



4. OPEN SPACE, CONSERVATION, AND RECREATION

Similar to the *Merced Vision 2030 General Plan*, the Bellevue Community Plan (BCP) takes an integrated approach to managing and planning for open-space resources. The goal of the Open-space, Conservation, and Recreation Chapter of the BCP is to provide an interconnected network of open-space land while still allowing for new development in appropriate areas. This Chapter outlines the varied types of open-space land and provides examples of how additional land for open-space, conservation, and recreation can be integrated with the City's existing and planned network of trails, drainage basins, and urban plazas.

An integrated design with a focus on the connectivity of open-space will help further the City's goals of not only protecting natural and man-made resources, reducing impact on wildlife habitat, and managing water and agricultural resources, but also providing an expanded network of on- and off-street bike paths, preserving Merced's unique character, and planning for a sustainable future. Also, by providing a range of open-space types, the BCP allows flexibility for design depending on the surrounding environment and intended role of the open-space land for resource preservation, recreation, health and safety, or conservation. This strategy avoids the potential for ad-hoc and haphazard placement of inaccessible and ultimately, ineffective, open-space land.

Open-space takes many forms, and integrates a wide variety of needs including recreation, resource conservation, public health and safety, natural beauty, and wildlife protection.

Open-space is one of the essential elements contributing to the high quality of life in the City of Merced. It provides a multitude of functions that are beneficial to the community.

View of Agriculture Land Near Plan Area



Lake Road Scenic Corridor



SETTING

Open-space is one of the essential elements contributing to the high quality of life in the City of Merced. It provides a multitude of functions that are beneficial to the community. The BCP recognizes that the urban form of the planning area will be shaped in a positive manner through retention of open-space elements, including sensitive species habitat, creek and/or irrigation channels, street design, and recreation-based parks. Providing a well designed open-space network will attract residents, future employers, and investment.

This section provides an overview of the setting and environmental factors most significant to the open space, conservation, and recreation system.

AGRICULTURE

Agricultural lands provide a valued aesthetic and lifestyle contrast to the more urbanized areas. Agriculture open space is seen as an intermediary use until such areas are needed for urban expansion, however.

SCENIC CORRIDORS

Bellevue Road and Lake Road are listed as Scenic Corridors in the *Merced Vision 2030 General Plan* and are also identified in the BCP as Gateways. The scenic character of Lake Road is proposed to be maintained and enhanced, where possible. Lake Road forms the eastern boundary of the BCP planning area and acts as an important element of the large rural residential character area, buffering this area from future urbanization anticipated to occur to the east. More information can be found on the Gateway design principle in Chapter 2 of this document.

