoff is slow, and hazard of water erosion is light. The surface layer is inches approximately 18 thick and is a dark grayish brown in color. The subsoil, a brown sandy clay loan and yellowish brown sandy loam, is about 30 inches thick.

Other soil types are found adjacent to the Parkway, to the outside of the creek corridor. These include San fine Joaquin sandy loam, 0 to 3 percent slopes; xerarents - San Joaquin complex, 0 to 1 percent slopes; Reiff fine sandy loam**,** 0 to 2 percent slopes, occasionally flooded; Bruella sandy loam, 0 to 2 and 2 to 5 percent slopes; Fiddyment fine sandy loam, 1 to 8 percent slopes; San Joaquin fine slopes; sandy loam, 3 - 8 percent; and sailboat silt loam, drained, 0 to 2 percent slopes, occasionally flooded. These soils are very well suited for restoration of riparian habitat or grasslands.

4.0 HYDROLOGY AND FLOOD ISSUES

The Dry Creek watershed includes approximately 116 square miles, and encompasses Dry Creek and its tributaries, including Antelope Creek, Clover Valley Creek, Secret Ravine, Miners Ravine, Strap Ravine, Linda Creek, and Cirby Creek. The headwaters of

Dry Creek occur in the upper portions of the Loomis Basin in the vicinity of Penryn and Newcastle, in the Granite Bay area near Folsom Lake in Placer County, and in the Orangevale area in Sacramento County. Elevations of Dry Creek range from 1,250' in the upper reaches to approximately 30' where it enters Steelhead Creek.

Several in-depth studies have focused on hydrological and flood control issues for the Dry Creek watershed area. The most comprehensive treatment for the area is the Dry Creek Watershed Flood Control Plan (Montgomery, 1992) prepared for the Sacramento County Water Agency and Placer County Flood Control and Water Conservation District. A second study (Fugro-McClelland, 1992) is the Draft Environmental Impact Report for the Natomas Area Flood Control Improvements prepared for Sacramento Area Flood Control Agency (SAFCA) which includes the area immediately downstream from Ascot Avenue to Steelhead Creek. Additional hydraulic analyses are included in the Final Supplemental EIR for the NEMDC West Levee and Robla Creek South Levee Stage 2 Improvements (EIP Associates, 1997) and in the Final Subsequent EIR for the Lower Dry Creek and Robla Creek Levee Improvements Mitigation Project (EIP Associates, 1998). Opportunities for flood detention and stream restoration in Placer County were considered in the Dry Creek Watershed Flood Detention and Stream Restoration Feasibility study (Swanson Hydrology, 2000) prepared for SAFCA. The most current study that addresses flooding in the Sacramento County areas of the Dry Creek watershed is the Sacramento County Local Floodplain Management Plan (2001).

4.1 High Flow Conditions

Floods typically occur from October through April. The most severe flood conditions occur after a combination of prolonged rainfall leading to saturated soils and after a short period of one to six hours of intensive precipitation (Montgomery, 1992).). In the1992 report the peak 100-year flow was estimated to be 17,230 cfs at the Placer/Sacramento County Line, and 17,480 cfs at Rio Linda Boulevard. After the severe flooding in 1995, representatives of affected agencies entered into a coordinated effort known as the Dry Creek Hydrology and Hydraulics Peer Review Committee to update and revise the Dry Creek hydrology. This effort resulted in the Statement of Findings Regarding the Historic Peak Flow and Flood Frequency of Dry Creek at Vernon Street in Roseville, CA., dated November 6, 1996. The peak 100-year flow in Dry Creek at Vernon Street based on the revised hydrology is estimated to be about 15,900 cfs. Montgomery (1992) concluded that under existing conditions, the Dry Creek area in Rio Linda would incur substantial flood damages not only with the 100-year flood, but even with 10-year flood events.

Peak flows during more the frequent storm events (i.e. return intervals of 2-yr, 10-yr and 25-yr) have increased in recent years due to urbanization. The magnitude of potential peak flood flow will increase by 10 to 20 percent, according to Montgomery (1992).

4.2 Low Flow Conditions

Historically, little water flowed in Dry Creek during the summer months. Much of the recent summer flow is caused by stormwater runoff, urban runoff, waste water

treatment plant discharges (from Roseville), and irrigation return water. Mean summer flows range from 8 to 30 cfs.

4.3 Channels

The two forks of Dry Creek represent the main or South Fork channel and the overflow or North Fork channel. The overflow channel is several feet higher than the main South fork. The channel bottom of the South Fork channel consists largely of claypan or occasional deposits of sand or silt. According to one of the local property owners, the North Fork was formerly more active in conveying floodwaters than presently. It would appear that the accumulation of sandy materials on the channel bed of the North Fork precludes floodwater conveyance under minor storm conditions. Both forks of Dry Creek have numerous secondary channels that function to carry overflow from minor flood events.

4.4 Erosion and Degradation of Creek Banks

Creek bank erosion is occurring commonly at bridge and road crossings, where drain pipes cross streams, where narrow levees have been placed adjacent to the creek, where residential backyard fences abut too closely to the creek channel, and where riparian vegetation has been degraded.

Structures that encroach into the floodplain, such as bridges and road crossings, create reverse flood eddies especially at higher water flood events. This causes severe local erosion problems. An example of this kind of local erosion is the area immediately downstream from the Elverta Road crossing. The damage results from bridge abutments that have narrowed the floodway, increasing the flow velocity, and causing reverse flow eddies during flood events, with the resulting wave impact thus causing bank erosion.

The presence of houses and backyard fences close to the creek bank is also contributing to erosion problems. Landowners often remove vegetation along the creek and without the protective soil-holding capabilities of the riparian plants, banks tend to erode. Homeowners commonly resort to "hard" riprap solutions for bank protection.

Low levees have been placed along many reaches of the interior section or “island” between the north and south forks of Dry Creek. While the effect of these low levees is minimal during major floods, they may indirectly cause some erosion during low flow events by restricting water to a narrower portion of the floodway adjacent to the creek.

The present channel banks and creek configuration evolved in an earlier period before the watershed became urbanized. As mentioned above, urbanization has caused an increase in flood flows associated with frequent flood events, resulting in new erosion stresses on creek banks. With the loss of bank and soil rooting zones, trees are undermined and fall over resulting in a loss of riparian habitat.

The heavy storms in 1986 and 1996 created extreme flooding conditions in the Dry Creek watershed. To lessen future flood damage, studies by Montgomery (1992) and Swanson (2000) make several recommendations for the Dry Creek Watershed. These include:

1. Regional detention basins. A number of sites upstream of the Dry Creek Parkway have been identified as potential regional storm water detention sites. Montgomery (1992) identifies potential detention basins that would temporarily store close to 1,800-acre feet of storm water and then slowly release them back into Dry Creek. Swanson (2000) targets a detention capacity of about 600-acre feet in Placer County to mitigate future increases in water surface elevation due to urban development. This capacity would not reduce existing flooding levels. According to the Sacramento County Local Floodplain Management Plan, Placer and Sacramento counties have agreed that detention will not be required on Dry Creek below Placer County.
2. Bridge and culvert replacement. Montgomery (2000) identified approximately 130 bridge and culvert replacements all of these being above the Parkway area.
3. Local, on-site detention. Placer County has adopted regulations that prevent new developments from contributing stormwater flows above the predevelopment levels. While onstream detention is not planned for the Dry Creek channel in Sacramento County, new developments will not be allowed in the floodway, and may not cause offsite increase in the 100-year flood elevation.
4. Flood plain management. Montgomery (1992) recommended that continued and new enforcement of flood plain management ordinances, grading ordinances, and policies to control development in the flood plain, to prevent modification of natural channels, or removal of vegetation. It is noteworthy that Montgomery (1992) cautioned against clearing of vegetation in the upper watershed, stating that "The dense vegetation in the channels and flood plains throughout the watershed acts as a flood retarding structure." The study further recommended that "...flood plain management and grading ordinances and policies be enacted where such ordinances and policies are not already in place". Swanson (2000) specifically focuses on opportunities to incorporate detention basin planning with stream habitat restoration, water quality improvement, and open space/recreational amenities.

