# 6.0 PROPOSED GREENWAY RECREATION IMPROVEMENTS

The Dry Creek Greenway forms a major open space network within Placer County. Greenway corridors follow each of the major streams: Dry Creek, Linda Creek, Cirby Creek, Strap Ravine, False Ravine, Miners Ravine, Secret Ravine, Antelope Creek and Clover Valley Creek. These corridors are defined by the greater of the 100 year floodplain, valuable riparian habitat, open space designated in the Placer County and Roseville General Plans, 100 foot buffers around perennial streams and 50 foot buffers around intermittent streams. These factors were selected because Placer County currently has regulations limiting development in these areas, and these zones were thought sufficient to meet the goals of the Greenway such as maintaining flood capacity, protecting water quality, providing recreational opportunities where appropriate, and preserving habitat in and around the creeks.

This chapter of the Greenway Plan describes the proposed improvements that make up the Dry Creek Greenway. These improvements can be categorized into three areas: corridor types, trails and nodes.

Section 6.1 addresses appropriate activities in areas of the Greenway. Section 6.2 describes types of trails in the Greenway, key connections, guidelines for trail-stream crossings and standards for trail design. Section 6.3 on nodes presents types of staging areas, activities allowed at each, and signage. Management of trails and nodes will be addressed in the Management Strategy section of this document.

## 6.1 Corridor Types

The Dry Creek Greenway is divided into three corridor types based upon the role that each section plays in the overall functioning of the Greenway: recreation, habitat with potential recreation, and habitat only. Some of the major factors used in defining the spatial extent of these types include the importance of Greenway trail connections to bicycle, pedestrian and equestrian trails in the local jurisdictions through which the Greenway passes; existence of open space and likelihood of acquiring trail access, sensitivity of the creek system to disturbance, and respect for private property rights.

"Recreation" corridors are focused on integrating recreational uses with habitat preservation and enhancement. "Habitat with potential recreation" corridors include areas with valuable or sensitive habitat that may include some recreational usage, if such usage can be harmoniously blended with the existing habitat and local property owners are willing. "Habitat only" corridors are those areas that should be managed to preserve and enhance riparian and stream habitat.

Each of these corridor types is discussed in greater detail in the following text.

### *6.1.1 Recreation*

Recreation plays a critical role in the Dry Creek Greenway. The Greenway forms the final critical link in a recreational loop trail system that encompasses much of the Sacramento metropolitan area. The Dry Creek Greenway connects the Dry Creek Parkway (DCP) in Sacramento County to the Folsom Lake State Recreation Area (FLSRA) and the Pioneer Express Trail. The other elements of this loop include The American River Parkway and the

Ueda Parkway. This sixty to seventy mile trail system defines a contiguous, primarily off-street bicycle and pedestrian trail for residents and visitors to the Sacramento area to experience the regional waterways, riparian vegetation and wildlife.

The sections of the Greenway within the recreational designation are located in the lower creek reaches, along Dry Creek, Linda and Cirby Creeks, and the lower portions of Secret and Miners Ravines. These corridors form major Class-I bikeways along these waterways and connect the DCP and FLSRA to several points along Sierra College Boulevard and the existing and proposed bicycle trail networks in Roseville and Placer County[20]. The primary connection between DCP and FLSRA occurs along Dry Creek, Cirby Creek, Linda Creek, Swan Stream (N. branch Linda Creek) and an existing unpaved trail along the Placer-Sacramento County Line through Baldwin Lake Reservoir. This Baldwin Reservoir connection is not a part of the Dry Creek Greenway, but forms a critical link in the loop trail system. The unpaved trail follows an existing Placer County easement, and this plan recommends that it be upgraded to a Class I bikeway.

A secondary connection from the Greenway to the FLSRA follows Dry Creek upstream from its confluence with Cirby Creek near Riverside to Miners Ravine, then along Miners Ravine to the Sierra College Boulevard overcrossing. From there, the bikeway follows Sierra College Boulevard as a Class II trail, then parallels Douglas Boulevard until it becomes a Class-I off-street trail east of Auburn Folsom Road. It intersects the Pioneer Express Trail that follows the west shore of Folsom Lake. The section of the trail along Douglas Boulevard should be located within the existing 300 foot buffer south of Douglas and separated from the street by a wide planting strip. Street crossings in this stretch could be handled by a separate pedestrian/cyclist controlled light or the existing traffic control structures on Douglas.

A third major recreational corridor follows Secret Ravine from its confluence with Miners Ravine upstream to China Garden Road, where it links to an on-street Class II route.

Several smaller open space connections form additional recreational trail corridors in the Greenway, generally connecting the larger regional recreational corridors to existing or proposed on-street bike routes. Table 6-1 summarizes the recreational corridors proposed in this plan:

**Table 6-1 Recreational Corridor Locations**

| | |
|---|---|
| Primary Route (connects DCP to FLSRA) | Dry Creek from Sacramento-Placer County line upstream to Cirby Creek,<br>Cirby Creek to Linda Creek confluence,<br>Linda Creek to Swan Stream (N. branch Linda Creek) confluence,<br>Swan Stream to powerline corridor east of Sierra College Boulevard,<br>Baldwin Lake connection. |
| Major Routes | Dry Creek from confluence with Cirby Creek to Miners Ravine confluence,<br>Miners Ravine upstream from confluence with Antelope Creek to Sierra College Boulevard, |

[20] Roseville Bikeways Master Plan & Placer County Regional Bikeway Plan

| | |
|---|---|
| | Secret Ravine upstream from confluence to approximately 500 feet downstream of Hidden Ct. |
| Secondary Routes | Dry Creek intermittent tributary east of Walerga Rd from confluence to Crowder Lane, following existing trail,<br>Cirby Creek from confluence with Linda Creek to Douglas Blvd,<br>Strap Ravine from confluence with Linda Creek to Sierra College Blvd,<br>Swan Stream from powerline corridor to Roseville Parkway,<br>False Ravine from confluence with Miners Ravine, northeast to Secret Ravine Parkway and Scarborough Drive,<br>Antelope Creek, from Sunset Blvd to approximately 1200 feet upstream of Village Oaks Dr. |

Recreation corridors perform both as linear transportation routes and as recreational destinations. They may contain multi-use trails; nodes that provide access to trails and may include parking, restrooms and/or interpretive signs; existing and proposed parks adjacent to the Greenway; fishing access points or platforms; overlooks; picnic areas; or interpretive sites.