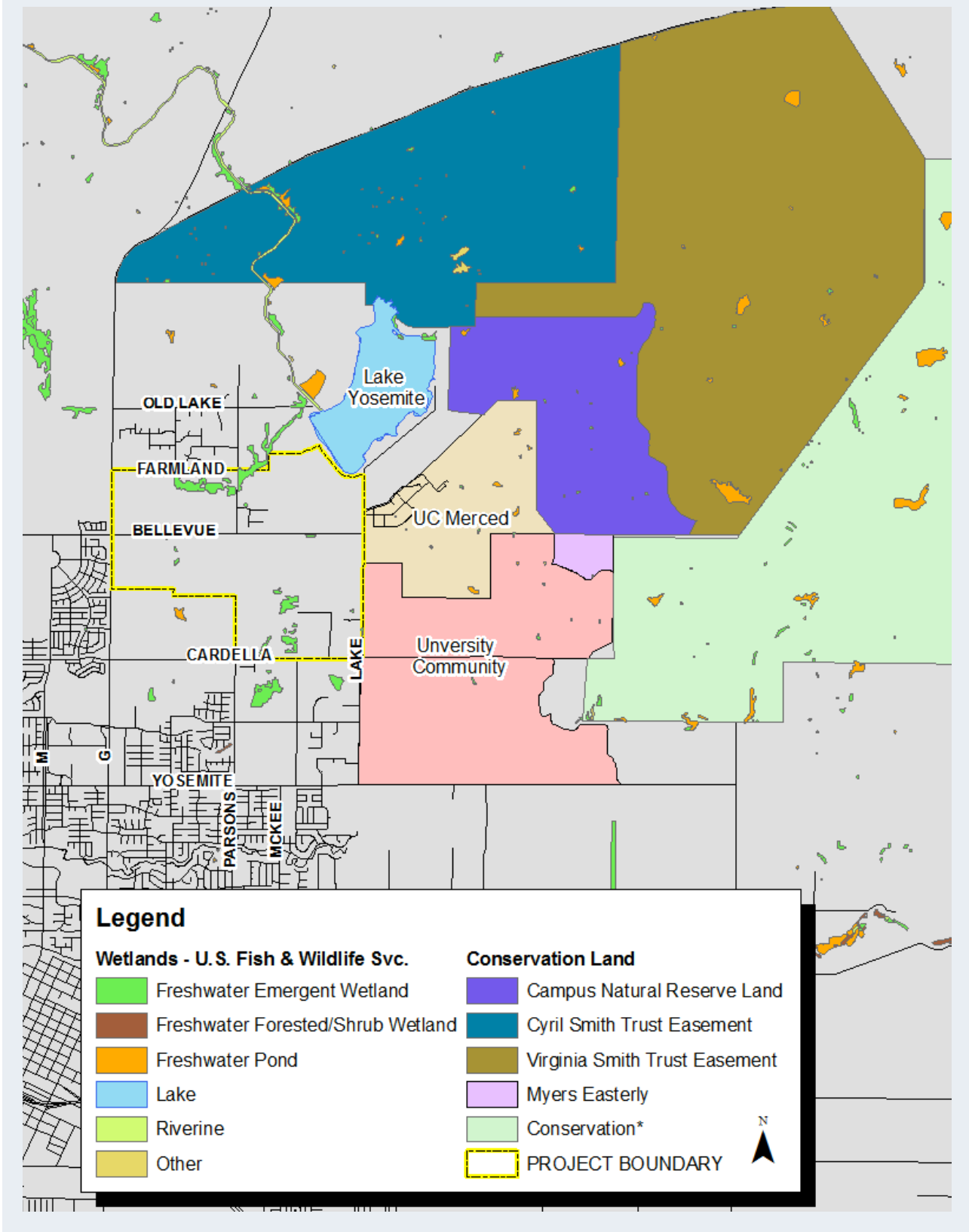
TRANSPORTATION CORRIDORS

Streets, bike paths, and transit facilities can include linear or nodal open-space features for the use and enjoyment by the public. These features include street trees, parkways, street furniture areas, storm water drainage swales, and public art. Open-space features combined with enhanced architectural designs and urban plazas can create memorable community gathering places and gateways in the community.

BIOLOGICAL RESOURCES

The BCP seeks to continue the tradition of preserving and protecting open-space corridors along natural drainages in the plan area, and to enhance or create open-space corridors in appropriate environmentally sensitive areas. Open-space Land Use, Urban Expansion, and Sustainability policies of the *Merced Vision 2030 General Plan*, which are also applicable to future development in the BCP, ensure that sensitive habitat areas, and the plants and animals found in them, are adequately considered and managed to reduce any adverse effects from development. In an effort to avoid significant future amendments to the BCP, a conceptual open-space network has been crafted to take into consideration the long-term protection of habitat and riparian areas. At the same time, the BCP recognizes that the BCP Open-space Map (Figure 37) may need to be adjusted to account for increases or decreases in

Figure 33. Sensitive Habitats and Conservation Lands within and near the Plan Area



the amount of lands to be conserved, depending on how future development projects provide for conservation and protection of sensitive habitat and species. It is important to note that while the size of an open-space corridor or area may be reduced, it should not be removed altogether.

Figure 33 from the *Merced Vision 2030 General Plan* depicts the location of conservation areas and sensitive lands within and near the BCP area. Table 7.2 in the City's *General Plan* contains a list of Special Status plants and animal species, which are likely to be found in the City's Sphere of Influence, including the BCP area.

CONSERVATION LANDS

North and east of the BCP, many acres of land have been set-aside to protect sensitive species and habitats located in the region (see Figure 33). These sites act as a natural boundary to urbanization in Northeast Merced. The size and location of future additional conservation areas, whether adjacent to these sites or within the BCP, is unknown at this time. Consistent with the mitigation measures for the *Merced Vision 2030 General Plan*, these determinations will occur either prior to or concurrent with annexation proposals. The timing of this determination aligns with the Memorandum of Understanding between the City of Merced and the United States Fish and Wildlife Service (USFWS), which sets forth development permit review procedures related to the identification and protection of sensitive species and habitats in North Merced.

POTENTIAL SENSITIVE HABITAT AREAS

The BCP planning area contains several water features, ranging from ephemeral streams, irrigation channels, wetlands, and vernal pools that may provide habitat for several sensitive species. These features are distributed throughout the BCP area and are depicted in the *Merced Vision 2030 General Plan*. Prior to development on public or private lands, detailed biotic assessments will be conducted. The results of these assessments, the determinations and requirements made by resource agencies, and any applicable mitigation measures, can play a major role in the future design of development projects.

