

CHAPTER SEVEN
RECREATION AND OPEN SPACE

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CHAPTER SEVEN: RECREATION AND OPEN SPACE

7.1 INTRODUCTION

Recreation and open space are important components in the development of the Mountain House new community. A well designed network of attractive and accessible (both visually and physically) public open spaces are necessary to offset the lack of private open spaces that result from the higher densities and smaller lots proposed in much of Mountain House. Also, since 86% of the community is proposed to be developed with various urban or suburban land uses, mitigation for the loss of wildlife, open space and agricultural values must be incorporated into this Master Plan.

This chapter includes: Section 7.2: Parks and Open Space Plan; Section 7.3: Biological Resources Management, which includes a Habitat Management Plan, provisions for agricultural land preservation, requirements for special status species, wetlands, and off-site biological impacts; and Section 7.4: Cultural Resources.

Other topics related to recreation and open space are included in the Master Plan as follows: Chapter 4 contains development and design of landscape corridors including streets and gateways, windbreaks, open space setbacks and community edges; Chapter 9 contains transportation and circulation provisions for bicycle and pedestrian circulation that is not part of the park's trail system. Chapter 15 contains storm drainage and flood protection relating to the design and development of the Mountain House Creek Park and other open space areas.

7.2 PARKS AND OPEN SPACE PLAN

7.2.1 Plan Contents

Overview. Parks and open space comprise approximately 15% of the Mountain House community (see Table 7.1: Recreation and Open Space Areas and Figure 7.1: Recreation and Open Space Plan). Recreational facilities at Mountain House will predominantly consist of public parks and open space. Other open spaces include wetlands, easements, and landscape buffers.

MOUNTAIN HOUSE MASTER PLAN

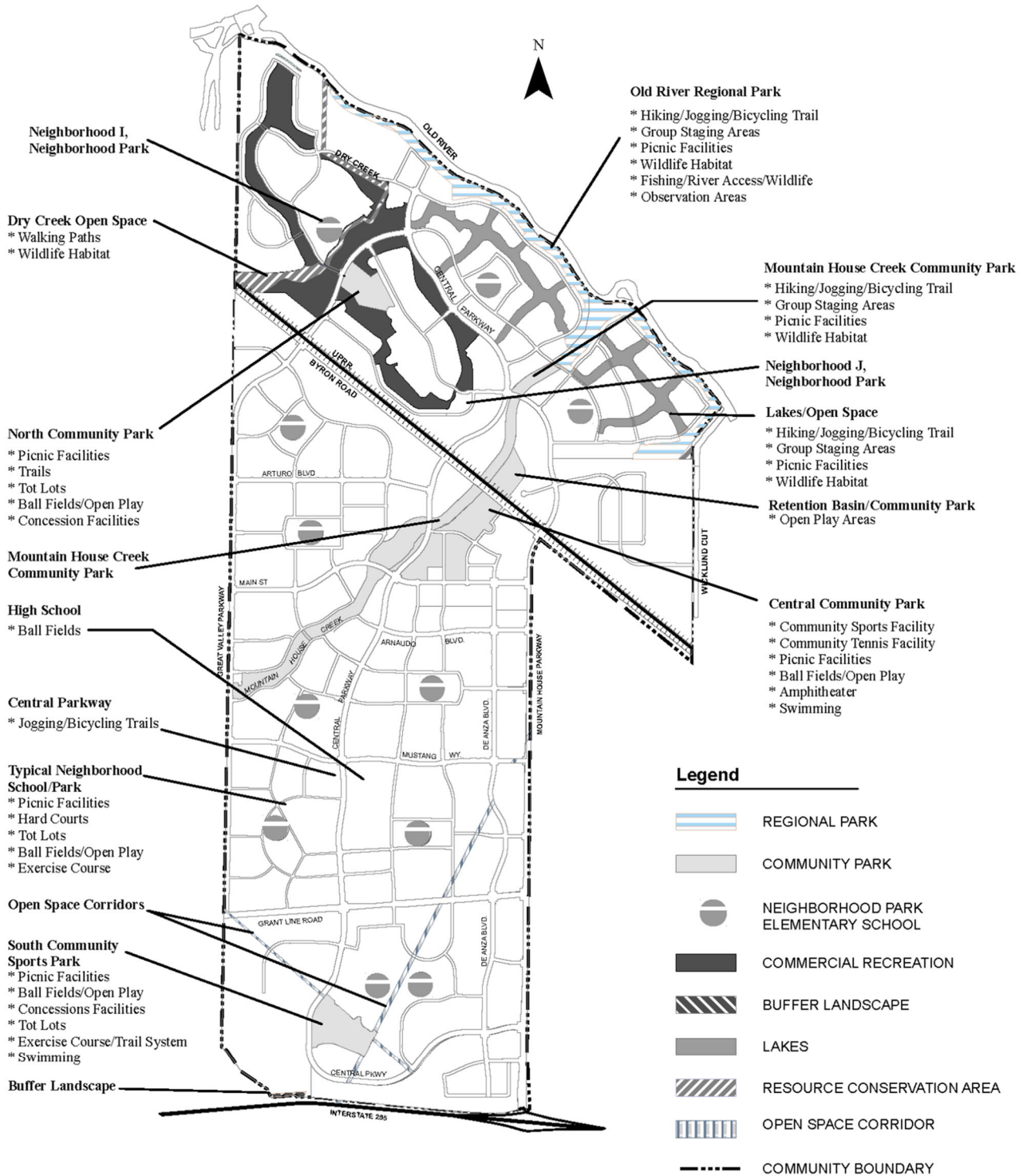


FIGURE 7.1 – RECREATION AND OPEN SPACE PLAN

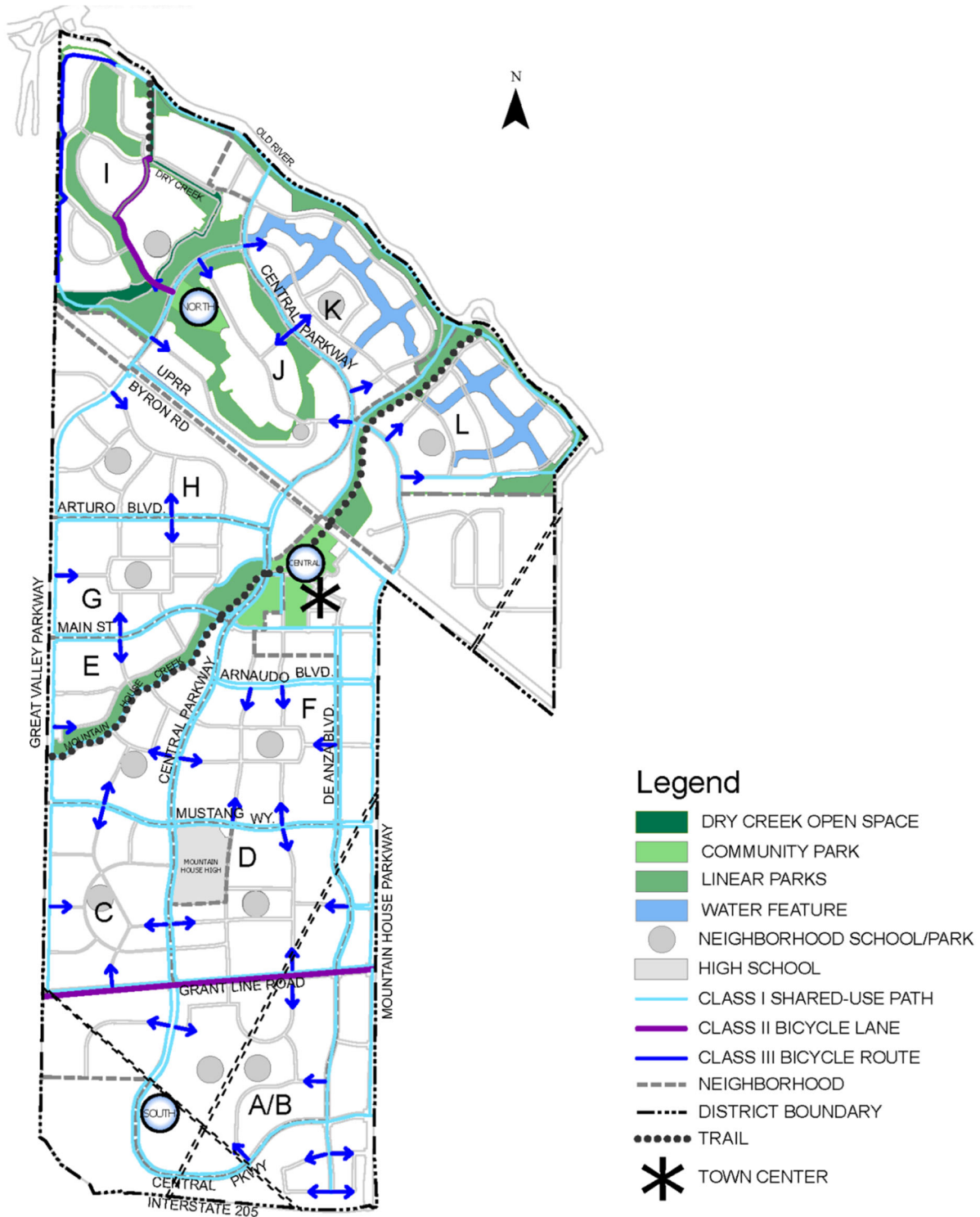


FIGURE 7.2 – OPEN SPACE DESTINATIONS AND LINKAGES PLAN

Table 7.1 Recreation and Open Space Areas (Note: Acreages are approximate)		
Neighborhood Parks	61.1 acres	8.3%
Mountain House Creek Community Park*	92.2 acres	12.5%
Central Community Park	41.6 acres	5.6%
Other Community Parks	53.3 acres	7.2%
Old River Regional Park	88.2 acres	11.9%
Commercial Recreation	215.5 acres	29.1%
Lakes	95.6 acres	12.9%
Water Quality/Detention Basins	20.8 acres	2.8%
Other Open Space (buffers, gas/electric corridors)	41.2 acres	5.6%
Wetlands/Resource Conservation	17.2 acres	2.3%
Dry Creek	13.0 acres	1.8%
*Includes 7.5 acres of wetlands		
Total	739.7 acres	100%

The Parks and Open Space Plan is intended to guide the provision of parks, trails and other public recreational facilities as well as private recreational facilities, including the proposed golf course and “mini parks.”

The Plan describes different types of parks, sets forth policies and design requirements, and presents a framework for the specific standards that will be included in the MHCSD’s “Parks, Recreation and Leisure Plan” (see 7.2.3: Relationship to Other Plans and Programs).

7.2.2 Vision and Purpose

Except for Mountain House Creek and Old River, the new community has little in the way of natural attributes or distinct features that would give the community identity. However, by enhancing these features and effectively incorporating them into the park system, they can become not only valuable open space resources, but also can create a visual identity for the community. These features will also be extremely critical in providing both visual and usable open space in what will otherwise be a densely developed community.

The land use plan uses a hierarchy of new park open spaces to organize Neighborhoods and community elements. Each element of the parks system has a different purpose, each of which is critical to the community. Neighborhood Parks are planned as part of each Neighborhood Center to serve local, family-oriented recreation in close association with K-8 schools. Community Parks offer a greater range of active recreational activities and community gatherings at locations near the Town Center. The Mountain House Creek Park incorporates storm drainage and wildlife habitat with open space uses. The Regional Park offers a unique opportunity for access to the Old River waterfront. Lastly, the connections and linkages between these elements of the park system, as well as to other destinations within the community, create an integrated system that will serve the residents of the new community as it grows.

7.2.3 Relationship to Other Plans and Programs

The Mountain House Parks and Open Space Plan is consistent with the 2035 General Plan for San Joaquin County. It is noteworthy that minimum park acreage requirements have been altered for Mountain House. The 2035 General Plan allows Mountain House to have an approved park ratio of not less than five acres of parks per 1,000 population, instead of a required ratio of 10 acres of regional parks and three acres of local parks per 1,000 population as for other unincorporated communities. For Neighborhood and Community Parks, Mountain House allocates a minimum of 5 acres per 1,000 population and significantly reduces the minimum 10 acres per 1,000 population for Regional Parks. Instead of a larger acreage dedication for Regional Parks based on buildout population, Mountain House will develop and maintain an 85-acre Regional Park along Old River. Although this is a much smaller park, acreage wise, than would ordinarily be required, this is offset by including a commitment for its construction and on-going maintenance. Also, should a Regional Park fee be required County-wide, development in Mountain House will be subject to it.

As described above, this Plan presents a framework for other more detailed plans and programs to follow. Specifically, each Specific Plan will provide more detailed plans for Neighborhood, Community, and Regional Parks that are in the Specific Plan boundaries. The Mountain House MHCSD will provide more detailed plans and tailored specifications and standards that will ensure that when the parks are actually built they will not only be consistent with the policies adopted in the Master and Specific Plans, but will also be tailored to meet the current needs of the residents.

The Public Land Equity Program (PLEP), Development Title Chapter 9-1245M, for Mountain House provides for the acquisition and dedication of most public lands in the community, including all park sites. The PLEP will ensure that park lands are available for development in a timely manner, at no direct cost to the community.

Appendices. This Park and Open Space Plan also includes, by reference, Master Plan Appendix 7-A, Mountain House Creek Planting and Restoration Measures. However, the provisions contained in this appendix shall be implemented by the MHCSD.

Table 7.2 summarizes the types of information which shall be provided by the Master Plan/Parks and Open Space Plan, Specific Plans, Special Purpose Plans, MHCSD "Parks, Recreation and Leisure Plan," and Tentative Map/Development Plans.

Table 7.2 Index to Park Plans and Standards				
	Master Plan Parks/Open Space Plan	Specific Plans/SPP's	MHCSD Parks, Recreation, and Leisure Plan	Final Map/Develop. Plan
General Park and Recreation Policies	X			
Detailed Park and Recreation Policies		X		
Locations of Park Sites	X			
Park Facility Standards			X	
Facilities Component			X	
Conceptual Park Plans	X			
Preliminary Park Plans		X		
Final/Construction Plans			X	if required

7.2.4 Types of Park Plans

The following discussion describes the three “tiers” of planning that each of the parks will go through before actual construction. The Master Plan includes Conceptual Plans for all of the parks. Each specific plan includes Preliminary Plans for parks within or adjacent to a specific plan area. The MHCSD shall be responsible for Final Plans and Construction Plans for each public park.

- a) Conceptual Plans. Conceptual Plans are intended to be an illustrative, generalized concept for the development of park sites. These plans include a generalized plan view drawing indicating the anticipated location of recreational facilities, access, edge treatments, landscape concepts and interface with anticipated adjoining land uses.
- b) Preliminary Plans. Preliminary Plans will provide more detailed text and illustrative plan information, indicating the following, as appropriate:
 - the boundaries and configuration of the site;
 - location of adjoining streets;
 - location of recreation facilities;
 - edge treatments;
 - schematic landscape concepts;
 - interface with adjoining uses;
 - functional relationships of areas within and adjacent to the park;
 - parking areas;

- special features such as overlooks, boat launches, fishing platforms, etc.;
 - buildings, restrooms, service and maintenance structures; and
 - pedestrian and bicycle access to park.
- c) Final Plans (MHCSD). Final Plans include the exact location of the park, all park amenities, and specifications for landscaping. Specific items include: vehicular and pedestrian access connections, edge treatments, details on proposed techniques where it abuts other land uses (setbacks, fencing, landscaping, etc.), use of areas within and adjacent to the park and their functional relationships, parking areas, special features such as fishing platforms, restrooms, maintenance and storage structures.
- d) Construction Plans (MHCSD). Construction Plans will be prepared by the MHCSD. They must be of sufficient detail to allow contractors to bid on construction of parks. Final and Construction Plans can be combined, if appropriate. These plans will, at a minimum, include:
- construction specific details;
 - cost to construct, budgets; and
 - timeframes, and phasing of construction in conformance with the Master Plan.