### *6.1.2 Habitat with Potential Recreation*

Greenway corridors designated "Habitat with Potential Recreation" include areas of high quality riparian habitat that may be sensitive to intensive recreational uses. In these locations, staging areas should be low-impact, and activities should be confined to linear paved or unpaved trails. These corridors are also locations where multi-use trails form important connections to existing routes but may not be feasible due to private property or other access issues. Further investigation is required to identify willing landowners and evaluate the potential of locating trails along these corridors. Actions appropriate in the "Habitat with Potential Recreation" corridors include bicycling, hiking, horseback riding, habitat preservation and enhancement, fishing, bird watching, nature interpretation, maintenance of regional flood control facilities, and other low-impact activities.

These corridors may or may not include recreational trails, depending upon ability of the local jurisdictions to acquire property along the creeks, sensitivity of habitat in those areas, availability of other bicycle and/or equestrian routes, and restrictions to trail development such as existing land use and bridges. The "Habitat with Recreation" designation typically occurs in the central portion of the watershed where the more privately held upland stream corridors link to the recreation corridors. Table 6-2 lists proposed locations for these trail types. Major routes are those corridors that form important connections to the existing and proposed City and County bike trails, and secondary routes are those corridors that form minor or local connections to existing communities or bike routes.

**Table 6-2 Habitat with Potential Recreation Corridor Locations**

| | |
|---|---|
| Major routes | Secret Ravine from approximately 500 feet downstream of Hidden Ct. to King Road,<br>Antelope Creek from confluence with Dry Creek upstream to Springview Drive,<br>Clover Valley Creek from Rawhide Road upstream to English Colony Way. |

| | |
|---|---|
| Secondary routes | Clover Valley Creek through Sunset Whitney Country Club,<br>Miners Ravine from approximately 1800 feet upstream to approximately 2500 feet upstream of Sierra College Boulevard, following the existing multipurpose trail,<br>Linda Creek tributary from Roseville Parkway to Pastor Drive. |

### *6.1.3 Habitat Only*

High quality riparian and wetland habitats exist along many of the creeks in the study area, especially in the upper watershed. Riparian stands, often dominated by valley oak, blue oak and interior live oak, form mostly contiguous corridors from the lowlands near the Placer-Sacramento County line to the uplands near the town of Auburn. One of the goals of the Greenway is to preserve and enhance riparian and aquatic habitat located within the Greenway boundaries and enhance value of habitat areas adjacent to the Greenway by providing connecting corridors and habitat diversity. The Greenway plan recognizes the need to preserve and enhance the riparian corridors to permit migration of local animal and fish species, particularly spawning salmonids that have been identified in Miners Ravine and Secret Ravine. The plan also acknowledges the need to respect private property rights and privacy and recognizes that recreational trails are neither desired nor appropriate in all areas of the Greenway.

The goal of the "Habitat Only" corridors is to provide high quality, contiguous riparian and aquatic habitat from the more recreationally focused corridors in the lower reaches of the Greenway to the upper parts of the watershed. The plan for these corridors is that they will be managed for quality of habitat, if in public ownership. If privately held, property owners will be encouraged to maintain existing riparian areas and enhance degraded locations.

The majority of the "Habitat Only" corridors fall in the unincorporated areas of Placer County. The County currently has regulations that prohibit development within areas of sensitive habitat, floodplains or within 100 feet of a perennial stream or 50 feet of an intermittent stream. County native oak tree regulations prohibit cutting of native oaks over 6" diameter at breast height (DBH) or 10" DBH aggregate (for multi-stemmed trees), even on private land. A permit is also required to remove a native tree of any size in a riparian area.

In addition to supporting these restrictions, the Greenway plan makes the following additional recommendations within the "Habitat Only" corridors:

- Removing non-native plants and replanting with native species,
- Limiting removal of standing snags (dead trees) except where necessary for public safety,
- Limiting of removal of native vegetation from stream channels, except where such removal, if not done, presents a safety issue with respect to floodwater conveyance, fire control or public safety,
- Limiting of removal of large woody debris (LWD) from stream channels, except where such removal, if not done, presents a safety issue with respect to floodwater conveyance. Where LWD presents a potential safety issue, orienting the downed snags parallel to stream-flow may reduce the risk,

- Revegetation of poor quality habitat areas with native species such as valley oak, blue oak, interior live oak, black cottonwood, alder or other California riparian species native to this area,
- Restoration of excessively eroding stream banks using bioengineering techniques that benefit aquatic species and wildlife,
- Restoration of degraded salmonid habitat through reduction of siltation sources, growth of a healthy riparian canopy that shades the stream and provides root masses for cover.

**Figure 6-1 Habitat Only Corridor**

While these activities are recommended in all of the Greenway corridors, they are especially applicable to the habitat-only management areas. See the Potential Greenway Implementation Strategies, Chapter 5, under Goal 1.9, Riparian Protection Zone for additional recommendations.

Figure 6-1 shows an example of a "Habitat Only" corridor between an existing large parcel residential neighborhood and an agricultural land use. This simulation depicts a rural landscape in the uplands of the watershed, where floodplain influences are lesser than lower in the watershed. The intact riparian area consists of valley oaks, interior liveoaks, blue oaks, cottonwood, alder and willow and is managed for the quality of the habitat. The adjacent agricultural fields, their maintenance roads and residential landscaping are set back from the intact riparian vegetation.

Table 6-3 lists the "Habitat Only" corridors.

