

Lake Los Carneros Trail Management, Rehabilitation And Interpretive Program Review



Santa Barbara County Trails Council • September 2009

OVERVIEW

The most recent of several management plans for Lake Los Carneros was developed by Hunt & Associates in 1999 for Santa Barbara County Parks Department. Among other things it included an overview of existing physical and biological conditions, wildlife resources, current maintenance activities and recommended management practices.

As noted in the management plan, Lake Los Carneros provides a tremendous resource for the City of Goleta, which took over management of the 140 open space area when the city was incorporated in 2002. Besides providing valuable open space, habitat for many species of birds and animals, the park serves as an important source of recreation for the community.

Despite this, as of yet there is no formally adopted trail system, no guidelines for how to mitigate impacts of recreation on the habitat or wildlife, nor plans for how to manage or maintain the trails. As noted in the 1999 plan, the result has been a “network of poorly maintained, heavily eroded informal trails that fragment the open space, especially the grasslands northeast and east of the lake.”

The plan further noted that the result has been a significant “disturbance to wildlife by allowing humans and dogs to wander anywhere in the park.” Clearly, there is a need to review the trails currently in existence, especially since there are many more trails than those shown on the map below.

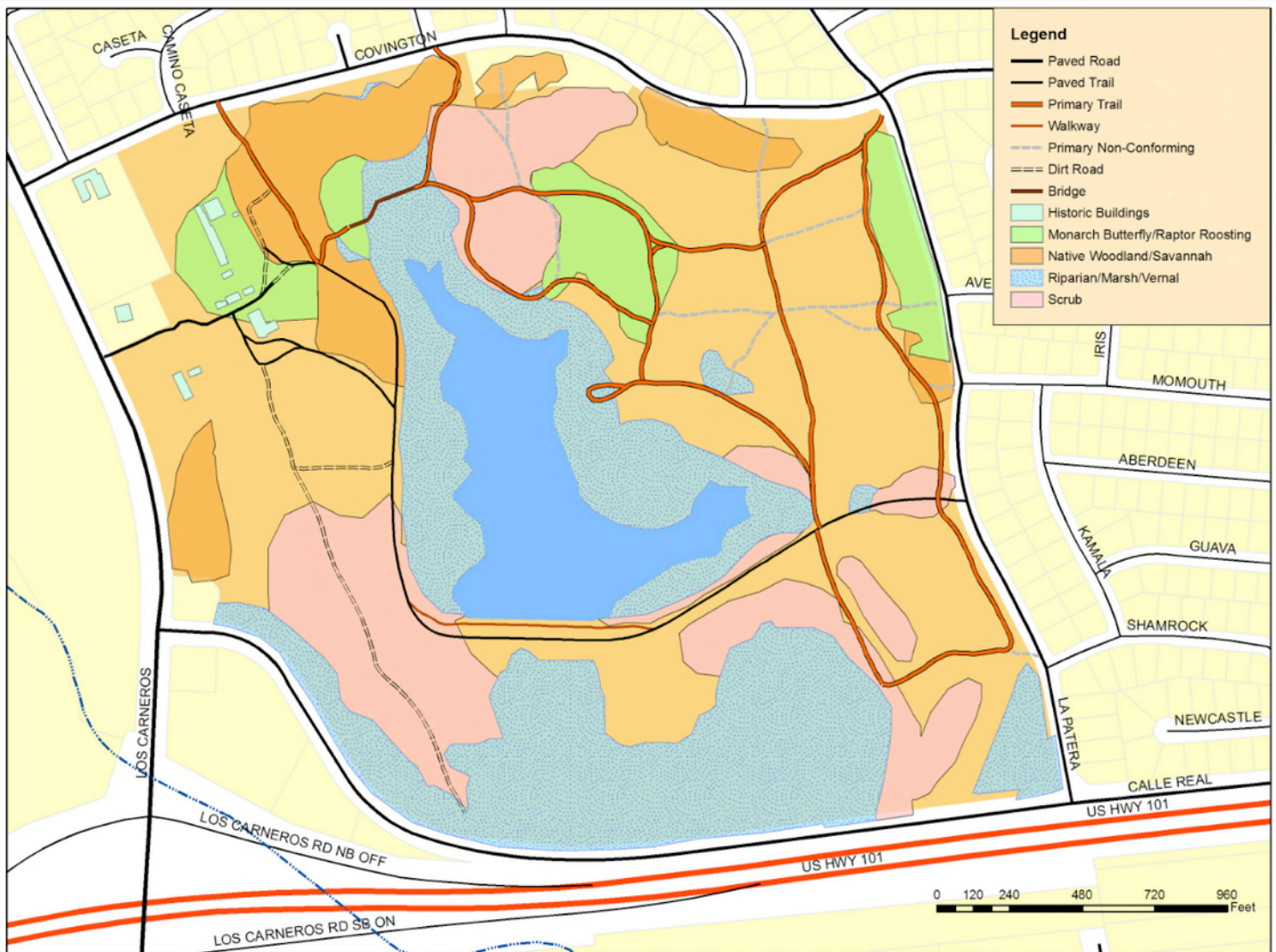


Figure 1. Map depicts trail network recommended by Penfield & Smith in 1987. If adopted, other trails, including the “primary non-conforming trails not shown on this map would be eliminated.

Among recommendations made by Hunt & Associates in 1999 was the adoption of a trail network included in an earlier Master Plan compiled in 1987 by Penfield & Smith (see map above). Among other recommendations, the 1999 plan called for maintaining trails with chipped wood in order to reduce erosion, to eliminate other trails not included in the Penfield & Smith trail map and to rip up the compacted soil along these trails and plant them with non-native annual grasses and thorny shrubs such as wild rose to keep people on the established trails.