4.5 Hydrological Issues in Relation to Recreational Planning

The entire Dry Creek Parkway lies within a major floodway capable of destroying developed properties. The Sacramento County Department of Water Resources has identified 26 properties within the Parkway that have had repetitive losses from flooding. Planning for parkway trail and facility development requires an understanding of the effects of flooding water on proposed amenities. Likewise, proposed developed amenities could have an impact on the capacity of Dry Creek to convey floodwaters. Proposed parkway amenities in the floodplain should be designed to complement future flood control proposals. Specifically, low flow secondary channels; terraces, elevated trails and levees can be incorporated into the parkway design to provide for future increased flood flow, development of riparian

vegetation, and recreational uses (e.g., trails). Design and implementation of Parkway amenities in the floodplain must be coordinated with the Sacramento County Department of Water Resources and SAFCA

5.0 PLANT LIFE AND VEGETATION

The vegetation and habitat conditions of the Dry Creek Parkway are influenced by topography, availability of water, channel dynamics, and human land use activities. The plant list in Appendix II includes more than 90 species of plants found within the Parkway. The Parkway was surveyed during the dry season in 1992 and during the winter of 2001. It is likely that additional species could be found with additional botanical assessment during the spring.

Natural habitats within the proposed Dry Creek Parkway include principally riparian, riparian scrub, oak woodland, grassland, aquatic, and seasonal wetlands. Other land uses include various croplands, orchards, irrigated pasture, and developed sites. The U.S. Army Corps of Engineers in its American River Watershed Investigation (1991) mapped preliminary habitat types in the Dry Creek area of Sacramento County. This report draws on the Corps study, and their results have been field tested and modified accordingly.

5.1 Riparian Plant Communities

Approximately 220 acres of riparian vegetation exist in the study area. This estimated measurement includes vegetation on both sides of both channels of the creek and the several small tributaries.

The most important habitat within the proposed Parkway, from standpoint of overall wildlife productivity and richness, is the riparian zone along Dry Creek. Riparian plant communities are found in areas having running water (or subsurface water) availability during the summer months. Plants in these communities are dominated by broad-leaved, winter deciduous trees. These habitats stand out as ecologically rich islands in an otherwise arid, summer dry, Mediterranean climate. Riparian habitats are structurally complex, multi-layered communities. Tree heights reach up to nearly 100 feet. In California's Central Valley, typical tree species forming the upper canopy include valley oak (*Quercus lobata*), Fremont's cottonwood (*Populous fremontii*), California sycamore (*Platanus racemosa*), ash (*Fraxinus latifolia*), and several species of willow (*Salix* sp.). Sub-canopy species include white alder (*Alnus rhombifolia*), boxelder (*Acer negundo*), Oregon ash, and sometimes buttonwillow (*Cephalanthus occidentalis*). Lianas, or vines, such as California grape (*Vitis californica*) and pipevine (*Aristolochia californica*) often drape these species, especially in mature systems. Understory species include poison oak (*Toxicodendron diversilobum*), wild rose (*Rosa californica*) blackberry (*Rubus vitifolius, R. procerus*), and elderberry (*Sambucus mexicana*). The herbaceous layer consists of sedges (*Carex praegracilis, C. barbarae*) and grasses (*Elymus triticoides*) and Douglas sagewort (*Artemisia douglasiana*). Riparian plant development is greatly influenced by disturbance conditions of flood cycles of rivers and creeks. Many plant species regenerate best after disturbance caused by flooding.

In the Central Valley, riparian habitats have been classified as Great Valley Oak, Great Valley Cottonwood, and Great Valley Mixed Riparian Forest (Holland, 1986). The dominant type in the study area is the Great Valley Oak, followed by the Great Valley Mixed Riparian Forest. Very little of the cottonwood type is found in the area, possibly due to the beaver's preference for the inner bark of cottonwood trees over other species for food.

The riparian corridor along Dry Creek is generally very narrow. Nevertheless, the riparian zone is of very high quality compared to many stream side areas in Sacramento County, such as the American River Parkway and Sacramento River. The primary reason for this high quality is that natural hydrological processes such as annual flooding, deposition of silt, and seasonal high water tables are still intact. In fact, compared to historical conditions, more frequent and severe winter flood events occur in recent history due to urbanization of the watershed. Also, more summer water flows through the system. The consequence is that present conditions may be more conducive to growth of lush riparian systems than in earlier times. This may explain, in part, why the stands of trees are relatively young in age, as judged by tree diameter. The most dominant trees, in order of abundance, are valley oak, ash, willows (*Salix goodinggii*, *S. hindsii*), Fremont cottonwood, black walnut (*Juglans hindsii*), and buttonwillow (*Cephalanthus occidentalis* var. *californicus*). It is noteworthy that very few numbers of exotic trees are found, these including black locust (*Robinia pseudoacacia*), mulberry (*Morus albus*), fig (*Ficus elastica*), and several others.

Along Dry Creek, typical mid-story plants include box elder (*Acer negundo*), elderberry (*Sambucus mexicana*), wild rose (*Rosa californica*), and sapling trees mostly represented by shade tolerant ash. In some of the more mature stands, vines such as Himalayan blackberry (*Rubus discolor*), wild grape (*Vitis californica*), and pipevine (*Aristolochia californica*), drape the trees.

In some places, such as openings and early successional sites, understory plants are dominated by both introduced plants such as annual grasses (*Bromus diandrus*, *Bromus mollis*), yellow starthistle (*Centaurea solstitialis*), and fennel (*Foeniculum vulgare*). In more successionally mature sites, native plants such as creeping wildrye (*Elymus triticoides*), sedges (*Carex barbarae, C. praegracilis*), and mugwort (*Artemisia douglasiana*) dominate the sites.

Plants in the riparian zone are segregated spatially according to distance from the water's edge. Plants immediately adjacent to the stream bank include buttonwillow, ricecut grass (*Leersia oryzoides*), watergrass (*Echinochloa cruz-galli*), and cocklebur (*Xanthium spinosum*). Farther upslope, in drier conditions, typical riparian plants such as creeping wildrye, sedges (*Carex barbarae*, *C. praegracilis*), wild rose, and mugwort are found.

Riparian plants along Dry Creek are found both along the Main (South) Fork, North Fork, and numerous overflow channels. Low flow secondary channels serve to carry floodwaters and to reduce erosion along the main banks. Low flow secondary channels and terraces, from a hydrological perspective, serve to widen the riparian

corridor. The wider corridors in turn support broader riparian zones, thereby increasing its biological value.

The riparian plant community is better developed along the summer wet Main Fork compared to the summer dry North Fork. While a tree canopy is present along the North Fork, the vegetative understory species cover is comparatively sparse compared to the Main Fork. Many of the trees, especially ash, appear drought stressed.

Riparian plant development is heavily influenced by hydrological conditions of Dry Creek. Historically, little water flowed through Dry Creek in the summer months. This has been changed with urbanization in the region, including water from the Roseville Water Treatment Plant. With increased moisture availability, a richer development of riparian communities probably occurs now than in earlier, historic conditions. Winter runoff conditions, as mentioned earlier, have also changed due to regional urbanization. The consequence of increased winter flow is that the historic channels are not wide enough in all places to carry flood waters. This results in erosion forces along the banks, leading to erosion of tree root zones, and ultimately, trees falling into the water.

