

1. INTRODUCTION

1.1 PURPOSE OF THE EIR

In compliance with the California Environmental Quality Act (CEQA), this report describes the environmental effects of the proposed Tolay Lake Regional Park Master Plan (project) located in Sonoma County. This Environmental Impact Report (EIR) is designed to inform Sonoma County Regional Parks' decision-makers, responsible agencies, and the general public of the proposed project and the potential physical effects of project approval. This EIR also examines alternatives to the proposed project and recommends mitigation measures to reduce or avoid potentially significant physical impacts.

Sonoma County Regional Parks (Regional Parks) is the Lead Agency for environmental review of the proposed project. This EIR will be used by Sonoma County Regional Parks and the public in their review of the proposed project and the Sonoma County Regional Parks with its associated approvals described in Section 3, Project Description.

1.2 PROPOSED PROJECT

This EIR has been prepared to evaluate the environmental impacts of the proposed Tolay Lake Regional Park Master Plan (project). The project would result in the development of a new open space regional park facility to serve the residents of Sonoma County. The proposed Tolay Lake Regional Park would provide day use activities and permit camping and other overnight uses on a year-round basis. The Park would be open seven days a week, from dawn to dusk.

The Master Plan consists of conceptual plans for physical improvements; a resource management plan, educational and interpretive plan, trails plan, and phasing and implementation plan; Park maintenance and operation activities; and Master Plan goals, objectives, and policies that will guide implementation of Park activities and provide resource protection measures and activities.

The Master Plan includes recreational improvements for multi-use and hiking-only trails; equestrian facilities; a Park center that includes a visitor center with interpretive and educational facilities; as well as improved restrooms and parking. The Master Plan provides resource management recommendations for continued cattle operations, as well as improvements in fencing, boundaries, and exclusion zones of sensitive habitats and prehistoric cultural resources. Additionally, the Master Plan includes improvements to park access, ADA improvements, a new ranger residence, and water supply and wastewater facilities.

The Master Plan provides recommendations for habitat restoration focusing on the restoration of Tolay Lake to maximize and improve the lake ecology for native species, and restoration of 4.5 miles of Tolay Creek in the Park. In addition, the Master Plan provides recommendations for the protection and interpretation of the significant cultural and historical resources of the property, including a schedule of tasks for long-term monitoring of natural resources in the Park.

The types of recreational activities proposed for the site include: nature study and outdoor educational programs, hiking, docent led walks, horseback riding, mountain biking, group and family picnicking, bird watching and other types of passive recreation, and overnight hike-in individual and group camping on a permit basis.

The project would be located in southern Sonoma County at 5869 Cannon Lane, approximately 5 miles southeast of the City of Petaluma, 12 miles southwest of Sonoma, and 25 miles southeast of Santa Rosa (see Figure 3-1 and -2). Primary access is from Cannon Lane, a County-maintained road off Lakeville Highway. Secondary access would be provided on the southern boundary from SR 121 north of the SR 37 intersection.

A detailed description of the proposed project, including project background and history, is provided in Section 3, Project Description. The conceptual site plan for the Park is shown in Figure 3-5. The conceptual site plan for the Park Complex area is shown in Figure 3-6. The key elements of the project are summarized in Chapter 2, Executive Summary and described and illustrated fully in Chapter 3, Project Description.

1.3 CEQA PROCESS AND PUBLIC OUTREACH

1.3.1 Notice of Preparation

Regional Parks circulated a Notice of Preparation (NOP) notifying responsible agencies and interested parties that an EIR would be prepared for the project. The NOP also indicated the environmental topics anticipated to be addressed in this EIR. The NOP was received by the State Clearinghouse on June 26, 2015. In addition, the NOP was mailed to local and regional public agencies, organizations, owners of properties adjacent to project boundaries, and individuals that have requested notification regarding the project or that are likely to be interested in the potential impacts of the project. The NOP was also published on the Regional Parks' website and in the Santa Rosa Press Democrat.

A scoping session for the Draft EIR was held as a public meeting on July 21, 2015. Four (4) comment letters regarding the NOP were received. Five (5) comment cards were received at the NOP Scoping Meeting. A copy of the NOP and the comments received are included in Appendix A of this EIR.

1.3.2 Draft EIR Public Review

Regional Parks is making this document available to local, state, and federal agencies and to interested organizations and individuals that may wish to review the EIR and submit comments. Publication of this Draft EIR marks the beginning of a 45-day public review period, starting January 10, 2017 to February 23, 2017, during which individuals and agencies may direct written comments to the following address:

County of Sonoma
ATTN: Karen Davis-Brown, Project Manager
Sonoma County Regional Parks Department
2300 County Center Drive, Suite 120 A
Santa Rosa, CA 95403
Telephone: (707) 565-1359
Or via e-mail: karen.davis-brown@sonoma-county.org

Copies of the Draft EIR are available for review at the following public locations:

Petaluma Library
100 Fairgrounds Drive
Petaluma, CA 94952

Sonoma County Regional Parks Department
2300 Country Center Drive, Suite 120 A
Santa Rosa, CA 95403

Santa Rosa Library
211 E Street
Santa Rosa, CA 95404

Sonoma Valley Regional Library
755 West Napa Street
Sonoma, CA 95476

1.3.3 Comments and Responses Document and Final EIR

All written comments received within the public review period and all oral comments received at public hearings on the Draft EIR will be addressed by Regional Parks in a Comments and Responses document, which will be released for public review. The Draft EIR and the Comments and Responses document will together constitute the Final EIR. Following circulation of the Final EIR, the Board of Supervisors will certify the EIR (CEQA Guidelines, Section 15090) during a public hearing. If the Sonoma County Board of Supervisors certifies the EIR, it would then consider approval of the project.

CEQA requires the adoption of findings prior to approval of a project where a certified EIR identifies significant environmental effects (CEQA Guidelines, Sections 15091 and 15092). If Regional Parks approves the project but the EIR identifies significant impacts that cannot be mitigated, Regional Parks must prepare a Statement of Overriding Considerations (CEQA Guidelines, Section 15093[b]).

1.3.4 Mitigation Monitoring and Reporting

At the time of project approval, CEQA requires lead agencies to “adopt a reporting and mitigation monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment” (CEQA Section 21081.6; *CEQA Guidelines* Section 15097). This Draft EIR identifies and presents mitigation measures that would form the basis of such a monitoring program. Any measures adopted by the County as conditions for approval of the project will be included in the Mitigation Monitoring and Reporting Program to ensure compliance.