CRITICAL HABITAT DESIGNATIONS

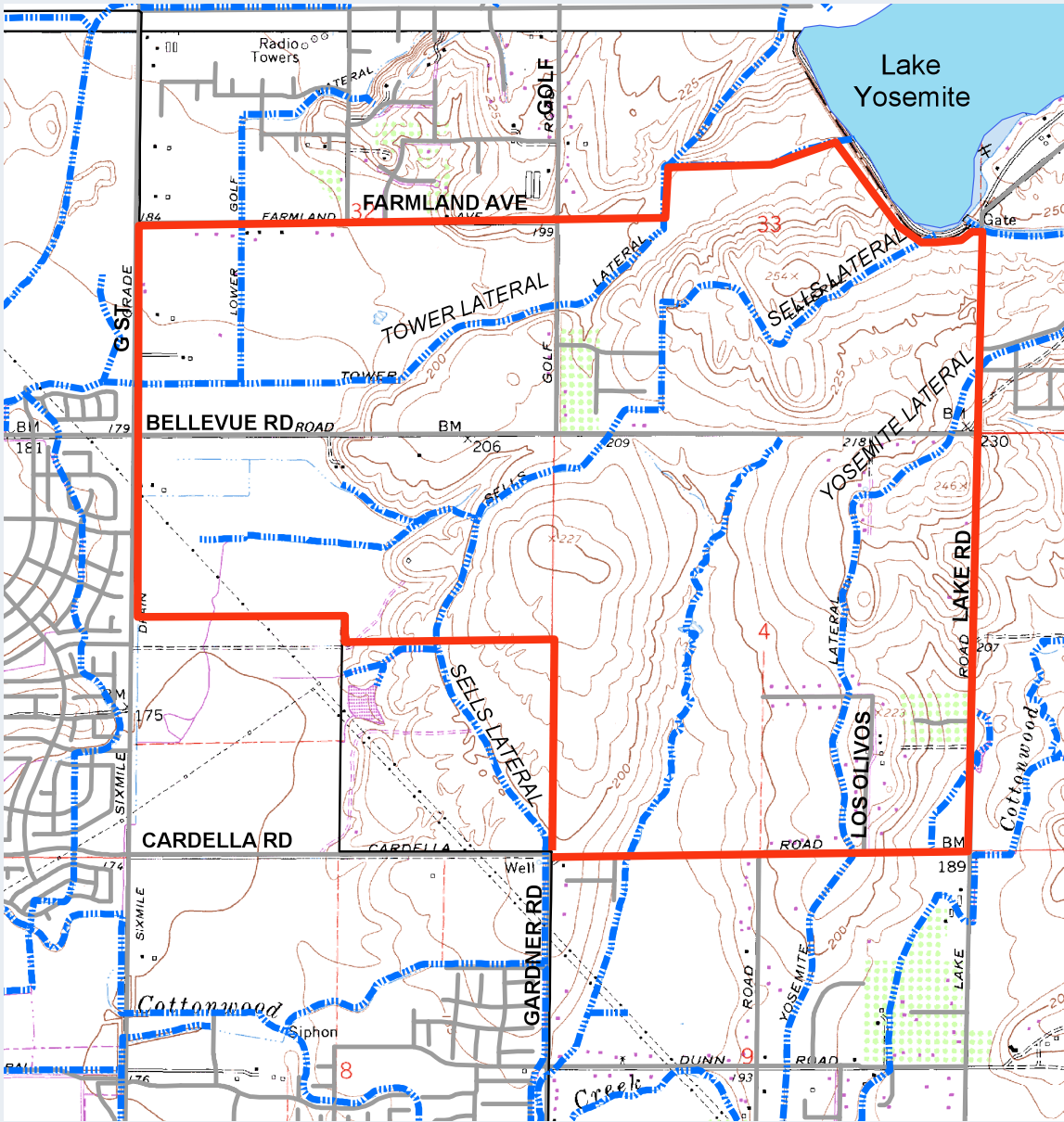
Portions of the BCP are designated critical habitat for various sensitive species. While such designation does not preclude development, it does raise the level of resource agency review and possible conservation-related requirements.

WATER RESOURCES

The water resources of the Merced area are derived from two sources: local rainfall and runoff from the Sierra Nevada Mountains. Both sources contribute to groundwater and surface water resources of the BCP area. The Merced Irrigation District (MID) irrigation reservoir and canal system captures and distributes surface water resources.

Figure 34 depicts the locations of existing natural drainages, irrigation channels and existing storm-water drainage facilities.

Figure 34. Site Topography and Drainage Features Within and Near the Planning Area



SURFACE WATER

The City of Merced contains a rich and varied surface water system which includes a natural creek and drainage system, the MID irrigation canal system and Lake Yosemite in the northeastern portion of the City’s planning area. Surface water features within the BCP include the following, and are depicted in Figure 34 and Figure 35:

- Tower Lateral
- Settlers Lateral
- Yosemite Lateral
- Lower Golf Lateral

Water flow in these laterals are less than 100 cubic feet per second (cfs), which is the threshold used by the Merced Irrigation District (MID) to bury open laterals as development occurring adjacent or over them.