**Table 6-3 Habitat Only Corridors**

| | |
|---|---|
| Major migration corridors | Miners Ravine from approximately 2500 feet upstream of Sierra College Boulevard to headwaters,<br>Secret Ravine from King Road to headwaters,<br>Antelope Creek from approximately 1200 feet upstream of Village Oaks Dr. to headwaters. |
| Secondary habitat corridors | Linda Creek mainstem from Placer-Sacramento Count line to headwaters,<br>Swan Stream from Pastor Drive to headwaters,<br>Strap Ravine intermittent tributary between Roseville Parkway and Sierra College Boulevard, from confluence to headwaters,<br>Remnant oak woodland on north bank of Dry Creek tributary west of Walerga Rd, |

| | |
|---|---|
| | Dry Creek intermittent tributaries (2), between Walerga Rd and Cook Riolo Rd, extent as shown in Figure 2-3,<br>Dry Creek intermittent tributaries (2), between Cook Riolo Rd and Roseville City limits, extent as shown in Figure 2-3,<br>Remnant Oak stand on north bank of Miners Ravine near Sunrise Boulevard crossing, extent as shown in Figure 2-3,<br>Secret Ravine intermittent tributary downstream of Roseville-Rocklin City limits, extent as shown in Figure 2-3,<br>Secret Ravine tributary south of Rocklin Road crossing, from Aguilar Drive to Rocklin City limits,<br>Antelope Creek from Springview Drive to Sunset Boulevard,<br>Clover Valley Creek from English Colony Way to headwaters. |

## 6.2 Trails

Three types of approved trails occur in the Greenway: paved bike/pedestrian, combined, and unpaved multipurpose. Paved bike/pedestrian trails occur in those areas where equestrians are prohibited and are typically 10' wide paved trails with 2' shoulders. Combined trails accommodate bicycles, pedestrians and equestrians. Bicycle and equestrian traffic may be separated by a strip, often 5' or more, or the paths may abut one another where space is limited. Unpaved multipurpose trails are unpaved, often being compacted dirt or decomposed granite. They may accommodate equestrians, able pedestrians or mountain bikes.

Trails should be located outside of riparian corridors, although in areas where an incompatible land use abuts the riparian corridor, as in the Morgan Creek Golf and Country Club, it may be necessary to locate the trail in the riparian fringe to avoid health and safety issues.

### *6.2.1 Paved Bike/Pedestrian*

The paved trails within the City of Roseville in the Recreational Greenway corridors are for bicyclists and pedestrians, since current City regulations prohibit equestrians on public trails. Additionally, recreational Greenway corridors outside of the City of Roseville that do not form significant connections with the equestrian trail network[21] are designated "paved bike/pedestrian" as well. Other than lacking an equestrian path, these trails are similar to the combined trails found in the remaining Greenway corridors with a recreational focus. They comply with the Class I designation requirements used by the City of Roseville, with the following standards:

- Separated from the street system,
- Exclusively for bicyclists, pedestrians and motorized scooters that travel less than 5 mph,
- Minimum width of 10 feet with 2 foot graded shoulders on each side. These shoulders provide recovery space to the path and must be clear of obstacles.

This plan includes the following additional recommendations:

- Striping should be used to indicate traffic lanes,
- Because the bicycle system also functions as emergency access for vehicles such as utility/maintenance and fire control, paths should be designed to accommodate these vehicles with respect to turning radii, grades, etc.,
- Rules of the road should be published that indicate right of way (see standards section which follows),
- Where the trail is adjacent to an incompatible land use, a berm or combination of berm and planting should be used to visually and spatially separate the trail from the adjacent use. In many circumstances, a trail is seen as a highly desirable amenity to a residential community, and residents often install gates in their backyards for more convenient access. However, in some areas, residents may be sensitive to public

[21] As provided by the Loomis Basin Horseman's (LBHA) Association, Map titled "Loomis Basin Horseman's Association Trail Map", August 31, 1999.

access or view issues. In these cases, a berm may also be used to separate paved trails from private residential backyards.

Figure 6-2 and Figure 6-3 illustrate a paved pedestrian/bike trail.