1.4 EIR SCOPE

This Draft EIR is a Program-level EIR. All CEQA Guidelines Appendix G topics are discussed in the Draft EIR; however, based on the initial site analyses and public scoping, the following environmental topics are addressed in separate sections of this EIR:

- Aesthetics
- Agriculture and Forestry Resources
- Biological Resources
- Cultural Resources
- Hydrology and Water Quality

- Land Use and Planning Policy
- Noise
- Public Services and Recreation
- Transportation and Circulation
- Utilities

1.5 REPORT ORGANIZATION

The purpose of this document is to evaluate the potential environmental effects of the Tolay Lake Regional Park Master Plan (project). This document is organized to provide the public and agencies with clear, direct information on the potential environmental impacts resulting from the project. This EIR is organized into the following sections:

- *Section 1 –Introduction:* Discusses the overall EIR purpose, provides a summary of the proposed project and the EIR scope, and summarizes the organization of the EIR.
- *Section 2 –Summary:* Provides a summary of the proposed project and the impacts that would result from project implementation, and describes mitigation measures recommended to reduce or avoid significant impacts. A discussion of alternatives to the proposed project is also provided.
- *Section 3 –Project Description:* Provides a description of the project history, project site, project details, project objectives, and required permits and approvals.
- *Section 4 –Setting, Impacts and Mitigation Measures:* Describes the following for each environmental technical topic: existing conditions (setting); potential environmental impacts and their level of significance; and measures to mitigate identified impacts. Potential adverse impacts are identified by levels of significance, as follows: less than significant impact (LTS), significant impact (S), and significant and unavoidable impact (SU). The significance of each impact (after mitigation) is categorized before and after implementation of any recommended mitigation measure(s).
- *Section 5 –Alternatives:* Provides an evaluation of the alternatives to the proposed project in addition to the No Project alternative.
- *Section 6 –CEQA Required Conclusions:* Provides additional specifically-required analyses of the proposed project’s cumulative impacts, growth-inducing effects, and significant irreversible changes.
- *Section 7 –Report Preparation:* Identifies EIR preparers, references used and persons and organizations contacted.

2. EXECUTIVE SUMMARY

2.1 PROJECT UNDER REVIEW

This EIR has been prepared to evaluate the environmental impacts of the proposed Tolay Lake Regional Park Master Plan (project). The project would result in the development of a new open space regional park facility to serve the residents of Sonoma County. The proposed Tolay Lake Regional Park would provide day use activities and permit camping and other overnight uses on a year-round basis. The Park would be open seven days a week, from dawn to dusk.

The Master Plan consists of conceptual plans for physical improvements; a resource management plan, educational and interpretive plan, trails plan, and phasing and implementation plan; Park maintenance and operation activities; and Master Plan goals, objectives, and policies that will guide implementation of Park activities and provide resource protection measures and activities.

The Master Plan includes recreational improvements for multi-use and hiking-only trails; equestrian facilities; a Park center that includes a visitor center with interpretive and educational facilities; as well as improved restrooms and parking. The Master Plan provides resource management recommendations for continued cattle operations, as well as improvements in fencing, boundaries, and exclusion zones of sensitive habitats and prehistoric cultural resources. Additionally, the Master Plan includes improvements to park access, ADA improvements, a new ranger residence, and water supply and wastewater facilities.

The Master Plan provides recommendations for habitat restoration focusing on the restoration of Tolay Lake to maximize and improve the lake ecology for native species, and restoration of 4.5 miles of Tolay Creek in the Park. In addition, the Master Plan provides recommendations for the protection and interpretation of the significant cultural and historical resources of the property, including a schedule of tasks for long-term monitoring of natural resources in the Park.

The types of recreational activities proposed for the site include: nature study and outdoor educational programs, hiking, docent led walks, horseback riding, mountain biking, group and family picnicking, bird watching and other types of passive recreation, and overnight hike-in individual and group camping on a permit basis.

The project would be located in southern Sonoma County at 5869 Cannon Lane, approximately 5 miles southeast of the City of Petaluma, 12 miles southwest of Sonoma, and 25 miles southeast of Santa Rosa (see Figure 3-1 and -2). Primary access is from Cannon Lane, a County-maintained road off Lakeville Highway. Secondary access would be provided on the southern boundary from SR 121 north of the SR 37 intersection.

A detailed description of the proposed project, including project background and history, is provided in Section 3, Project Description. The conceptual site plan for the Park is shown in Figure 3-5. The conceptual site plan for the Park Complex area is shown in Figure 3-6. The key elements of the project are summarized in Table 2-1 and described and illustrated fully in Chapter 3, Project Description.

Table 2-1: Summary of Key Project Components

Component	Relevant Information
Park Complex	
Cultural Gathering Area (A)	18,000 SF - Private gathering space for use by the Federated Indians of Graton Rancheria. Outdoor facilities for shade, seating, meeting, classes, and picnicking. May include traditional structures as needed for Tribal ceremonies. May include Dark-Sky-Association compliant lighting for evening ceremonial events.
Viewpoint (B)	3 short term and 1 ADA parking spaces provided on the main entry access road. Sited to provide panoramic vistas of Tolay Lake.
Interpretive Vistas	Up to 12 interpretive vistas. May include leveled area for shade structure, seating and interpretive signage.
New Equipment Shed (C)	4,000 SF, for ranch and park operations.
Screen Plantings (D)	Native vegetation planted as needed to provide screening for neighboring properties/and as needed for Park aesthetics/shade.
Ranch Manager Residence (E)	Structural and other improvements as needed, includes Dark-Sky-Association compliant outdoor lighting.
Entry Road Improvements(F)	May include minor realignment, grading, and concrete asphalt paving from property boundary to main parking lot.
Group Camping (G)	Two (2) group camping areas provided with seating, dining, and food locker storage and leveled area for up to 50 campers per campground.
Animal Pen (I)	30,000 SF – Preserve existing animal pen for housing of ranch animals including such as pigs, goats and chickens.
Historic Corral (J)	12,000 SF – Move existing historical corral near the old stone floor barn to south of the existing tractor barn.
Preserve and Interpret Historic Working Ranch (L)	Preserve historic, bunkhouse (#2), old dairy barn (#7), creamery (#8), and slaughter house (#15) for interpretation of the historic working ranch operations. Structural improvements for long term preservation and aesthetics provided only for interpretation. Interiors viewed from outside or at the entries or windows of buildings.
Bunk House (M)	4,700 SF – New bunkhouse south of the historic granary providing overnight stay facilities for groups up to 40 people. Dark-Sky-Association compliant outdoor lighting.
Park Office (N)	5,000 SF – Structural improvements and maintenance to allow continue use of historic yellow house (#5) as main park office. Dark-Sky-Association compliant outdoor lighting.
Group Picnic (O)	Large group picnic facility south of the new bunkhouse. May include shade structures, shade trees, picnic tables, food preparation facilities, and bar-b-ques.
Maintain Working Ranch Facilities (P)	Minor maintenance and structural improvements as needed to continue use of work shop (#12), Tractor Barn (# 13), equipment shed (#14), and modern barn (#17). Continued use as part of the working ranch and for Park's Department operations.