7.2.5 Overall Objectives and Policies

Objectives:

- a) To provide a full range of recreational facilities and open space areas that exceed minimum County standards, and are made available to residents in a timely manner.
- b) To provide the community with both public and private open space areas that reflect the needs and desires of the community.

Policies:

- a) The community shall maintain a combined community and Neighborhood Park ratio of not less than five acres per 1,000 population.
- b) The Public Land Equity Program (PLEP) shall be utilized to ensure the timely acquisition and dedication of all park sites.
- c) The Mountain House community shall incorporate a comprehensive system of Regional, Community and Neighborhood Parks at locations which serve every part of the community.
- d) The park system shall provide community focal points that are accessible to residential Neighborhoods and complement other community programs, especially schools.

- e) The park system shall provide natural resource areas to preserve and enhance wildlife habitats and corridors, and create educational opportunities for the observation and study of the local ecology.
- f) The community's bicycle and pedestrian circulation system shall establish linkages between residential areas and open space destinations (see Figure 7.2: Open Space Destination and Linkages Plan).

7.2.6 Neighborhood Parks

The Land Use Plan locates a Neighborhood Park of five acres or more adjacent to each K-8 school at the center of family neighborhoods and the Neighborhood K mixed active adult and family neighborhood. The Land Use Plan also locates a Neighborhood Park within the Neighborhood I active adult neighborhood near the clubhouse. A Neighborhood Park, located on the east side of the neighborhood, is also provided for the Neighborhood J mixed active adult and family neighborhood. The location of these Neighborhood Parks is intended to increase the usability of park open space and reduce overall operation and maintenance costs. See also policies regarding schools and Neighborhood Centers in Chapter 5, Section 5.1, Education and Section 5.2, Child Care Facilities.

Objective:

- a) To provide Neighborhood Parks that will serve all residents, within a particular Neighborhood (as defined in Section 3.1.3: Neighborhood Structure and Village Centers), including toddlers, young children, teenagers, adults, parents with infants, and senior citizens.

Policies:

- a) A Neighborhood Park of approximately five acres or more in size shall function as a central element within each family neighborhood and the Neighborhood K mixed active adult and family neighborhood, with easy access by bicycle, sidewalk, trail system, and the local street system from every part of the neighborhood.
- b) Neighborhood Parks shall be located on a Collector street generally within a half mile of residences within the surrounding Neighborhood.
- c) Crossing of Major Arterial streets shall be minimized if walking or bicycling from any part of the Neighborhood to the Neighborhood Park.
- d) Neighborhood Parks shall be sited and designed to be as visible as possible from local streets in the Neighborhood, thereby creating a feeling of open space and Neighborhood identity.
- e) A Neighborhood Park shall be located adjacent to K-8 schools. School and park recreational programs shall be coordinated. Approximately two and one half acres of the park acreage will be shared with the adjacent school.

- f) Neighborhood Parks shall be designed and maintained to provide for active and passive uses. If only passive uses are included in the initial construction of the park, provisions should be made to allow the later addition of active uses to meet the needs of the Neighborhood.
- g) Neighborhood Parks shall be designed to be consistent with the design theme of Neighborhood streets, schools, and other public open spaces. as detailed in Neighborhood Specific Plans and/or Special Purpose Plans.

Implementation:

- a) Timing of Neighborhood Parks. Construction of Neighborhood Parks by the MHCSD shall begin as soon as 50% of the dwelling unit permits for each Neighborhood have had their final inspection. The park shall be completed no later than the time 80% of dwelling unit permits for the Neighborhood have had their final inspection.
- b) Park/School Joint Use. A formal agreement for joint use of parks and recreation facilities with adjacent K-8 schools shall be required prior to construction.
- c) Neighborhood Recreation Needs. As specified in the MHCSD "Parks Recreation and Leisure Plan," residents of the Neighborhood in which the park is proposed shall be surveyed (except for the first three Neighborhoods) to determine which facilities and improvements are most needed and desired. This survey shall be completed by the MHCSD prior to preparation of Final Plans for the Neighborhood Park.
- d) Phasing of Neighborhood Parks. The MHCSD shall be responsible for the development and phasing of parks to meet Master Plan requirements.
- e) Neighborhood Park Preliminary Plans. Preliminary Plans shall be included in the Specific Plan or Special Purpose Plan for each Neighborhood.

7.2.7 Community Parks

Community Parks are distributed throughout the community to provide major, active and passive recreational uses to all Neighborhoods (see Section 7.2.8 for a separate discussion of the Mountain House Creek Park which also qualifies as a Community Park). Central Community Parks located in or near the Town Center include a site intended for phased development with a lake and other facilities; a sports-related site; and a site to support a possible amphitheater or stadium to serve the high school(s) and other events. Other parks provide recreation facilities in the northern and southern portions of the community.

Objective:

- a) To establish Community Parks which serve the overall community with both active and passive recreational opportunities, with facilities provided that meet the needs of the community as it develops.

Policies:

- a) With the exception of the small park along Old River, Community Parks shall contain a minimum of 20 acres. Several adjacent properties, such as described for the Central Community Park complex, may each contain less than this minimum, as long as they are adjacent, and total at least 20 acres in aggregate.
- b) Each of the three Villages (i.e., four Neighborhoods served by a Village Commercial Center), shall also be served by a Community Park.
- c) Community Park planning for areas outside the Mountain House Creek corridor shall generally follow the conceptual program summarized below:
 - A Central Community Park complex which will total approximately 42 acres, shall be developed in three distinct subareas and shall be located within and/or adjacent to the Town Center, reinforcing the community focus of the downtown. These subareas include a site intended for phased development with a lake, amphitheater and other facilities; a sports-related site; and a larger site to support a possible stadium and adequate shared parking to serve the various public uses in the area;
 - A sports-related Community Park shall be located north of Byron Road, adjacent to Central Parkway; and
 - A major active Community Park shall be located south of Grant Line Road to serve that portion of the community with sports-related uses.
- d) Community Parks shall include both active and passive uses. Active area facilities may include ballfields, pools, par courses, courts (hard-surfaced, sand or turf), trails, playgrounds, support structures such as restrooms and concession stands, and parking. Passive areas may include picnic areas, amphitheaters, gardens, vista points, and special features such as environmental sculptures, fountains and lakes.
- e) Where a Community Park is located in proximity to the high school, joint use shall be encouraged.
- f) A Community Park shall be sited in conjunction with the Town Center to encourage community events at this location. Major recreation facilities shall be located in Community Parks near the Town Center.

- g) Community Parks shall be easily accessible from Arterial or Collector streets and from adjacent residential Neighborhoods.
- h) A small sports stadium may be located in a Community Park near the Town Center. The stadium could accommodate about 5,000 to 6,000 people, could be used by the High School, and be used for community events such as concerts, parades, and local sports events.
- i) Community Parks may also accommodate Community Centers for indoor facilities such as a multi-purpose gymnasium, and rooms for meetings, classes, banquets, childcare, games, arts and crafts, dance and exercise classes, kitchens, restrooms, storage, offices, and lockers.
- j) Programming for Community Parks shall address the needs of the entire community, including families, singles, youths, seniors, disabled residents, and children.
- k) Wherever possible, parking facilities for Community Parks shall be located so as to provide shared-use opportunities with other public facilities such as transit, libraries and schools.

Implementation:

- a) Parks and Open Space Plan and Specific Plan Requirements. See Section 7.2.3: Relationship to Other Plans and Programs.
- b) Community Park Preliminary Plans. Preliminary Plans for each of the Community Parks shall be included in the Specific Plan for that Neighborhood or Village, or as determined by the Director.
- c) Timing of Construction and Plans. The MHCS D “Parks, Recreation and Leisure Plan” shall include a program for submittal of detailed design and construction plans, including the timing and responsibility for construction. Final and construction Plans for the first phase development of interim sports fields and open play areas shall be prepared by the MHCS D prior to the issuance of the 500th dwelling unit permit. First-phase development of sport fields for team play and open play areas shall be provided prior to issuance of the 800th dwelling unit permit. These first-phase sports fields may be constructed on land reserved for the high school and planned for subsequent use by the school district or at a site designated by the MHCS D. The 11-acre Community Park, located at Central Parkway and Main Street, shall be constructed prior to the issuance of the 2,000th dwelling unit permit, and may include the construction of interim playing fields, at the MHCS D’s discretion. Further provisions for timing of Community Parks shall be established by the MHCS D “Parks, Recreation and Leisure Plan.”
- d) Recreational Activities. Programming of recreational activities shall be provided to ensure full utilization of the Community Parks, as specified in the MHCS D “Parks, Recreation and Leisure Plan.”

- e) North Community Park Conceptual Design and Facilities. The intent of this park is to provide for the active recreational needs of residents living north of Byron Road. This park will provide various sports fields, hardcourts, and a multi-use trail system that connects with the other open spaces. The active uses of this park will become even more critical in meeting the recreational needs of local residents.

- f) Central Community Park Conceptual Design and Facilities. This park consists of three subareas totaling approximately 42 acres, located adjacent to and within the Town Center. The Central Park will initially contain interim ballfields (or as otherwise constructed at the high school, or in another area, as specified in the MHCSD “Parks, Recreation and Leisure Plan”). It will also contain multi-purpose open areas for community activities to serve early residents of Mountain House. The permanent or long term program, as specified in the MHCSD Plan will expand to include trail links to the Mountain House Creek Park and other destinations, additional park facilities, three acres of public parking to be shared with the civic center or transit center, plus amphitheater and stadium uses.

- g) South Community Park Conceptual Design and Facilities. The intent of this park, located in Neighborhood A/B, is to provide active recreational facilities for residents living south of Grant Line Road. Passive recreational uses should be incorporated into the land beneath the transmission lines.

7.2.8 Mountain House Creek Park

The Mountain House Creek Park is considered a Community Park, but it is discussed separately since its design, function, and construction will be handled quite differently from the other Community Parks. The Community Park acreage forms a linear park along Mountain House Creek, establishing the primary open space feature through the community (see Figure 7.1). It is estimated that 92 acres will be set aside for this park, although this acreage may increase to include detention basins once more detailed drainage and runoff information is available.

Mountain House Creek runs northeast/southwest through the community. The creek corridor presents an opportunity for creation of wildlife habitat, and a corridor for wildlife to travel along; recreational activities; as well as a course for stormwater runoff. Existing wildlife habitat value along the creek is quite limited due to decades of agricultural practices. Once the community develops out, however, the value of the creek corridor will increase greatly as it will be the only remaining path for wildlife to access Old River from the agricultural and grazing lands to the west.

Mountain House Creek now contains about eight acres of freshwater marsh (based on the United States Army Corps of Engineers approved delineation). Some of these marshes were created as a result of irrigation practices. The riparian woodlands on-site (with the exception of Old River) are in a degraded condition, with more introduced species than natives. The remainder of the creek is relatively narrow without the width and diversity of channel form needed to provide for a high value riparian system.

The existing pastures (both on- and off-site) are a major source of pollution to Mountain House Creek. Out-of-bank flooding, primarily a result of off-site flows, is common during major storms due to the narrowness of the creek channel.

Possibilities for enhancing the creek corridor lie with reconstruction of riparian areas. Much of the value of riparian areas is derived from the shallow flow or ponding of water through a gently-sloped channel and the extent of woodland cover. The combination of shallow water and vegetation cover can remove pollutants from the water, increase nutrient production, flood storage and groundwater recharge, reduce storm erosion, create waterfowl and shorebird habitat, and provide passive and active recreation.

Habitat values of riparian landscapes are primarily determined by the diversity of habitats within the system. A high value system for wildlife would contain perennial and seasonal marshes and several classes of riparian woodlands in a matrix of native grasslands.

Use of the creek corridor for flood control as well as wildlife habitat requires careful consideration of the impacts of flood-related sedimentation and erosion on areas which have been landscaped for habitat purposes. As discussed in Chapter Fifteen: Storm Drainage and Flood Protection, the creek is designed to reduce erosion and sediment flow during infrequent major storm events when high flows reduce the possibility of sediment deposition, thereby allowing the floodplain to double as a natural wildlife area and Community Park.

Figures 7.4 and 7.5 illustrate the proposed design of Mountain House Creek corridor. Appendix 7-A: Mountain House Creek Planting and Restoration Measures provides additional information and requirements on planting within the creek corridor. Section 15.6: Mountain House Creek Improvements provides a discussion and provisions on critical issues of sedimentation, erosion, storm flow, and protection of wetlands and streambanks.

Objectives:

- a) To restore the Mountain House Creek corridor to a diverse riparian system dominated by native species and protected from inappropriate uses or activities.
- b) To create a viable wildlife corridor within the creek park to allow wildlife unobstructed access to Old River.
- c) To establish a Community Park and creekside landscape along Mountain House Creek which will serve as the central open space feature for the community and provide passive recreational opportunities, open space connections, wildlife habitat, and flood control.

Policies:

- a) Creek design and management shall integrate the multiple purposes of flood control, wildlife habitat, and recreation. Installation of recreational

facilities shall be provided in coordination with habitat restoration and drainage requirements.

- b) The Mountain House Creek Park shall provide continuous trail access along the creek through the entire Community and connect to the Regional Park at Old River.
- c) Recreational uses shall be designed to minimize trespass into habitat areas.
- d) The existing Mountain House Creek channel and adjacent marshes shall be retained and a diverse riparian system created, to the maximum extent practicable.
- e) Flood protection of adjacent lands and infrastructure shall be provided while minimizing damage to the creek.
- f) The creek corridor shall be properly buffered from or integrated into the land uses adjacent to the corridor.
- g) Numerous openings shall be provided throughout the creek Park's length to prevent the park from being closed off either visually or physically.
- h) The impact of infrastructure crossings of the creek shall be minimized.
- i) An adequate number of pedestrian crossings shall be provided to minimize trespass into the creek course.
- j) All urban stormwaters draining to the creek shall be subject to Best Management Practices prior to their entry into the main creek channel.

Implementation:

- a) Multi-Use Development. The creek Park shall be overseen and managed as a single multi-use program integrating and coordinating requirements for 100 year flood protection, development and protection of riparian values and wildlife habitat, and enhancement of recreation. The MHCS D's Final and Construction Plans shall address the multi-use aspect, especially how it relates to any phased construction.
- b) Timing of Construction. The Final Plans for the segment of the creek that runs through Neighborhood E, and Preliminary Plans for the remaining creek south of Byron Road, shall be approved no later than the preparation of the MHCS D infrastructure or "precise" plan for the east half of Neighborhood E. Construction plans may be phased so that segments of the park are constructed according to the need for drainage improvements, however the Final Plans must include, at a minimum, a phasing plan that breaks the park up into logical segments for construction as specified in c), below.