Irrigation-related laterals could be piped and placed in an easement containing public open-space with or without an off-street bike path. This design option currently exists along the Buhach Lateral in the City of Atwater and could have application to irrigation laterals in the plan area. Alternatively, a collaborative approach between the City, MID and property owners to create open space corridors in the BCP with surface water should also be explored further. For example, the *Merced Vision 2030 General Plan* (Figure 7.1) depicts a well-defined open-space recreational land use area between Lake Yosemite and Golf Road, and the Tower Lateral extends through this area as well, providing an opportunity for an open-space corridor and/or bike path.

Natural drainages that are not managed for irrigation purposes can be designed as open-space corridors that maintain natural surface water and riparian features. A tributary to Cottonwood Creek, located between the Sells Lateral and the Yosemite Lateral provides an opportunity to develop an uninterrupted bikeway between Cardella Road and Bellevue Road. Figure 34 depicts natural drainage features and site topography within the BCP area.

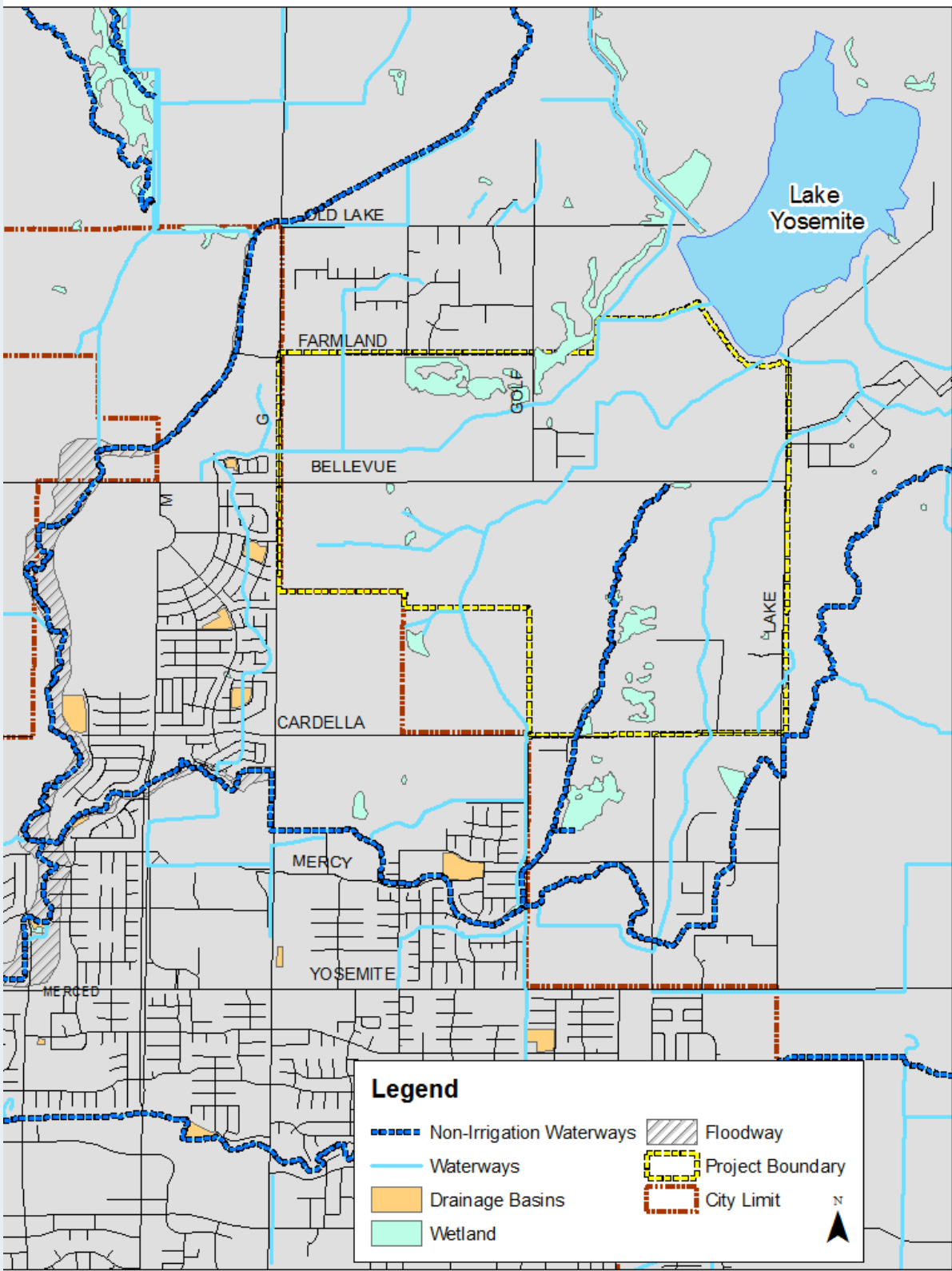
Example of a Stormwater Detention Basin



STORM-DRAINAGE

The City of Merced Storm Drainage Master Plan (2002) requires the retention of stormwater to regulate the flow into drainage channels. Storm water retention and/or detention basins are primarily used for flood control, with a secondary purpose of providing ground water recharge where soil conditions allow. These basins can also be utilized for open-space and limited recreational uses, where practical. Additionally, while the BCP area does not include sites for deep groundwater recharge, stormwater basins have the potential to recharge shallow aquifers. While joint use is encouraged, park-related uses in storm-drainage basins only partially satisfy City requirements for amounts of parkland needed to serve local populations. Opportunities to create storm-water related open-space features are discussed in the Public Facility Chapter of the BCP.

Figure 35. Wetland Features with and near the Plan Area



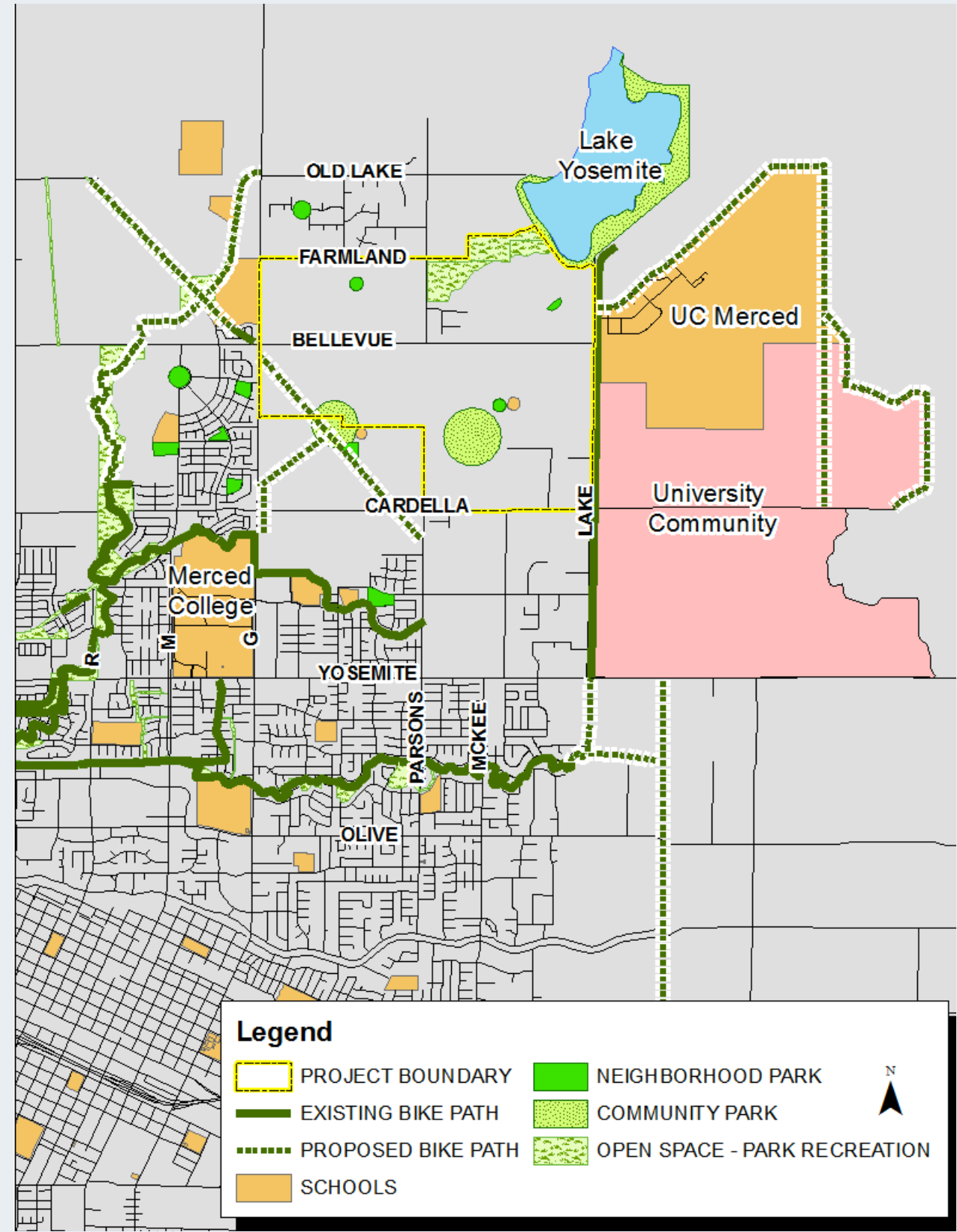
A general underlying goal of the BCP is to provide adequate services and amenities to current and future populations.