Table 2-1: Summary of Key Project Components

Component	Relevant Information
Culinary Ethno Garden (Q)	Expanded existing historical garden plus expanded composting and greenhouse areas.
Temporary Residence (Artist etc.) (1)	Structural improvements as needed to existing cottage (#1) for use as a temporary extended stay residence. Dark-Sky-Association compliant outdoor lighting.
Sales/Group Picnic Shelter (S)	5,000 SF – Concessions or group picnic area. May include shelter, shade structure, seating, food preparation area including bar-b-ques.
Visitor Center (K) and Restroom (V)	10,000 SF – New building west of the lake and north of the Old Stone Floor Barn. Ranch style and may include interpretive displays, classrooms, video room, Park store, etc. Outdoor patio or deck seating facing the lake and landscape improvements using native plants. Public restroom. Dark-Sky-Association compliant outdoor lighting.
Ranger Residence (T)	3,000 S F– Demolish existing structure. Construct new Ranger residence, two-car garage. Located on main entry drive in location of green house (#4). Dark-Sky-Association compliant outdoor lighting.
Restrooms (V) and Showers (U)	2,400 SF – Eight (8) shower and eight (8) restroom stalls in new building located south of historic granary building in association of group overnight stay improvements. Dark-Sky-Association compliant outdoor lighting.
Riparian/Wetland Restoration (W)	Tolay Creek, Cardoza Creek, un-named seasonal streams graded/improved for habitat restoration and to minimize ongoing watershed erosion.
Kitchen and Dining Area (X)	2,400 SF indoor kitchen and 1,000 SF covered outdoor dining near historic granary (#9) and in association of programs and group overnight stay improvements. Dark-Sky-Association compliant outdoor lighting.
Spray Irrigation Area (Y)	50,000 SF – Treatment plant water used to drip-irrigate restoration projects or as spray irrigation for non-food agricultural crops surrounding the treatment ponds.
Equestrian Parking (Z)	See Parking, below, for details
Boardwalk (AA)	Interpretive and permitted non-motorized boating boardwalk access constructed near and from the Lake Causeway.
Outdoor Class/Stage (BB)	Outdoor class area graded and constructed to include shade structure/shelter, formalized group seating, group fire-pit, stage, and/or amphitheater.
Electric Vehicle Charging Stations	Installation of up to three (3) electric vehicle charging stations in Visitor Center parking area
Southern Park Area	
Host Camp Site	Southern entrance near Tolay Creek. Dark-Sky-Association compliant outdoor lighting
Trails	
Hiker Only	Ten (10) miles of natural surface trail for use for pedestrians only. Grading, retaining walls, drainage crossings, etc. as needed.
Multi-Use (Hike, Bike, Equestrian)	Twenty-two (22) miles of natural and/or rocked surface equestrian, cyclist, and pedestrian trails. Includes creek crossings/bridges, retaining walls,

Table 2-1: Summary of Key Project Components

Component	Relevant Information
	drainage structures, and surface improvement including rock-paving.
Decommission roads/trails	Decommission 8.5 miles of existing trails or roads on too steep or otherwise poor alignments by grading, seeding, planting, exclusionary signage or fencing, and/or other restoration improvements.
Camping/Overnight Areas	
Backcountry Sites	Two (2) single-family backcountry hike in camp sites near Park center, west of Tolay Creek. Minor grading for leveled area for tent, picnic table and food storage, portable restroom, minor grading. Wood screen for aesthetics.
Picnic Areas	
Picnic Areas	Informal picnic areas at Park center and various locations along trails. One to several tables, minor grading improvements made for placement.
Parking	
<i>Auto</i>	
-Daily Parking Area	Up to eighty (80) daily use parking spaces near Visitors Center and Old Stone Floor Barn. Grading and rock-paving, accessible parking for ADA compliance, surface drainage, and native landscaping. Dark-Sky-Association compliant outdoor lighting.
-South Entrance	Up to twenty-five (25) parking spaces, including ADA compliant spaces. Graded and rock-paved surface. Parking lot open regular Park hours only; sunrise to sunset.
-Events Parking, additional at Tolay Lake	Event parking just south of the ranch (located where current Tolay Fall Festival event parking). Approximately 1,000 vehicles. Open grassland area would continue use as no-till hay field or left fallow and harvested and/or mowed when needed for event parking.
-Events Parking, additional north	Two additional areas north of ranch may be used for event parking (spaces for up to 300 vehicles): grass field normally mowed used as event parking and other area within the historical rock quarry.
<i>Equestrian Parking</i>	
- North Entrance	Equestrian staging area developed above and west of the ranch near the historic dairy barn for up to thirty (30) vehicles. Existing ranch road to, and staging at the barn minimally graded, widened for parallel parking, and rock-paved. Equestrian facilities (manure bunkers and water troughs) may be installed.
-South Entrance	Equestrian staging for up to eight (8) vehicles. Area graded and rock-paved. May include manure bunker and water trough.
Infrastructure	
Water Supply/Wells	Install potable water well on eastside of lake within a few hundred yards of Causeway Trail and Pond Trail Intersect. Public use potable water and as needed for Park and ranch functions. Water alignment to the North Park Core using existing ranch roads and trails (mostly along the Causeway Trail). Solar power supply developed and/or augmented with power drop from extension

Table 2-1: Summary of Key Project Components

Component	Relevant Information
	of power line nearby from neighboring property in northeast corner of the Park.
Wastewater Treatment Plant	New wastewater treatment plant with Combined Single-Stage Trickling Filter and Natural Wastewater Treatment System. Two wetland treatment ponds. Treated water used to drip irrigate restoration projects or to spray non-food producing agricultural fields.
Cannon Lane Improvements	Minor road widening, grading, road shoulder drainage improvements, and asphalt overlay and/or paving for the entire length of the road from Lakeville Road to the Park entry road.
Hydrology & Lake Restoration (W)	
Restore and improve lake hydrology and associated wetland meadows	Restoration of Tolay Creek and irrigation channels surrounding the Lake and areas of agricultural fields to the east of the lake to a pre-agricultural conditions. Intermittently dammed or filled. Entirety of Lake may be graded to improve lake hydrology to a more natural condition. Increase water flow to the Lake north of the causeway and restore wet meadow habitat east of, and surrounding, the lake.
Causeway Culvert	Replace causeway culvert with up to ten (10) high capacity culverts across the lake, raise the causeway by up to 4.75 feet at the center of the causeway.
Farm Bridge	Grade outlet at farm bridge on Tolay Creek to widened channel and establish final lake elevation. Remove or replace farm bridge.
Levee and Bypass Culvert Removal	Remove horseshoe culvert, all bypass culverts, and associated agricultural levees. Grade lake to remove levees and restore the lake bottom to a more natural condition.
<i>Native Vegetation Restoration</i>	Plant native trees, shrubs, and perennial including grasses, surrounding the lake and throughout the wetland meadow.

**Parking and camping are also included under those topics.*

Source: Tolay Lake Regional Park Master Plan, 2016.

2.2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

This summary provides an overview of the analysis contained in Section 4, Setting, Impacts and Mitigation Measures. CEQA requires a summary to include discussion of: 1) potential areas of controversy; 2) significant impacts; 3) recommended mitigation measures; and 4) alternatives to the proposed project.

2.2.1 Potential Areas of Controversy

Potential areas of controversy were raised by the public during the scoping period. Issues include:

- Decreases in agricultural productivity for adjacent properties due to restoration activities at Tolay Lake;

- Park users being exposed to noise, dust, chemicals, and odors from adjacent agricultural uses;
- Land use and funding conflicts from Measures A, C, and F;
- Traffic/congestion on Cannon Lane;
- Increase in fire hazard;
- Light pollution;
- Signage/broadcasting equipment; and
- Potential increase of mosquitos/other vectors due to restoration activities.

Other topics that were raised by the public relate to improving equestrian uses/experience at the park, reducing the size of the visitor center, banning watercraft, restrictions on organized night time activities, dog policies, smoking policies, and trail improvements.

Topics that public agencies addressed during the scoping period include:

- Following new policies and methodologies for evaluating flow impacts outlined in the Policy for Maintaining Instream Flows in Northern California Coastal Streams, adopted by the Water Board in 2014 (State Water Resources Control Board);
- Needing an encroachment permit to proceed with any work that encroaches onto the state right of way (Caltrans); and
- Ensuring that mitigation requirements are upheld per the contract between Caltrans and Sonoma Land Trust (Caltrans).

2.2.2 Significant and Less-than-Significant Impacts

As described in CEQA Section 21060.5 and 21068, a significant effect on the environment is defined as: a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, noise, and objects of historic or aesthetic significance.