5.2 Riparian Scrub

This community is an earlier successional phase of the riparian forest community. It is often dominated by young valley oaks, but may also consist of willows and cottonwoods. According to the 1992 assessment, approximately 36.45 acres of this habitat type is found in the study area.

5.3 Blue Oak Woodland

Two areas of blue oak woodland are found in the study area. One is already in public ownership at the north end of the Sacramento County Cherry Island Golf Course. The other is found on a piece of land west of the North Fork between Q and U Streets. This latter stand is uncommon in Sacramento County in being represented by many young trees. The stand between Q and U Streets is 7-8 acres in size, though individual trees are spread out over a larger area.

5.4 Grassland

There are approximately 62 acres of annual grasslands located between the two forks in the study area. All grassland areas between the two channels would naturally convert to riparian forest given enough time, whereas many areas immediately outside the flood plain (on higher terraces) are permanent grassland sites. Typical grasses in the drier sites include exotic species such as wild oat (*Avena fatua, A. barbata*), soft chess (*Bromus mollis*), ripgut brome (*Bromur diandrus*), and annual fescue (*Vulpia myuros* var *hirsuta*). Native wildflowers include brodiaea (*Brodiaea elegans*, B. *laxa, B. multiflora*), lupines (*Lupinus* sp.), and vetches (*Vicia* sp.). In moister sites, often in the shade of trees, native grasses such as creeping wildrye and various sedges (*Carex barbarae, C. praegracilis*) are found.

5.5 Wetlands

Non-forest wetlands are found as forest understory creekside components, as periodically inundated channel bottom communities, as seasonal wetlands in upland grassland sites, as human built drainage ditches and as pond side vegetation areas. Typical plants of these areas include cocklebur (*Xanthuium spinosum*), watergrass, and ricecut grass. Approximately 4.5 acres of wetlands have been mapped for the area, including the mitigation wetlands at the Cherry Island Soccer Complex. There are about 13 additional acres of unmapped area that support various seasonal and permanent water features. This does not include the immediate bankside vegetation, which could account for several more acres

5.6 Agricultural Landscapes

5.6.1 Grain

Approximately 136.7 acres of crops have been planted in the between area the two forks, south of Cherry Island to Dry Creek Road, and in an area west of the Rio Linda Airport.

5.6.2 Irrigated Pasture

Approximately 131.7 acres of irrigated pasture, used mostly for cattle and horses, are found between the two channels. Most of this pasture is located south of Elkhorn Boulevard. The source of water for much of this area comes from the damming of the Main Fork at the lower end of Rio Linda High School.

5.6.3 Orchard

Only approximately 22.3 acres of orchard, mostly abandoned or in poor condition, are found in the study area.

5.7 Developed Areas

Very little developed area occurs between the two forks. Most of the developed area is located along Elkhorn Boulevard and Cherry Lane. Approximately 27 residences are currently found within 175 ft. of the outside banks of the creeks in this area.

5.8 Vegetation Protection in Relation to Recreational Development

Recreational and park land development need not have a particularly negative impact on natural resources, if planned properly. Native plants are readily incorporated in park design and are attractive and generally has a low cost to maintain. At the same time they provide value to wildlife. Establishing maintained pedestrian, equestrian, and bicycle trails may actually help reduce the amount of damage caused by people blazing their own trails without regard for sensitive vegetation.

The human activity that has the most potential for major negative impact to natural vegetation would be arson-caused fires. If the American River Parkway can serve as

an example from which to learn, human-caused fires could potentially destroy large areas of vegetation if careful fire-control mechanisms are not built into the project area.

6.0 WILDLIFE

The Dry Creek Parkway is home to many species of wildlife. The most diverse group of wildlife is the bird fauna, followed by fish and mammals. The richness of the bird life results from the abundance of relatively undisturbed riparian habitats and adjacent farmlands found in relatively large, continuous natural corridors.

6.1 Wildlife Corridors

An important concept in wildlife management, especially as landscapes become more urbanized, is to provide migration corridors. Many species, some more than others, require uninterrupted, familiar habitat for movement from one place to another. Many songbirds, for example, form loose feeding aggregations during migration and move along wooded corridors to find sufficient food to fuel their long-distance travels. Corridors also provide cover from predators that often follow migrating songbirds (e.g.: Accipiter hawks and falcons). Corridors are essential for the survival of secretive species that do not readily cross gaps in vegetation. Neither can tolerate habitat fragmentation and readily abandon sites or perish as a result of habitat loss.

As habitat corridors become further and further apart, migrant birds, particularly songbirds, must fly farther to seek cover and food. Longer flights mean longer exposure to inclement weather conditions and predators, thus reducing migration efficiency. Such reduced efficiency can result in higher mortality, as migration is the most energetically demanding period a bird must face.

Corridors are also important in maintaining overall biodiversity. It has been well documented that as continuous tracts of forest become more and more fragmented, carrying capacity (the number of species and individuals supported by a given area) is reduced (Whitcomb, et al 1977). Also, studies have shown that bird species richness increases as forest width increases (Stauffer and Best 1980). In essence, one can look at fragmented patches of forest as islands. Smaller islands translate to less biodiversity. As these islands become farther and farther apart, movements become more limited. If one forest patch were to die from disease, the organisms living within, if unable to find another suitable patch, would perish as well. The maintenance of corridors can therefore minimize the creation of habitat islands and maintain diversity (Geibert 1980).

Corridors themselves can become traps. The width of a corridor is a critical consideration in any environmental plans involving corridors. If these avenues of habitat are too narrow, they become pathways for predators to find prey easily. This is especially true for bird and mammal species nesting and breeding in narrow corridors. Passerines in the Sacramento area, nesting in narrow corridors become more susceptible to predation from small mammals, hawks, jays (eggs and young), and cowbirds (nest parasitism) (Gaines 1977).

6.2 Bird Life

The most diverse wildlife community in the project area is the bird fauna. A breeding bird atlas for the Dry Creek area compiled by the local Audubon Society (Appendix III) lists approximately 72 species for the general area. While some of the waterbirds are found in rice fields near Rio Linda, and aren't expected to be found within the Parkway, most of the listed-birds have been found or are expected to be found within the boundaries of the parkway. Typical resident birds seen in the area include kingfishers, acorn woodpeckers, nuthatches, white mockingbirds, house red-tailed hawks, northern harriers, magpies, California woodpeckers, breasted nuthatches, myrtle warblers, wrens, doves, black-shouldered kites, red-shouldered hawks, great horned owls, pheasants, common bush-tits, quail, scrub jays, mallard ducks, great blue herons, ruby-crowned kinglets, and lesser-goldfinches.

6.3 Fish

Based on interviews with Fish and Game and from field surveys, typical fish species found in Dry Creek include fall-run chinook salmon (*Oncorhynchus tshawytscha*), steelhead trout (*Oncorhynchus mykiss*), mosquitofish, (*Gambusia affinis*), carp (*Cyprinus carpio*), Sacramento sucker (*Catostomus occidentalis*), catfish, brown bullhead, Sacramento sucker, tule perch, hitch, threadfish, shad, lamprey, bluegill (*Lepomis -macrochirus*), greenfish (*Lepomois cyanellus*), and Largemouth bass (*Micropterus salmoides*).

The fall-run chinook ascends Dry Creek in October-December after fall rains increase run-off and decrease water temperatures. Salmon spawn above Roseville in Dry Creek and its upstream tributaries. Eggs are laid in gravel, and hatch in approximately 50 days, usually in March. The young fish stay in the stream until they are approximately 3 inches long, after which they swim to the ocean in April and May. Citizen groups and the Dept. of Fish and Game are participating in ongoing monitoring to observe the spawning salmon.