OPEN-SPACE SERVICE STANDARD

A general underlying goal of the BCP is to provide adequate services and amenities to current and future populations. This is achieved by knowing the nature and amount of increased demand for recreational facilities resulting from increased population of the BCP, and assuring the BCP provides recreational facilities or resources sufficient to meet potential demand. The City of Merced has historically used the standard of five acres of City park land for every thousand residents. Figure 36 on the following page details the existing and planned recreational facilities.

School grounds, church grounds, and Lake Yosemite are not included in the park standard; these supplement the network of the City's park lands. The City and local school districts have worked closely in the past to share facilities and programs. Similarly, lands required to be set-aside to conserve sensitive habitat are not counted when determining the amount of City park land.

Figure 36. Existing and Planned Recreational Facilities Within and Near the Plan Area



PARK TYPES

Parks in Merced are classified into the following types: Regional Parks, Community Parks, Neighborhood Parks, Mini-parks, linear parks, school parks, special use areas, urban plazas, and athletic parks. The following describes the types of recreation and park facilities which can most likely be used to meet the increase in park demand within or near the BCP area.

REGIONAL PARK

Lake Yosemite Regional Park is located northeast of the City and operated by Merced County. Lake Yosemite Regional Park is of special interest to the broader Merced community because of its water recreation opportunities and open-space qualities. It is also within bicycle commute range for many residents. It is the intent of the BCP to provide options for open-space and trail linkages to Lake Yosemite Regional Park.

COMMUNITY PARK

The *Merced Vision 2030 General Plan* (Figure 7.1 of the *Merced Vision 2030 General Plan*, showing conceptual park locations) depicts a large “floating” open-space recreational land use area in the area bounded by Bellevue Road, Lake Road, Cardella Road and Gardner (extended). This land use corresponds with proposed Community Park CP-43.

Examples of Community Parks



NEIGHBORHOOD PARKS

The *Merced Vision 2030 General Plan* (Figure 7.1 of the *Merced Vision 2030 General Plan*, showing conceptual park locations) depicts four neighborhood parks distributed throughout the BCP planning area.

Examples of Neighborhood Parks



MINI-PARK AND URBAN PLAZAS

In addition to the provision of neighborhood and community parks, the urban nature of the BCP along the Mandeville Transit Corridor warrants the consideration of urban plazas. The City's 2000 Merced Park and Open-space Master Plan defines an urban plaza as a small park, usually passive, that provides an opportunity for the public to gather in urban locations, such as "Bob Hart Square". The BCP proposes at least three urban plazas to be located within or near neighborhood commercial centers, and connected to the area's open-space and bikeway network.

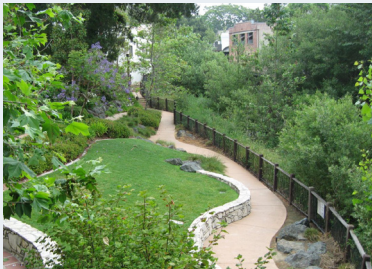
Examples of Urban Plazas



LINEAR PARKS AND OPEN SPACE CORRIDORS

In addition to provisions for park and recreational facilities, the BCP also emphasizes connectivity between open-space and encourages joint-use of existing open-space corridors. The BCP acknowledges that the connections within and between existing and planned open space is equally important to the total amount of open-space.

Examples of Open-space Corridors



In Merced's built urban environment, many off-street bike paths run parallel with the numerous creeks that traverse the City. At UC Merced, bike paths are planned with campus expansion. The BCP presents opportunities to create important transportation and recreation corridors by connecting the off-street bike paths in the City and County with those of UC Merced.

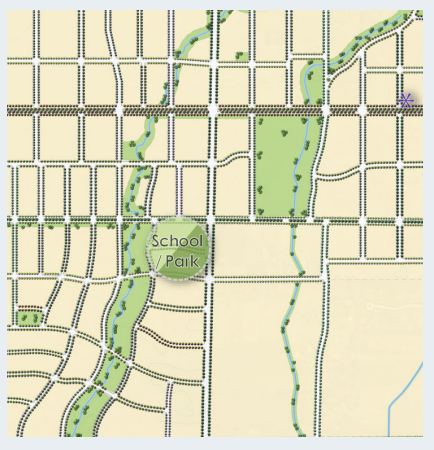
Within the BCP, continuing emphasis should be placed on locating new park sites adjacent to existing open-space corridors such as wetlands, riparian areas, and irrigation canals and ditches. Placement of off-street bike paths within these linear parks and open-space areas should be considered, especially when able to connect to local and regional destinations and other bike paths. There are several opportunities for adding open space corridors to the existing bike network, including the Tower Lateral Bikeway, the Cottonwood Creek Tributary Bikeway, and the extension of bikeways from the PG&E open-space corridors located to the southwest of the BCP planning area.