Currently, the City of Goleta's General Plan and Coastal Land Use Plan provides overall guidance as it relates to open space areas such as Lake Los Carneros, with an emphasis on habitat protection and restoration, passive recreation and low impact uses of these areas. However, it should be noted that to date there is still no clearly defined trail network for Lake Los Carneros, classification of types of trails or uses or standards in place to guide what maintenance does occur there.

The purpose of this review is to provide the City of Goleta with guidance in the formulation of a trail management plan for Lake Los Carneros.

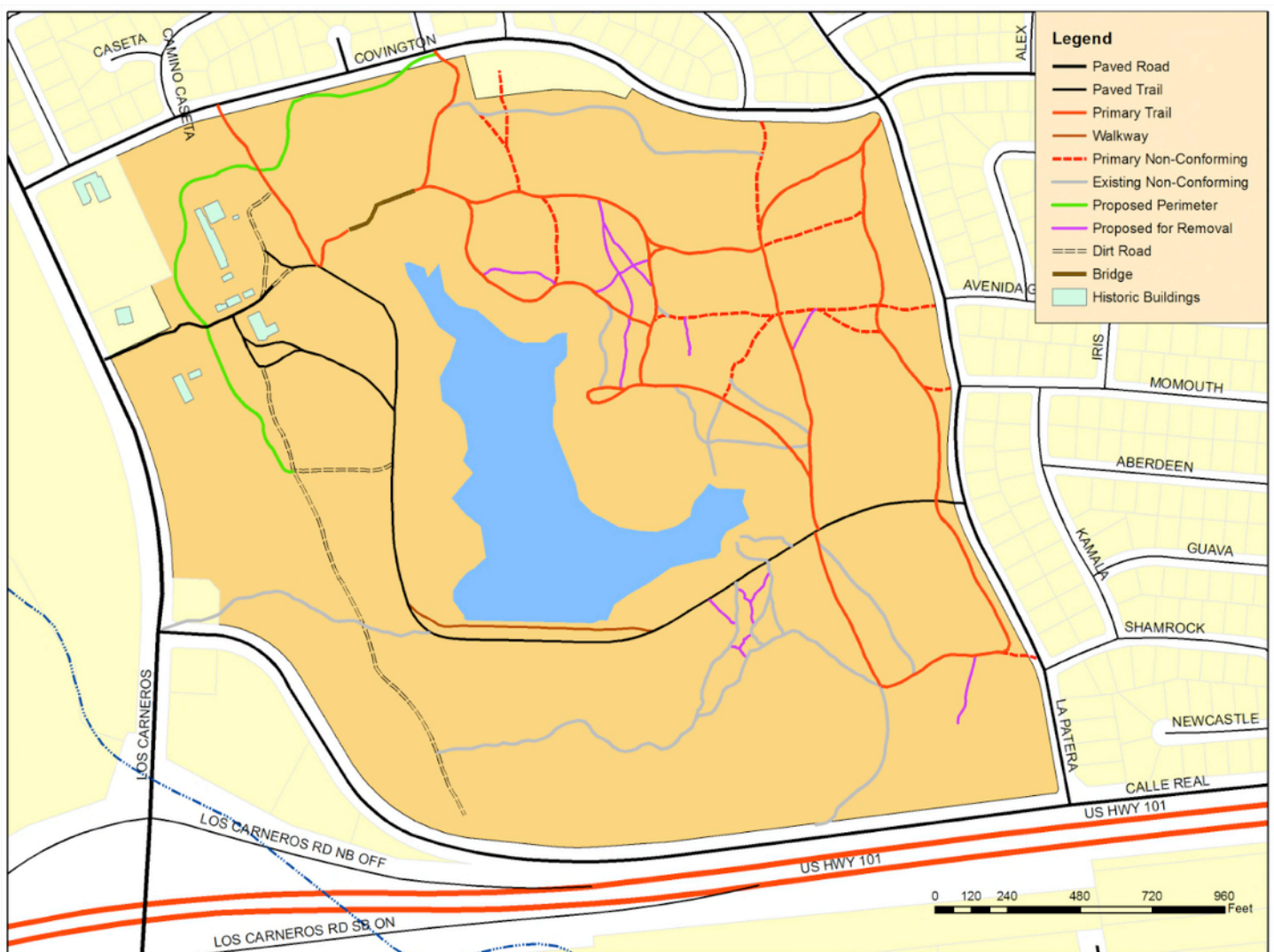


Figure 2. Map shows current trail locations throughout Lake Los Carneros, including the Primary Trails recommended by Penfield & Smith, several types of non-conforming trails, including connections to the primary trails, lesser used routes (shown in gray) as well as a number of other routes recommended for elimination (shown in purple). The result is a poorly designed and maintained network of trails that is in need of update.

THREE STEP PROCESS

The Trails Council recommends the City of Goleta begin a process of identifying trails at Lake Los Carneros suitable to be part of the larger network of trails, standards to be applied in maintaining them and criteria for removing those that no longer serve a useful purpose.

- Creation of a Trails Classification System to provide guidance in development of an overall network of trails of varying width, surface type and experience.
- Development of guidelines for the long-term maintenance of each type of trail
- Implementation of a maintenance program to bring the trails within each classification up to standard.

TRAIL CLASSIFICATION SYSTEM

The Trails Council recommends the development of a Trails Classification System to provide the City of Goleta with guidance in future trail planning needs, to help identify which trails should be included in an overall trails network for the park, what standards should be applied to each type of trail.

Initially, SBTC has identified seven potential classes of trails. Over time, as decisions are made regarding some classes of trails, it can be expected that some of the classes will merge with others or go away entirely.