Several factors influence the salmon fisheries. The presence of protective, streamside vegetation serves to cool the stream and thus prolong the spring period for rearing salmon. Salmon need high quality water between October to June. Maintaining water quality is imperative. A substantial amount of the water that Dry Creek receives comes from the Roseville Sewage Treatment Plant. Storm water drains could potentially lower water quality in the area. It will be imperative to monitor water quality. Structures placed across Dry Creek may impede fish migration. Hayer Dam located below Elkhorn Boulevard is operated to allow adult salmon passage in the fall.

6.4 Mammals

A number of mammals have been reported in the area. The most common include beaver, ground squirrels, gray squirrel, raccoon, opossum, fox, skunk and numerous rodents (see Appendix V). Recently, a group of river otters has been seen near the Hansen Ranch parcels (pers. comm. Mary Tappell, February 2001).

6.5 Special Status Species

Special-status species include:

1. Plants and animals listed or proposed for listing as threatened or endangered under the federal Endangered Species Act. The local USFWS office also maintains lists of species of concern.
2. Plants and animals that are listed or proposed for listing under the California Endangered Species Act.
3. Animals species that are fully protected in California by the California Fish and Game Code, Section 3511.
4. Animals species of special concern to the Department of Fish and Game.
5. California Native Plant Society Plants "rare, threatened, or endangered" plants in California and elsewhere.

A search for rare and endangered species of plants and animals and threatened habitats was done using the California Department of Fish and Game Natural Diversity Data Base for the Rio Linda Quadrangle. Several sensitive species including great blue heron (*Ardea herodias*), great egret (*Casmerodius albus*), burrowing owl (*Athene cunicularia hypugea*), Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus caeruleus*), western pond turtle (*Clemmys marmorata marmorata*), giant garter snake (*Thamnophis gigas*), vernal pool tadpole shrimp (*Lepidurus packardi*), vernal pool fairy shrimp (*Branchinecta lynchi*), California linderiella (*Linderiella occidentalis*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), dwarf downingia (*Downingia pusilla*), legenere (*Legenere limosa*). Additionally, habitat for valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) may be found in the vicinity of the study area. Of these species, only the great blue heron and great egret were seen. A large rookery is located near the Hansen Ranch property that is used annually by great blue heron and great egret.

Swainson's hawk, a state-listed threatened species, and giant garter snake, a state and federally-listed threatened species, are found in the northern part of the county, especially to the west in the Natomas region. There are numerous records of Swainson's hawk nests within 10 miles of the Dry Creek Parkway area. There is an unconfirmed nesting site near the confluence of Dry Creek and East Main Drainage Canal (Furgo-McClelland, 1992). The Dry Creek Parkway could potentially be utilized by Swainson's hawk as both foraging and nesting habitat.

Giant garter snake inhabits sloughs, marshes and drainage canals having slow moving or stagnant water. It is not a riparian species, and therefore is not expected to inhabit Dry Creek.

7.0 WILDLIFE IN RELATION TO HABITATS

7.1 Wildlife and Riparian Habitat

The greatest diversity of wildlife in the Parkway is found associated with the riparian plant communities. The tree environment provides food material and a rich,

diversified habitat of shelter, shade, and nesting sites for numerous kinds of birds, mammals and other wildlife. In the spring and summer, the foliage, bark, and wood of the native oaks, willows, and cottonwoods serve as a food source for many species of insects and other invertebrates. Many small passerine birds, such as flycatchers, titmice, wrens, vireos, warblers and orioles, feed on these invertebrates. In the autumn, acorns serve as an important source of food for many wildlife species, such as squirrels, woodpeckers, quail, and jays. In the denser riparian forests, many understory species -- shrubs, vines, and forbs -- also produce abundant food.

The common beaver, a non-native species, is found in this area. Typical feeding and nesting behavior can and has caused substantial damage to riparian vegetation such as cottonwoods and can also play a role in local flooding problems.

In California, songbird migration in spring and fall occurs along habitat corridors, usually woodlands and riparian habitats. Insectivores often travel in loose aggregations, feeding together as they migrate.

Both living and dead trees serve as nesting habitat for many species of birds. Woodpeckers excavate holes in trees. Later, other species, such as raccoons, fox, and coyote take refuge in these sites.

7.2 Wildlife and Blue Oak Woodland

Two significant blue oak woodlands are found in the parkway. One is located at the Cherry Island Golf Course and is already protected. The other is located between "U" Street and "Q" Street on the-west bank of the North Fork. Blue oak woodlands-are utilized by many wildlife species, such as woodpeckers, raptors, and many song birds.

7.3 Wildlife and Grasslands

Many forms of wildlife utilize grasslands. The seeds and insects that these habitats produce is the basis of an important food web. The abundant rodent populations in grasslands serve as food for many other species, such as coyotes and several raptors, including Americans kestrel, red-tail hawk (*Buteo jamaicensis*), and black-shouldered kite. Many songbirds also forage for seeds and insects in grassland areas. Grasslands, especially dense spring vegetation, provide nesting sites for western meadowlark, lark sparrow, and Savannah sparrow. Grasslands provide foraging habitat for birds including western bluebird, loggerhead shrike, red-tailed hawk, western kingbird, and black-shouldered kite. The value of these grasslands at Dry Creek is enhanced by the close proximity of oak woodlands and riparian communities, which provide suitable nesting and roosting cover. A variety of rodents are found in these communities, including deer mice, California vole, California ground squirrel, and black-tailed hare. Snakes and lizards are regular inhabitants of grasslands, including gopher snakes, western fence lizards and others. Many grasslands still remain in Parkway.

7.4 Wildlife in Farmlands

Some types of farmlands are more beneficial to wildlife species than other types. Orchards are generally less valuable as foraging habitat than cropland such as pasture, wheat, and barley fields, and grazing lands. The reason for this is that many raptors can forage in these areas that are grazed or after harvest. However, orchard habitat is sometimes used as nesting habitat for species such as black shouldered kite and American kestrel. A large area between Cherry Island Golf Course and Q Street and between Elkhorn Boulevard and Ascot Avenue includes types of land uses suitable for wildlife use.

8.0 WILDLIFE IN RELATION TO RECREATIONAL AND PARK PLANNING

The placement of trails and developed park sites require careful planning to protect natural resources. In particular, facilities development should be designed to avoid affecting wildlife, native plants, and riparian vegetation; to lessen fragmentation of habitats; to avoid placement of developed sites in areas that are extremely flood prone; and to reduce the potential of arson-caused fires.

Dry Creek and its adjacent creekside vegetation represents the best riparian community in the northern part of the County. Though the riparian corridor is narrow in its present condition, the entire zone between the North and South Forks can support a riparian, oak woodland, and grasslands communities. Because this area is repeatedly flooded, it could constitute one of the best riparian systems in the county if fully restored. Within this area, the most important resource is the riparian area surrounding the South (main) Fork of Dry Creek. Since it has a year round source of running water, it has the best stand of natural vegetation and wildlife use. It is therefore imperative to direct intensive recreation away from this sensitive area.

Dry Creek and its narrow riparian corridor are very small compared to the American River; hence use of the American River parkway as a model for the development of the Dry Creek Parkway is limited. Paved trails placed close to small creeks, in comparison to large rivers, can have a comparatively greater impact. Intensively used without proper controls, the riparian resources could become trampled. Indiscriminate use by people would frighten away some wildlife species. The placement of paved trails close to the creek requires careful consideration of flood levels and hydrology avoid the path from being washed out during major floods. Proper controls to encourage people to stay on the paths are needed to prevent negative impacts to the banks and to protect the riparian habitat adjacent to the creek.