Examples of Off-Street Multi-Use Paths



Merced is familiar with off-street pathways alongside natural watercourses and through parks, but has little experience with off-street pathways that extend through urban cores, campuses, or institutional sites. The BCP abuts UC Merced and will contain many Research and Development (R&D) employment centers, providing an opportunity to create a continuous off-street bikeway. The features of this bikeway will change depending upon the surrounding environment. For example, part of the bikeway may traverse through an urban plaza, a R&D campus, alongside an active linear park, or as Merced’s first cycle-track (a bike path parallel but physically and spatially separated from vehicle traffic).

Open-Space Corridor Illustration



Examples of Bike Paths near or through R&D Centers



Safe environments for cycling facilities are essential. The application of five principles during the design process for bike paths and other human environments can reduce the incidence of crime, and include: natural surveillance, territoriality activity, access control and maintenance. For example, the principle of natural surveillance is directed primarily at discouraging criminal activity by ensuring that public spaces are easily observable. Designing for natural surveillance involves providing ample opportunity for legitimate users, engaged in their normal activities, to observe the space around them. The “eyes on the street” principle keeps more lines of sight open for normal users and potential witnesses. The overall sense of safety improves when people can easily see others and be seen.

Creekside Greenway Illustration



CONCEPTUAL OPEN-SPACE DIAGRAM

The conceptual BCP open-space diagram (Figure 37) is a composite of the open-space characteristics described in this chapter, and includes the following elements:



The BCP open-space diagram is meant to be a guiding and dynamic tool. The map establishes a network of City park land with corridors connected to important destinations and maintains acreage consistent with the City's park standard. The intent of the illustrative open-space plan for the BCP area is to establish an open-space framework consistent with community needs, but flexible enough to accommodate new information and approaches which could shift alignments and the amount of park and natural open-space lands to accommodate new information provide a better or more effective network. The open-space diagram provides the large, generally flat BCP area the opportunity to highlight and emphasize the subtle, existing natural terrain. By incorporating the existing topography, the BCP area celebrates the unique, natural qualities already present in Merced.

As with park-sites, these corridors are mapped so that future development can be designed in harmony with them, and not break or develop disconnected parks or detention basins that then become the default open-space features of the area. Rather, individual development in the BCP would help create its part of the larger interconnected open-space network.

Figure 37. BCP Open-Space Diagram



BELLEVUE COMMUNITY PLAN GOALS AND POLICIES

The goal headings of this BCP chapter are grouped into the same policy topics as the *Merced Vision 2030 General Plan*. This approach fosters consistency and builds on the City’s broader *General Plan* guidance. In furtherance of consistency with the City’s *General Plan*, Appendix C, policies specific to the BCP planning area are described in greater detail and grouped with the goals and policies it shares in common with the City’s *General Plan*. In additions to the goals and policies below, Master Plans/projects/permit applications need to take into account the BCP in its entirety and be consistent with the language herein.

Table 7 Open Space, Conservation, and Recreation Goals and Policies Specific to the Bellevue Corridor Community Plan consistent with the City’s General Plan

Goal Area OS-1: Open-space for the Preservation of Natural Resources

Policy OS-1.1: Identify sensitive habitats and species early in the development process.

Prior to or concurrent with all annexation proposals, a biological study shall be prepared to identify the presence of sensitive habitats (including vernal pools) and species. Where appropriate, a delineation of the Waters of the U.S. and wetlands shall also be performed and submitted to the U.S. Army Corp of Engineers prior to annexation of lands within the BCP.

Policy OS-1.2: Utilize the BCP Open Space Map as both a guiding framework and an adjustable dynamic planning tool.

The BCP Open Space Map, which emphasizes avoidance of sensitive habitats, may be adjusted upon annexation if supported by biological studies, and comments by state and federal resource agencies, and if alternative mitigation supported by them, and is implemented by the property owner. The BCP Open Space Map includes potential long-term habitat and riparian areas, and shifts essential land uses such as research and development parks and land uses within one-quarter mile of Mandeville away from these areas. While this approach avoids the potential loss of these significant uses due to a state or federal requirement to scale-back development, the BCP allows development to occur within the open space corridor in the event that no mitigation or alternative mitigation is applied. Pending final determinations about the extent of actual habitat area needs, the map may be amended by either increasing, decreasing or relocating the amounts of open-space lands, and meeting minimum land amount requirements by the City.

Policy OS-1.3: Encourage property owners to collaborate their planning and habitat protection and conservation responsibilities.

A collaborative approach to planning and habitat protection and conservation can allow for greater flexibility in locating development in the BCP area. Regardless of the method, steps to involve review of development proposals by resource agencies should occur early in process.

Policy OS-1.4: Encourage the formation of continuous open-space corridors.