Paved Walkways

Several of the old roads leading to and surrounding the Stow House serve as walkways through parts of the park. These provide handicapped access as well as serve those who wish to enjoy the area without venturing off onto the dirt trails. While the portion of the paved walkway leading from La Patera Lane along the south side of the lake is in relatively good condition, other parts of the asphalt are in extremely poor condition.

Primary Trails

Due to its relatively gentle terrain and high level of community use, Lake Los Carneros provides recreational opportunities for many different types of users during all seasons and most every part of the day. There is a need for a system of relatively wide trails with smooth, easy-to-navigate tread that can accommodate individuals, dog lovers, social walks, bicyclists and other uses in a safe and friendly manner. These trails should be accessible from the main parking areas, neighborhood streets and provide safe multi-use type experiences.

Primary Trail Connectors

Informally, a number of short connector trails have developed over time to link neighborhood streets to the primary trails and to connect primary trails with one another. In past management plans, most of these connectors have been identified for removal but all of them serve a useful purpose for one part of the user community or another. Because many of them act as feeders from nearby streets, it may be difficult to remove them and, in fact, may be desirable to include as a part of the Primary Trails system.

Secondary Trails

Over time, a number of smaller, less well-defined trails have developed to provide access to more secluded and remote parts of the park. Many of these may be suitable to inclusion in the trail network but due to the nature of the habitats or areas they pass through, may have a more narrow tread and/or less brush clearance on either side to help maintain their secluded, natural quality. More than half of the trail segments found within the park fall into this category. Many of them have developed over time by users looking to enjoy parts of the park not served by the primary trails or as informal connectors from one of the main trails to another.

One of the main decisions City open space planners will need to make is in defining which, if any, of these Secondary Trails should be added to the Los Carneros trails system and which should be eliminated. Because many of the Primary Trails pass through the more open, grassland type habitats, there is little opportunity for quieter, more secluded trail experiences. Many of the “existing non-conforming” trails serve such an experience, often as short connections to the primary trails that provide a peek at other habitats or longer routes

that pass through parts of the park that the Primary Trails do not go. Unfortunately, a number of these trails either pass near or go through sensitive habits such as Monarch butterfly and raptor roosting areas, or riparian, marshland and vernal pool areas that may or may not be suitable for trails.

Trail Closures

Other of the smaller, less well-defined secondary trails may not be suitable for public use, either due to erosion or other environmental issues they cause, because they traverse sensitive habitat or serve little additional value. Trails that fit into this category need to be identified and criteria for restoring the habitat they pass through developed. An initial set of trails that appear to fit into this class have been identified and included on the map shown in Figure 2. Along with identifying which trails should be removed, standards for restoring these trails and nearby habitat need to be developed as well.

Potential Trail Additions

Because the current trails at Lake Los Carneros developed over decades with little planning involved, SBTC recommends taking a fresh look at the trails system currently in place to identify other trail possibilities that might provide additional recreational opportunities without impacting habitat or wildlife values.

Accessible Trails

While by default, most of the paved roads within the park serve as handicap accessible trails, due to the condition of some of the asphalt walkways or lack of suitable parking limit access for those with handicaps. Currently, due to slope, tread condition and brush clearance, the trails leading to the bridge crossing the upper part of the lake area is not accessible from either side, nor are any of the Primary or Secondary trails found throughout the park. SBTC recommends identification of an “accessible” set of trails within the larger trails network and standards to maintain them.

TRAIL STANDARDS

Trail standards provide guidance in the day-to-day care of the trails as well as defining specifics such as tread width, surface, drainage or erosion control and vegetation clearance (both vertical and horizontal). Trail Standards also help define user experiences and provides for safe use given numbers and types of users.

Trail standards in turn are heavily dependent on the types and numbers of people who will be using the trails as well as the type of experience desired. In the case of Lake Los Carneros, while the primary use of the park is by foot, there is also a considerable amount of bicycle use as well, especially along the paved roads and wider dirt jeepways, a wide range of age classes who use the trails and in many cases, the desire for a more social experience where those on foot travel side-by-side along the trail.

SBTC recommends developing both general trail standards to provide guidance in maintaining all of the trails along with standards specific to each of the different trail classification types.

IMPLEMENTING A MAINTENANCE PROGRAM

Once each trail has been identified by its appropriate class type and standards developed for the long term maintenance, SBTC proposes to work with City Planning to develop a series of projects to bring each trail in compliance with trail standards and to initiate an annual volunteer trail maintenance program to maintain the trails.

PRIMARY TRAILS

As shown in the map below, in 1999, Hunt & Associates recommended Santa Barbara County Parks recognize a trail network that included a primary set of dirt trails (shown in red) and a number of paved walkways, one dirt walkway that follows the south edge of the lake, several short roads and one bridge linking several of the trails.

Among the many characteristics that make these trails so popular include:

- The trails provide access to most parts of the park from any of the neighborhood streets. They all lead to or around the lake.
- The trails are gentle and accessible for the very youngest to the oldest.
- They provide access to a variety of habitats as well as spectacular views.
- The trails are wide and open, with good line of sight, making them easy and safe to use.
- They provide the opportunity for a variety of loops and different routes,



Figure 3. The trails network recommended in 1999 focused on those shown in red along with several old paved roads, walkways and one bridge. Today, these trails are still the main ones used by the public. Note the connecting trails shown in gray. These represent routes that would have been removed if the 1999 recommendations had been implemented.

Paved Walkways

While asphalt and not actual trail, the 15-foot-wide “walkway” that leads around the south and west side of Lake Los Carneros provides one of the most scenic and popular walks in the park. Both morning and evening lighting provide stunning mountain views and the old roadway is wide enough to provide safe use for all types of users, including the handicapped.

However, towards the west end of the lake, the asphalt is severely degraded in places and is in somewhat poor condition for several hundred yards along the west side of the lake nearest Stow House.