- c) Construction Requirements. Construction may be phased, as set forth in the MHCS D Final Plans, but shall include, at a minimum, concurrent habitat restoration, Community Park development, and necessary drainage improvements.
- d) Habitat Restoration. The restored creek corridor shall include perennial and seasonal marshes and several classes of riparian woodlands in a matrix of native grasslands, consistent with the provisions of the Mountain House Creek Planting and Restoration Measures in Appendix 7-A. Specific planting programs, which include the species contained in this appendix, shall be part of the Final Plans, and shall include the following: (see also Figure 7.4(A) and 7.4(B)).
- The creek landscape shall include the following three distinct landscape zones (although these landscape zones or types can merge or overlap at their edges): the upper zone, Town Center zone and lower zone, progressing from a generally drier landscape regime in the upper reaches to a generally “wetter” landscape in the lower portions: (see Figures 7.4(A), 7.4(B), and 7.5).
 - Overall, the corridor shall be designed to create a natural, tree-shrouded corridor along the creek channel, with intermittent expanses of open areas between the channel and adjacent development.
 - The upper landscape zone shall create a predominantly oak savanna landscape along the margins of the corridor with willows and other riparian species near the channel and lower terrace areas.
 - The Town Center zone shall enhance the existing seasonal and perennial wetlands and create a mixed oak woodland and large deciduous tree landscape near the edges of roadways and development parcels.
 - The lower landscape zone shall utilize primarily riparian and wetland plant species;
 - A “restoration planting plan” shall be finalized as part of the Construction Plan drawings for the Creek Park. This plan shall include the planting of rare perennial marsh species which occur in this region such as California hibiscus (*Hibiscus californicus*) and Sanford’s sagittaria (*Sagittaria sanfordii*).
- e) Wetland Maintenance. A level of water shall be maintained in the creek adequate to ensure maintenance of all wetlands, including any related habitat restoration, located within the creek corridor.
- f) Minimum Park Width. The creek corridor shall be a minimum of 200 feet in width, but within that corridor the creek may meander from side to side reaching as close as 50 feet from the corridor edge. The creek shall be designed so that it appears to meander through the creek corridor in order to provide greater aesthetic and wildlife values. Final Plans will specify minimum and maximum corridor width based on wetland and drainage considerations. Detailed drainage and runoff information is required before the width of the park can be finalized, if significant changes in the width or design of the park are required as a result of this information, then

- amendments to this section of the Master Plan will be required, including, but not limited to a new environmental assessment.
- g) Flood Channel Design. Increasing the channel width and excavating a low terrace shall be used to provide flood conveyance and increase wildlife habitat. See also implementation e) above, and Chapter Fifteen for storm flow considerations in the design of the creek channel.
 - h) Detention Basins and Water Quality. The storm water system shall provide for BMP (Best Management Practices) pre-treatment of all urban, project-derived stormwater drainage prior to discharging into Mountain House Creek, the Old River, or other existing wetlands (as delineated by the Corps of Engineers). Wet or dry detention basins are generally the most efficient form of stormwater treatment and their use is consistent with wildlife uses and shall be allowed within the creek corridor (see Chapter Fifteen: Storm Drainage and Flood Protection). If detention basins are proposed within the creek Park after detailed drainage and runoff work has been completed for this creek course, a revision to this Plan may be required, as described in Implementation e): Wetland Maintenance.
 - i) Minimum Setback Between Edge of Creek Park and Buildings. Any buildings adjacent to the creek Park shall be setback from the edge of the corridor a minimum of 50 feet, and a minimum of 100 feet from the edge of the creek course.
 - j) Adjacent Land Uses. Design of development adjacent to the Creek Park shall incorporate visual and physical openings to the greatest extent possible. This shall include, but is not limited to, open cul-de-sacs, single loaded streets adjacent to the park, and open fencing.
 - k) Wetland Preservation/Restoration. Both preservation and restoration of existing wetlands shall be specifically addressed in the Final Plans (see also section 7.3.6, Wetlands Management and Appendix 7-A).
 - l) Perennial Marshes. Where appropriate and feasible, perennial marsh areas shall be identified in the Preliminary Park Plan. Details for construction of perennial marshes shall be included in the Construction Plans of the MHCSD. Permanent open water may be provided in areas designated for perennial marsh. See Appendix 7-A for further information.
 - m) Staging Areas. The restored Mountain House Creek corridor shall accommodate a minimum of 2 staging areas within the portion of the park between Great Valley Parkway on the southwest and Byron Road on the northeast. Staging areas will occur at or near road crossings in areas where the cross section of the park corridor is greater than 250 feet. No staging areas will occur within 200 feet of the wetlands. Access will be from the nearest road, and the staging area will be set back from the edge of road right-of-way a minimum of 30 feet to allow for natural screen plantings. Staging areas will contain car and bicycle parking, picnic facilities, trash receptacles, access to the creek and/or pathways, lighting, and restrooms (at the MHCSD's discretion).

- n) Additional Picnic Facilities. In addition to picnic facilities at staging areas, additional walk-in picnic areas will occur along the 1.5 mile creek corridor south of Byron Road, with picnic areas evenly divided between the two sides of the creek. Some of these should be located adjacent to pedestrian creek crossings, and Neighborhood access points.
- o) Pedestrian Crossings. In addition to pedestrian crossings included in road crossings (i.e., sidewalks), two pedestrian crossings south of Byron Road and two pedestrian crossings north of Byron Road shall be provided. Crossings should be designed to minimize their impact to the creek course and vegetation using both open-type bridge and at-grade crossings.
- p) Trails. Trails shall meander on the outside edge of the corridor and shall not encroach into the creek channel or other surface water features. Trails shall provide views of the creek and shall provide a sense of community participation without degrading the wildlife habitat value of the corridor. Specific trail alignment and design details shall be included in the Final Plans, but shall include the following:
- Along the southeast side of the creek, the path will be at least 8 feet wide, hard surfaced, and painted with a center stripe. It will be located out of the 100 year flood channel and provide a continuous path of travel for maintenance crews and emergency vehicles.
 - Along the northwest side of the creek, the path will be more naturalistic and will be 8 feet in width. It will be constructed of a hard-packed surface such as decomposed granite. Portions of this path will be allowed to meander into the 100 year flood channel.
 - Creek paths will cross Byron Road at the Central Parkway overcrossing and the Mountain House Parkway on-grade intersection.
 - Benches shall be located along both paths at no more than 500 feet intervals, most appropriately where pedestrian crossings intersect with the trail system.
- q) Buffers from Wetlands. Recreational activities shall be buffered from wetlands and sensitive wildlife habitats. These buffers may include vegetative screens or hedges composed of native plant materials which allow views but discourage access to sensitive areas. Buffer treatments shall be specified in the Final Plans.
- r) Fencing. A post-and-cable or similar barrier shall be provided along all creek corridor edges which front public spaces such as roads. Where multi-family residential, commercial, or public development will back up to the creek, “good neighbor” fencing (open fencing promoting views of the corridor) shall be used to minimize the potential for dumping of debris and yard clippings. Privacy fencing may be used where single family residential lots abut the creek corridor. Fencing along the creek shall allow for regular openings to permit pedestrian and visual access. Fence and barrier treatments that are part of the park shall be included in the Final Plans.

- s) Timing of Improvements. All channel modifications, recreation improvements, wetland enhancement, and revegetation associated with the creek restoration component of the park plans shall be funded and installed concurrently with the adjacent Mountain House Creek flood improvements. This does not apply to upstream or downstream flood improvements that may be required that are not related to actual park construction (for example, off-site, at Old River).
- t) Openings under Roadways for Wildlife. Infrastructure crossings of the creek shall provide for at least two openings in any crossing to provide a movement corridor for wildlife that are in addition to culverts required for stormwater runoff. Road crossing will either have adequate clearance for wildlife to pass through or there shall be at least one opening provided along each bank, a minimum of 12 square feet in cross-section (preferably about 3' x 4') above the ordinary high water line with earthen banks along at least one side of the opening. Conceptual design for these structures shall be included in the Final Plans, however, detailed design shall be included with the adjacent roadway which may not be tied to the construction of the park.
- u) Roadway Crossings. Roadway crossings of the creek shall minimize the length and width of the crossing as much as practicable. Road crossings shall be aligned and designed to avoid existing wetlands and avoid any discharge of dredged or fill material into the existing Mountain House Creek channel. Although, design of roadway crossings should be addressed in the Final Plans, the timing of detailed design of the roadway crossings may need to proceed in advance of final park development.
- v) Roadway Crossing Design. Where practicable, openings in the deck of the roadway crossings shall be provided to create more light under the crossing. The timing of detailed design of the roadway crossing may need to proceed in advance of the final park design and construction.
- w) Safety Considerations. The MHCSO "Parks, Recreation and Leisure Plan" shall address safety considerations for the Creek Park. Since portions of the park may not be visible from roadways or adjacent properties, it should be routinely patrolled by bike or foot patrols. Some low level night lighting should also be installed along the hard surface pedestrian path.
- x) Construction Plan Requirements - Mountain House Creek at Town Center. Special consideration shall be given in the planning of park improvements that are located across from the Central Community Park and Town Center area. Techniques to provide open views of the wetlands located in this area, while protecting it from trespass should be specifically addressed in the Final and Construction Plans for this portion of the creek Park.
- y) Construction Plan Requirements - Habitat Preservation and Salvage. Prior to any grading operations in construction areas of the creek corridor, all habitats to be either preserved or salvaged shall be staked by an ecologist with easily observable flagging and pre-construction conferences held to

ensure that grading contractors recognize the importance of these resources.

- z) Construction Plan Requirements - Grading. Grading operations shall ensure that soil does not spill into the existing marshes and fill existing wetlands, restrict flooding of the habitat, or reduce water quality. During grading, the overburden may be removed from the wetland edge backwards towards the uplands to create the marsh, as with a backhoe, or a berm may be left between the existing marsh and the construction area which would be removed in the last stages of construction.
- aa) Monitoring of Habitat Restoration. The creek corridor restoration shall be periodically inspected by a qualified ecologist with proven successful experience in the areas of habitat development and wetland restoration. Inspection is divided into two phases. The first phase involves inspection of the construction project to ensure its compliance with the approved restoration program and relevant permits. The second inspection phase shall occur for five years after construction and shall review channel stability and sedimentation in the creek, water surface elevations and plant species richness and cover for the marshes, and plant height and vigor for the woodlands. A Monitoring Program shall be established by the MHCS D.

The project shall be evaluated against specific performance standards at the end of the fifth year of inspection.

Where the inspection program shows an unsuccessful conclusion, the MHCS D shall take action to correct that trend.

7.2.9 Old River Regional Park

The Master Plan designates an 88-acre riverfront park along Old River from part way down the Westside Irrigation District Canal (known as the Wicklund Cut) in the northeast to the proposed marina in the northwest part of the community. The Regional Park also includes the mouth of Mountain House Creek from the junction with Mountain House Creek Park to the Old River edge. It is anticipated that people throughout the southern part of the County will use the riverfront park.

Old River forms the northern boundary of the community. The riverfront represents one of the richest biological habitats and visual resources in the Master Plan area. Along the Old River levee is a narrow riparian area dominated by willow interspersed with blackberry, wild rose and an occasional white alder. The riverfront is more densely vegetated than other locations, and provides wildlife habitat for a number of species. The river itself offers boating access to the larger Delta system.

Regional Parks and access to the Old River and similar waterways currently are limited in the region. This new community designates an area including the Old River levee be utilized as a Regional Park for recreational and wildlife habitat purposes (see Figure 7.6: Old River Regional Park Diagram and Figure 7.7: Old River Regional Park Sections).

Development of the park includes terraced fill to raise the elevation of areas adjacent to Old River and thereby improve flood control protection, water quality treatment and recreational value. This approach will meet current flood control requirements and remove all of the community from the 100 year flood plain designation. A paved multi-purpose path will provide maintenance access and the existing levee will remain with its high habitat values undisturbed.

The Regional Park will likely be developed in phases. An exception to this will be the construction of a river access facility to serve residents of Specific Plan I. There will be a need to provide some structured and safe access to the river in the early years of community development and a river access facility may help to minimize uncontrolled access and trespass to other areas along the river.

The Department of Water Resources is currently proposing to build a barrier or dam across Old River adjacent to the Regional Park. This barrier is proposed to improve water levels and quality in Old River. However, the massive man-made appearance of the structure would significantly alter the natural river experience proposed with the development of this Regional Park. Negotiations are ongoing with the state to minimize the impact of this “barrier,” if it is constructed.

Objective:

- a) To utilize the Old River levee for a variety of purposes suitable for a Regional Park, including regional recreation, wildlife and native plant habitat, and flood protection.

Policies:

- a) The waterfront of the Old River shall be utilized as a linear park and wildlife preserve offering access to the regional delta system and including facilities for picnicking, boating, fishing, trails, wildlife observation, and play areas.
- b) The Old River Regional Park shall provide a continuous trail for hiking and biking along its entire length (except where Mountain House Creek enters Old River), as well as sufficient access for maintenance vehicles.
- c) The Regional Park Trail system shall connect to the trails of the riverfront park and Mountain House Creek Community Park.
- d) The Old River Regional Park shall provide facilities for fishing, viewing, and similar activities desirable at a waterfront location.
- e) Access for the general public shall be provided at least two locations, from the north end of Central Parkway and the mouth of Mountain House Creek, with parking areas sized to accommodate park users from within and outside the community. A river access facility for residents in Specific Plan I may be provided in another location.
- f) The existing Old River levee shall be dedicated primarily to natural habitat, excepting the access points described above and other minor uses such as fishing platforms.
- g) To the extent possible, wildlife habitats and wetlands shall be buffered and protected from recreational activities. These buffers could be vegetative screens or hedges composed of native plant materials which allow views but discourage public access. Man-made materials shall be avoided.

Implementation:

- a) Other Plans. Construction of the Old River Regional Park may be phased. A Preliminary Parks Plan shall be included with the first Neighborhood specific plan adjacent to Old River. Strategies to provide phased park development, as well as other long range planning and development strategies shall be included in the MHCS D's "Parks, Recreation and Leisure Plan."
- b) Early Access. A river access shall be provided during the development of Specific Plan I, but no later than issuance of the 2,000th building permit. The MHCS D shall be responsible for providing detailed plans, and for the construction of the early river access. At the MHCS D's discretion, they may locate a parking area adjacent to their wastewater treatment plant and provide signed pedestrian access to an improved viewing area adjacent to Old River at Wicklund Cut, or provide auto access to a parking area closer to Old River.
- c) Old River Access for Residential Development North of Byron Road. Improved access, similar, but in addition to the early access for Specific

Plan I described above, shall be provided concurrent with the first residential development constructed north of Byron Road.