Examples of human intrusion and loss of wildlife values can already be seen along Dry Creek. Comparisons can be made with the developed parts of Dry Creek -- Gibson Ranch and Cherry Island Golf Course -- with the undeveloped areas. Wildlife requiring relatively larger foraging areas, such as birds of prey (red-tailed hawks, red-shouldered hawks, black-shouldered kites), great blue herons and possibly others, do not make use of the developed areas as they do in the undeveloped reaches. However, many of the smaller species can adapt to disturbance more than the larger species. Thus, at Cherry Island Golf Course, woodpeckers, warblers, sparrows, kinglets, and others coexist with recreation users. But many of these same species need dense cover for nesting and/or

foraging, and while they may tolerate some conjunctive use with human recreationists, they would be extirpated if their habitat is removed.

8.1 Conversion of Habitat

Presently, the Parkway consists of over 1,300 acres including parks, riparian forest, riparian scrub, grassland, seasonal wetland, crop land, pasture, orchard, and developed sites. While the entire zone could be converted to riparian habitat, doing so would reduce the biological diversity of the area. For example, raptor foraging habitat would be lost if the grasslands were replaced by riparian forest. Therefore, a goal of habitat conversion should be to leave a mix of environments.

8.2 Sensitive Species

Some species of wildlife will be more negatively impacted than others due to particular wildlife species needs and ability to adapt to human presence. Most resident raptors, especially those that feed in large grassland and farm areas, could suffer from unrestricted park development more so than other wildlife groups. Fragmentation of these habitats and intrusion by humans will require birds of prey to travel farther in order to locate suitable open space for hunting. Affected species include red-trailed hawk, kestrel, black-shouldered kite, and possibly Swainson's hawk. A number of seed eating birds, such as western kingbird and horned lark, will be negatively affected due to loss of grassland habitat. They are not expected to be extirpated from the area; however, if a substantial portion of the grassland community remains intact. Fish, such as fall-run chinook salmon and central valley steelhead, would also be negatively impact by development too close to the South Fork of Dry Creek.

8.3 Habitat Fragmentation

As discussed above, the indiscriminate development of the Parkway could possibly result in fragmentation of the habitats with resulting loss of biodiversity. In order to protect existing species and those that potentially could use the restored landscape, it is imperative not to unduly fragment the natural resources.

8.4 Impact Due to Fires

Based on experience along the American River Parkway, increased recreational use of the Parkway could result in arson-caused fires. Riparian habitats are very sensitive to tree damaging fires, and it will be critical to have adequate patrols and preventive measures to protect against such events.

9.0 RESTORATION POTENTIAL

Much of the zone between the North and South Forks of Dry Creek can potentially support riparian vegetation. Restoration should be accomplished in conjunction with flood control projects, namely the construction of low flow channels and terraces. By providing the appropriate hydrological conditions, riparian restoration can be

accomplished easily. The low flow channels and terraces will serve to protect existing channels and banks from potential degradation.

Appendix I. Dry Creek Reach Descriptions

A. Reach: Gibson Ranch - Main Fork

Upstream Boundary: Placer County Line. Downstream Boundary: Elverta Road. Reach Definition Rationale: Slightly steeper grade than reaches below Elverta Road, similar land use (dominated by Gibson Ranch on west bank, grassland areas on east bank).

Tree Species (Overstory):

Riparian community dominated by Quercus lobata, but with moderate representation of Salix spp., Fraxinus latifolia, Quercus wislizenii, one nice stand of Populus fremontii, and a few Juglans hindsii, and a few Robinia pseudoacacia. Regeneration: Good reproduction of Quercus lobata and Quercus douglasii on east side.

Shrub Species (small tree layer):

Thick development, especially on east side, with stands of Rubus procerus, Sambucus mexicana, Rosa californica, Fraxinus latifolia. and exotic Prunus sp. Cephalanthus occidentalis abundant adjacent to creek.

Understory Species:

Good native stand development, including Elymus tritcoides, Carex praegracilis, Carex barbarae, Artemisia douglasii, Chenopodium ambrosioides, Aristolochia californica. Exotics include typical annual grasses, Cynodon, Datura, Vicia sp. and Foeniculum vulgare.

Corridor Characteristics:

Well developed, fairly intact, though narrowed on west bank due to presence levee (road), 60-70% canopy closure. Extensive grassland area on east bank.

Wildlife Observations:

Many dead snags, especially cottonwood (beaver girdled, now used by woodpeckers). Red-headed woodpeckers, black-shouldered kites, quail, scrub jay, turkey vultures, etc. East bank grasslands good as raptor feeding area.

Hydrogeomorphology:

Main Channel: Compared to lower stretches, minor grade changes, relatively narrow (10-15 yards), many meander sequences, especially where room allows (but constricted by presence of levee on west bank). Steep bank at northern section.
Bed Characteristics: Sandy, numerous grade changes with rock spillways (constructed from levee material).
Bank Erosion: Moderate, apparently due to grade changes and sandy soil conditions.
Debris in Channels: Several logs and trees across channel.
Secondary Channels: Many present on both sides.

Soils:

Sandy.

Adjacent Land Uses:

Gibson Ranch, especially levee, constricts riparian zone on west bank. Cement pilings on east bank.

Other Observations:

Excavated hole on east bank, offers opportunity for restoration. Note banks of trees on east bank. East bank slated for golf course development.

B. Reach: Cherry Island Golf Course -- Main Fork

Upstream Boundary: Elverta Road. Downstream Boundary: Golf Course boundary.
Reach Definition Rationale: Similar management: golf course and soccer complex.

Tree Species (Overstory):

Good development of Quercus lobata, Fraxinus latifolia, Salix goodinggii, Quercus wislizenii, some Salix hindsii. Regeneration: Fraxinus latifolia, moderate Quercus lobata.

Shrub Species (small tree layer):

Fraxinus latifolia, Toxicodendron diversilobium, Cephalanthus occidentalis, Salix sp., Rubus procerus.

Understory Species:

Carex barbarae, Elymus triticoides, Artemisia douglasiana on bench, Leersia, Epilobium, Bidens, Leptochloa close to creek.

Corridor Characteristics:

Generally very good along some stretches, but narrowed in some areas along Golf Course where fairway crosses and where golf cart comes too close and below soccer complex. Sierra Creek enters into the site from the east.

Wildlife Observations:

Mallards, bushtits, great blue herons, green-backed heron. Many bird species make use of blue oaks within golf course.

Hydrogeomorphology:

Main Channel: Meandering, approximately 10-15 yards wide.
Bed Characteristics: Sandy to slightly gravely, occasionally clayey.
Bank Erosion: Slight.
Debris in Channels: Some trees fallen across channel.
Secondary Channels: Several low flow channels with good development of vegetation.

Adjacent Land Uses:

Golf course, soccer complex. The riparian zone has generally been protected by placement of protective fencing. However, in some areas, the fairway and golf path are fairly close to stream bank.

C. Reach: Main Fork Dry Creek

Upstream Boundary: Cherry Island Golf Course. Downstream Boundary: Q Street.

Tree Species (Overstory):

Dominated by good stands of Quercus lobata, Fraxinus latifolia, Salix sp. and Populus fremontii. Regeneration:

Shrub Species (small tree layer):
Young Fraxinus latifolia, some Rubus procerus, Rosa californica.

Understory Species:
Carex barbarae, Elymus triticoides, annual grasses, Artemisia douglasiana, Chenopodium ambrosioides, Foeniculum vulgare, Leptochloa, and Leersia.

Corridor Characteristics:
Generally very good corridor characteristics.

Wildlife Observations:
Kingfisher, mallard ducks, red-tailed hawks, black-shouldered kites, etc.