**Figure 6-2 Paved Bike/Pedestrian Trail**

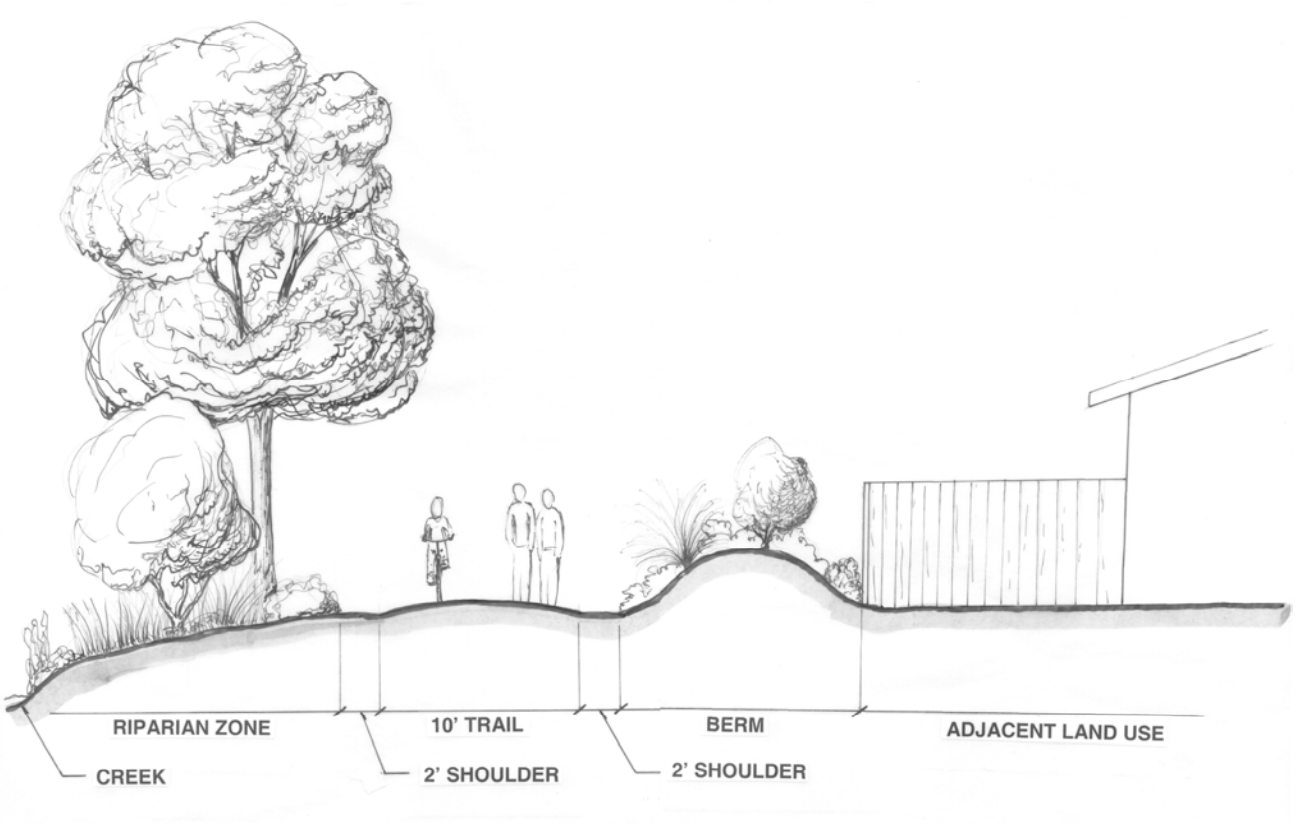


**Figure 6-3 Cross Section of Paved Trail**

### *6.2.2 Combined*

Combined trails are located within the Greenway outside of the City of Roseville in areas where equestrian trails are indicated as proposed on the LBHA map or recommended by this plan. In addition to the trails proposed on the LBHA map, this plan recommends equestrian trails be developed along the creeks where the trails will connect to the larger equestrian trail network in two locations: lower Dry Creek from the Placer-Sacramento County line to the Atkinson Road crossing, and upper Secret Ravine from King Road to China Garden Road. The Dry Creek connection will extend the equestrian trail in the Dry Creek Parkway four to five miles into Placer County. Nodes at both ends of this trail provide equestrians with parking and access to this trail segment. The Secret Ravine trail is within a "Habitat with Potential Recreation" corridor, and would require acquisition of properties or easements to create this connection. It connects to the existing unpaved multipurpose trail on King Road and provides equestrian access to approximately 4.5 miles of the Greenway along Secret Ravine.

These combined trails are similar in design to bike/pedestrian trails, except for the addition of a six to eight foot unpaved equestrian trail. This trail should be separated from the bike path by an unpaved strip that is planted with native grasses or perennials, where sufficient easement width is available. If space is not available, the equestrian path can abut the pedestrian path.

Figure 6-4 depicts a cross section through a combined path.

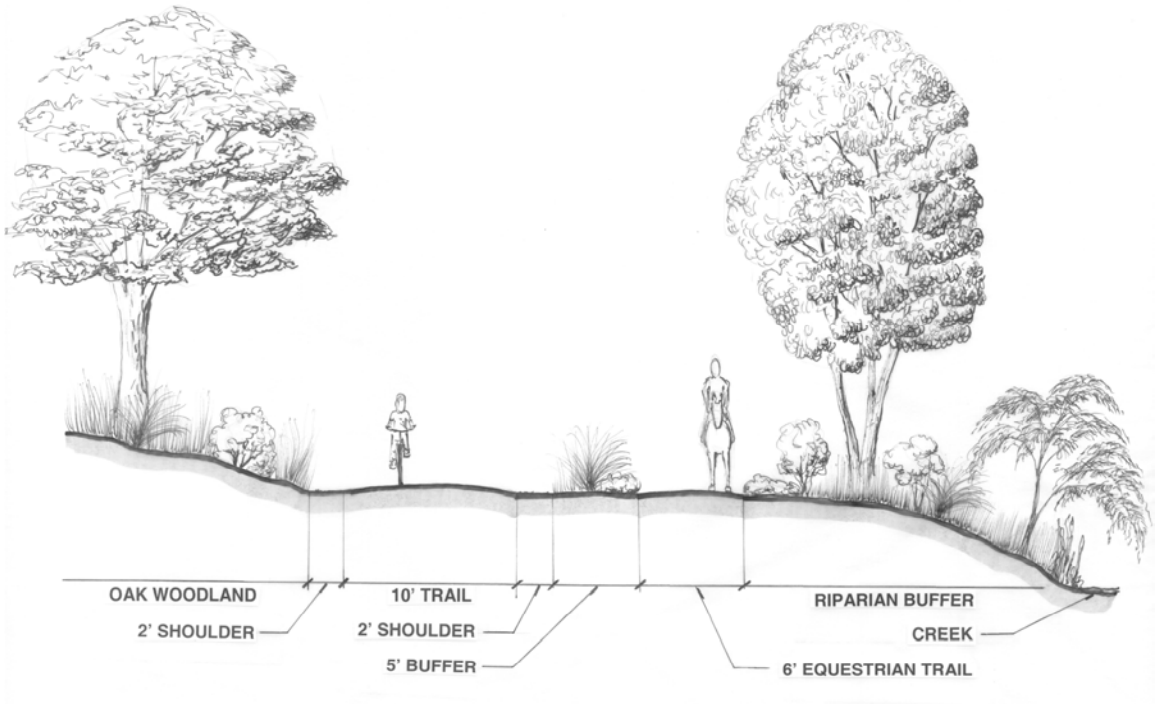


**Figure 6-4 Combined Trail Cross Section**

### *6.2.3 Unpaved Multipurpose*

Unpaved multipurpose trails are dirt paths used for walking, jogging, mountain biking, horseback riding and other non-motorized off-road activities. These trails are typically six

to eight feet wide with a three-foot security buffer on either side. This buffer should be clear of obscuring vegetation (not including tree trunks) from three feet to eight feet high to provide a greater feeling of security to trail users.

The "Habitat with Potential Recreation" corridors are appropriate places for unpaved multipurpose trails, if private property owners are amenable to public access. There are also areas in the "Habitat Only" corridors where unpaved trails may be located such as already exists in the Miners Ravine Nature Preserve. These trails may have different rules from the larger Greenway system depending upon programmed uses; for example, a recreational trail in the Greenway may allow mountain bikes, but an unpaved trail in a nature reserve may only allow pedestrians.

Unpaved multipurpose trails in the Greenway may represent a transitional phase. For example, any Greenway trail may be developed as an unpaved path following acquisition of easements or property but before funding is secured for construction of a paved bike/pedestrian or combined trail.

A representative cross section of an unpaved multipurpose trail is shown in Figure 6-5.