- d) Terraced Fill. Grading of the area adjacent to Old River shall raise the elevation of areas behind the existing levee, drain the areas behind the levee back to retention areas within Neighborhoods K and L, and create usable open space within the Regional Park.
- e) Implementation of Parks Plan. The MHCS D’s “Parks, Recreation and Leisure Plan” shall include a two phase park planning program: provisions for the Preliminary Plans to be included with the first Specific Plan containing land adjacent to the Regional Park, and more detailed program aspects to be addressed in the MHCS D’s Final Plans which shall include all applicable flood control provisions, the existing levee, and proposed grading concepts into the Regional Park plans. Provisions for water access shall also be addressed.
- f) Educational Signage. Educational signage shall be included within the park at appropriate locations to identify the values of the Old River and encourage its protection.
- g) Old River Path. A multi-use path shall be constructed parallel to Old River, extending from the east end at Wicklund Cut to the western terminus of the park. A minimum 12-foot width shall be improved with asphalt, which shall be striped to designate pedestrian and bicycle travel lanes. An unimproved compacted path shall also be constructed along the existing levee adjacent to Old River. This path shall be constructed in a manner that will minimize any alteration to the existing habitat, although several improved corridors through the vegetation should be provided for views of the river and fishing access.
- h) Wetland Resources. Provisions to include and protect the 1½ acre wetland at the extreme southern corner of the Regional Park shall be incorporated into the Final Plans prepared by the MHCS D.
- i) Woodlands. The woodland portion of the park design shall be planted in a variety of native riparian and oak woodland species.
- j) Riparian Woodlands. Species acceptable for planting in the riparian woodland area should include the species listed in Appendix 7-A, and other species native to the region and ecotype.
- k) Grasslands. Grassland dominated by native species indigenous to the region shall be restored wherever practicable within the park.
- l) Landscape Treatment. The landscape treatment of the Regional Park shall incorporate the following:
 - The river edge zone shall utilize riparian species and augment the existing vegetation adjacent to Old River.

- A mixed oak woodland shall be planted at the interior edge of the park, with picnic areas, parking, and trails incorporated.
- m) Pre-Grading Requirements. Prior to any grading operations adjacent to Old River, all habitats to be either preserved or salvaged shall be delineated by an ecologist and staked with easily observable flagging.
- n) Grading Requirements. Grading operations shall be conducted so as to ensure that soil does not spill into Old River.
- o) Maintenance Manual. The Construction Plans prepared by the MHCS D shall include a requirement for a Maintenance Manual. This will ensure that long-term maintenance practices continue which support the purposes of the Old River enhancement program, and shall be developed for use after completion of construction of the Regional Park, including natural habitats. The manual shall detail maintenance procedures such as erosion control, debris removal, exotic plant eradication, irrigation guidelines, species cultural requirements, replanting, protective fencing, if necessary, and signing. A separate section of the manual shall detail maintenance procedures for the Old River levee which are acceptable to appropriate federal, state, and local agencies.
- p) Corrective Actions. If natural habitats within the Regional Park are not meeting the policies in this Master Plan, relevant corrective actions shall be taken by the MHCS D.