While there really isn't a standard for maintaining paved walkways, at some point the City will need to address maintenance, either by repairing the asphalt, removing it replacing it with something like decomposed granite or providing a combination of asphalt and decomposed granite so users have a choice of surfaces on which to walk.



Bridge

The 270-foot span of the zig-zag bridge that crosses through the upper tules at Lake Los Carneros provides one of the more unique features in the park. In the winter months when the water is higher the area is filled with different types of birdlife and both turtles and fish can be seen below the surface.



Despite the opportunities the bridge offers for viewing wildlife, the bridge is not accessible for the handicapped from either end. At a minimum SBTC recommends re-routing the trail on the west end of the bridge so handicapped access is available from the asphalt walkway on that side.

Primary Trails

The Primary Trails, shown below in red, comprise the heart of the trail network at Lake Los Carneros. These trails provide access to about half of the park, meandering through open meadows, mostly on level or near-level ground. The trails vary in width from 3-8 feet and are in relatively good condition.



Trail Standards—because they are both popular and used by most every type of user, of necessity, these Primary Trails need be relatively wide, allow different user groups to pass by one another safely, and accommodate small groups of users who may want to walk along together.

SBTC recommends that trails designated as Primary Trails be a minimum of 4' wide and no wider than 6'. In a recent survey of the trails, it was noted that where the primary trails were less than four feet wide parallel trails often

developed and where wider than six feet, users tended to meander back and forth creating trails with irregular widths. Ideally, a width of 5' for all Primary Trails might provide a useful benchmark. Other trail standards include:

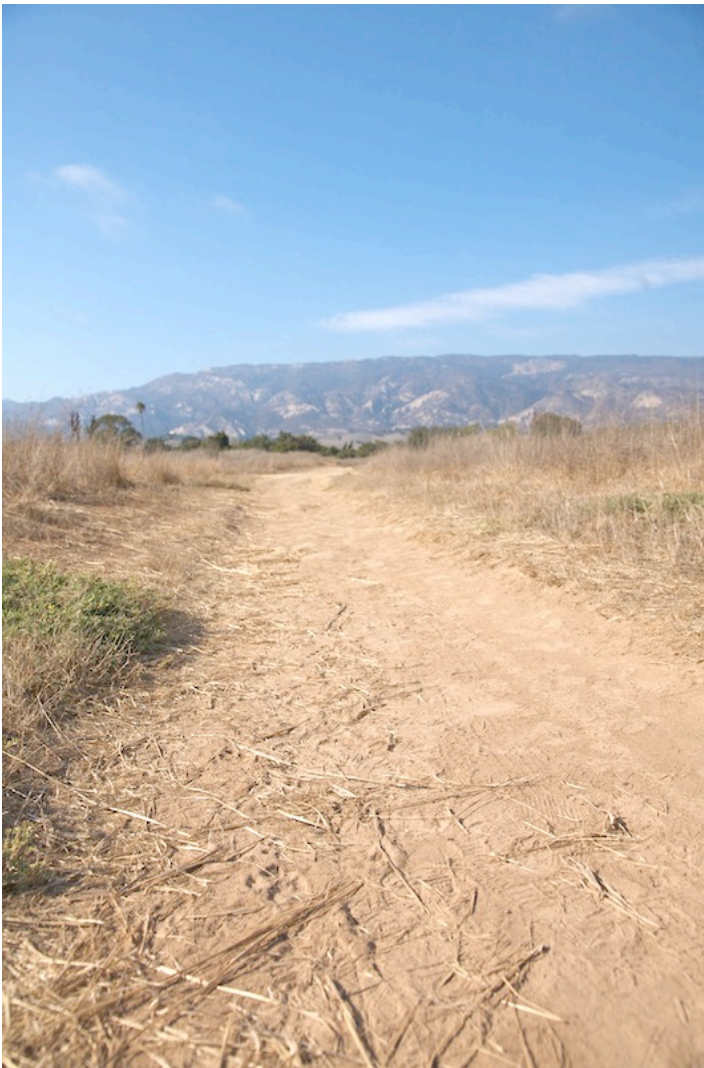
- Trail Tread—should be smooth and graded to avoid the excessive erosion that causes gullyng.
- Sight lines—should extend at least 50' where possible so users can see one another well ahead of meeting each other.
- Meadow grass—should be mowed back a minimum of 2' off either side of the trail tread but not so far as to encourage users to travel off the tread and unintentionally contribute to trail widening.
- Brush should be trimmed back to provide a trail corridor of at least 2' beyond either side of the trail and be done to maintain sight lines as described above.



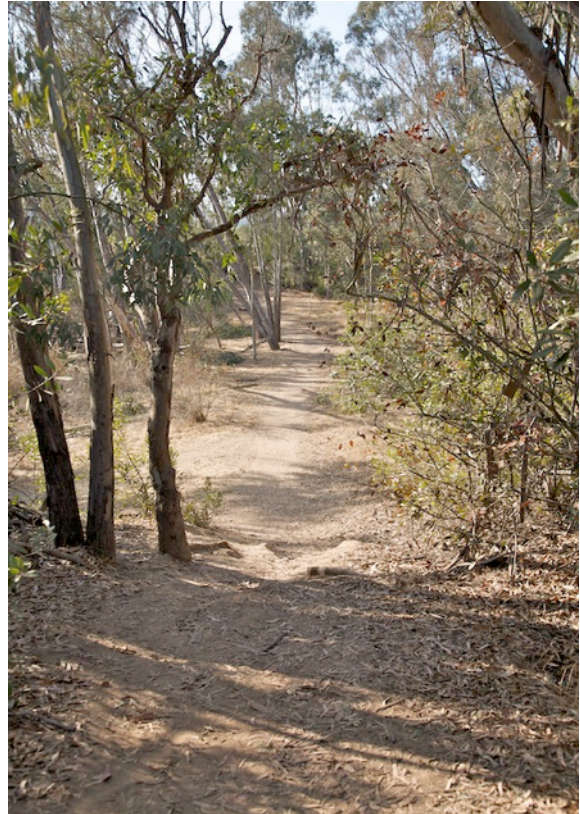
Trail on the right is typical of many of the Primary Trails though in need of maintenance due to gullyng. Grass has been cut back 5- 6' on either side, encouraging users to wander off of the existing tread. Some erosion control is needed to minimize gullyng.