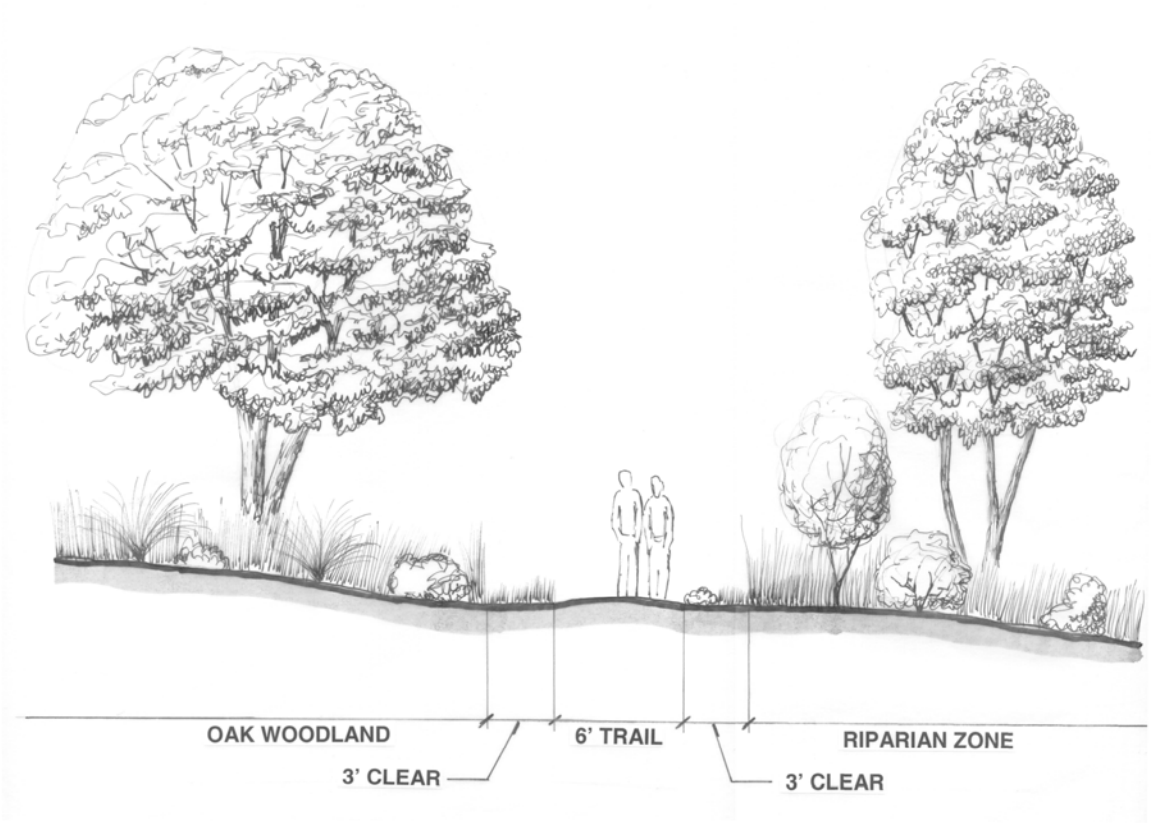


**Figure 6-5 Cross Section through an Unpaved Trail**

### *6.2.4 Trail Connections*

Trail connections within the Greenway occur where bikeways from the City of Roseville and Placer County cross the Greenway. Sometimes, a node may be located at these intersections, in which case signage associated with the node will provide directions;

otherwise, signage at the trail crossing will provide directions and indicate the Greenway route.

Trail crossings may be at grade or grade-separated, depending upon local topography and presence of bridges. If grade-separated, appropriate transitions must be made between trails. If at-grade, stop signs should be used to control bicycle traffic, unless a road is also present, in which case traffic signals may be appropriate, depending upon the volume of traffic.

In areas of the Greenway where a trail connection is needed through private property, and easements or acquisition cannot be obtained, the route may use local streets to bypass the inaccessible properties. If this is done, the connecting trail should be separated from the street with a planted buffer strip as illustrated in Figure 6-6. The illustration shows a 10 foot buffer strip incorporating street trees and a stormwater interception swale.

**Figure 6-6 Greenway Path Adjacent to Local Road**

### *6.2.5 Guidelines for Trail Development and Maintenance*

The Dry Creek Greenway Regional Vision envisions a series of open space corridors following the primary streams within the Placer County portion of the Dry Creek watershed. These corridors take the form of recreation corridors in some areas and habitat preservation corridor in others. The primary objective of the recreation corridors is to interweave habitat with recreational trails to benefit trail users while preserving and protecting habitat. The primary objective of the habitat preservation corridors is to restore and enhance riparian and aquatic habitat. This section presents general guidelines for trail and habitat development and maintenance.

The trails proposed for the Greenway that are not currently a part of an existing bikeway master plan are as follows:

- Unpaved trail along Dry Creek from the Sacramento-Placer county line to the node at Atkinson Road,
- Paved trail along Secret Ravine from China Garden Road to Brace Road,
- Unpaved trail along Secret Ravine from Sierra College Boulevard to King Road,

- Paved trail along Strap Ravine connecting from Linda Creek to Sierra College Boulevard,
- Paved trail along False Ravine from Secret Ravine Parkway to Scarborough Drive,
- Paved trail on Swan Stream from the powerline corridor to Pastor Drive.

These trails should conform to the following standards:

***Paved Trails***

| | |
|---|---|
| Width: | 2-Way – 10' minimum with 2' D.G. shoulders, preferably striped |
| Surface: | Paved |
| Terrain: | 5% maximum |
| Separate: | When possible |
| Speed: | 15 MPH maximum |

***Unpaved Trails***

| | |
|---|---|
| Width: | 6' minimum |
| Surface: | Dirt |
| Terrain: | Varied |
| Separate: | Yes |

### *6.2.6 Stream Crossings*

There will be places in the Greenway where it is necessary for the trails to cross the stream. This may be due to the location of publicly owned parcels, a negotiated easement, a connection to a local or regional bikeway, access to a node, or where the trail leaves the creek. Stream crossings may be low-flow or above-channel.

Low-flow crossings typically entail a low bridge or weir structure over which the trail passes. A bridge is the preferred, though higher cost, option due to its lesser impact on fish migration and stream-flow. If a weir is used, the stream usually passes through one or more culverts. Whichever structure is chosen, it is designed to be inundated when the stream is swollen with stormwater runoff. This usually works well in a bike trail system on the West Coast, because trail use is often minimal in the rainy season, especially during or shortly after storms when the stream banks are likely to be full. Costs are also lower for a low-flow structure than for a standard bridge; however, these systems can carry a higher liability unless controls are installed to close the trail or inundated trail segments during wet weather.

Bridges located above the channel avoid these problems, but may cost $30,000 or more (in 2003 dollars) for a small (30') span pedestrian and bike bridge. These structures should be designed to avoid inundation during high-flows.