NEIGHBORHOOD "F" PARK CONCEPT

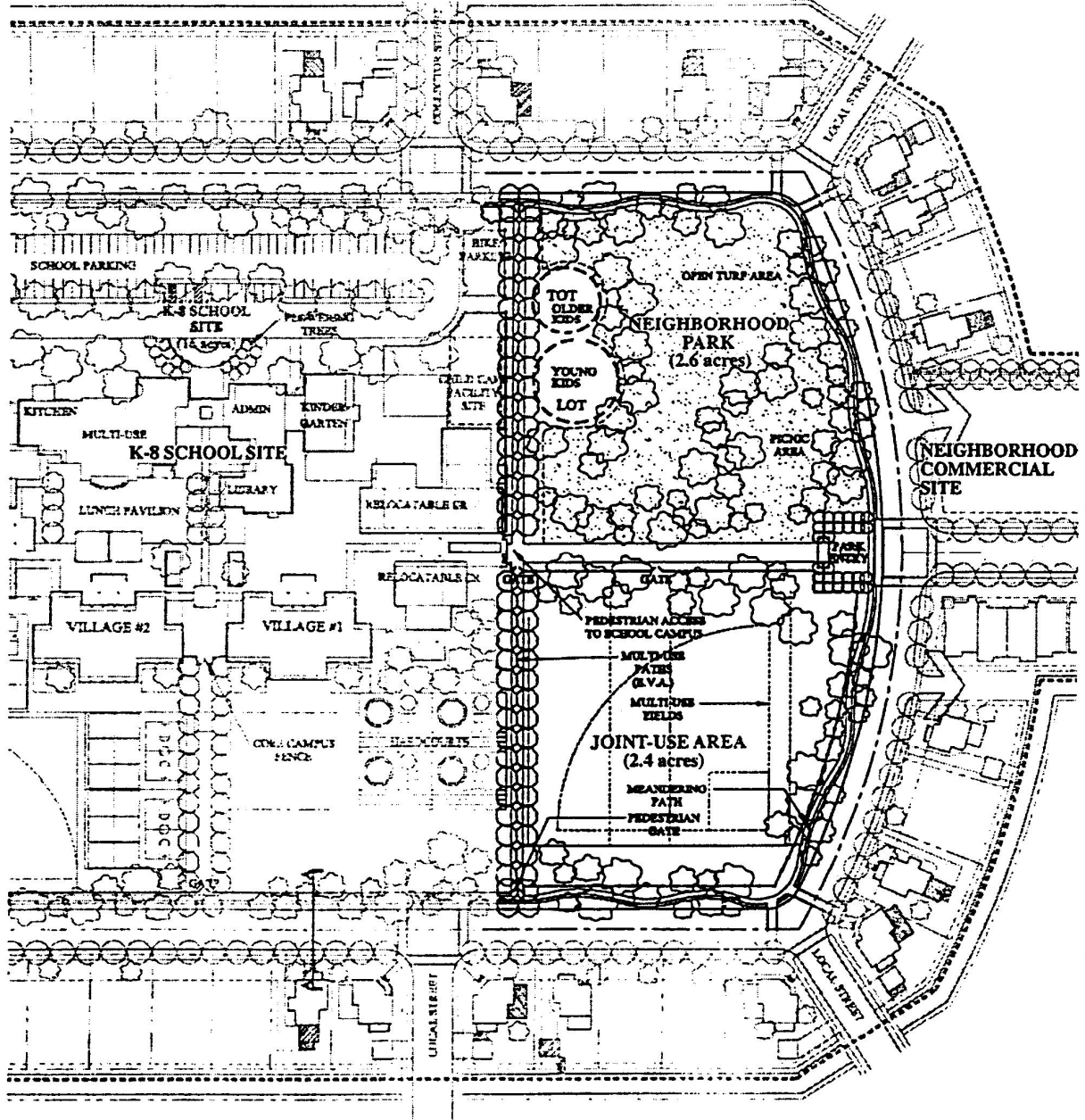


FIGURE 7.3 – NEIGHBORHOOD PARK CONCEPT



FIGURE 7.4(A) – MOUNTAIN HOUSE CREEK PARK PLAN

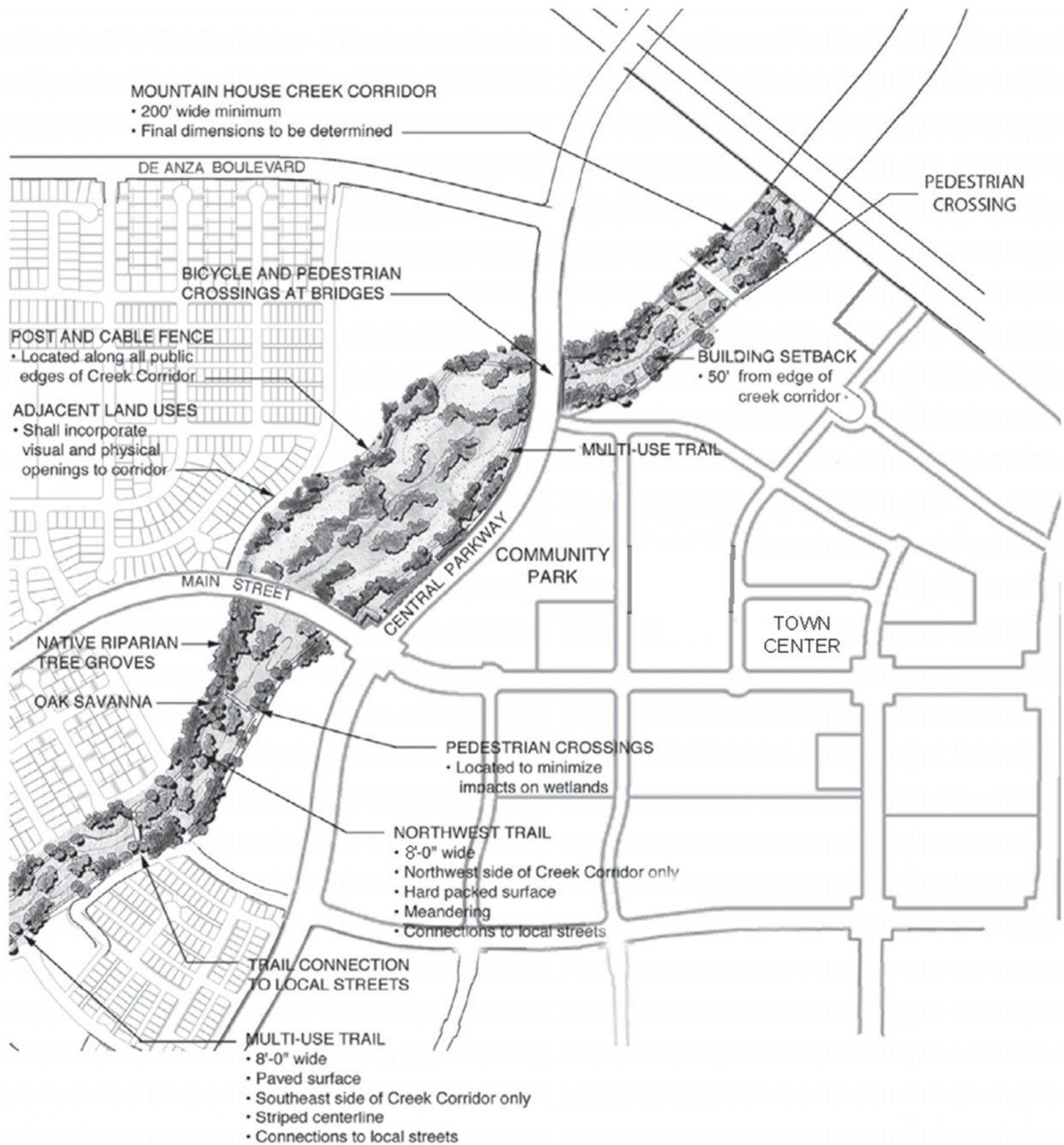


FIGURE 7.4(B) – MOUNTAIN HOUSE CREEK PARK PLAN

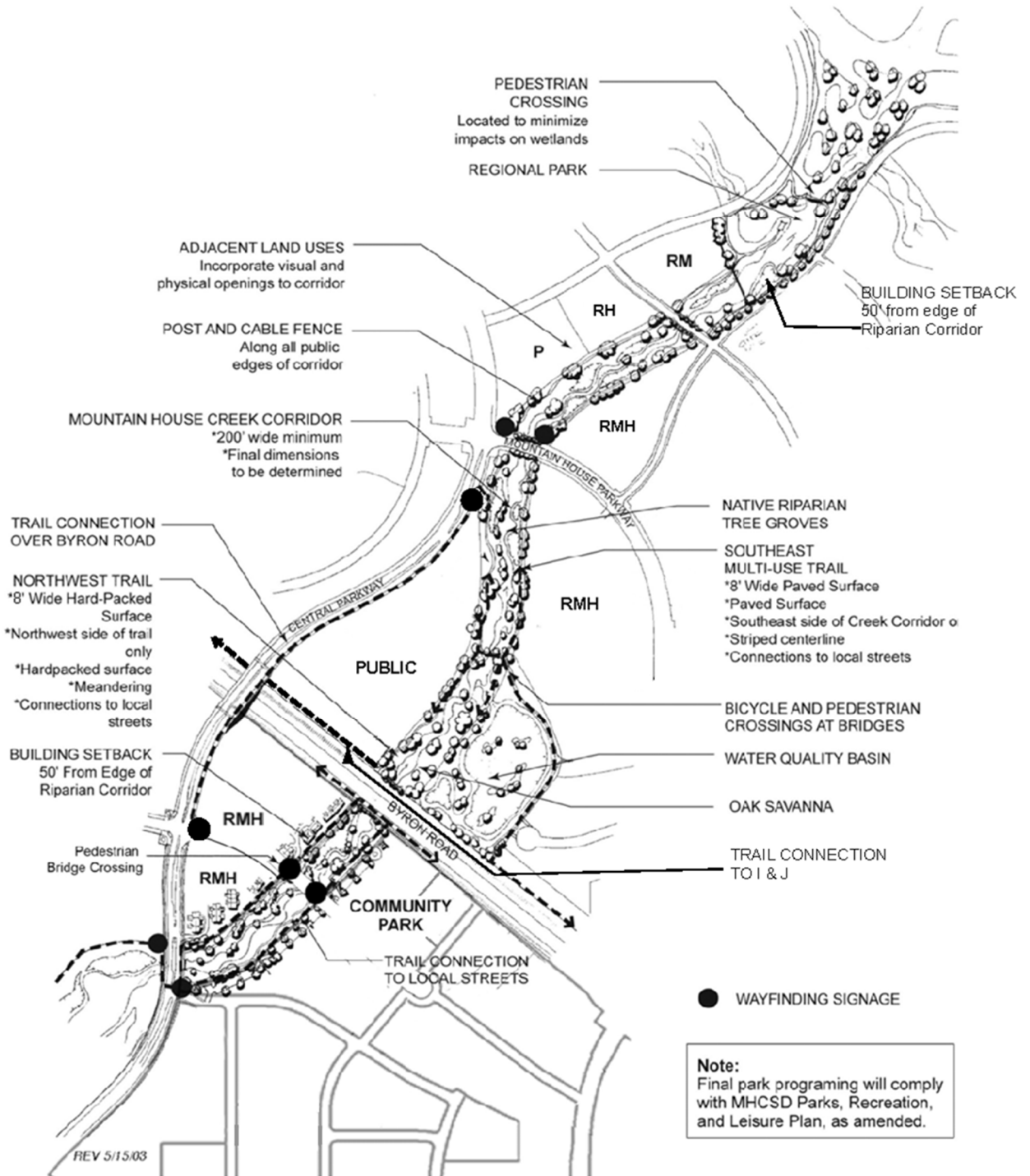


FIGURE 7.4(C) – MOUNTAIN HOUSE CREEK PARK PLAN

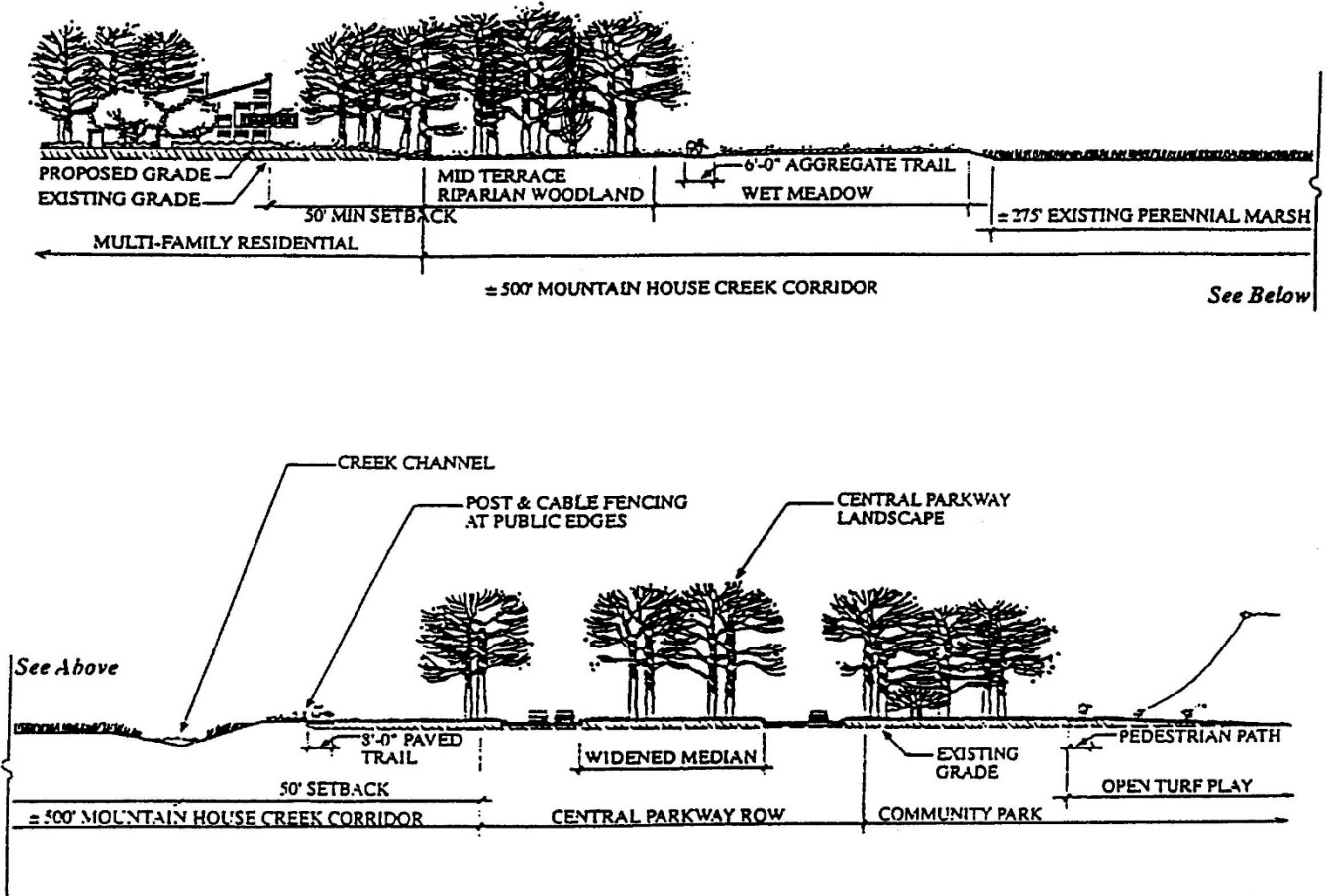


FIGURE 7.5 – MOUNTAIN HOUSE CREEK AT TOWN CENTER

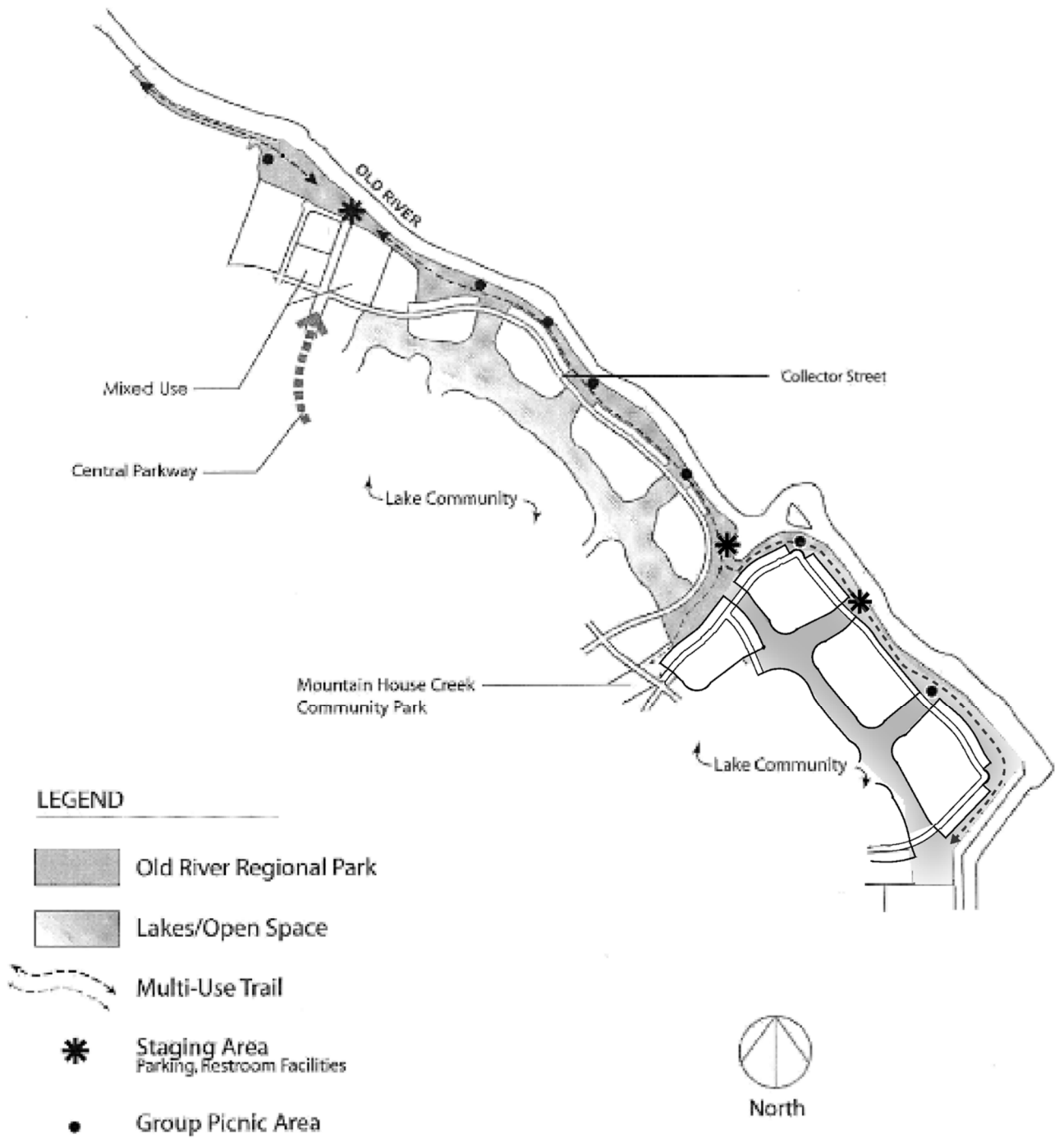
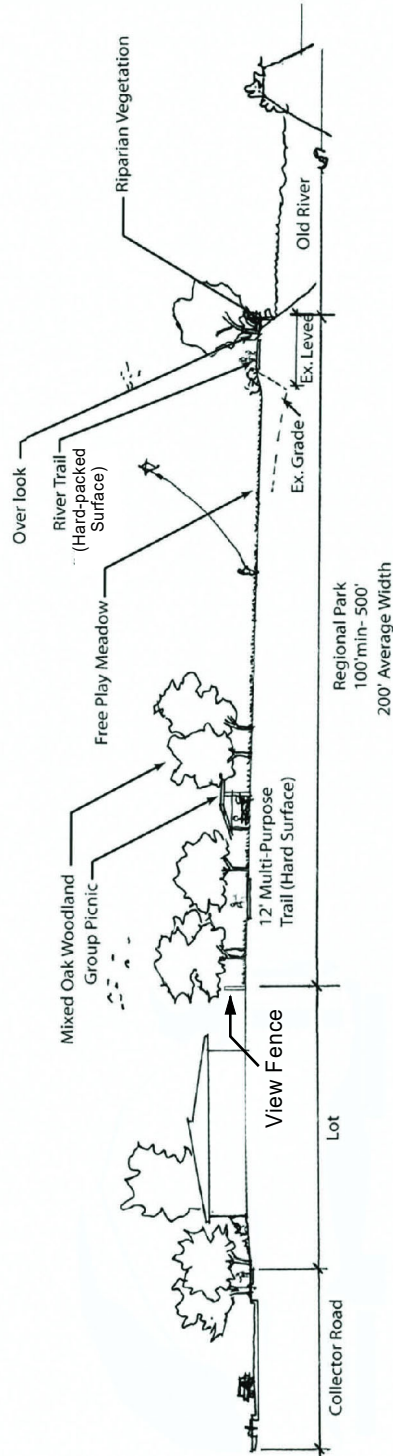


FIGURE 7.6 – OLD RIVER REGIONAL PARK DIAGRAM



Note:
Final park programming will comply with MHCSD Parks, Recreation, and Leisure Plan, as amended.

OLD RIVER REGIONAL PARK

FIGURE 7.7 – OLD RIVER REGIONAL PARK SECTIONS

7.2.10 Regional Trails

Figure 7.2 illustrates the major open space destinations and linkages within Mountain House. Chapter Nine contains provisions for pedestrian and bicycle paths and circulation not included as part of the park system described in this chapter. Path design and improvement standards are also contained in the policies and implementation measures of Mountain House Creek Park and the Old River Regional Park. Provisions for Regional Trail linkages are provided below. Regional Trails include those planned by the East Bay Regional Park District (EBRPD), the Livermore Area Recreation and Park District, and the National Park Service.

The East Bay Regional Park District's Master Plan 1997, indicates a potential Regional Trail along the Union Pacific Railroad/Byron Road, that stops at the Alameda/San Joaquin County line. Other potential trails connect San Joaquin County with Regional Park facilities at Brushy Peak, Vasco Caves, and Bethany Reservoir. These proposed trail alignments stop at the County line since it is also the eastern edge of EBRPD's jurisdiction. Although these trail connections stop at the County line, is the intent of EBRPD, that if these trails are constructed, they would logically extend into San Joaquin County. The Livermore Area Recreation and Park District show a potential trail corridor leading from Bethany Reservoir generally in the direction of Mountain House. Both of these districts believe that a significant percentage of Mountain House residents will utilize their facilities in the future.

The National Park District has considered extending the De Anza Trail, a National Historic Trail, into San Joaquin County at or near the Mountain House area. However, the EBRPD's Master Plan 1997, includes a potential alignment for the De Anza Trail that is entirely within Contra Costa and Alameda Counties.

Objectives:

- a) To establish a network of paths that provide pedestrian and bicycle connections to open space and other destinations within Mountain House.
- b) To connect the Mountain House pedestrian and bicycle circulation system to future potential Regional Trail alignments.

Policies:

- a) Signage and information shall be provided to orient users and promote better use of the pedestrian and bicycle system.
- b) Paths within Mountain House Creek Community Park, Old River Regional Park, Central Parkway and Great Valley Parkway shall be interconnected to provide for easy access.
- c) Future Regional Trails leading from Alameda or Contra Costa County to the Mountain House area shall connect to the pedestrian and bicycle network within the community. Potential Regional Trails include those planned by

the East Bay Regional Park District and Livermore Area Recreation and Park District. Wherever possible, such trails shall provide access to destinations within Mountain House, including the Old River Regional Park and Mountain House Creek Park.

- d) Should the National Park Service decide to extend the De Anza Trail into the Mountain House area, the trail shall be accommodated through connections to the Mountain House pedestrian and bicycle network, and identified with signage. The most likely alignment would be to provide trail routing along proposed Class I bike lanes that parallel Great Valley Parkway from Kelso Road to Grant Line Road.

Implementation:

- a) Design. Design of paths, including alignment, standards, signage, location of trailheads or staging areas, and timing of construction and maintenance shall be provided in the Parks and Open Space Plan (see Section 7.2.2: Recreation System).
- b) Trail Connections. Specific Plans for the affected area shall incorporate provisions of the Parks and Open Space Plan and provide for the design and location of on-site Regional Trails and provide for linkages to destinations within the community, especially Mountain House Creek Community Park and Old River Regional Park. These trails include those planned by the East Bay Regional Park District, the Livermore Area Recreation and Park District, and the National Park Service (De Anza Trail).
- c) Coordination with Other Districts. There shall be ongoing coordination with the East Bay Regional Park District, the Livermore Area Recreation and Park District, and the National Park Service to insure that Regional Trail connections are contiguous wherever feasible, constructed in coordination with other park and street improvements, and are maintained.

7.2.11 Private Recreation

The Master Plan allocates privately developed recreation uses, including two linked nature preserves, one in the Neighborhood I and one in the Neighborhood J mixed active adult and family neighborhood, located north of Byron Road. In addition, private recreation facilities are expected to be constructed as amenities within Neighborhoods, higher density residential complexes, or commercial areas.

Private Neighborhood recreation facilities are encouraged to locate within discrete Neighborhood units or high density residential complexes. Such facilities shall be in addition to Neighborhood and Community Parks. Private recreation facilities may include pools, small parks, pocket parks/tot lots areas, community buildings or other facilities.

Other private recreation such as theaters, skating rinks, water slides, bowling alleys, and game centers are encouraged to operate in appropriate locations within the community.

Objectives:

- a) To incorporate private recreation uses that will serve community residents and contribute to a high quality of life.

Policies:

- a) Pocket parks shall be provided in larger multi-family developments.
- b) Mini-parks shall be provided in single family subdivisions located more than ½ mile from the edge of a Neighborhood Park.

Implementation:

- a) Specific Plan Requirements. Golf course design criteria shall be provided by the Specific Plans for the golf course areas.
- b) Location and Construction of Mini Parks. Where any portion of a proposed subdivision is located more than ½ of a mile from the edge of the nearest Neighborhood Park, the Tentative Subdivision Map shall include a mini park. Upon completion, the park will be dedicated to the MHCSD, who will then be responsible for operation and maintenance. Mini parks will be subject to the following minimum criteria:
 - Each mini park shall contain a minimum of ½ acre. It should provide enough room for a small playground, a half court surface for basketball, and setbacks to buffer it from adjoining residences. A mini-park may incorporate a through connection for pedestrians.
 - No restrooms will be provided.
 - Lighting will be provided only if there is inadequate lighting from street lights, and then it should be restricted to low level lighting for pedestrian use.
- c) Other Private Recreation. Larger multi-family developments (those in R/MH and R/H areas) developed with 75 or more units shall include provisions for a children's play area with the development's private open space. Any adult or senior citizen only development will be exempt from this requirement.

7.2.12 Other Open Space

Other open space areas within Mountain House are addressed in the following sections of this Master Plan:

- Buffers and Edges – Chapter Four: Development and Design;
- Storm Drainage Easements – Chapter Fifteen: Storm Drainage and Flood Protection;
- Transmission/Pipeline Easements – Chapter Six: Public Health and Safety;
- Wetlands – Chapter Seven, Section 7.3: Biological Resources Management;
- Street Landscaping – Chapters Four: Development and Design (text); and
- Nine: Transportation and Circulation (figures).