Despite its reasonably good condition, uneven trail tread, gullying and excessive tread width are present on portions of many of the Primary Trails. In particular, excessive width is difficult to deal with given that once the trail is wider and the ground compacted, it isn't easy to get people to stay off the wider edges or for anything to grow there. SBTC recommends planting native vegetation and California oaks along these sections to enhance the trailside habitat and guide people to the main part of the tread.

Dealing with the tread issues is complicated by the fact that many of the trails are located on parts of the park that are level or almost level. Erosion over the past several decades, while slight, has resulted the trail tread that is below grade in a number of places. Practically speaking, this means that the tread surface is below the surrounding meadows, making it difficult to get water off the trail. SBTC recommends "meandering" the trail in places, using short re-routes to move the trail off the existing tread, up onto higher ground and then back onto existing tread to vary the trail elevation while adding soil in some areas to bring the trail back up to the level of the surrounding areas.



Trail on left has tread that is about 6' wide and approximately 12" below surrounding meadow areas, making it impossible for water to travel anywhere but down the trail. Trail segment on the right is severely gullied, forcing users to the right or left of the channel and widening the trail. Note that the trail narrows again in the distance where the gullying no longer occurs.



Trail segments that all need improvements including widening the tread in the upper left; narrowing the tread width in the upper right; and brushing to improve sight lines in the lower left and lower right. Note the lower right trail section drops too steeply down into the eucalyptus “bowl.” Re-routing to the right to lessen the grade would be helpful.

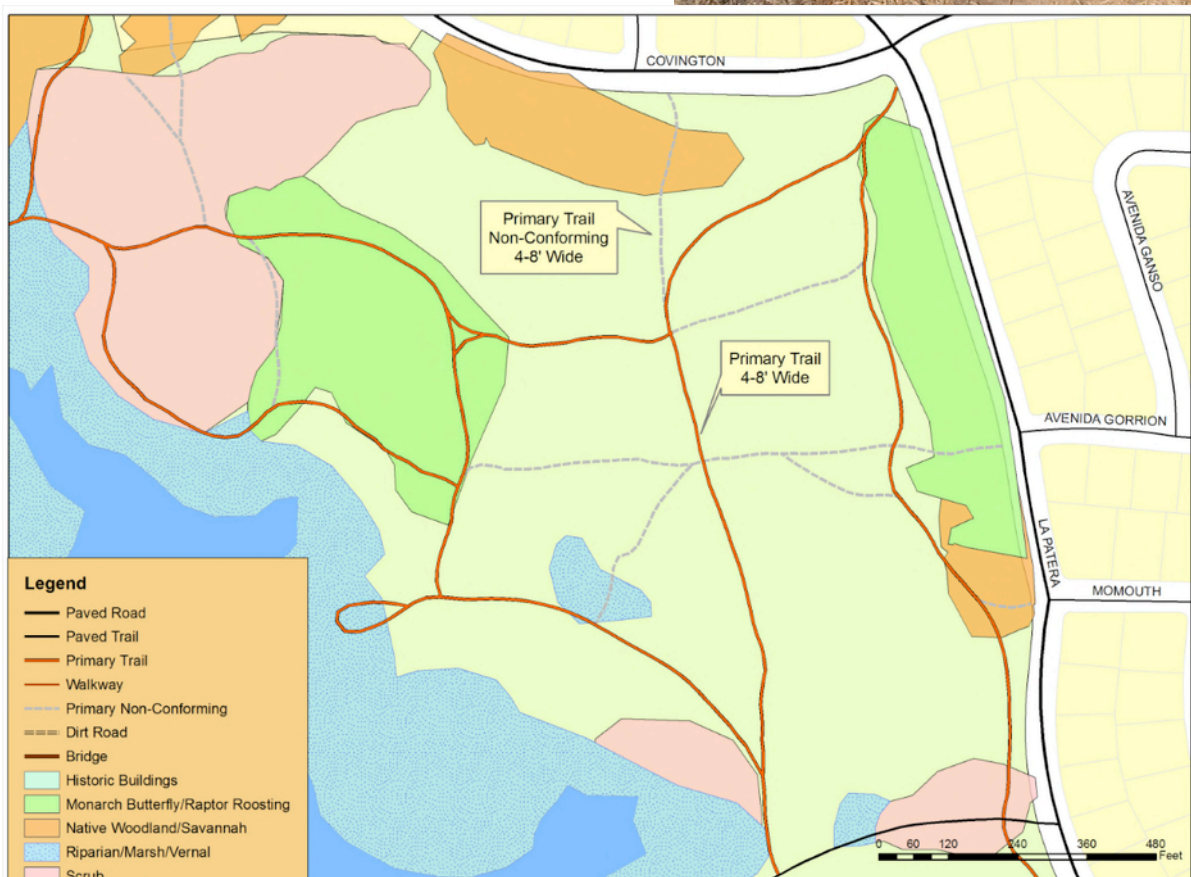
Trail Connectors

Over time, a number of short connector trails have been developed that link to the primary trail system either as shortcuts from one trail to another or to link the trails to nearby neighborhood streets. Though many of these have been recommended for elimination in past years, because they serve nearby neighborhoods, SBTC recommends including these into the primary trail network.