### *6.2.7 Road Crossings*

Roads and railroads crossing the Greenway and vehicular bridges over the streams pose a challenge to trail development within the Greenway. Each crossing must be studied to determine if the trail can go under, over or through the crossing. Routing of trails under bridges is often the preferred option, if feasible, because it interrupts the trail experience less, avoids conflicts between trail users and automobiles, and is often the lower cost

alternative. Under-bridge trail crossings are likely to be low-flow routes, because they have to descend the streambank to clear the bridge, and thus become inundated during large storm events when the creeks are swollen with rainwater.

The Union Pacific Railroad crossing is a particularly significant barrier which has already been discussed. The preferable option for this route is an under-bridge trail with an alternate route in the event the low-flow trail is flooded; however, this requires additional study in collaboration with the railroad to determine feasibility.

Other significant road crossings in the Greenway include the Interstate-80 bridges over Linda Creek and Secret Ravine. These bridges should have sufficient clearance for Greenway trails to pass beneath them, but additional studies are necessary on all bridge overcrossings where trails are planned to verify feasibility.

### *6.2.8 Standards for Trail Design*

The following standards for trail design are recommended for the Greenway. Implementation of these standards will provide consistency to the trails within the Greenway.

1.0 Design trails to avoid high-quality habitat areas to minimize impacts to sensitive vegetation. This includes habitat associated with CNDDB species (see Figure 1-12).

2.0 Trail Signage

A. Provide trail signage at nodes to indicate who has right-of-way on the trails between bicyclists, pedestrians and equestrians.

B. Provide directional signage at trail intersections.

C. Provide signage clearly stating the rules of the Greenway. This includes dog policies, motorized traffic restrictions, etc. Where the Greenway trails cross jurisdictional boundaries, post signs indicated changes in trail rules.

D. Design and incorporate a common element into signage to indicate Greenway trails. This element might be a logo or other design unique to the Dry Creek Greenway.

E. Design signage to meet ADA requirements.

F. Provide interpretive signage where appropriate at nodes, overlooks and other significant sites. These sites may include historically or prehistorically significant locations, wetlands or sensitive habitats, local wildlife that trail users might encounter, etc. Design interpretive signage to meet ADA requirements.

3.0 Design trails for emergency vehicle access, a minimum of 10 feet wide with minimum curve radii of 45 feet. 12 foot wide paved routes are recommended by Caltrans in areas where heavy bicycle or pedestrian traffic is anticipated. Paved

paths that are less than 12 feet wide are also more vulnerable to degradation of pavement edges due to wear by maintenance and emergency vehicles[22].

4.0 Provide striped, separated lanes for traffic control, where possible.

5.0 Design all improved pedestrian, bicycle and combined trails to meet ADA requirements, where feasible. Unpaved trails will not meet universal accessibility standards.

6.0 Provide a diversity of riding and walking experience by varying the ecosystems through which the trail travels. Take advantage of ecotones (transitions between ecosystems) to create an interesting experience for the trail user. Create overlooks at scenic locations on the creek or surrounding landscape.

7.0 Avoid trail dead-ends, especially where a trail terminates in a private parcel. This encourages trespassing. Instead of creating a dead-end, identify a nearby road or other circulation element and connect the trail to that system. Ideally, the connection would be to a road that has an existing bike route. If that is not available, a road that has a proposed bikeway is preferred.

8.0 Where a trail is adjacent to residential or industrial uses, provide a minimum 6 foot high barrier to separate the trail from the adjacent land use. This barrier might take the form of a berm or a berm and plantings.

## 6.3 Nodes

Nodes are locations on the Greenway where trail users gain access to the system. These nodes range from small neighborhood access points to larger regional staging areas (see Figure 1-3). Nodes are located based upon the Roseville and Placer County existing and proposed bikeways, the road network, and Greenway connections. The suggested types of nodes are dependant upon factors such as the class of the intersecting bikeways, size of roads, significance of the particular area within the Greenway, location of equestrian trails, sensitivity of local neighborhoods to increased traffic associated with larger nodes, and locations of other nodes.

Table 6-4 lists the node types in the Greenway.

**Table 6-4 Node Types**

| Node Type | Description | Locations |
|---|---|---|
| A | Neighborhood access, no parking, minimal signage, traffic control. | Local street/Greenway crossings. Located within neighborhoods. |
| B | General public access, some automobile parking (horse trailers excluded), basic signage. May have some basic site amenities such as benches or native landscaping. | Major street/Greenway crossings. May be on an arterial street in urban areas or a rural road. |

[22] Caltrans, 2001.

| Node Type | Description | Locations |
|---|---|---|
| C | Public access, horse trailer and car parking, moderate signage, no plumbed facilities, may have site amenities such as trash receptacles, benches, landscaping, porta potties, etc. | Major street/Greenway crossings on equestrian routes. |
| D | Regional access, full facilities, plumbed restrooms, horse trailer (where equestrian trails are present) and car parking, full signage, security lighting, bike racks and trash receptacles | Major street/Greenway crossings coincident with Class I Greenway trails. |
| E | Park: Type D adjacent to a local or regional park. Includes planned park uses such as recreation facilities, picnic tables and shelters, benches, etc. | Greenway/Park coincident locations. |

Type A nodes are located in local neighborhoods or other places where nodes that include parking are inappropriate. They are also located where secondary corridors provide access from private open space areas to the Greenway system.

Type B nodes are located where major streets intersect the Greenway. They include parking for locals and visitors, some signage, and control structures to prevent unauthorized access to the Greenway by automobiles and other motorized traffic.

Type C nodes are located where existing or proposed equestrian trails intersect with Greenway equestrian trails. They may include parking for horse trailers and cars, moderate signage and may include site amenities such as benches or trash receptacles. Two type C nodes at the King Road crossing and at Sierra College provide access to the Secret Ravine equestrian trail. The node at Sierra College Boulevard and Miners Ravine connects the Greenway to an unpaved multipurpose trail.

Type D nodes are located near the Walerga Road crossing over Dry Creek, the Foothills Boulevard crossing over Dry Creek, the Roseville Parkway crossing over Secret Ravine, and near the Village Oaks crossing over Antelope Creek. The Foothills Boulevard and Walerga Road nodes provide equestrian access to the equestrian trails in the Dry Creek Parkway, as well as bicycle and pedestrian traffic access to the Greenway. The type D node at the Roseville Parkway crossing provides access to three Class I bikeways that come together in that location, converging from Dry Creek, Miners Ravine and Secret Ravine. This node need not include horse trailer parking, since equestrians are not permitted on the trails within the City of Roseville.