7.3 BIOLOGICAL RESOURCES MANAGEMENT

7.3.1 Introduction

The Mountain House lands provide habitat for a variety of species. Sections 7.3.3: Swainson’s Hawk, and 7.3.5: Other Special-Status Species, contain policies relating to impacts to Swainson’s hawk and other special-status species, respectively. Section 7.3.4: San Joaquin Kit Fox, discusses the San Joaquin kit fox, which is not included in the Habitat Management Plan discussed in Section 7.3.2.

7.3.2 Habitat Management Plan (HMP)

This section addresses provisions for an HMP for enhancement of wildlife values, agricultural preservation, and potential use of reclaimed wastewater for crop irrigation.

The HMP proposes an off-site program which includes the following elements:

- a) Mitigation of impacts to wildlife that currently utilize the Mountain House agricultural lands for foraging and/or nesting as follows:
 - Swainson’s hawk - nesting and foraging;
 - Northern harrier - foraging;
 - Black-shouldered kite - nesting and foraging; and
 - Tri-colored blackbird - foraging.
- b) Preservation of agricultural lands.
- c) Potential utilization of reclaimed wastewater for agricultural irrigation.

Implementation of this Master Plan will convert agricultural land to other uses. Most of this land serves as habitat for wildlife (notably for nesting and foraging by Swainson’s hawk and Black-shouldered kite, and foraging by Northern harrier, other raptors, and Burrowing owl. The HMP has been designed primarily to address the habitat needs of the Swainson’s hawk, for which specific mitigation is required. However, this habitat also will provide foraging and/or nesting opportunities for the other raptors listed above and potentially for the Tri-colored blackbird, for which there are no quantifiable mitigation requirements. The HMP does not address specifically the habitat and needs of the owl.

See Section 7.3.5: Other Special-Status Species, regarding measures appropriate to the Burrowing owl.

The HMP provides the opportunity to integrate compatible uses to mitigate for impacts to existing wildlife habitat, preserve agricultural lands and productively utilize reclaimed wastewater. Agricultural fields can be cultivated while providing suitable habitat for the species identified above. Reclaimed wastewater also may be used to irrigate crops. If an agricultural impact fee is adopted by the County (relating to conversion of lands in agricultural production to non-farm uses) which is applicable to this project, off-site agricultural lands dedicated pursuant to the HMP shall be considered when assessing the fee and to the greatest extent possible shall be credited towards satisfaction of any obligation of the project to pay such fee or otherwise comply with the relevant County ordinance.

The following policies and implementation measures are proposed to provide guidelines for an off-site mitigation program.

Assumptions:

- a) Most wildlife impact mitigations required for Mountain House can be satisfied by an HMP on lands adjacent or within reasonable proximity to the community that will continue to be used for agricultural production. Reclaimed wastewater also may be used to irrigate crops.
- b) The HMP requires sufficient acreage to mitigate impacts to approximately 3,860 acres of Swainson's hawk foraging habitat found within the Master Plan area in accordance with mitigation ratios established in the HMP. Specific acreage requirements do not apply to the other HMP species.
- c) If reclaimed wastewater is used to irrigate HMP lands, the assumed agricultural water use for one year will be approximately four acre feet per acre.
- d) Habitat lands may be shared with farm operations, to the greatest extent practical, as long as they don't restrict the farmers' ability to continue to farm in a viable and economical manner.

Objective: To combine mitigation for impacts to wildlife (primarily the Swainson's hawk) with the preservation of agricultural land and maintain viable and economical agricultural productivity and enhanced wildlife values on the mitigation site(s). If feasible, reclaimed wastewater may be used to irrigate crops on HMP lands.

Policies:

- a) Habitat mitigation for Swainson's hawks, Northern harriers, and Black-shouldered kites shall be provided through an HMP on off-site

agricultural lands, riparian areas, or other areas obtained for purposes of habitat mitigation.

- b) The HMP may be combined with wastewater reclamation.

Implementation:

General Considerations

The HMP is attached as Appendix 7-B: Habitat Management Plan (HMP) and includes the following elements:

- a) Standards. Performance and monitoring standards to ensure successful implementation of the plan, as well as long-term management procedures.
- b) Provision of Mitigation Land. Mitigation land provided through fee title and/or a permanent conservation easement.
- c) Identification of Responsible Agencies. Identification of the responsible agencies for land ownership, operation and maintenance of the HMP after the implementation phase.
- d) Phasing. Development of the HMP occurring in phases corresponding with the phases of community development.
- e) HMP/Farm Practices. All HMP components and farm practices shall be carried out without significant detriment to either the HMP or to the economical and practical operation of the farm lands.

Agricultural Management

- f) Viable Farm Operations. Selection of crop types as specified in the HMP to provide suitable wildlife foraging habitat and maintenance of agricultural practices which will ensure viable farming operations.
- g) Rodent Control. Use of non-chemical practices to control vole and gopher populations, and standard agricultural rodent control measures to control mice and squirrel populations.

Preservation of Wildlife Values

- h) Habitat for Special-Status Species. To the extent practicable, the provision of suitable habitat for other special-status species as discussed herein.
- i) Wildlife Habitat Preservation. Reasonable assurances that the wildlife habitat will be preserved in perpetuity.

- j) Tree Preservation. Whenever possible, existing mature trees on the mitigation site(s) shall be preserved because of their value as roosting and nesting sites for raptors and other wildlife.
- k) Mitigation Requirements. Mitigation provisions for the loss of Swainson's hawk foraging habitat within the Master Plan area in accordance with Section 7.3.3, Swainson's Hawk.

Use of Reclaimed Wastewater

- l) Use of Reclaimed Wastewater. A program for the use of reclaimed wastewater on HMP lands is discussed in the MHCS D's Development Standards.

Hold Harmless Clause

- m) Endangered Species Acts. In carrying out the operations of the project, the applicant shall take no action that violates the provisions of the California Endangered Species Act or the Federal Endangered Species Act or any other laws or regulations pertaining to the protection of the Swainson's hawk, the San Joaquin kit fox, or other protected species. Compliance with said laws shall be the sole responsibility of the applicant, and the applicant agrees to indemnify, defend, and hold the County harmless from and against any claim or action by affected State agencies as to the project's compliance with said laws.

7.3.3 Swainson's Hawk

Swainson's hawk is a large, broad-winged buteo which frequents open grasslands. The hawk generally requires large trees (approximately 41' to 82' tall) for nesting adjacent to open grasslands, riparian areas, or agricultural land which supports accessible prey for foraging. Open fields and pastures are the primary forage areas.

In 1983, the State of California listed the Swainson's hawk as a threatened species, affording it protection under the California Endangered Species Act. The California Department of Fish and Game (DFG) Draft Hawk Mitigation Guidelines (1993) contain the following objectives:

- a) Preservation and recruitment of suitable nesting trees;
- b) Protection of existing nesting habitat from destruction or disturbance;
- c) Maintenance of compatible agricultural practices to preserve forage habitat; and
- d) Mitigation for loss of breeding and/or foraging habitat.

No nesting by the Swainson's hawk was observed on-site during surveys performed in connection with the EIR for the Mountain House General Plan

Amendment (March 1992), and no potential nesting habitat was found on the project site. Almost all Swainson's hawk sightings within the Master Plan area were made near or adjacent to Old River and secondarily over the lands north of Byron Road. Few sightings were recorded south of Byron Road.

More recent spring/summer 1994 surveys documented two active Swainson's hawk nests within the Master Plan area. Neither of these nests occurs in preferred tree species. One Swainson's hawk nest is located in a willow tree overhanging Old River, and the other occurs in a lone eucalyptus tree surrounded by alfalfa fields in the central area of the site (see Figure 7.8: March 1992 Swainson's Hawk Sightings).

The Final SEIR for the General Plan Amendment (January 1993) states that depending on various factors, replacement habitat requirements for Swainson's hawk impacts could be as much as 4,290 acres (based on areas supporting suitable crops for Swainson's hawk foraging). Because of the recently documented nesting activity on the site, the Swainson's hawk impact area encompasses all areas supporting suitable forage crops. Approximately 430 acres of the 4,290 total consist of farmsteads, dairies and other facilities not compatible with Swainson's hawk use. Accordingly, the total area susceptible to use by the Swainson's hawk within the Master Plan area is 3,860 acres.

Assumptions:

- a) Suitable foraging habitat for the Swainson's hawk within the Master Plan area totals approximately 3,860 acres, upon which the basis of off-site mitigation is based.
- b) Habitat requirements of the Swainson's hawk will allow mitigation lands to provide habitat for other impacted species. These mitigation lands also would qualify for inclusion in any agricultural preservation program which may be adopted for this project.
- c) Mitigation lands may use reclaimed wastewater for agricultural irrigation.

Objective: To insure the implementation of appropriate mitigation for Swainson's hawk impacts, including use of mitigation lands for other impacted species, agricultural production, and if feasible, utilization of reclaimed wastewater to irrigate crops.

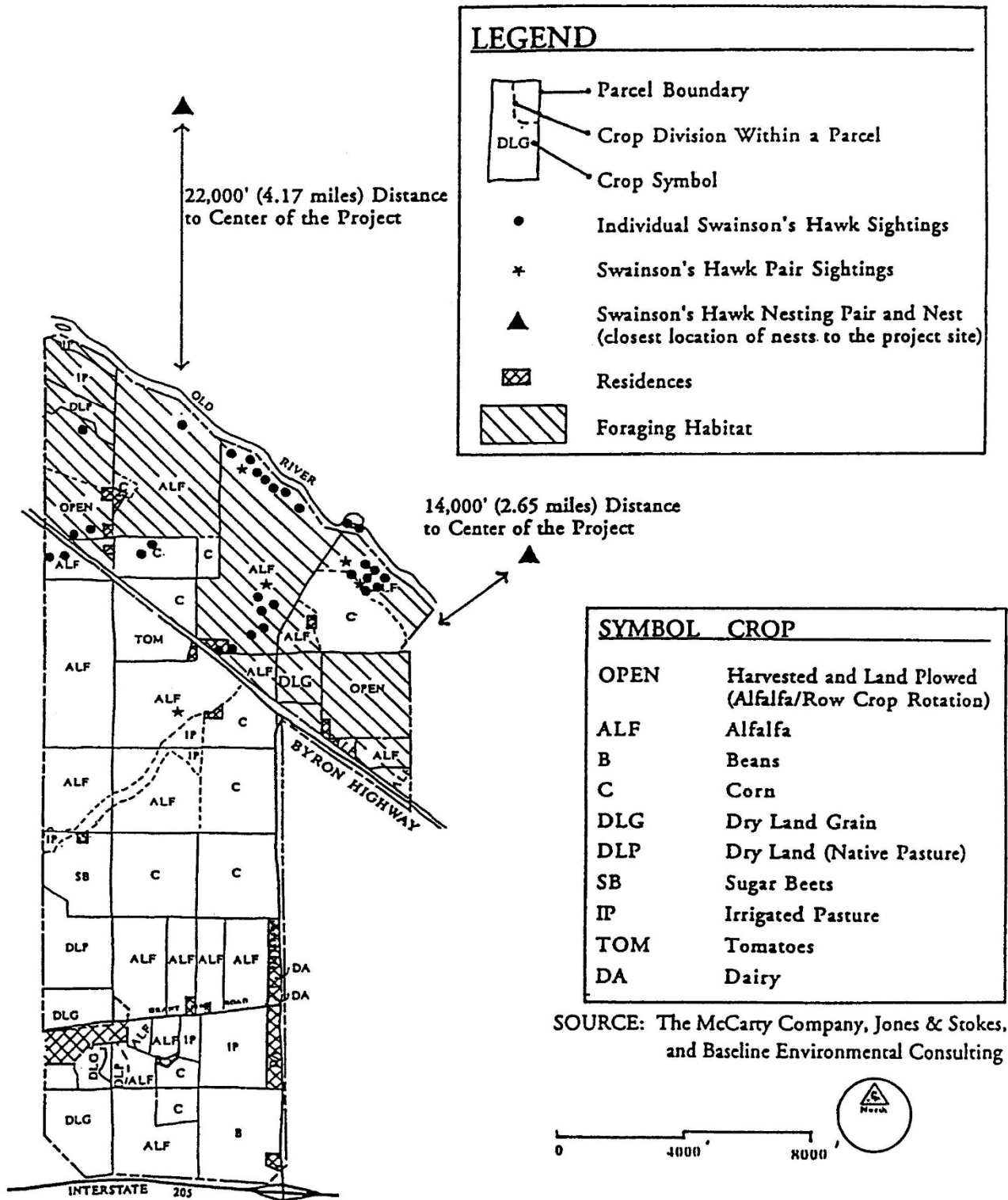


FIGURE 7.8 – MARCH 1992 SWAINSON'S HAWK SIGHTINGS

Policies:

- a) Mitigation for loss of Swainson's hawk foraging habitat shall be based on approximately 3,860 acres of impacted land within the Master Plan area.
- b) Mitigation for Swainson's hawk impacts shall be combined with mitigation for other species to the extent practicable.
- c) Foraging habitat provided as mitigation for Swainson's hawk impacts must be at least 100 acres in size and, subject to reasonable land availability, contiguous. Nesting habitat provided as mitigation must be at least 5 acres in size and shall constitute no more than 6% of total mitigation lands.

Implementation:

- a) Mitigation Requirements. Mitigation for loss of Swainson's hawk foraging habitat may be satisfied by participation in the Mountain House HMP; fee participation in a County-sponsored multi-species conservation program or similar effort; by other programs as approved by San Joaquin County; payment to DFG of a mitigation fee under applicable DFG regulations and/or guidelines which may be in effect at the time mitigation is undertaken; or by a combination of all or any of the above elements.

The mitigation measures and policies proposed within the Master Plan represent the County's current understanding of its legal rights and obligations under existing law, and are proposed with the recognition that both the biological and legal status of the Swainson's hawk are subject to sudden and unpredictable change during the planning and implementation of the project. For example, during the preparation of the Habitat Management Plan (HMP) as well as the Master Plan and Specific Plan I, an additional Swainson's hawk sighting occurred south of Byron Road, necessitating changes in the HMP, the Master Plan and Specific Plan I. It is also possible that during implementation of the project, the Swainson's hawk could be removed from the California Endangered Species List.

From a legal standpoint, the extent of state and federal agencies' authority to require mitigation for loss of endangered species habitat has been the subject of several recent judicial decisions, as well as a recent opinion by the Legislative Counsel of the State of California. These decisions have raised serious questions as to the authority of the Department of Fish and Game and USFWS to require mitigation for habitat loss under the State and Federal Endangered Species Acts. Further clarification of these legal issues could arise in the context of case law, quasi-judicial opinions, new legislation or amendments of existing legislation.

For these reasons the policies of the Master Plan and Specific Plan I, and the mitigation measures in the several project Environmental Impact Reports to date, are subject to revision by the Board of Supervisors where changed biological or legal circumstances exist. (Under all circumstances,

the measures in Section 7.3.2 pertaining to the protection and removal of nest trees shall still be required.) In no event, however, shall these changed circumstances eliminate the project applicant's obligation to comply with all requirements of the State and Federal endangered species acts.