As discussed in Section 4 of this EIR, project implementation has the potential to result in adverse environmental impacts in several areas. Impacts associated with the following environmental topics would be significant without the implementation of mitigation measures, but would be reduced to a less than significant level if the mitigation measures recommended in this EIR are implemented:

- Aesthetics
- Biological Resources
- Cultural Resources
- Transportation

Impacts associated with the following environmental topics would be considered less than significant and would not require any mitigation measures based on the identified criteria of significance:

- Air Quality
- Agricultural and Forestry Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gases
- Hazards and Hazardous Materials
- Mineral Resources
- Noise
- Population and Housing
- Public Services

2.2.3 Significant and Unavoidable Impacts

As discussed in Section 4 of this EIR, the project would result in a significant unavoidable impact from:

- Traffic
- Noise
- Public Services and Recreation

2.2.4 Alternatives to the Project

The following alternative to the project is considered in this EIR:

- Alternative A: No Project/Interim Management Plan

2.3 SUMMARY TABLE

Table 2-2 identifies impacts and mitigation measures associated with the proposed project. This information is organized to correspond with environmental issues discussed in Section 4. The table is arranged in four columns: 1) environmental impacts; 2) level of significance prior to mitigation measures; 3) mitigation measures; and 4) level of significance after mitigation. For a complete description of potential impacts and recommended mitigation measures, refer to Section 4.

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Table 2-2: Summary of Significant Environmental Impacts and Mitigation Measures

Significant Environmental Impact	Mitigation Measure	Level of Impact After Mitigation
Aesthetics		
<p>Impact AES-4: Project construction and implementation would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.</p>	<p>MM AES-4: Construction or reconstruction of buildings may require the installation of new lighting. As part of the project design process, Sonoma County Parks shall specify and install night-lighting consistent with Dark Sky Association BMPs. This type of lighting shall meet the following standards:</p> <ul style="list-style-type: none"> a. Use fixtures recommended by the International Dark Sky Association b. Provide adequate light for the intended task – do not “over-light” an area c. Use fully-shielded lighting fixtures that control the light output in order to keep the light in the intended area and reduce spillover 	<p>LTS</p>
Biological Resources		
<p>Impact BIO-6: The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.</p>	<p>MM BIO-6a: Prior to project implementation, a qualified arborist would inventory trees in areas proposed for development and determine whether they are protected.</p> <p>MM BIO-6b: Valley oak trees removed would be replaced at the ratios detailed in Table 4.4-3.</p>	<p>LTS</p>
Cultural Resources		
<p>CULT-4: The project would cause a substantial adverse change in the significance of an historical resource as defined in §15064.5 [§15064.5 generally defines historical resource under CEQA.</p>	<p>Mitigation Measure CULT-4: Document by way of historic narrative, photographs and architectural drawings any built environment historic resources that are slated for removal, demolition or would be the focus of modifications and management approaches that significantly alter the resource.</p>	<p>LTS</p>
<p>CULT-5: The project would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.</p>	<p>MM CULT 5: Cease Ground-Disturbing Activities and Implement Treatment Plan if Paleontological Resources Are Encountered. In the event that paleontological resources and or unique geological features are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 60 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the County. Work shall be allowed to continue outside of</p>	<p>LTS</p>

Table 2-2: Summary of Significant Environmental Impacts and Mitigation Measures

Significant Environmental Impact	Mitigation Measure	Level of Impact After Mitigation
	the buffer area. The County shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist’s discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing.	
CULT-6: The project would disturb any human remains, including those interred outside of formal cemeteries.	MM CULT-6: Unknown Human Remains. In the event of accidental discovery of cultural resources, such as structural features or unusual amounts of bone or shell, artifacts, human remains, architectural remains (such as bricks or other foundation elements), or historic archaeological artifacts (such as antique glass bottles, ceramics, horseshoes, etc.), work shall be suspended and Sonoma County Regional Parks staff would be contacted (do not touch or remove the cultural material or human remains). A qualified cultural resource specialist and tribal representative, as appropriate, would be retained and would perform any necessary investigations to determine the significance of the find. The Parks would then implement the measures deemed necessary for the recordation and/or protection of the cultural resources. In addition, pursuant to Sections 5097.97 and 5097.98 of the California PCR and Section 7050.5 of the CHSC in the event of the discovery of human remains, all work shall be halted and the Sonoma County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission would be adhered to in the treatment and disposition of the remains.	LTS
Noise		
Impact NOI-5: The proposed Master Plan would result in a substantial and permanent increase in ambient noise levels from increased traffic levels on Cannon Lane.	There are no feasible mitigation measures available to reduce this significant increase in traffic noise this impact would be considered <i>Significant and Unavoidable</i> .	SU

Table 2-2: Summary of Significant Environmental Impacts and Mitigation Measures

Significant Environmental Impact	Mitigation Measure	Level of Impact After Mitigation
Public Services and Recreation		
<p>Impact PUB/REC-3: The project includes recreational facilities that would require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment</p>	<p>Impacts to and traffic and noise would remain significant, with no mitigation measures available to reduce their impacts. Therefore, impacts from the project for these environmental topics would be <i>significant and unavoidable</i>.</p>	<p>SU</p>
Transportation		
<p>Impact TRAF-1: Lakeville Highway (SR 116)/Stage Gulch Road: Phase A of the project would expect to increase average side street delay by more than five seconds, which would be considered significant and cumulatively considerable. However, the intersection currently warrants the installation of a traffic signal or roundabout based on traffic signal warrants and existing traffic volumes.</p>	<p>Since there is no adopted plan or funding mechanism for these improvements, the impact of the project would be considered <i>significant and unavoidable</i>.</p>	<p>SU</p>
<p>Impact TRAF-2: Lakeville Highway/Cannon Lane: Phase A of the project would be expected to increase average side street delay by more than five seconds resulting in a LOS E condition which would be considered significant and cumulatively considerable.</p>	<p>Mitigation Measure TRAF-2: The project should provide widening of Cannon Lane near throat of the intersection with Lakeville Highway. Specifically, at least 24 feet of width should be provided on Cannon Lane for 100 feet of length. Since the first 50 feet of Cannon Lane, east of Lakeville Highway, is already 24 feet wide or more, the mitigation would result in widening for approximately the remaining 50 feet. This widening would allow right-turning vehicles to travel around vehicles queued for westbound left-turn movements. Since the westbound left-turn traffic is less than 30 vehicles per hour, Level of Service criteria would not apply to this movement.</p>	<p>LTS</p>
<p>Impact TRAF-3: Lakeville</p>	<p>Mitigation Measure TRAF-3: The project should provide manual traffic control officers at the</p>	<p>LTS</p>

Table 2-2: Summary of Significant Environmental Impacts and Mitigation Measures

Significant Environmental Impact	Mitigation Measure	Level of Impact After Mitigation
<p>Highway/Cannon Lane: Project traffic volumes would be expected to increase queues in the southbound left-turn lane during the Fall Festival weekend conditions. The queues would be expected to extend well beyond the capacity of the existing left-turn lane on Lakeville Highway which would be considered significant.</p>	<p>intersection between the hours of 11:00 a.m. and 3:00 p.m. on Saturdays and Sundays during the Fall Festival.</p>	
<p>Impact TRAF-6: Cannon Lane: The County intends to provide improvements to Cannon Lane based on recommendations from the Cannon Lane Roadway Concept, April 17, 2015, Fehr & Peers. However, these improvements will not be completed prior to the opening of the project. Therefore, based on potential safety issues, this would be considered a significant impact.</p>	<p>Mitigation Measure TRAF-6: As an added safety measures for both vehicles and bicycles, the County should provide additional road safety signage such as Reduced Speed Ahead, Share the Road (bicycles), 15 mph advisory, and Narrow Road advisory signs.</p>	<p>LTS</p>
<p>Impact TRAF-7: Lakeville Highway (SR 116)/Stage Gulch Road: Phase B of the project would expect to increase average side street delay by more than five seconds and would be expected to result in a drop in operation from acceptable LOS D to unacceptable LOS E during the weekend midday peak hour, which would be</p>	<p>Since there is no adopted plan or funding mechanism for these improvements, the impact of the project would be considered <i>significant and unavoidable</i>.</p>	<p>SU</p>