The connector shown on the right leads for about 40 yards from one of the primary trails to another. The map below shows all of the trail connectors as light gray dashed lines. Though they do break up the meadows into smaller sections, thus subdividing valuable wildlife habitat, almost all of them provide valuable connections to nearby streets.

Not only would it be difficult to keep the public off them, it would require community members (and kids) to walk long distances on the sidewalks to reach one of three main entry points when they could simply cross the street and enter the park.

In actuality, there are many other smaller non-conforming trails that should be considered for removal before any of these connectors.



Secondary Trails

Throughout the park there are a number of lesser trails, often 12-24” in width that have been established over the past several decades to meet social needs. Currently SBTC has identified fifteen trail segments that may be suitable for inclusion in the Los Carneros trails network. These are labeled “existing non-conforming trails” in Figure 4 below and displayed in green.



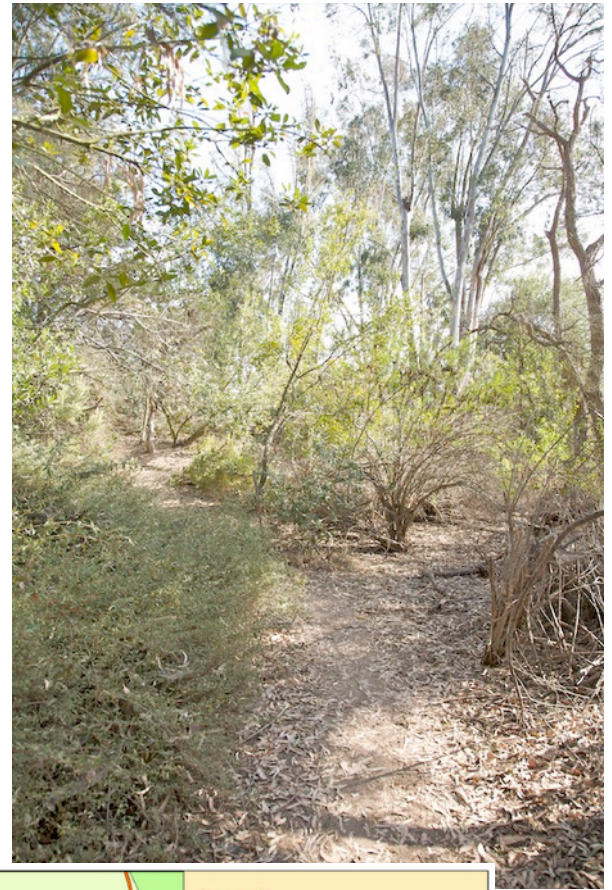
Figure 4. Over the past several decades more than two dozen informal social trails have developed at Lake Los Carneros. SBTC has identified a number of these as suitable for removal for a number of reasons along with the fifteen trail segments shown in green that may have potential for inclusion in the trail network under the classification of “Secondary Trails.”

While the Primary Trails provide access for the public to the more open meadow areas in the north and east parts of the park, as shown in the map above, a number of smaller more primitive trails have developed over time. Some of these provide short connections to the Primary Trails; others provide access to parts of the park that would otherwise be unavailable to the public.

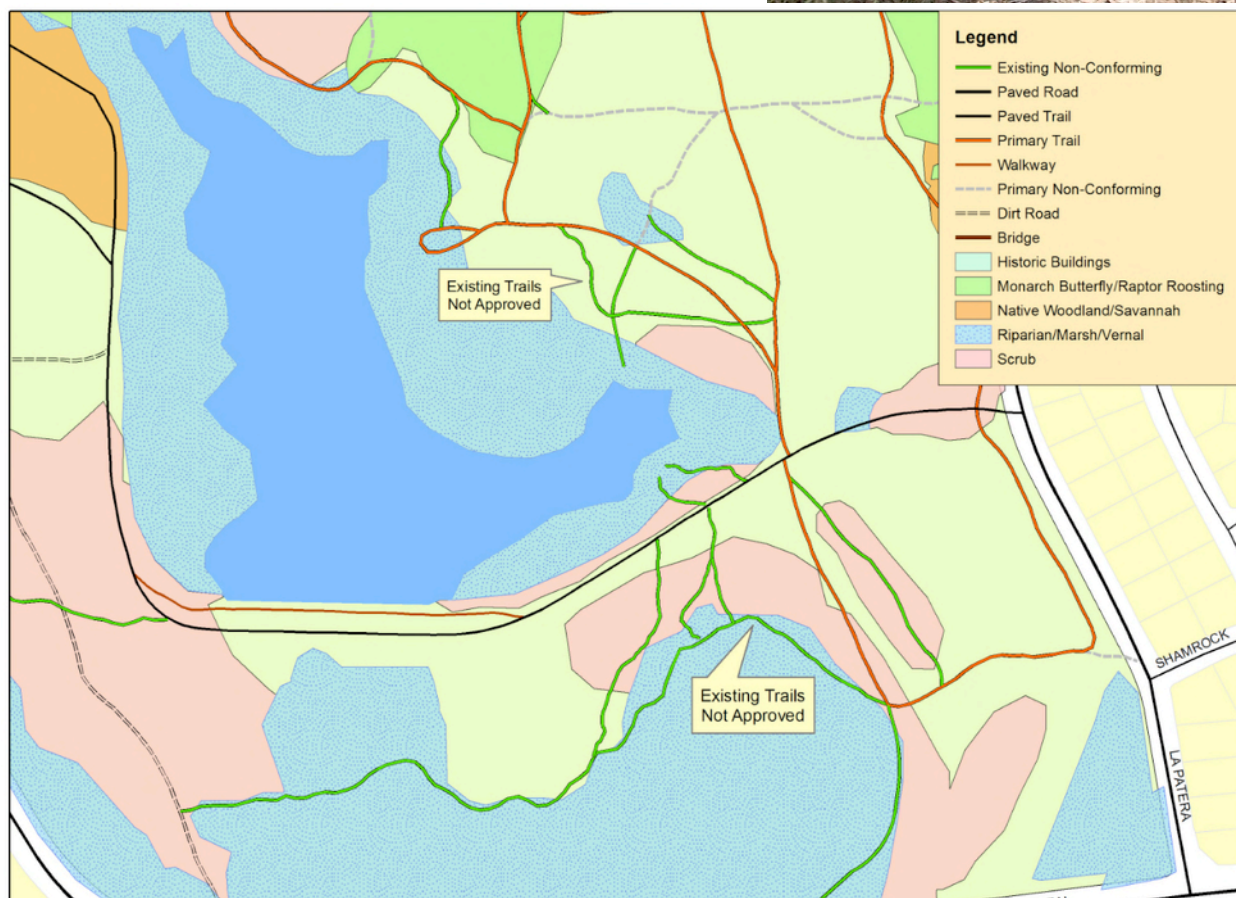
What these trails have in common are that they travel through more secluded parts of the park, are narrower in width and have a more natural feeling. The tread on these trails is often not as smooth and in many cases not easy to navigate due to rutting, off-sloping, bumps and other imperfections. Brush is generally more overgrown along the trails, which provides a more natural, secluded feeling but also provides almost no line of sight. Trail users may come upon one another with almost no warning and passing by each other may be difficult or in some cases unsafe.