Type E nodes occur anytime the Greenway intersects an established or planned park, such as at Johnson Springview Park on Antelope Creek, or Loomis Regional Park on Secret Ravine. These nodes utilize the park facilities for staging and rest stops within the Greenway, including picnic grounds, restrooms, drinking fountains, sports facilities, etc.

The following section presents the suitability of each site where a Type B, C or D node is proposed. Since Type A nodes are simply trail access points without parking or other facilities, they can occur almost anywhere that the trail intersects with a road, and so have not been individually investigated for site suitability.

### *6.3.1 Type B Nodes*

**Dry Creek at Cook Riolo Road**

Cook Riolo Road crosses Dry Creek on a narrow one lane girder bridge. This area currently has a rural character, although that may change with new development that is occurring in this area (Figure 6-7).

**Figure 6-7 Cook Riolo Road and Dry Creek Greenway**

Sufficient space exists on either bank for a bike and equestrian trail to pass under the bridge (Figure 6-8). Wooden stairs are currently set in to the south bank on the west side of the road to give access to an informal dirt trail. The creek splits into two low-flow channels in this section.

**Figure 6-8 Cook Riolo Bridge**

There is sufficient room within the existing riparian band for a Type B staging area, but this would impact valuable existing vegetation.

The preferred location is where the existing Class I bikepath dead-ends at Cook Riolo Road several hundred feet south of the bridge (Figure 6-9). This trail follows the south side of the Dry Creek riparian zone and connects to Walerga Road to the west. Properties in the vicinity of this node are owned by private entities, so acquisition of the land for the node will require negotiations with private landowners or partnerships for easements and/or fee-title purchase. Land could also be dedicated as part of a development project.

**Figure 6-9 Existing Bikeway at Cook Riolo Road**

Across the road from the existing paved path is a private drive, and posted signage states that this is a private drive with no public access, indicating that residents may have had problems with trail users in the past. The Cook-Riolo Road-Dry Creek Greenway intersection will require redesign when the path is extended eastward to resolve potential conflicts with the existing private drive and properties.

**Dry Creek at Vernon Street**

Sufficient space exists on both stream banks on both sides of the street for a Type B node, including parking for several automobiles, trailhead and signage (Figure 6-10). Both sides of both banks are currently designated open space, zoned "floodway". Both parcels are privately owned, so the City of Roseville would need to negotiate access with the property owners. A BMX track is the existing land use on the north bank, east of Vernon Street. The property on the opposite side of the creek is currently undeveloped, and is adjacent to a Union Pacific Railroad maintenance facility.

**Figure 6-10 Dry Creek at Vernon Street**

Although a formal vegetation survey was not conducted, a field visit to this site showed good riparian canopy structure upstream and downstream of Vernon Street, with herbaceous, shrub and tree layers present (Figure 6-11). The field visit also found evidence of a potential homeless problem in this reach, which may be somewhat alleviated with the increased public presence associated with a node and trail.

**Figure 6-11 Vernon Street Looking West**

A special study is needed to determine how the Greenway path will negotiate the Union Pacific Railroad yard just upstream of this node. A path could pass beneath the UPRR bridge on the south bank of the stream between the bridge abutment and two rows of support columns; however, this path would need to be raised five to ten feet to allow use of the trail in anything but extreme low flows, as the existing ground level is just above dry season water level in October (Figure 6-12). Given that the bottom of the bridge is at least 20 feet high, construction of a raised bike and pedestrian trail should be feasible. In addition to the technical challenges of locating a trail underneath the UPRR yard, the City of Roseville will need to negotiate with the UPRR for this access.

**Figure 6-12 UPRR Bridge South Bank**

**Antelope Creek at Roseville Parkway**

Where Roseville Parkway crosses over Antelope Creek, the road is built on an embankment that is perhaps 30 to 40 feet above the stream. There are no locations on the west bank where access is feasible from the street without construction of large fill banks or bridge structures. On the east bank, the land rises to the level of the road, where the Creekside Ridge office complex is located on the north side of the highway.

There are three options for locating a node with parking, trailhead and signage in this area (Figure 6-13).

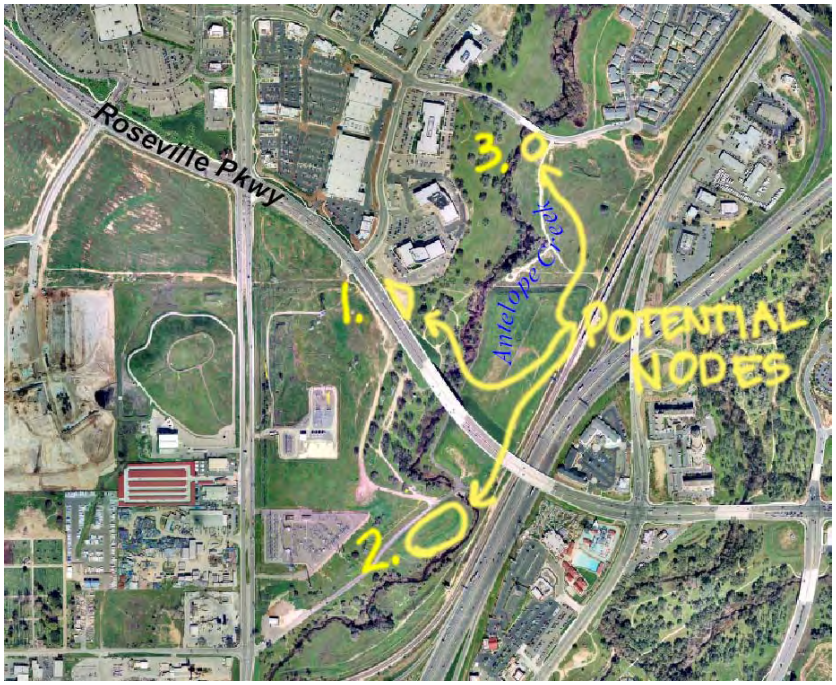


**Figure 6-13 Antelope Creek at Roseville Parkway**

The first is a vacant lot zoned industrial but designated open space between the office complex and the creek. The east bank of the creek on the north side of the highway is currently posted private property and appears to be a target range, potentially for archery. This may pose a safety hazard for trail users in this area, and a potential barrier for trail access from this node location (Figure 6-14).