Furthermore, in the event a Country-wide or regional Swainson's hawk mitigation program is implemented, the project applicant will retain the option to participate in such a program in lieu of the mitigation measures set forth in this Master Plan and the HMP. Finally, if the project applicant negotiates an agreement which is mutually acceptable to the applicant and the DFG, such an agreement will supersede the provisions of this Master Plan and the HMP.

- b) Hawk Mitigation Program. Table 7.3: Proposed Swainson's Hawk Mitigation Program, below, summarizes the mitigation program proposed in the HMP. This program provides a range of mitigation ratios that reflect various factors as described in the HMP adapted from the current DFG Draft Mitigation Guidelines for Swainson's hawks in the Central Valley of California (October 18, 1993). The table is arranged according to the habitat type to be acquired. Consequently, for any developer of a portion of the hawk impact area on the project site, this table provides a "menu" of possible selections, subject to specific restrictions. For foraging habitat acquisition, these mitigation ratios are based upon the distance of the acquired foraging habitat from an active nesting tree. The DFG Guidelines (1992 and 1993) do not address this subject; the 1993 DFG Guidelines propose varying levels of mitigation based upon the distance of the impact area from an active nest site.
- c) Timing of Mitigation. Mitigation for loss of Swainson's hawk foraging habitat shall occur as foraging habitat is converted from suitable forage crops to urban uses as designated by this Master Plan and the applicable Specific Plan. Mitigation land shall be set aside in fee or by easement as a condition of Tentative Map approval. Mitigation land shall be set aside in fee or key easement, as a condition of Tentative Map approval. Mitigation lands shall be dedicated or a security instrument shall be posted (as approved by the Community Development Director) prior to Final Map recordation. If a security instrument is posted, dedication of habitat mitigation lands for the entire Final Map shall be provided prior to the issuance of any grading or building permits.
- d) Protection and Removal of Nest Trees. Protection and removal of nest sites within the Master Plan area are subject to the following measures:
 - (1) Eucalyptus Tree Nest Site. It is anticipated that project development will result in the removal of the one nesting tree (discovered in spring 1994) located south of Byron Road. Upon acceptance of the HMP by the County, this eucalyptus tree may be removed at any time so long as Swainson's hawk do not occupy the

tree and fledglings are not dependent upon the nest habitat (which shall be confirmed in writing by a qualified biologist). If this eucalyptus tree is not removed, it shall be subject to the measures described below.

- (2) Protection of Nest Trees (Other than Along Old River). If the Swainson's hawk is nesting in any tree within the Master Plan area, other than trees along the Old River, no disturbance, construction, or other project-related activities which may cause nest abandonment or forced fledging shall occur within 1/2 mile of such tree between March 11 and August 15, or until fledglings are no longer dependent upon nest habitat. The nesting and fledgling dependency determinations shall be made in writing by a qualified biologist.
 - (3) Protection of Nest Trees Along Old River. If the Swainson's hawk is nesting in the willow tree along Old River (discovered in spring 1994), or in any other tree along Old River, no grading or other project-related activities requiring the use of heavy equipment shall occur within 1/4 mile of such tree between March 1 and August 15, or until fledglings are no longer dependent upon nest habitat. Other activities that do not require heavy equipment, e.g., planting in connection with restoration of the Old River and development of the Old River Park, may occur during this period. The nesting and fledgling dependency determinations shall be made in writing by a qualified biologist.
 - (4) Removal of Nest Trees. If any Swainson's hawk nest tree (other than the eucalyptus tree referenced above) is to be removed and fledglings are present, the nest tree may not be removed until the young are no longer dependent upon the nest site, a determination to be made in writing by a qualified biologist.
- e) Agricultural Impact Fee. If the County adopts an agricultural impact fee which is applicable to this project, agricultural lands dedicated pursuant to the HMP shall be credited against satisfying any obligation of the project to pay such fee or otherwise comply with the relevant County ordinance to the greatest extent practical, as allowed by the terms of the ordinance.

Table 7.3⁽¹⁾ Proposed Swainson's Hawk Mitigation Program				
Type of Habitat Dedicated ⁽²⁾	Distance of Mitigation Land from Active Nest	Nest trees Planted	Habitat Enhanced	*Mitigation Ratio ⁽³⁾
Foraging	> 5 miles and within 10 miles	N/A	Yes	0.50:1
Foraging	0 to 5 miles	N/A	Yes	0.33:1
Potential Nesting	N/A	Yes	Yes	0.25:1
Existing Nesting	N/A	No ⁽⁴⁾	Yes	0.17:1

*Mitigation Ratio represents the ratio of acquired habitat to impacted areas.

1. This program assumes a 3,860-acre impact area on the project site. Mitigation also may be required for approximately 300 additional acres of foraging habitat if off-site agricultural acreage is used for wastewater storage ponds.
2. See Attachment B of the HMP for habitat descriptions and other definitions. Mitigation lands may be dedicated in fee or through appropriate conservation easements. Foraging habitat must be at least 100 acres in size and, subject to reasonable land availability, contiguous. Nesting habitat (existing and potential) must be at least 5 acres in size and shall constitute no more than 6% of total mitigation lands.
3. The mitigation ratios represent the amount of land, by habitat type, to be acquired to mitigate for each acre of impact.
4. Existing nesting habitat already contains nest trees and would not be planted with additional nest trees.

7.3.4 San Joaquin Kit Fox

The San Joaquin kit fox (kit fox) is a federally listed endangered and state listed threatened species, protected respectively under the Federal and California Endangered Species Acts.

A portion of the southern half of the Master Plan area is located within the northernmost segment of the kit fox range as currently designated by the US Fish and Wildlife Service.

One survey conducted between May and July 1991 using California Department of Fish and Game (DFG) approved methodologies (den searches, track/scent stations and spotlight surveys) failed to find any kit fox dens or other direct evidence of kit fox use on the project site. A second survey performed during April through September 1992 using more intensive survey methodologies (den and sign surveys, night spotlighting, scent stations and camera stations) confirmed the results of the earlier survey.

There have been no confirmed kit fox sightings on this site.

Appendix 7-C: Kit Fox Pre-Construction and Construction Protocol recommends provisions to ensure compliance with the Federal and State Endangered Species Acts.

Assumptions:

- a) Only a portion of the southern half of the Master Plan area is located within the current US Fish and Wildlife Service (FWS) designated kit fox range.
- b) Based on kit fox surveys, the Master Plan area does not provide suitable denning and foraging habitat for the kit fox. There have been no confirmed kit fox sightings, or dens found, on this site and development of the community will not result in a harm or taking of the species as defined by the Federal and State Endangered Species Acts.

Objective: To comply with the federal and state Endangered Species Acts.

Policy:

- a) If, in the future, it is determined at any time that the kit fox would be endangered by the development of the community, then appropriate mitigation shall be provided.

Implementation:

- a) Kit Fox Protection. The measures contained in Appendix 7-C: Kit Fox Pre-Construction and Construction Protocol shall be followed to the extent possible to ensure that project construction does not result in harm or injury to the kit fox. These measures shall apply for so long as the kit fox retains its listed status under the respective Endangered Species Acts, or successor legislation; or until such time as 50% or more of the community south of Byron Road is built.

7.3.5 Other Special-Status Species

The size and duration of the anticipated buildout of the Master Plan area prevents reliable quantification at this stage of the planning process of specific impacts and mitigation for localized species.

During the biological surveys conducted as part of the Mountain House General Plan Amendment, northern harriers, black-shoulder kites and burrowing owls were observed on-site. The former two species were concentrated near Old River. A pair of owls was found in the southern portion of the site. Small flocks of Tri-colored blackbirds were seen in April 1991 in the northern portion of the site. The western pond turtle was found on the banks of the Old River. Seine sampling along the Old River in April 1991 did not produce either the Delta smelt or the Sacramento splittail; however, Old River was identified as potential habitat for each of these species.

Mason's lilaeopsis was observed on the pilings and banks along Old River in the northwest corner of the site. Old River and Mountain House Creek provide suitable habitat for the California hibiscus (although this species has not been

found during surveys performed to date), which grows readily along river banks and sloughs at the edges between riparian and freshwater marsh habitats.

On-site preservation and/or enhancement of wetlands and the area's two waterways, i.e., Mountain House Creek and Old River, will provide potential habitat for raptors and the Tri-colored blackbird, Western pond turtle, Mason's lilaeopsis and California hibiscus.

Objective: To preserve and/or provide for other special-status species found within the Master Plan area.

Policy:

- a) The preservation and/or enhancement of habitat for other special-status species shall be considered in the development of Mountain House. These species may include Northern harrier, Black-shouldered kite, Burrowing owl, Tri-colored blackbird, Western pond turtle, Winter-run Chinook salmon, Delta smelt, Sacramento splittail, Mason's lilaeopsis and California hibiscus.

Implementation:

- a) Special-Status Species Surveys. Each Specific Plan area (except Specific Plan I) shall be surveyed by a qualified biologist prior to approval of the Specific Plan to generally map the location of special-status species identified in the particular Specific Plan area. Development sites shall then be surveyed for special-status species potentially occurring on that site prior to the submittal of any tentative map for the applicable area. Surveys conducted prior to the submittal of tentative maps shall comply with any applicable survey protocols for such species promulgated by FWS or DFG.
- b) Raptor Surveys. As a condition for development for parcels with large trees (greater than 30 feet in height) or adjacent to Mountain House Creek or Old River, pre-construction surveys for occupied raptor nests, by a qualified biologist, shall be required. If occupied raptor nests are found which will be impacted by such development, no disturbance or other project-related activities that may cause nest abandonment or forced fledging shall occur within 200 feet of the occupied nest tree until fledglings are no longer dependent upon nest habitat, as determined by a qualified biologist.
- c) Burrowing Owl Surveys and Nest Relocation. As a condition of development for parcels with levees, berms, or other suitable ground-nesting locations, pre-construction surveys for burrowing owl nesting sites, by a qualified biologist, shall be required. Burrowing owl nesting sites impacted by development shall be relocated prior to construction. These nests shall be relocated to the Old River levee and/or other suitable sites that are not likely to be disturbed by future development. Active burrowing owl nests shall not be disturbed or relocated during the breeding season (typically April 15 to July 15) in accordance with applicable DFG regulations and a permit must be obtained prior to any nest disturbance.
- d) Wetland or Riparian Habitat Restoration. Restoration of Mountain House Creek and other wetland or riparian habitats in the Master Plan area shall

include, as may be appropriate to the restored habitat, preferred habitat for the special-status species identified above.

- e) Old River Levee. The existing Old River levee shall be preserved and/or enhanced to provide habitat for the western pond turtle, raptors, and other special-status species, as may be appropriate to this habitat.
- f) Participation in Other Programs. Compliance with the measures set forth above also may be accomplished through implementation of the HMP described in Section 7.3.2: Habitat Management Plan (HMP), or participation (by payment of a fee or otherwise) in an adopted County-wide multi-species habitat conservation plan. Regardless, pre-construction raptor and burrowing owl surveys would still be required to protect active nests until young birds have fledged even if a developer participates in HMP's or other conservation plans.

7.3.6 Wetlands Management

Wetlands are transitional ecosystems between open water and upland environments. There are approximately 25 acres of wetlands existing within the Mountain House area, including seasonal wetlands (see Section 1.4: Environmental Setting). Figure 7.9: 1993 Tree Locations and Wetlands indicates the location of wetlands.

Objective: To preserve wetlands within Mountain House

Policies:

- a) Development shall be carried out so that existing wetlands are preserved to the degree practicable.
- b) Where development cannot practicably occur without impacting wetlands, the development shall minimize impacts.
- c) Where impacts are unavoidable, their loss shall be compensated through mitigation.
- d) Wetlands shall be protected from damage caused by adjoining development. Buildings and structures shall be setback from the edge of wetlands a minimum of 50 feet. This setback distance should be increased where wetlands are of high value.
- e) Passive recreational uses such as bird watching, nature trails and observation areas are normally compatible with wetlands and may be permitted adjacent to wetlands. Active recreational uses such as ballfields, paved bike trails or other such uses shall not be located within or immediately adjacent to wetland areas.
- f) The Dry Creek wetland west of Kelso Road shall be preserved or enhanced as a natural amenity.

- g) The Dry Creek channel shall be left undisturbed within the jurisdictional limits of the Army Corps of Engineers.

Implementation:

- a) Specific Plan Requirements. Provisions for the treatment of wetlands shall be included in any Specific Plan that will impact wetlands.
- b) Wetlands Mitigation. Wetlands mitigation shall provide for creation of wetlands to replace those which would be lost. Mitigation shall occur within the Mountain House Creek Restoration Plan.
- c) Buffering. Where preserved wetlands provide valuable habitat to wildlife, protective fencing, screening or buffers shall be provided where necessary to minimize disruption of habitat areas. The type of protection will vary depending on the type and function of the wetland, the adjoining land use and the terrain.
- d) Wetlands Management Plan. As part of any Specific Plan that includes wetlands, a Wetlands Management Plan shall be adopted prior to the recordation of the Final Map including such wetlands area. The plan shall include setbacks for structures from wetlands.
- e) Runoff Water. Runoff water from developed or landscaped surfaces may be discharged into BMP facilities within Mountain House Creek or other open space areas such as the golf course. The runoff shall be treated through application of appropriate Best Management Practices (BMPs) to ensure water quality, prior to entering the Mountain House Creek low flow channel and/or Old River. These practices will be monitored in accordance with state water quality control procedures.
- f) Fencing. Buffer zones along wetland restoration areas shall be temporarily fenced during construction so as to minimize the potential for inadvertent impacts from construction activities. Following construction, permanent barriers and/or fencing shall be installed to preclude access and damage from wheeled vehicles such as motorcycles and ORVs. Any fencing that is located within the drainage facilities of Mountain House Creek shall be designed to prevent debris accumulation or otherwise impact water surface elevations. A post-and-cable or similar barrier shall be provided along the Dry Creek corridor edges which front public spaces such as roads. Where multi-family residential, commercial or public development will back up to Dry Creek, open fencing promoting views of the corridor shall be used. Privacy fencing may be used where single family lots abut the Dry Creek corridor.
- g) Maintenance Requirements. The wetlands shall be retained as self-sustaining, requiring only minimal long-term maintenance to repair barriers or fences, and remove debris resulting from use of the area by residents.

- h) Recreational Uses. Active and passive recreational uses near wetlands shall be addressed in the Parks and Open Space Plan described in Section 7.2.2: Recreation System.
- i) Water Conveyance Pipeline. The raw water conveyance pipeline shall be constructed in accordance with the provisions of the Corps of Engineers Nationwide Permit for Utility line crossings (NWP 12). The ground contours shall be restored to their original condition following placement of the pipeline. In order to accelerate revegetation, the topsoil within wetlands shall be salvaged prior to trench excavation and replaced after backfilling the trench.
- j) Dry Creek Requirements. When development is proposed that is adjacent to the drainage course of Dry Creek, then a detailed plan for wetlands and riparian land management shall be prepared and implemented as part of the Improvement Plans for the development. The Development Permit for the water treatment plant will contain specific provisions to buffer and protect the Dry Creek wetland.
- k) Required Approvals. Any proposed modifications to wetlands or waters of the U.S. should be prepared in compliance with applicable laws and regulations of the Corps and the CDFG prior to approval of any Tentative Maps encompassing these features.