In general, this doesn't make them unsuitable trails; it just indicates they need improvement to make them suitable. However, by definition, secondary trails can be expected to be narrower, provide a more natural experience and require a bit more awareness than when using the Primary Trails

- Trail Tread—should be smooth and graded but no more than 24” in width
- Sight lines—may extend to as little as 25’ and trail users need to exercise more vigilance in looking out for others.
- Meadow grass—should be mowed back a minimum of 1-2’ off either side of the trail tread to define the tread. Because the terrain is not as amenable, mowing will need to be done by hand.
- Brush should be trimmed back to provide a trail corridor of at least 2’ beyond either side of the trail and be done to maintain sight lines as described above.
- Dips and/or waterbars should be added where appropriate to control the flow of water and get it off the trail.



Trail on right is typical of many of the more primitive trails that SBTC has classified as “non-conforming.” Though it is suitable for the public, it needs both brush and line-of-sight improvements. However, issues such as habitat or wildlife values, however, may make it unsuitable for other reasons. Map below shows non-conforming trails overlaid on top of habitat.



Proposed for Elimination

SBTC has identified a number of other non-conforming trails (shown in purple) in Figure 5 that we believe either serve little purpose, impact habitat or other values too much or increase erosion to the point that they need to be removed. For these reasons we recommend they be eliminated.