Table 2-2: Summary of Significant Environmental Impacts and Mitigation Measures

Significant Environmental Impact	Mitigation Measure	Level of Impact After Mitigation
<p>considered significant and cumulatively considerable. However, the intersection currently warrants the installation of a traffic signal or roundabout based on traffic signal warrants and existing traffic volumes.</p>		
<p>Impact TRAF-8 - Lakeville Highway/Cannon Lane: Phase B of the project would be expected to increase average side street delay by more than five seconds resulting in an LOS E condition which would be considered significant and cumulatively considerable.</p>	<p>See Mitigation Measure TRAF-2.</p>	<p>LTS</p>
<p>Impact TRAF-9 - Lakeville Highway/Cannon Lane: Project traffic volumes would be expected to increase queues in the southbound left-turn lane during the Fall Festival weekend conditions. The queues would be expected to extend well beyond the capacity of the existing left-turn lane on Lakeville Highway which would be considered significant.</p>	<p>See Mitigation Measure TRAF-3.</p>	<p>LTS</p>
<p>Impact TRAF-12: Arnold Drive (SR 121)/Ram’s Gate-South Park Entrance: Phase B of the project would result in LOS F operation on the eastbound (Park exit) approach of the intersection, however, since</p>	<p>Mitigation Measure TRAF-12: When the project opens its access to SR121, a northbound left-turn lane with a storage of at least 100 feet and appropriate transition meeting Caltrans standards should be installed and operational. The left-turn lane would require widening of SR121 and would also require a Caltrans encroachment permit.</p>	<p>LTS</p>

Table 2-2: Summary of Significant Environmental Impacts and Mitigation Measures

Significant Environmental Impact	Mitigation Measure	Level of Impact After Mitigation
the approach volume totals less than 30 vehicles, it is less-than-significant by Sonoma County standards. The project would warrant the addition of a northbound left-turn lane on SR 121.		

LTS= Less Than Significant
 SU= Significant Unavoidable

3. PROJECT DESCRIPTION

This chapter describes the Tolay Lake Regional Park Master Plan (project) that is evaluated in this Environmental Impact Report (EIR). A description of the project's background, location, components, implementation schedule, and objectives is followed by a summary of required approvals.

3.1 PROJECT BACKGROUND

Tolay Lake Regional Park (Park) is comprised of two properties. The first property is Tolay Lake Ranch, a roughly 1,737-acre area that was purchased by the Sonoma County Agricultural Preservation and Open Space District (District) and its partners on September 27, 2005. At the close of escrow, the District transferred title to Sonoma County Regional Parks (Regional Parks) and retained a Conservation Easement. Sonoma County Board of Supervisors in November of 2005 approved the Tolay Lake Regional Park Interim Public Use and Resource Management Plan allowing limited public access through a Day-Use Permit Program.

The second property is the approximately 1,665-acre Tolay Creek Ranch, currently owned by the Sonoma County Land Trust (SLT), which is protected by a separate Conservation Easement retained by the District. This property abuts the southern boundary of the Tolay Lake Ranch property on the north, and SR 121 on the south. The property is fenced and used for limited grazing and is not open to the public as part of the park facility subject to the Day-Use Permit Program. The Tolay Creek Ranch includes 2.5 miles of Tolay Creek, which flows into San Pablo Bay. The SLT will transfer the Tolay Creek Ranch to Regional Parks in 2016. This property will become open to the public upon approval and adoption of the Master Plan project.

The 3,400 acres of land that comprises Tolay Lake Regional Park are the territorial lands of the Federated Indians of Graton Rancheria (Tribe), which is a federally recognized tribe made up of families from many distinct Coast Miwok and Southern Pomo communities. The diverse habitat, abundant wildlife, lush valley lakebed, and panoramic vistas made it a desired location for Coast Miwok tribal activity including ceremonial gathering and celebration. The pre-historic cultural resources of the site date back thousands of years and add a significant component of preservation, protection and interpretation that impacts all elements of Park development. Parks and the Tribe are working in partnership to collaboratively manage the Park, particularly regarding protection and interpretation of the Park's pre-historic resources.

3.1.1 Master Plan Process

The Tolay Lake Regional Park master planning process includes three major phases: Phase 1 Discovery; Phase 2, Plan Development; and Phase 3, Environmental Impact Report (EIR).

Phase 1, Discovery took place between January and June 2013 and included a variety of public engagement activities designed to solicit stakeholder and community input regarding desired future activities in the Park.

Using this public input, the project team developed the Master Plan during Phase 2, Plan Development, which took place between July 2013 and March 2015. The first step in Phase 2 was to develop conceptual plan alternatives for park development. The conceptual plan alternatives were evaluated for consistency with existing Regional Parks' policies; impacts on

health and safety; impacts to neighbors; costs to build, operate, and maintain; and consistency with federal, state and local environmental laws and Conservation Easement. Regional Parks refined the Master Plan based on the above referenced evaluation process and the Master Plan that is the subject of this EIR. The EIR reflects the chosen project components, implementation phasing, and goals and guidelines deemed most suitable for accomplishing Regional Parks' objectives for the Park.

Phase 3 includes preparation of this EIR to evaluate the environmental impacts of implementing the Master Plan. The EIR will also identify all the necessary steps required to implement actions in the Master Plan, such as obtaining environmental permits, required Conservation Easement approvals, and public access easements. Once the EIR process is complete, the Master Plan will be adopted by Regional Parks as the guiding instrument for development of the Park.

3.2 PROJECT LOCATION AND SURROUNDINGS

3.2.1 Project Location

The Park is located in southern Sonoma County, at 5869 Cannon Lane, approximately 5 miles southeast of the City of Petaluma, 12 miles southwest of Sonoma, and 25 miles southeast of Santa Rosa (see Figure 3-1 and -2). Primary access is from Cannon Lane, a County-maintained road off Lakeville Highway. Secondary access would be provided on the southern boundary from State Route (SR) 121 north of the SR 37 intersection.

The Park is located in a valley between two ridgelines, with terrain characterized by rolling hills, moist grasslands, wetlands, riparian and upland habitat, and remnant stands of oak trees. The Park is named for the approximately 200-acre shallow lake that sits in the center of the valley. Streams and artificial ponds form other water features on site. The valley is drained by Tolay Creek, which flows south through the Park towards San Pablo Bay. The Park ranges between 100 and 800 feet above sea level and is mainly vegetated with native and non-native grasslands, forbs, and tree groves.

3.2.2 Existing Land Uses

The Park is divided into two areas: the Tolay Lake Ranch property and the Tolay Creek Ranch property. The Tolay Lake Ranch property includes Tolay Lake and the Park Complex. The Tolay Creek Ranch property is the southern end of the Park and includes the Tolay Creek riparian zone (see Figure 3-3).