7.3.7 Tree Mapping and Conservation Policy

On December 10, 1992, a preliminary site survey was performed to determine the general location, species and condition of mature trees. Figure 7.9: 1993 Tree Locations and Wetlands is based on the preliminary tree survey which indicates that trees are generally confined to isolated portions of the Mountain House Creek corridor, windrows along existing roadways, agricultural fields or farmsteads, and the riparian edge of Old River.

Objective: To preserve whenever possible the visual quality of healthy trees within and adjacent to the Mountain House community.

Policy:

- a) Existing healthy mature trees, particularly those located along Mountain House Parkway and Grant Line Roads, shall be preserved and incorporated into the landscape design of the community to the greatest extent practical. Land uses should be compatible with the preservation program for mature trees.

Implementation:

- a) Design of Roadways. The design of major roadways, widening or reconstruction of existing major roadways, and local streets shall address the preservation of mature trees in good condition.

- b) Horticultural Practices. Existing trees shall be preserved by following good horticultural practices to maintain existing drainage, ventilation, and solar conditions. These measures shall include keeping pavement well away from the driplines of trees designated for preservation.
- c) Tree Surveys and Assessments. As part of the environmental assessment for a development permit, a detailed tree survey shall be performed for the subject area to accurately locate all mature trees, to determine their species and to assess their condition. The information obtained from the survey shall be reviewed, and those trees found suitable for preservation shall be noted and considered in detailed designs.

7.3.8 Off-site Biological Impacts

Off-site improvements, such as pipelines for water or wastewater, storage ponds, establishment or relocation of irrigation canals or irrigation systems, could adversely affect sensitive biological resources.

Implementation:

- a) Biological Surveys and/or Plans for Off-site Biological Impacts. Detailed field surveys of any proposed off-site mitigation locations should be conducted by a qualified biological consultant to determine the presence of any special-status species, sensitive natural communities, or wetland resources. Surveys for special-status species should focus on the presence of critical habitat features which could be adversely affected by construction of various off-site improvements. If sensitive resources are encountered, proposed improvements should be modified. If necessary, to provide compliance with the State and Federal Endangered Species Acts, a habitat protection plan should be prepared by a qualified biologist in consultation with representatives of the USFWS and CDFG. These provisions could include appropriate setbacks and construction restrictions from a nest or den during the breeding season for the species of concern, or relocation of proposed structural improvements such as storage ponds or pipeline alignments.

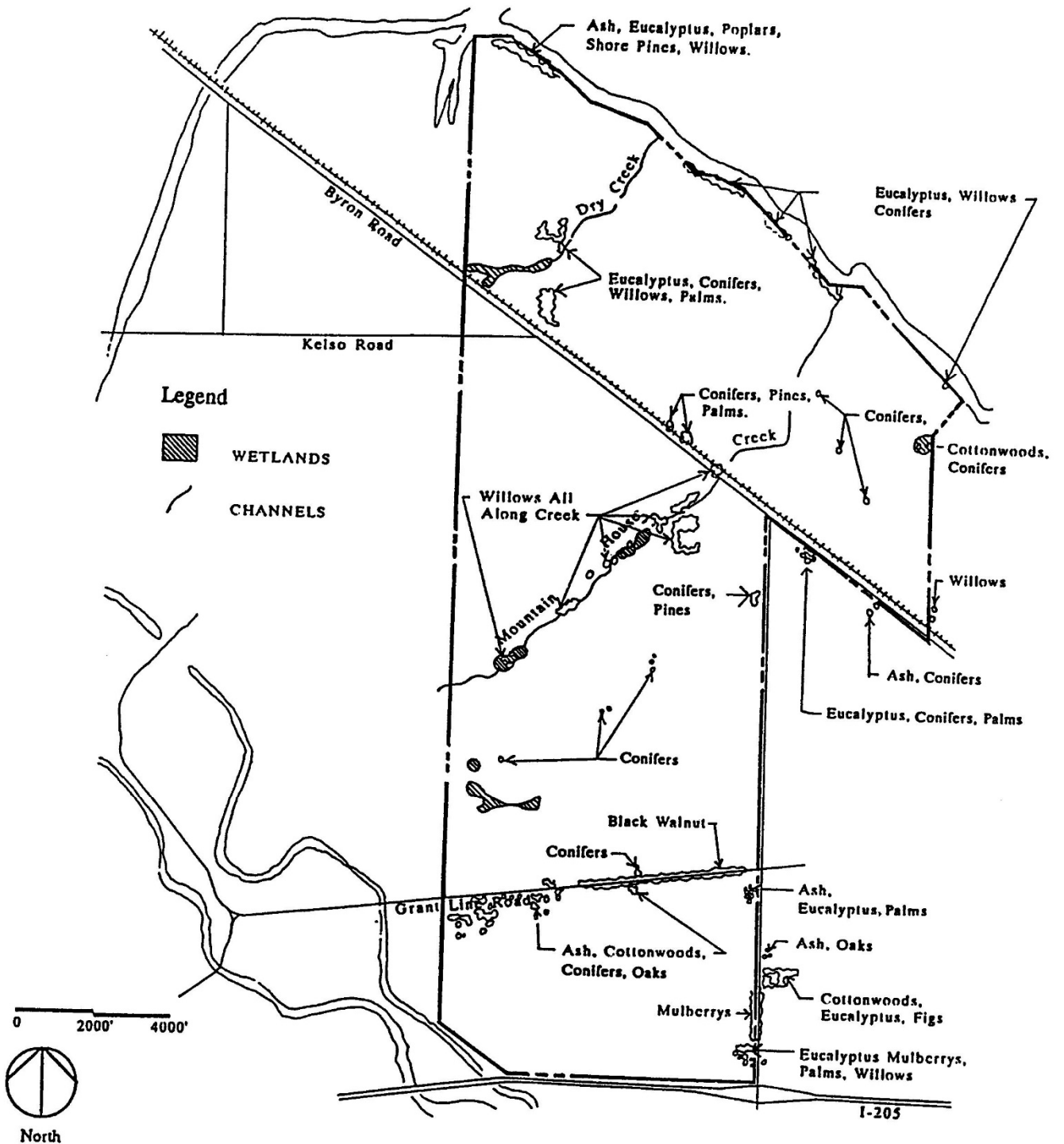


FIGURE 7.9 - 1993 TREE LOCATIONS AND WETLANDS

7.4 CULTURAL RESOURCES

The Final EIR for the Master Plan and Specific Plan I identified the need for more detailed cultural resource studies. Most of the additional studies were located within the boundaries of Specific Plan I and infrastructure required in order to develop Specific Plan I. These additional, more in-depth studies were completed in late 1996.

Objective: To preserve cultural resources within Mountain House.

Policy:

- a) Significant cultural resources and historic structures shall be identified and, where possible, preserved by integrating into new development or relocation.

Implementation:

- a) Additional Surveys. When specific land use and development plans are formulated as part of a Specific Plan, additional archaeological surveys shall be conducted in areas of development that have not been subjected to intensive archaeological reconnaissance.
- b) Subsurface Features. If, during the course of construction, subsurface historic archaeological features were identified on sites Ca-SJo-229H, Ca-SJo-230H and Ca-SJo-231H or anywhere within the project site, work should be immediately halted in the vicinity of the finding and a qualified archaeologist consulted for an on-site evaluation.
- c) Buried Prehistoric Resources. If, artifacts or evidence of materials such as bone, shell or non-native stone are uncovered during construction activities, work should immediately be halted in the vicinity of the finding and a qualified archaeologist consulted for an on-site evaluation. Such evaluation may entail archaeological test excavation and/or mitigative data recovery.
- d) Demolition Permit. A demolition permit, to be approved by the Building Division of the Community Development Department, shall be required prior to destruction of any building in excess of 50 years of age.
- e) Discovery of Human Remains. The County Coroner, the Native American Heritage Commission, and an archaeologist shall be informed and consulted if a human prehistoric burial site were discovered during site construction. An agreement shall be formulated between the Native American representative, the archaeologist, San Joaquin County, and the developer with regard to the proper treatment and disposition of human remains and associated artifacts. Such treatment and disposition may require archaeological excavation and reburial.

- f) Historical Structures. Each Specific Plan shall contain a determination by a qualified architectural historian as to whether any of the structures that are more than 50 years old would be affected by Specific Plan implementation. If Specific Plan implementation were determined to affect the structures, recommendations by the qualified professional shall be implemented; such mitigation measures could consist of avoidance of impacts by incorporating the structure into planned developments, detailed architectural documentation and history, or removal of a structure to another location. Each Specific Plan shall map the location of all structures 50 years or older that have been determined by a historian to be of historic significance, except for Specific Plan I.

7.5 PHASING AND COSTS

7.5.1 Capital Facility Cost and Phasing

Approximately 725 acres of the Mountain House community will be dedicated to parks, recreational uses, open space, nature preserves, and wetlands. The capital costs associated with development of these land uses will total more than \$57 million. Neighborhood Parks will total \$6.8 million. Neighborhood Park lands will be part of the land equity program and will be constructed by the MHCSD. Another \$16.3 million is associated with facilities that are considered “private ventures” because the facility will likely generate revenues to a private operator who will be responsible for constructing and operating the facility. Such private ventures are not addressed as part of the Parks and Open Space Plan.

In addition, there are approximately \$10 million of additional facilities that will be encouraged for development if it is determined that such development is financially feasible; these improvements are considered “optional community costs”. Improvements listed as optional community costs are items that are considered desirable for the community, but will be directly dependent on the financial feasibility of their development. Some of these items include Neighborhood pools, Neighborhood Community Centers, and a community stadium and tennis court facility. If it is determined in future years that the community can afford to provide these amenities, and if the residents of Mountain House consider these items a priority, they will ultimately be provided by the community.

Of the “planned facilities”, \$34 million will be included in the PFP for facilities that must be funded as backbone improvements. This amount includes \$3.8 million for kit fox habitat mitigation, although any kit fox mitigation requirements are considered highly unlikely. Table 7.4 is a breakdown of planned facilities, private venture improvements, and optional community costs:

Parks will be a central feature in each residential Neighborhood and in the community as a whole. Therefore, Neighborhood Park development will occur on a continual basis as growth takes place to keep up with, or precede, the demand from residents.

Table 7.4: Costs for Recreational Facilities	
Planned Facilities	
Neighborhood Parks	\$ 6,845,000
Community Parks	17,241,000
Regional Parks	3,304,000
Linear Park	7,670,000
Public Art	1,400,000
Other Misc.	4,116,000
Total	\$40,576,000
Private Ventures	
Golf Courses	\$12,760,000
Marina	3,550,000
Total	\$16,310,000
Optional Community Costs	
Neighborhood Pools	\$ 3,129,000
Community Stadium Park	3,128,000
Neighborhood Community Centers	3,600,000
Total	\$ 9,857,000

Note: These figures are approximate and may be modified by Specific Plans and minor plan amendments.

Providing parks at an early stage of the community's development will demonstrate to a potential homebuyer that these amenities are considered a community priority. All Neighborhood Parks are scheduled for development to commence half-way through the residential development of each Neighborhood.

First-phase development of sport fields for team play is expected when approximately 800 units have been built. In addition to fields within Neighborhood Parks, the initial sports fields will be constructed on land reserved for the first high school and will later be transferred to the high school for their use. The park will be designed to serve existing and future residents and to act as an additional attractor for potential homebuyers.

Construction of the first Community Park is expected to occur prior to the 2,000th residential unit. Special purpose Community Parks, such as the Mountain House Creek Community Park and the Town Center Green, will be constructed as the adjoining lands develop.

Timing, phasing and responsibilities for Regional Park improvements shall be addressed by the Parks and Open Space Plan. Construction may occur in phases. The park will likely be funded from impact fees levied throughout Mountain House, as will public art, which will be provided as funding becomes available. It is assumed that development of the Regional Park will begin approximately mid way through residential buildout.

Cost estimates for planned facilities and optional community costs assume dedication of sites for each facility. Purchase of land may be required for items considered private ventures. A detailed cost and phasing breakdown for planned facilities is included in the PFP.

7.5.2 Operations and Maintenance

Maintenance of parks and recreational facilities will be provided by the community operating out of community on-site facilities. Personnel and equipment will be combined for the maintenance of parks and other public facilities to create the most efficient and cost effective program possible. Ultimately it is anticipated that several staff persons will be needed strictly for the upkeep of park and open space areas in the community. The same personnel may be used to maintain the off-site mitigation areas.

7.6 SPECIFIC PLAN REQUIREMENTS

The following list is a compilation of all Specific Plan requirements contained in this chapter:

- a) Park Plans in Specific Plan I. Specific Plan I shall provide conceptual park plans for parks within the Specific Plan Area. Preliminary Parks Plans for Specific Plan I shall be provided as part of the Parks and Open Space Plan.
- b) Park Plan in Other Specific Plans. Other Specific Plans shall provide Preliminary Park Plans for parks within the applicable Specific Plan Areas or as otherwise specified in the Parks and Open Space Plan.
- c) Recreation Facilities. Public parks, open space areas and recreational facilities shall be addressed by the Specific Plans in which they are located. With the exception of Specific Plan I, Specific Plans shall include a Preliminary Park Plan for each park site within the Specific Plan Area. For parks within the Specific Plan I, Preliminary Park Plans shall be provided as part of the Parks and Open Space Plan.
- d) Old River Plan. Preliminary Plans for the portions of the Old River Regional Park within the Specific Plan Area shall be provided in the Parks and Open Space Plan.
- e) Trail Connections. Provisions for trail connections shall be included in the Parks and Open Space Plan. Specific Plans for the affected area shall incorporate provisions of the Parks and Open Space Plan and provide for the design and location of Regional Trails and provide for linkages to destinations within the community, especially Mountain House Creek

Community Park and Old River Regional Park. These trails include those planned by the East Bay Regional Park District, the Livermore Area Recreation and Park District, and the National Park Service (De Anza Trail).

- f) Swainson's Hawk Habitat Mitigation. Mitigation for loss of Swainson's hawk foraging habitat shall occur as foraging habitat in accordance with this Master Plan and the Specific Plan pertaining to such lands. The actual mitigation acreage will be determined at approval of each Specific Plan, or approval of a site development plan which is not encompassed within a particular Specific Plan.
- g) Wetlands Requirements. Provisions for the treatment of wetlands shall be included in any Specific Plan that will impact wetlands.
- h) Dry Creek Requirements. When development is proposed that is adjacent to or would impact any portion of the drainage course of Dry Creek, then a detailed plan for wetlands and riparian land management shall be prepared and implemented as part of the Specific Plan for the development. The Development Permit for the water treatment plant will contain specific provisions to buffer and protect the Dry Creek wetland.
- i) Historical Structures. Each Specific Plan shall contain a determination by a qualified architectural historian as to whether any of the structures that are more than 50 years old would be affected by Specific Plan implementation. If Specific Plan implementation were determined to affect the structures, recommendations by the qualified professional shall be implemented; such mitigation measures could consist of avoidance of impacts by incorporating the structure into planned developments, detailed architectural documentation and history, or removal of a structure to another location. Each Specific Plan shall map the location of all structures 50 years or older that have been determined by a historian to be of historic significance, except for Specific Plan I.
- j) Additional Surveys. When specific land use and development plans are formulated as a part of a Specific plan, additional archaeological surveys shall be conducted in areas of development that have not been subjected to intensive archaeological reconnaissance.