Open-space corridors, whether developed, natural or a combination of both, should be formed with multiple use pathways within or immediately adjacent to these areas. The BCP Open Space Map includes two potential continuous open-space corridors that will offer habitat and bikeway connections to Lake Yosemite and UC Merced. The “Tower Lateral Bikeway” corridor located north and generally parallel to Bellevue Road connects to Lake Yosemite. The “Cottonwood Creek Tributary Bikeway” corridor located south of Bellevue Road connects to UC Merced. Work with the Merced Irrigation District to create approaches to permit the Tower Lateral to continue to flow along the surface and not be under-grounded.

Policy OS-1.5: Plan for the construction and use of an off-street bike path within an open space corridor along the tributary to Cottonwood Creek (The “Cottonwood Creek Tributary Bikeway”).

The “Cottonwood Creek Tributary Bikeway is located within the area bounded by Cardella Road, Lake Road, Bellevue Road and Gardner Road extended. Options for the actual location of the pathway, as well as the size and extent of the open space drainage corridor, will need to be explored as part of a master drainage study by the property owner prior to or as part of any future plans. The size and extent may also be affected by actions to conserve any proximate sensitive lands.

Policy OS-1.6: Seek to maintain the rural character of Lake Road, and shift community and regional traffic to the Campus Parkway in the long-term.

The City’s General Plan lists Lake Road as a scenic corridor. Its current design features include a two-lane road, natural drainages, a separate off-street multi-use pathway and street trees; these should be maintained and enhanced. Generally, improvements to reduce vehicular traffic congestion or to increase vehicular traffic capacity should not be made unless it is consistent with and enhances the current design features described above. Sub-standard traffic level of service may occur in order to satisfy this policy.

Policy OS-1.7: Encourage designs that enhance the view of UC Merced from Lake Road and multi-purpose path on its east side.

Whether the current view of agricultural fields and the Sierra Nevada, or future views of UC Merced and the adjacent University Community, the natural elevation of Lake Road and accompanying bike path provide a unique opportunity to create an attractive eastern view. The alignment of the campus parkway immediately east and below the bluff will create space between these areas, further establishing the opportunity for a unique visual experience.

Policy OS-1.8: Coordinate Urban Forestry Projects with other community goals.

It is possible to advance many community goals through urban forest projects. Whether the goal is to improve energy efficiency, to enhance aesthetics, to encourage walking or bike riding, to enhance property values or to prepare for increased temperatures, trees are the common solution. Urban forestry projects in the City currently include street and parking lot trees. Explore opportunities, supported by community, to expand and enhance the function of trees in the Bellevue Community Plan.

Goal Area OS-2: Open-space for Outdoor Recreation

Policy OS-2.1: Plan for and construct the “Cottonwood Creek Tributary Bikeway.”

A tributary to Cottonwood Creek extends from UC Merced to Cottonwood Creek (located south of Cardella Road) through the BCP planning area. Prior to any subdivision along either side of this watercourse, a plan that describes the location and design of how this Class I Bike Path will cross or extend under streets between UC Merced and Cottonwood Creek needs to be developed.

Policy OS-2.2: Plan for and construct the “Tower Lateral Multipurpose Pathway.”

The Tower Lateral is an existing canal that extends from Lake Yosemite to “G” Street. Prior to any subdivision along either side of this canal, a plan that describes the location and design of how this Pathway will cross or extend under streets between Lake Yosemite and “G” Street needs to be developed.

Policy OS-2.3: Seek to develop Community Park CP-43 in the BCP.

Consistent with the 2004 Park and Open Space Master Plan, CP-43 should be located on arterial or collector streets, be highly visible from adjoining streets, and should be a minimum of 20-acres in size, with the optimum being about 30-acres. Provided active recreation facilities can be provided, the community park may be sited alongside any natural open-space lands in this area.

Policy OS-2.4: Consider the utility and designation of the land immediately south and west of Lake Yosemite (between the earthen dam and Golf Road) for public park use.

This consideration could occur as part of the next update to the City’s Recreation and Parks Master Plan, or as a separate action. This site is currently designated as Park and Open Space/Recreation on the City’s Land Use Map. The site is proximate to Lake Yosemite Regional Park and has limited development potential. Significant City park resources will be located south of Bellevue Road closer to the highest population density on the BCP, however. Justification for public use and availability of funding need to be further explored prior to any expansion of the City’s planned recreation and parks open-space system.

Goal Area OS-3: Open-space for Public Health and Safety

Policy OS-3.1: Maintain the current Open Space/Parks-Recreation Land Use Designation that is located south and west of Lake Yosemite (between the earthen dam and Golf Road). Consider expanding the area as appropriate.

Proposals from property owners of land located adjacent to the site to expand the Open Space/Parks-Recreation Land Use Designation onto their properties will be considered. There may be interest by these property owners to transfer any density rights to another property within the BCP.

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