The Tolay Lake Ranch property includes the Park Complex, Tolay Lake, Willow Pond, Duck Pond, Fish Pond, Vista Pond, Cardoza Creek, the northern end of Tolay Creek, the East and West Ridge Zone, and a variety of trails. The Park Complex is located in the northwest corner of the Tolay Lake Ranch property, just west of Tolay Lake. The Tolay Lake Ranch property and the Park Complex are accessed via Cannon Lane.

The Park Complex consists of the Cardoza Ranch and associated buildings, including the John Cardoza Sr. house (now a ranger residence), John Jr. and Beatrice Cardoza House (now the Park office), the Bunkhouse (now a ranger residence), a cottage; an old dairy barn, hay barn, tractor barn, granary, and creamery; various shacks and storage sheds; slaughterhouse; cattle scale, corrals; and gardens. The main park entry access road provides the community access to a

variety of Park trails including ranch/operational roads that provide a circulation network within the site (see Figure 3-4 and 3-5). Emergency access/egress is provided by easements at the end of Cardoza Lane and Spolini Road. A historical quarry site will continue to be used by Park staff for Park projects and is located in the Park Complex, north of the Park entry road and the bulk of ranch buildings.

The southern portion of the Park is comprised of a portion of the historic Roche Ranch and is referred to as Tolay Creek Ranch. This area is undeveloped and includes Tolay Creek, Middle Reach, and several unnamed ponds. The area is currently leased as grazing land, and includes a large restoration project, the Tolay Creek Riparian Enhancement Plan. The enhancement strategy is to replicate a natural riparian ecosystem and floodplain riparian oak woodland. Thousands of native sedges, shrubs and trees have been planted by youth, often working through partner organizations such as Students and Teachers Restoring a Watershed (STRAW). This area is accessed from the southern entry road on the north side of SR 121.

Streams, springs and artificial ponds form other water features on the project site. The Park's southern entry access road would provide the public access to a variety of Park trails including ranch/operational roads that provide a circulation network within the Park. There is an operations access easement as well as emergency access/egress to the park at the end of Mangel Ranch Road. Park circulation is through various pastures includes associated features such as gates, fences, and bridges that relate primarily to the site's agricultural use.

3.2.3 Surrounding Land Uses

The Park is surrounded by private lands, primarily under agricultural uses or cultivation. Land uses in the areas surrounding the northern portion of the Park include wineries, dairies, grazing lands, lands under agricultural cultivation, and the CDFW Petaluma Marsh Wildlife Area. Land uses in the area surrounding the southern portion include wineries, grazing lands, lands under agricultural cultivation, the Sonoma Raceway, and the USFWS San Pablo Bay National Wildlife Refuge.

Parcels sizes in the area are large, which is commensurate with these types of land uses. Although the area is sparsely developed, residential, farm, and winery buildings are developed on many of the parcels.

3.3 PROJECT COMPONENTS

3.3.1 Project Components Overview

The proposed project includes development of a new open space Regional Park facility to serve the residents of Sonoma County. The proposed Tolay Lake Regional Park would provide day use activities and permit camping and other overnight uses on a year-round basis. The Park would be open seven days a week, from dawn until dusk.

The Master Plan consists of conceptual plans for physical improvements; a resource management plan, educational and interpretive plan, trails plan, and phasing and implementation plan; Park maintenance and operation activities; and Master Plan goals, objectives, and policies that will guide implementation of Park activities and provide resource protection measures and activities.

The Master Plan includes recreational improvements for multi-use and hiking-only trails; equestrian facilities; a Park Complex that includes a visitor center with interpretive and educational facilities; as well as improved restrooms and parking. The Master Plan provides resource management recommendations for continued cattle operations, as well as improvements in fencing, boundaries, and exclusion zones of sensitive habitats and prehistoric cultural resources. Additionally, the Master Plan includes improvements to Park access, ADA improvements, a new ranger residence, and water supply and wastewater facilities.

The Master Plan provides recommendations for habitat restoration focusing on the restoration of Tolay Lake to maximize and improve the lake ecology for native species, and restoration of 4.5 miles of Tolay Creek in the Park. In addition, the Master Plan provides recommendations for the protection and interpretation of the significant cultural and historical resources of the property, including a schedule of tasks for long-term monitoring of natural resources in the Park.

The types of recreational activities proposed for the site include: nature study and outdoor educational programs, hiking, docent led walks, horseback riding, mountain biking, group and family picnicking, bird watching and other types of passive recreation, and overnight hike-in individual and group camping on a permit basis.

The project would include a General Plan Amendment to revise the Sonoma County General Plan land use designation for the site from Land Extensive Agriculture and Land Intensive Agriculture to Public-Quasi Public/Park. The project would also include a roadway easement agreement with an adjacent landowner to allow access to the Park entry at the end of Cannon Lane. The Tolay Lake Regional Park Master Plan is provided in Appendix B of the DEIR.

The conceptual site plan for the Park is shown in Figure 3-5. The conceptual site plan for the Park's Park Complex area is shown in Figure 3-6.

Table 3-1 shows a summary of the physical project components. Details on these project components are presented on the following pages.

Table 3-1: Summary of Key Project Components

Component	Relevant Information
Park Complex*	
Cultural Gathering Area (A)	18,000 SF - Private gathering space for use by the Federated Indians of Graton Rancheria. Outdoor facilities for shade, seating, meeting, classes, and picnicking. May include traditional structures as needed for Tribal ceremonies. May include Dark-Sky-Association compliant lighting for evening ceremonial events.
Viewpoint (B)	3 short term and 1 ADA parking spaces provided on the main entry access road. Sited to provide panoramic vistas of Tolay Lake.
Interpretive Vistas	Up to 12 interpretive vistas. May include leveled area for shade structure, seating and interpretive signage.
New Equipment Shed (C)	4,000 SF, for ranch and park operations.
Screen Plantings (D)	Native vegetation planted as needed to provide screening for neighboring properties/and as needed for Park aesthetics/shade.

Table 3-1: Summary of Key Project Components

Component	Relevant Information
Ranch Manager Residence (E)	Structural and other improvements as needed, includes Dark-Sky-Association compliant outdoor lighting.
Entry Road Improvements(F)	May include minor realignment, grading, and concrete asphalt paving from property boundary to main parking lot.
Group Camping (G)	Two (2) group camping areas provided with seating, dining, and food locker storage and leveled area for up to 50 campers per campground.
Animal Pen (I)	30,000 SF – Preserve existing animal pen for housing of ranch animals including such as pigs, goats and chickens.
Historical Corral (J)	12,000 SF – Move existing historical corral near the old stone floor barn to south of the existing tractor barn.
Preserve and Interpret Historic Working Ranch (L)	Preserve historic, bunkhouse (#2), old dairy barn (#7), creamery (#8), and slaughter house (#15) for interpretation of the historic working ranch operations. Structural improvements for long term preservation and aesthetics provided only for interpretation. Interiors viewed from outside or at the entries or windows of buildings.
Bunk House (M)	4,700 SF – New bunkhouse south of the historic granary providing overnight stay facilities for groups up to 60 people. Dark-Sky-Association compliant outdoor lighting.
Park Office (N)	5,000 SF – Structural improvements and maintenance to allow continue use of historic yellow house (#5) as main park office. Dark-Sky-Association compliant outdoor lighting.
Group Picnic (O)	Large group picnic facility south of the new bunkhouse. May include shade structures, shade trees, picnic tables, food preparation facilities, and bar-b-ques.
Maintain Working Ranch Facilities (P)	Minor maintenance and structural improvements as needed to continue use of work shop (#12), Tractor Barn (# 13), equipment shed (#14), and modern barn (#17). Continued use as part of the working ranch and for Park's Department operations.
Culinary Ethno Garden (Q)	Expanded existing historical garden plus expanded composting and greenhouse areas.
Temporary Residence (Artist etc.) (1)	Structural improvements as needed to existing cottage (#1) for use as a temporary extended stay residence. Dark-Sky-Association compliant outdoor lighting.
Sales/Group Picnic Shelter (S)	5,000 SF – Concessions or group picnic area. May include shelter, shade structure, seating, food preparation area including bar-b-ques.
Visitor Center (K) and Restroom (V)	10,000 SF – New building west of the lake and north of the Old Stone Floor Barn. Ranch style and may include interpretive displays, classrooms, video room, Park store, etc. Outdoor patio or deck seating facing the lake and landscape improvements using native plants. Public restroom. Dark-Sky-Association compliant outdoor lighting.