Hydrogeomorphology:
Main Channel: Meandering, numerous pools.
Bed Characteristics: Clay.
Bank Erosion: Slight.
Debris in Channels: Slight
Secondary Channels: Very good development, especially in mid and south area.

Adjacent Land Uses:
Agricultural development in interior, mostly agricultural-resident on east bank. Several houses and sheds near east bank.

D. Reach: Main Fork of Dry Creek
Upstream Boundary: Q Street. Downstream Boundary: Dry Creek Road. Reach Definition Rationale: Similar land uses, vegetation in good condition.

Tree Species (Overstory):
Canopy 70-80% closed, dominated by Quercus lobata, well represented by Fraxinus latifolia, fewer individuals of Quercus wislizenii, Juglans hindsii, Populus fremontii, and Salix hindsii. Regeneration: Good regeneration of Quercus lobata, Salix hindsii, Populus fremontii in excavated channel.

Shrub Species (small tree layer):
Sapling Fraxinus latifolia, Toxicodendron, Cephalanthus.

Understory Species:
Well represented with natives, including Artemisia douglasii, Elympus triticoides, Carex barbarae, Artemisia douglasii, Chenopodium, Epilobium; various exotics, including annual grasses, Rubus procerus, Lactuca.

Corridor Characteristics:
A berm and levee on inside bank limits corridor development.

Wildlife Observations:
Barn owl, turtles, red-tailed hawk, beaver signs, great blue heron, raccoon tracks.

Hydrogeomorphology:
Main Channel: Up to 20 yards wide.

Bed Characteristics: Appears mostly hardpan/clay.
Bank Erosion: Moderate where trees are lacking.
Debris in Channels: Some downed where trees.
Secondary Channels: Many secondary channels.

Adjacent Land Uses:
Fields on west bank, orchards and ranchetts on east bank.

E. Reach: Main Fork
Upstream Boundary: Dry Creek Road. Downstream Boundary: Elkhorn Road.

Tree Species (Overstory):
Mostly Quercus lobata, with especially good stand in southwest sector. Salix goodingii, Populus fremontii, and Juglans hindsii also represented. Juglans regia, Prunus and Punica also found. Regeneration: Very good in southwest sector.

Shrub Species (small tree layer):
Quercus lobata, Salix hindsii.

Understory Species
Festuca aruninacea in lower stretch, Elymus tritcoides, Carex barbarae, Cynodon, and yellow starthistle present.

Corridor Characteristics:
Hummingbirds, jays, doves.

Hydrogeomorphology:
Main Channel: Placid, up to 20 yard wide.
Bed Characteristics:
Bank Erosion: Little
Debris in Channels: None
Secondary Channels: None

Adjacent Land Uses:
Safflower field, degraded vegetation at parking area along Elkhorn Boulevard.

F. Reach: Main Fork
Upstream Boundary: Elkhorn. Downstream Boundary: Dam near High School. Reach Definition Rationale: Water backed up behind dam creates summer still water area.

Tree Species (Overstory):
Mostly Quercus lobata, Fraxinus latifolia. Regeneration: Very poor.

Shrub Species (small tree layer):
Sparse: Salix hindsii, Rubus procerus.

Understory Species:
Festuca arundinacea: Elymus tritcoides, Carex barbarae, annual grasses, Centaurea solstitchiales.

Corridor Characteristics:
Very narrow due to adjacent land uses.

Hydrogeomorphology:
Main Channel: Placid stretches, due to dam.
Bed Characteristics:
Bank Erosion: None observed.
Debris in Channels: Logs hung up below Elkhorn Road on pipes crossing stream.
Secondary Channels: None.

Adjacent Land Uses:
High School on est bank, and horse riding arena on west bank has degraded vegetation.

Other Observations:
Dam, which backs up water in summer, tends to flood the trees - may cause problems.

G. Reach: Main Fork of Dry Creek
Upstream Boundary: Rio Linda High School (below dam) Elkhorn Road. Downstream Boundary: Confluence with dry channel.

Tree Species (Overstory):
Mostly Quercus lobata, some Populus fremontii,, Fraxinus latifolia, Salix hindsii.
Regeneration: Generally very little, except in area shown on map.

Corridor Characteristics:
Generally very narrow, especially due to small 3 ft. tall levee on both sides, and grazing in southwest sector.

Hydrogeomorphology:
Main Channel:
Bed Characteristics: Hardpan.
Bank Erosion: Moderate erosion in lower stretch.
Debris in Channels: Little
Secondary Channels: None

Adjacent Land Uses:
Cattle grazing in southwest area, understory very sparse.

H. Reach: Dry (North) Fork of Dry Creek
Upstream Boundary: Near Elverta Road. Downstream Boundary: Golf Course boundary. Reach Definition Rationale: Area protected by Golf Course; housing development on east bank.

Tree Species (Overstory):
Mostly Quercus lobata, but also some Quercus wislizenii, Salix lasiolepi, S. hindsii, Juglans hindsii, Faxinus latifolia, some Quercus douglasii on upper banks. Regeneration: Excellent Quercus lobata.

Shrub Species (small tree layer):
Fraxinus latifolia, Cephalanthus occidentalis, Rubus procerus, Toxicodendron diversiloba.

Understory Species
Annual grasses, Artemisia douglasiana, Chenopodium ambrosioides, Centaurea solsticialus, Elymus triticoides, Carex barbarae, Mentha arvensis, Bidens, Leersia, Leptochloa, Epilobium spp., Ludwigia, Equisetum.

Corridor Characteristics:
One of the best protected areas along the dry (North) Fork, due to secondary channels, low flow terraces.

Hydrogeomorphology:
Main Channel: Sandy.
Bed Characteristics: Sandy.
Bank Erosion: Slight to moderate.
Debris in Channels: Willows growing in channel.
Secondary Channels: Some development on east bank.

Adjacent Land Uses:
Golf course on east side, housing development on west. Evidently the placement of housing on steep banks lessens human intrusions.

I. Reach: Dry Creek (North Fork) of Dry Creek
Upstream Boundary: Cherry Island Golf Course. Downstream Boundary: To point just below where road crosses creek bed. Reach Definition Rationale: Area is greatly disturbed.

Tree Species (Overstory):
Salix goodinggii, Quercus lobata, Frainus latifolia, Populus fremontii, Juglans hindsii.
Regeneration: Quercus lobata, Fraxinus latifolia, Salix hindsii.

Shrub Species (small tree layer):
Fraxinus latifolia, Salix goodinggii.

Understory Species:
Annual grasses, Elymus triticoides, Artemisia diygkasuaba, Carex barbarae, Xanthium, Centaurea solstitchiales.

Corridor Characteristics:
Broken canopy, with numerous open spaces, generally with grass or single tier of trees growing along bank's edge. Mostly disturbed site, early successional, with many gaps between trees.

Hydrogeomorphology:
Main Channel: Disturbed main channel, with bushy willows growing at bottom of channel, sand deposits, scoured holes ponding water. Disturbance seems related to non-culverted road crossing, where channel is 35-40 yards wide.
Bed Characteristics:

Bank Erosion: Bank erosion, especially in open area lacking trees and especially associated with road crossing. Some riprap along bank.
Debris in Channels: Trees growing in bed.
Secondary Channels: Small development at south end.

Soils:
Sandy channel bottom, hardpand on bank's edge.

Adjacent Land Uses:
Car bodies and other junk outside of outer bank.

J. Reach: Dry (North Fork) of Dry Creek
Upstream Boundary: Below where road crosses creek (see above description).
Downstream Boundary: Q Street. Reach Definition Rationale: Relatively low impacted area with good stand development.