**Figure 6-14 Posted Private Property at Roseville Parkway and Antelope Creek**

The second possible site is east of the Roseville power substation where Berry Street ends at Galleria Boulevard. From the aerial photographs, it appears that the paved road east of the Berry Street-Galleria Boulevard intersection crosses over the creek just south of the Roseville Parkway overpass; however, this road is blocked by a posted, closed gate. The land that this access road occupies is zoned "general industrial." The City of Roseville should consider whether this road could be used for public access to the Greenway.

The third and recommended location is north of the Roseville Parkway Bridge where Antelope Creek Drive crosses Antelope Creek. A large vacant lot on the east bank of the creek on the south side of the road could provide public access. This land is designated "park and recreation" and probably represents the best potential for access to the Greenway in this area.

**Swan Stream at Sierra College Boulevard**

A small tributary to Linda Creek joins the mainstem approximately 600 feet north of where Linda Creek crosses the Placer-Sacramento County line. This tributary has been called both Linda Creek (north branch) and Swan Stream, since it drains from Swan Reservoir to the east. An existing Class I bikeway follows this trail from Sierra College Boulevard east to a major powerline corridor. On the west side of the street, a wall separates the public right-of-way from Woodbridge Ranch. Within this private community, Swan Creek is bordered by private open space that varies from 150 feet to 450 feet in width (Figure 6-15). To create a connected trail through this segment, the City of Roseville should enter negotiations with Woodbridge Ranch to attain public access to this open space. This should be a high priority acquisition, because this segment forms part of the primary connection to Folsom Lake State Recreation Area. If access cannot be obtained, Old Auburn Road is the next best connection between Linda Creek and the Placer County dedicated open space along Swan Stream.

A Type B node at this location could occur within the vacant parcel south of the existing City of Roseville open space east of Sierra College Boulevard. Sufficient area exists to locate several parking spaces, signage and a trailhead (Figure 6-16).


**Figure 6-15 Swan Stream Open Space**

**Figure 6-16 Swan Stream Open Space Corridor**

The existing open space is zoned "floodway", so care should be taken to design the node to not impede the flow of floodwater, and minimize the potential for volatile organic compounds associated with parking lots from entering the waterways.

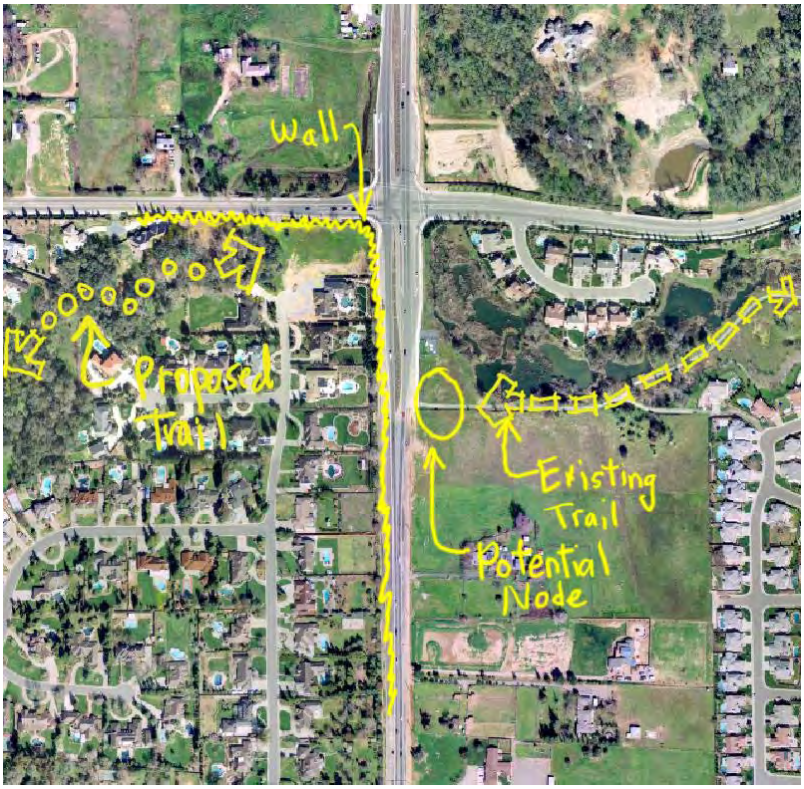


**Figure 6-17 Swan Stream at Sierra College Boulevard**

**Linda Creek at Rocky Ridge Drive**

The corner of South Cirby and Rocky Ridge is currently undeveloped, privately owned and zoned medium density residential. Additionally, the parcel immediately southeast, bordering S. Cirby Way, is undeveloped, zoned open space. This parcel, which appears from the city parcel map to be owned by the adjacent subdivision, currently has paved parking for two to three automobiles and an open gate leading down to the creekside (Figure 6-18). This area already functions as a node for access to the multipurpose trails along Linda Creek. Minor improvements such as the addition of sidewalks, marked parking spaces, and landscape plantings would formalize this node.

**Figure 6-18 Existing Parking off of Cirby**

Public open space along the creek extends to Maidu Park, following Strap Ravine (Figure 6-19). Trails within this open space would link Maidu Park to the Greenway system. Additionally Rocky Ridge has a bikeway that is divided from the street by a 5 to 10 foot landscape strip, and McLaren Drive has a grade separated, though not buffered, bike path.


**Figure 6-19 Linda Creek at Rocky Ridge**

**Secret Ravine at Sierra College Boulevard**

The 2003 Secret Ravine Floodplain Restoration Feasibility Study[23] recommends a floodplain restoration project east of Sierra College Boulevard on Secret Ravine. The proposed project focuses on creation of floodplain terraces, improvement of channel structure, removal of invasive plant species and replanting with riparian vegetation. As a recreational component, the Feasibility Study recommends a staging area for the Greenway that includes a small parking lot. This integration of a PCFCWCD project with the Greenway provides an opportunity to educate Greenway visitors on urban impacts to creeks and principles of urban stream restoration. The node at this location should include additional interpretive signage related to the restoration project.

Figure 6-20 shows the proposed location for the floodplain restoration site.


**Figure 6-20 Secret Ravine at Sierra College Boulevard**

[23] HDR, 2003.