Table 3-1: Summary of Key Project Components

Component	Relevant Information
Ranger Residence (T)	3,000 S F– Demolish existing structure. Construct new Ranger residence, two-car garage. Located on main entry drive in location of green house (#4). Dark-Sky-Association compliant outdoor lighting.
Restrooms (V) and Showers (U)	2,400 SF – Eight (8) shower and eight (8) restroom stalls in new building located south of historic granary building in association of group overnight stay improvements. Dark-Sky-Association compliant outdoor lighting.
Riparian/Wetland Restoration (W)	Tolay Creek, Cardoza Creek, un-named seasonal streams graded/improved for habitat restoration and to minimize ongoing watershed erosion.
Kitchen and Dining Area (X)	2,400 SF indoor kitchen and 1,000 SF covered outdoor dining near historic granary (#9) and in association of programs and group overnight stay improvements. Dark-Sky-Association compliant outdoor lighting.
Spray Irrigation Area (Y)	50,000 SF – Treatment plant water used to drip-irrigate restoration projects or as spray irrigation for non-food agricultural crops surrounding the treatment ponds.
Equestrian Parking (Z)	See Parking, below, for details
Boardwalk (AA)	Interpretive and permitted non-motorized boating boardwalk access constructed near and from the Lake Causeway.
Outdoor Class/Stage (BB)	Outdoor class area graded and constructed to include shade structure/shelter, formalized group seating, group fire-pit, stage, and/or amphitheater.
Electric Vehicle Charging Stations	Installation of up to three (3) electric vehicle charging stations in Visitor Center parking area
Southern Park Area	
Host Camp Site	Southern entrance near Tolay Creek. Dark-Sky-Association compliant outdoor lighting
Trails	
Hiker Only	Ten (10) miles of natural surface trail for use for pedestrians only. Grading, retaining walls, drainage crossings, etc. as needed.
Multi-Use (Hike, Bike, Equestrian)	Twenty-two (22) miles of natural and/or rocked surface equestrian, cyclist, and pedestrian trails. Includes creek crossings/bridges, retaining walls, drainage structures, and surface improvement including rock-paving.
Decommission Roads/Trails	Decommission 8.5 miles of existing trails or roads on too steep or otherwise poor alignments by grading, seeding, planting, exclusionary signage or fencing, and/or other restoration improvements.
Camping/Overnight Areas	
Backcountry Sites	Two (2) single-family backcountry hike in camp sites near Park center, west of Tolay Creek. Minor grading for leveled area for tent, picnic table and food storage, portable restroom, minor grading. Wood screen for aesthetics.
Picnic Areas	
Picnic Areas	Informal picnic areas at Park center and various locations along trails. One to several tables, minor grading improvements made for placement.

Table 3-1: Summary of Key Project Components

Component	Relevant Information
Parking	
<i>Auto</i>	
-Daily Parking Area	Up to eighty (80) daily use parking spaces near Visitors Center and Old Stone Floor Barn. Grading and rock-paving, accessible parking for ADA compliance, surface drainage, and native landscaping. Dark-Sky-Association compliant outdoor lighting.
-South Entrance	Up to twenty-five (25) parking spaces, including ADA compliant spaces. Graded and rock-paved surface. Parking lot open regular Park hours only; sunrise to sunset.
-Events Parking, additional at Tolay Lake	Event parking just south of the ranch (located where current Tolay Fall Festival event parking). Approximately 1,000 vehicles. Open grassland area would continue use as no-till hay field or left fallow and harvested and/or mowed when needed for event parking.
-Events Parking, additional north	Two additional areas north of ranch may be used for event parking (spaces for up to 300 vehicles): grass field normally mowed used as event parking and other area within the historical rock quarry.
<i>Equestrian Parking</i>	
- North Entrance	Equestrian staging area developed above and west of the ranch near the historic dairy barn for up to thirty (30) vehicles. Existing ranch road to, and staging at the barn minimally graded, widened for parallel parking, and rock-paved. Equestrian facilities (manure bunkers and water troughs) may be installed.
-South Entrance	Equestrian staging for up to eight (8) vehicles. Area graded and rock-paved. May include manure bunker and water trough.
Infrastructure	
Water Supply/Wells	Install potable water well on eastside of lake within a few hundred yards of Causeway Trail and Pond Trail Intersect. Public use potable water and as needed for Park and ranch functions. Water alignment to the North Park Core using existing ranch roads and trails (mostly along the Causeway Trail). Solar power supply developed and/or augmented with power drop from extension of power line nearby from neighboring property in northeast corner of the Park.
Wastewater Treatment Plant	New wastewater treatment plant with Combined Single-Stage Trickling Filter and Natural Wastewater Treatment System. Two wetland treatment ponds. Treated water used to drip irrigate restoration projects or to spray non-food producing agricultural fields.
Cannon Lane Improvements	Minor road widening, grading, road shoulder drainage improvements, and asphalt overlay and/or paving for the entire length of the road from Lakeville Road to the Park entry road.
Hydrology & Lake Restoration (W)	
Restore and improve lake hydrology and associated wetland meadows	Restoration of Tolay Creek and irrigation channels surrounding the Lake and areas of agricultural fields to the east of the lake to a pre-agricultural

Table 3-1: Summary of Key Project Components

Component	Relevant Information
	conditions. Intermittently dammed or filled. Entirety of Lake may be graded to improve lake hydrology to a more natural condition. Increase water flow to the Lake north of the causeway and restore wet meadow habitat east of, and surrounding, the lake.
Causeway Culvert	Replace causeway culvert with up to ten (10) high capacity culverts across the lake, raise the causeway by up to 4.75 feet at the center of the causeway.
Farm Bridge	Grade outlet at farm bridge on Tolay Creek to widened channel and establish final lake elevation. Remove or replace farm bridge.
Levee and Bypass Culvert Removal	Remove horseshoe culvert, all bypass culverts, and associated agricultural levees. Grade lake to remove levees and restore the lake bottom to a more natural condition.
<i>Native Vegetation Restoration</i>	Plant native trees, shrubs, and perennial including grasses, surrounding the lake and throughout the wetland meadow.

**Parking and camping are also included under those topics.*

Source: Tolay Lake Regional Park Master Plan, 2016.