Tree Species (Overstory):
Quercus lobata, Salix goodinggii, Salix hindsii, Fraxinus latifolia Cephalanthus occidentalis, Juglns hindsii. Quercus wislienii. Many ash trees with dead tops, resorting (drought induced?). Occasionally Ficus and Morus. Regeneration: Quercus lobata, Fraxinus latifolia, Salix goodinggii. Especially good regeneration near Q Street.

Shrub Species (small tree layer):
Young Fraxinus latifolia, Cephalanthus occidentalis, Rosa californica.

Understory Species
Elymus tritcoides, Artemisia douglasii, Carex barbarae, Chenopodium ambrosioides, Foeniculum, annual grasses, Centaurea solstitchiales, Equisetum, Datura; Ludwigia, Salix, Xanthium, Leptochloa on channel bottom.

Corridor Characteristics:
Corridor width generally narrow, often with only single tier of trees on outside bank (especially on east side). Canopy closure moderate, with large, mature Quercus lobata interspersed with Salix and Fraxinus latifolia and younger plants at earlier successional stages. Note excellent Quercus lobata regeneration at lower and northwest bank area.

Hydrogeomorphology:
Main Channel: Deeply incised, the bottom about 15 ft. below bank height, banks very steep. Numerous potholes ponding water, with Salix goodingii and Fraxinus latifolia and logs in channel.
Bed Characteristics:
Bank Erosion: Little detected.
Debris in Channels:
Secondary Channels: Some secondary channel development at upper end.

Adjacent Land Uses:
Grazing pasture on outside bank, unmanaged grasslands on inside.

K. Reach: Dry Fork of Dry Creek

Upstream Boundary: Q Street. Downstream Boundary: Dry Creek Road. Reach Definition Rationale:Area reamed out by Water Resources, similar land use.

Tree Species (Overstory):

Riparian overstory dominated by Quercus lobata, well represented by Fraxinus latifolia and Salix hindsii, with fewer numbers of Populus fremontii, Salix goodingii,, S. lasiolepis, Quercus douglasii and a few Ailanthus. Regeneration: Mostly reprouting Fraxinus latifolia.

Shrub Species (small tree layer):

Many sapling Fraxinus latifolia.

Understory Species:

Xanthium, Bidens, Lactuca, annual grassses, Cynodon, Carex barbarae.

Corridor Characteristics:

Canopy closure about 50%. Mostly narrow, especially in upper end, but wider at lower end due to presence of secondary channels.

Wildlife Observations:

Several snags.

Hydrogeomorphology:

Main Channel: Reamed out about 1 1/2 years ago, about 10-12 ft. across.
Bed Characteristics: Sandy, uniform throughout due to leveling.
Bank Erosion: Moderate.
Debris in Channels: None.
Secondary Channels: Present on lower 2/3 of channel reach.

Adjacent Land Uses:

Several buildings very close to bank.

L. Reach: **Dry (North Fork) of Dry Creek**

Upstream Boundary: Dry Creek Road. Downstream Boundary: Elkhorn Road. Reach Definition Rationale: Similar adjacent land uses -- small lots having impact on vegetation.

Tree Species (Overstory):

Riparian Zone dominated approximately 50-60% overstory Quercus lobata and Fraxinus latifolia; Salix hindsiana, Populus fremontii, and a few Salix goodinggii. Occasional Morus albus, Acacia sp., and Eucalyptus. Regeneration: Relatively poor.

Shrub Species (small tree layer):

Sapling Fraxinus latifolia and Salix hindsii.

Understory Species:

Stream bed with Ludwigia, Xanthium, Leptochloa, Polygonum, Cyperus esculentus, Helianthus and Foeniculum. Stream bank vegetation poorly developed, with Rubus procerus and mostly annual grasses and other exotics.

Corridor Characteristics:
Generally narrow, due to adjacent land uses consisting of many smaller subdivisions.

Wildlife Observations:
Quail, pheasants, bushtits, scrub jays, turkey vultures.

Hydrogeomorphology:
Main Channel: Dry channel, occasional wet pools near subdivision.
Bed Characteristics: Most of the length consists of sand overlaying hardpan.
Bank Erosion: Minor.
Debris in Channels: Little to none.
Secondary Channels: None (though there is a low terrace on north bank of northern section.

Adjacent Land uses:
Many small lots with houses and sheds 10-30 yards from top of bank.

M. Reach: Dry Fork of Dry Creek
Upstream Boundary: Elkhorn Road. Downstream Boundary: Confluence with main fork. Reach Definition Rationale: on east bank.

Tree Species (Overstory):
Dominated mostly by a sparse cover of Quercus lobata, with Fraxinus latifolia, and a few Populus fremontii, and Salix hindsii. Regeneratin: Very sparse.

Shrub Species (small tree layer):
Very Sparse.

Understory Species:
Leptolochloa, Xanthium, Cynodon, Helianthus, Polygonum on dry creek bottom; Annual grasses, Phalaris, Artemisia douglasiana on banks.

Corridor Characteristics:
Very narrow due to adjacent land uses, with 40-60% canopy closure.

Wildlife Observations:
Red-shouldered hawk, magpie, quail.

Hydrogeomorphology:
Main Channel: Deeply cut.
Bed Characteristics: Mostly sand, some annual growth in lower stretch.
Bank Erosion: Moderate in some places, note exposed tree roots.
Debris in Channels: None
Secondary Channels: None

Adjacent Land Uses:
Ranchetts, pastures, grasslands.

APPENDIX II. LIST OF PLANTS IN THE DRY CREEK PARKWAY

Aesculus californica
Aira caryophyllaea
Amaranthus albus
Alnus rhombifolia
Amsinkia intermedia
Anagallis arvensis
Artemisia douglasiana
Aristolochia californica
Asclepias cordifolia
Avena barbata
Avena fatua
Bidens
Brassica campestris
Brodiaea elegans
B. laxa
B. multiflora
Bromus carinatus
Bromus mollis
Catalpa
Centaurea solstialis
Carex barbarae
Carex praegracilis
Cephalanthus occidentalis
Chenopodium ambroisoides
Cirsium vylgare
Conyza canadensis
Convolvulus arvense
Cynodon dactylon
Cynosurus echinatus
Cyperus esculentus
Dasmonium californicum
Datura
Digitaria sanguinalis
Dowingia bicornuta
Echinochloa cruz-galli
Eleocharis marcrostachya
Elymus triticoides
Epilobium adenocaulon
Eremocarpus setigerus
Erodium cicutarium
Erodium botrys
Eryngium vaseyi
Equisetum
Festuca megalura
Ficus
Foeniculum vulgare
Fraxinus latifolia
Galium nuttallii
Geranium dissectum
Gnaphalium sp.
Holcus lanatum
Holocarpha virgata
Hordeum hystrix
Hordeum leporinum
Juglans hindsii
Juncus sp.
Lactuca serriola
Lasthenia glaberrima
L. fremontii
Leersia oryzoides
Lemna sp.
Leptochloa
Lolium perenne
Ludwigia
Lupinus sp.
Marrubium vulgare
Mentha arvensis
Morus albus
Niocotina
Orthocarpus attenuatus
Orthocarpus erianthus
Paspalum dilatum
Psilocarpus brevissimus
Plagiobothyris nothofulvus
Plantago lanceoloata
Polygonum
Populus fremontii
Robinia pseudoacacia
Rubus procerus
Rumex crispus
R. pulcher
Quercus douglasii
Quercus lobata
Quercus wislizenii
Salix goodingii
Salix hindsii
Salix lasiolepis
Sambucus mexicana
Solanum
Sorghum halepense
Toxicodendron diversilobium
Vicia sp.
Vitis californica
Vulpia megalura
Xanthium spinosum