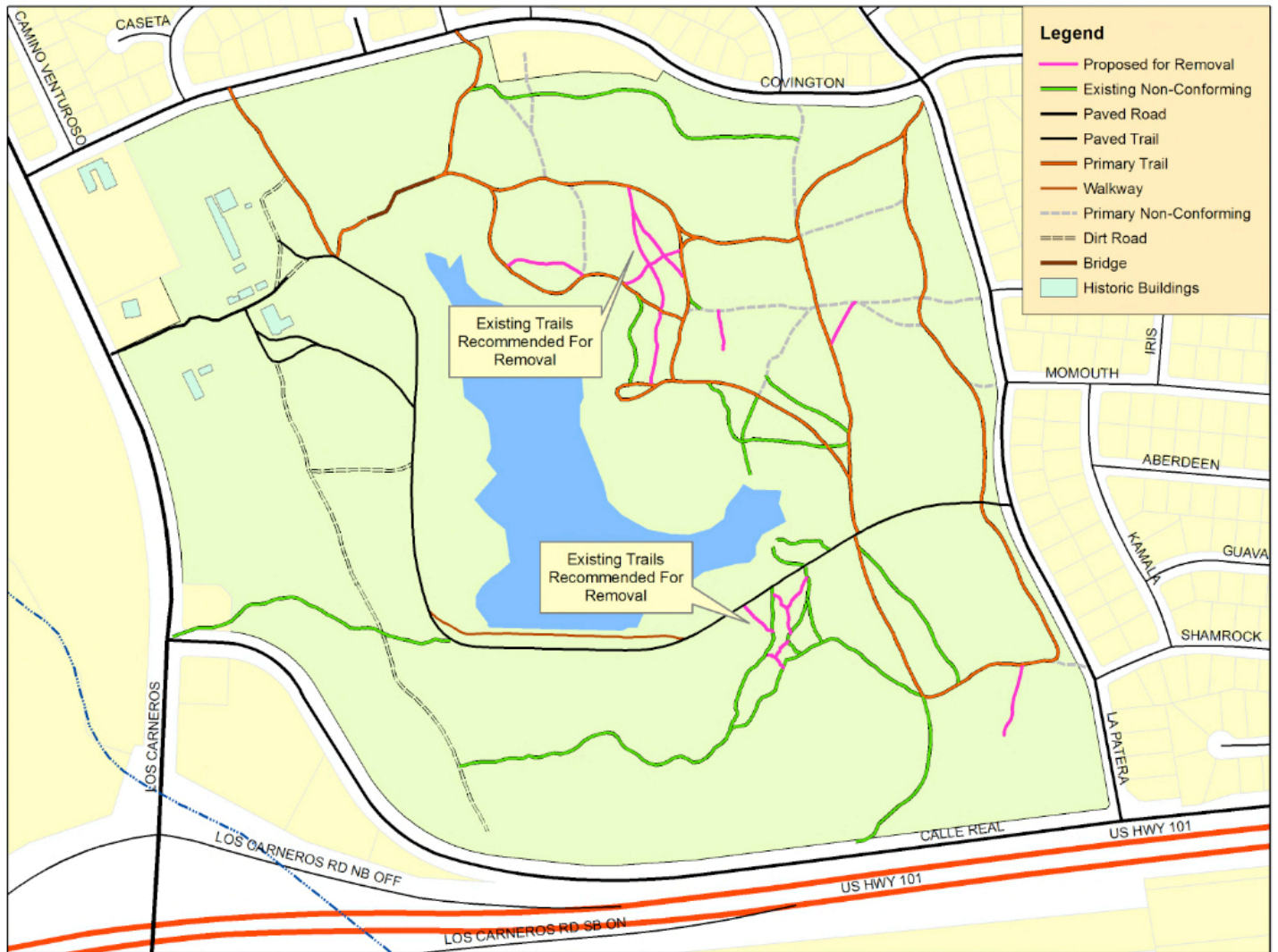


Figure 5. Many of the trails proposed for removal go nowhere, have serious erosion issues, provide shortcuts of little value or pass through sensitive wildlife habitat.

Removing existing trails provides their own challenges. While complete restoration of a site involves a fairly complex and long-lasting process, SBTC proposes an initial set of steps designed to direct the public away from entry points for the trails being removed and towards existing approved trails. This can be accomplished by:

- Digging up the trail tread to loosen compacted soil along the tread and discourage use.
- Spreading vegetation, branches and other materials along the trail to provide a more natural look and hide the old trail.
- Planting native vegetation at the entry points to these trails, thus cutting off entry to them as well as contributing to the natural setting.

Accessible Trails

Though not discussed at length in previous management plans — the number of paved walkways (roadways behind locked gates that serve as walkways for the most part), relatively level and gentle terrain and the open nature of the park — all serve to make Lake Carneros an ideal location for accessible trails.

Issues that need to be addressed to facilitate accessible trails include:

- Condition of the asphalt roads and walkways. While the roads that provide access to Stow House, surrounding buildings and the lake serve as accessible trails, potholes and crumbling asphalt make it increasingly difficult for wheelchair bound visitors to move around.
- Parking. While the parking lot on the west side of Los Carneros adjacent to the Train Depot serves well, parking along the main east access point to the lake will need to be improved.
- Access to Bridge. The trails on either side of the wooden bridge are currently not up to accessible standards. Re-routes would be necessary to standards.
- Northeast side trails. While the terrain is gentle and amenable to handicapped access and it would be relatively easy to define a route leading around the northeast side of the lake and looping back to the Stow House area, more-than-likely such a trail would need to be upgraded from dirt to decomposed granite at a minimum to make it an all-weather trail.

SBTC recommends identifying a loop route be developed that allows those with handicaps to circumnavigate the Lake.

Proposed Trail Additions

as a part of reviewing the current trails system, SBTC has identified at least one perimeter trail segment it would recommend for possible inclusion into the Los Carneros trail network. This trail would lead around the northwest side of the park from a point starting at the Stow House parking area and following the outer edge of the park to the Los Carneros Swimming Pool area.

The trail segment would pass through areas of primarily disturbed ground and grass and would have little impact on the native vegetation or natural habitats.

Note proposed perimeter trail shown at right in yellow. The trail would provide the potential for the development of a longer loop route that would follow the outer edges of most of the park, providing joggers, bicyclists and other users with a much longer trail experience.



TRAILS AND HABITAT RESTORATION

SBTC is currently investigating the potential for combining trail management and habitat restoration planning into the overall recreation experience. Additional information about the use of trailside planting to enhance the natural beauty, close off trails scheduled for removal and support sustainable trails coming soon.

INTERPRETIVE MATERIALS

SBTC recommends the development of small, un-intrusive kiosk or sign boards at each of the main entrances to the park to provide users with basic information regarding use of the park and interpretive materials throughout the park relating to the area's wildlife and natural features.

FINAL CONCLUSIONS

As one of the few open space area in Goleta and along the South Coast area, its native habitats, water bodies and winter wetlands provide both wildlife and the community with a treasured resource. Though the network of trails at Lake Los Carneros has proven workable over time, lack of planning and maintenance have contributed to a number of issues that need to be addressed:

- Over time, trails have proliferated without thought to design, standards or how they might fit into a larger trails network.
- Because of the lack of standards and regular trail maintenance, even those trails recommended by Penfield & Smith in 1987 are of varying tread width, condition and care. Currently. The primary "maintenance" provided is regular brushing once or twice a year in the later spring months. This, in itself, has contributed in part to the varying widths of some of the trails by making it easier for the public to wander off the main part of the tread.
- Though not a serious problem yet, erosion and subsequent gullyng on many of the trails is a serious concern because it will only get worse. Because the trails often pass through almost level grasslands, over time the trails have eroded to the point that many of them are below grade, meaning that the water has nowhere to go but down the trail. Trailside planting, short trail re-routes, dirt fill in places where the erosion is severe are all options that should be considered.
- By classifying the trails systematically, developing guidelines for how they should be maintained, and beginning a program of trail restoration to bring the trails within these guidelines, closing trails inappropriate to the park and identifying non-conforming trails which ought to be included either as primary or secondary trails, a healthy, sustainable trails system can be developed that meets the community's recreational needs while protecting the natural resources.
- Though not considered at length, City of Goleta park planners should consider upgrading some of the paved roads and trails to serve accessible needs.