APPENDIX III. LIST OF BIRDS IN PROPOSED PARKWAY AND RIO LINDA AREA

Acorn Woodpecker	*[1]	**[2]
American Avocet	*	
American Bittern	*	
American Coot	*	
American Crow	*	**
American Kestrel	*	**
American Robin	*	**
Ash-throated Flycatcher	*	**
Barn Owl	*	**
Barn Swallow	*	**
Bewick's Wren	*	**
Black-headed Grosbeak	*	**
Black-chinned Hummingbird	*	**
Black-crowned Night Heron	*	
Black-shouldered Kite	*	**
Blach Phoebe	*	
Black-necked Stilt	*	
Black Tern	*	
Brewer's Blackbird	*	**
Burrowing Owl	*	
Bush-Tits	*	**
California Quail	*	**
California Towhee	*	**
Casparian Tern	*	
Cinnamon Teal	*	
Cliff Swallow	*	
Common Moorhen	*	
Double-crested Cormorant	*	
Downy Woodpecker	*	**
European Starling	*	
Golden-crowned Sparrow	*	
Great Blue Heron	*	**
Green-backed Heron	*	
Great Egret	*	**
Great Horned Owl	*	**
House Finch	*	**
House Sparrow	*	**
Killdeer	*	**
Lark Sparrow	*	**
Loggerhead Shrike	*	**
Morning Dove	*[1]	**[2]

[1]* Breeding birds compiled by Tim Manolis for Rio Linda area.

[2]**Birds seen or likely to be seen within the proposed parkway boundaries.

Mallards	*	**
Marsh Wren	*	
Northern Flicker	*	**
Northern Mockingbird	*	**
Northern Oriole	*	**
Northern Rough-winged Swallow	*	
Nuttall's Woodpecker	*	**
Orange-crowned Warbler	*	**
Pheasant	*	**
Pied-billed Frebe	*	**
Plain Titmouse	*	**
Red-winged Blackbird	*	
Red-tailed hawk	*	**
Red-shouldered Hawk	*	**
Rock Dove	*	**
Ruby-crowned Kinglet	*	**
Rudy Duck	*	
Rufous-sided Towhee	*	**
Scrub Jay	*	**
Snowy Egret	*	
Tree swallow	*	**
Tri-colored Blackbird	*	
Turkey Vulture	*	**
Warbling Vireo	*	**
Western Kingbird	*	**
Western Meadow Lark	*	**
White-breasted Nuthatch	*	**
White-crowned Sparrow	*	
White-faced Ibis	*	
Yellow-billed Blackbird	*	
Yellow-billed Magpie	*	**

[1]* Breeding birds compiled by Tim Manolis for Rio Linda area.

[2]**Birds seen or likely to be seen within the proposed parkway boundaries.

APPENDIX IV. LIST OF FISH IN PROPOSED PARKWAY[1]

Common Name (Scientific Name)	Endemism
Anadromous Game Fish	
Fall-run Chinook Salmon (Oncohynchus tshawytscha)	Native
Steelhead trout (Salmon gairdneri)	Native
Warmwater Game Fish	
Largemouth bass (Micropterus salmoides)	Introduced
Warmwater Game Fish	
Catfish brown bullhead (Ictalurus nubulosus)	Introduced
Tule perch (Hysterocarpus traski)	Native
Bluegill (Lepomis macrochirus)	Introduced
Greenfish (Lepomois cyanellus)	Introduced
Non-Game Fish	
Mosquitofish (Gambusia affinis)	Introduced
Carp (Cyprinus carpio)	Introduced
Sacramento sucker (Catostomus occidentalis)	Native
Sacramento hitch (Lavinia exilicauda)	Native
Threadfin shad (Dorosoma petense)	Introduced
Pacific lamprey (Engonsphenus tridentatus)	Native

[1] Information provided by State Department of Fish and Game.

APPENDIX V. LIST OF MAMMALS LIKELY TO BE FOUND IN PROPOSED PARKWAY

Gray Fox
Ground Squirrel
Broad-footed Mole
California Ground Squirrel
Botta's Pocket Gopher
California Vole
Muskrat
Coyote
Raccoon
Virginia Opossum
Black-tailed Hare
Western Gray Squirrel
Deer Mouse
House Mouse
Striped Skunk
Beaver

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Appendix B - Potential Activities in the Dry Creek Parkway

Potential Activities	Active	Passive	Revenue Generating	Buffer Zone Needed	May Conflict with Adjacent Landowner	May Conflict with Habitat or Wildlife [1]	Parking Needed	Inconsistent with Parkway Concept
Amphitheater	•		•	•	•	•	•	
Amusement Park Rides	•		•	•	•	•	•	•
Arboretum		•	•		•	•	•	
Archery Range		•	•	•	•	•	•	
Baseball	•		•	•	•	•	•	
Basketball	•			•	•	•	•	
Bicycling (on designated trails)		•			•	•		
BMX/All Terrain Cycling	•			•	•	•		
Boat Launch (non-motorized)		•					•	
Boating (non-motorized)		•					•	
Botanical Garden		•	•		•	•	•	
Camping (Group - Day)	•		•	•	•	•	•	
Camping (Group - Overnight)	•		•	•	•	•	•	
Chess/Checker Tables		•				•		
Children's Play Area	•			•	•	•		
Community Center (Youth, Teen, Senior, etc.)		•	•	•	•	•	•	
Demolition Derby	•		•	•	•	•	•	•
Dog Park		•		•	•	•		
Dog Trials	•		•	•	•	•	•	
Equestrian Center	•		•	•	•	•	•	
Farmers' Market	•		•	•	•	•		
Fish Hatchery		•					•	
Fishing/Small Piers		•				•		
Food Service	•		•	•	•	•	•	
Football	•			•	•	•		
Frisbee Golf	•			•	•	•		
Hang Gliding	•				•	•	•	•
Hiking/Nature Trails		•				•		
Horse Boarding	•		•	•	•	•	•	
Horseback Riding		•	•			•	•	
Horseshoe Throwing	•					•		
Hot Air Balloons (Launch/Land)	•		•		•	•	•	

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Appendix B - Potential Activities in the Dry Creek Parkway (*cont.)*

Potential Activities	Active	Passive	Revenue Generating	Buffer Zone Needed	May Conflict with Adjacent Landowner	May Conflict with Habitat or Wildlife [1]	Parking Needed	Inconsistent with Parkway Concept
Hunting	•			•	•	•		•
Jet Skiing	•			•	•	•	•	•
Kite Festival	•			•	•	•	•	
Memorial Grove		•				•		
Motorcycling	•			•	•	•		•
Motorized Boating	•			•	•	•	•	•
Motorized Model Airplanes	•			•	•	•		•
Native Plant Nursery	•		•			•	•	
Natural History Museum	•		•	•		•	•	
Nature Center	•		•	•	•	•	•	
Nature Study Area		•						
Off Road Vehicles	•			•	•	•	•	•
Painting/Sketching		•				•		
Photography		•				•		
Picnicking (Group & Family)	•		•	•	•	•	•	
Polo Field	•		•	•	•	•	•	
Portable Performance Stage	•		•	•	•	•	•	
Recreation Rental & Retail	•		•	•	•	•	•	
Roller Skating/Blading (on paved trails)		•				•		
Shuffle Board	•					•		
Skateboards (on paved trails)		•				•		
Soccer	•		•	•	•	•	•	
Special Events (bike races, triathlons, etc.)	•		•		•	•	•	
Special Use Facility (weddings, parties, etc.)	•		•	•	•	•	•	
Staging Area (unpaved)	•					•		
Swimming Pools	•		•	•	•	•	•	
Tennis Courts	•		•	•	•	•	•	
Tree Swings		•				•		•
Volleyball	•		•	•	•	•		
Walking/Jogging		•				•		
Waterskiing	•				•	•	•	•
Wind Surfing	•					•	•	•

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