3.3.2 Park Complex

The Park Complex includes the original Cardoza Ranch and associated buildings. These buildings include the original ranch residences, bunkhouse, equipment barns and sheds, creamery, granary, slaughterhouse, and corrals. The Park Complex also includes facilities added by Regional Parks in the last few years during the interim public access period, including a viewing platform on the lake edge, picnic sites on the historical lawns, minor maintenance and improvements to the historical garden, ranch associated barns and sheds, entry road, and trails.

As listed in Table 3-1, proposed facilities for the Park Complex would include a cultural gathering area, viewpoint, new buildings (equipment shed, ranch manager residence, bunkhouse, park office, temporary residence, ranger residence, visitor center, and showers and restroom), restoration and plantings for aesthetic and habitat improvements, picnic and kitchen/dining areas, waste water treatment and associated wetlands, boardwalk, class areas/stage, and parking, including overflow parking. Figure 3-6 shows the conceptual location of these facilities. Due to the conceptual nature of these facilities, detailed construction drawings would be prepared closer to construction of each facility.

3.3.3 Camping

As shown in Figure 3-5 and -6, the Master Plan includes the construction of camping areas. With the exception of the Group Bunkhouse in the Park Complex, all sites would be hike-in camping sites. The Master Plan includes the Group Bunkhouse, potentially holding up to sixty (60) campers, two (2) backcountry single-family type sites; and two (2) group sites (approximately 50 people each site). All development outside the Park Complex require District approval per the Conservation Easement prior to development. this includes all structural features outside the Park Complex and any signs larger than 32 square feet in size.

3.3.4 Informal Picnic Areas

As shown in Figure 3-5 and -6, the Master Plan includes installation of five informal picnic areas outside the Park Complex with tables grouped in appropriate locations along trails.

3.3.5 Trails

The Master Plan trail system would be the principal means for providing comprehensive public access to Tolay Lake Regional Park. The trail system was conceived after extensive public input and consideration of the site's many unique opportunities and natural resource constraints. The Park would include two basic trail classifications: multiple use and single use trails.

The Master Plan includes improvements to existing trails, new trails, and the decommissioning of trails that are unsuitable due to terrain and soil types, sensitive resources, or habitat degradation. Some trail segments would also require the installation of bridges. Trail alignments are shown in Figure 3-5.

3.3.5.1 Multiple Use Trails

The Master Plan includes two types of multiple use trails:

- **12-Foot Wide Trail.** These rocky or unpaved trails would be open to emergency and Regional Parks operation/maintenance vehicles in addition to all allowed trail users.
- **5-Foot Wide Trail.** The Master Plan would include segments of 5-foot wide trails, which would be the predominant trail type in the Park, and would comfortably accommodate hikers walking two abreast.

3.3.5.2 Hiker Only Trails

The Master Plan features a select number of trails that would be limited to pedestrian use only. Hiker-only trails would be similar in construction techniques to multi-use trails and with minimized widths; they would be signed at key locations alerting users to the trail use limitations. Additionally, certain segments of the pedestrian-only trails would be designed to meet the criteria for an "educational nature trail" as defined in Section 41 of the California State Parks Accessibility Guidelines.

Trails would be designed and constructed using trail design guidelines and standards as shown in Chapter 8 of the Master Plan. These guidelines and standards were crafted to guide general trail design; multiple-use, educational nature, and accessible types of trails; and emergency access roads. Chapter 8 also includes trail maintenance guidelines and an implementation schedule for trail construction.

Table 3-2 shows a list of existing trails under the Master Plan. Proposed trails would be constructed in phases with phases extending from Phase 1 (1 to 5 years), Phase 2 (5 to 10 years), Phase 3 (10 to 20 years) and Phase 4 (20 and beyond).

Table 3-2: Trails on Existing Alignments

Trail Name	Mileage*	Description
Cardoza Road	0.40	Trail has a slight grade and follows a historic route lined with eucalyptus trees.
Ranch Interpretive	0.20	Gentle grade trail that uses internal ranch circulation paths to enable visitors to view historic structures within the Park Complex.
Duck Pond	0.20	Gentle grade trail that uses internal ranch circulation paths to enable visitors to view spring fed ponds in the Park Complex.
Causeway	1.3	Trail has a gentle to slight grade and crosses Tolay Lake. Offers views of the lake, and opportunities to view waterfowl and other birds.
Historic Lakeville Road	2.7	Trail on the historic alignment of Lakeville Road is a gentle grade to and along Tolay Creek, passes through rock cairns that form a gate.
West Ridge	3.6	Trail has a gentle grade, offers outstanding views of San Pablo Bay and the Petaluma River.
East Ridge	1.6	Trail has a gentle to moderate grade and passes through an oak woodland area to 3-Bridge Vista providing outstanding views of the Tolay Watershed.
Pond	0.80	Trail has a gentle to slight grade, connecting the Causeway Trail to the upland ponds.
Upland Pond Loop	0.90	Trail has a slight grade and provides access to a unique portion of the Park with its own micro-topography, springs, and spring wildflowers.
South Creek	0.30	Spur trail off the West Ridge Trail that provides views of the Petaluma River and South Creek.
Middle Reach	0.50	Existing section of ranch road on moderate grade from Upland Pond Loop Trail along the east side of the park.
Coyote	0.3	Trail begins on an existing ranch road alignment and extends from West Ridge Trail to Tolay Creek near in camp sites.
Total Miles	12.8	

*Mileages are rounded.

Source: Tolay Lake Regional Park Master Plan, 2016.

Table 3-3 shows the proposed trails and phasing. The Master Plan would also require the construction of four trail bridges. These trail bridges are part of proposed trails, and would be constructed at the time the associated trail segment is constructed. Table 3-4 shows the trail bridges and proposed phasing plan.

Table 3-3: Proposed Trails and Phasing

Trail Name	Mileage	Description
Phase 1: 1 to 5 Years		
Tolay Creek Ranch Entry to West Ridge (m)	1.8	Moderate grade trail starts at the southern park entry road creek crossing and connects to the existing section of West Ridge Trail.
South Entry (n)	0.30	Switchback ADA compliant trail from southern parking area across bridge #1 to the intersection of Tolay Creek Ranch Entry and Meadow Trail.
Lake Vista (o)	0.10	Short multi-use trail connects the Historic Lakeville Trail to an overlook of southern Tolay Lake
Fish Pond (b)	0.60	Multi-use trail has a slight grade and extends trail south of Cardoza Creek to the Historic Lakeville Trail
Oak Knoll (c)	0.40	Hike-only trail has a slight grade wandering through the only oak woodlands in the north area of the park, opening to picnic area and views of the Tolay watershed.
West Ridge Interpret (d)	1.20	Hike-only trail has a slight grade and offers outstanding views of the Petaluma River and San Pablo Bay
South Creek (e)	0.60	Multi-use trail extends the existing trail down to south creek on a moderate grade and provides a quiet area to rest or picnic along the creek.
Burrowing Owl (new alignment) (a)	0.70	Multi-use trail has a moderate grade trail on a new alignment from Historic Lakeville Road Trail to the intersection of West Ridge Trail and South Creek Trail. Creating a shorter loop walk, approximately three miles round-trip from the park center.
Ghost Rock (p)	0.20	Hike-only trail has a gentle grade and offers views of Tolay Lake from the northwest end of Tolay Lake.
Equestrian(q)	0.40	Short segment of multi-use trail connects the equestrian parking area to the Park Complex.
Phase 2: 5 to 10 years		
Middle Reach Loop (f)	1.50	Hike-only trail has a moderate grade and offers panoramic views of the region.
East Ridge South (r)	1.30	Extension of Middle Reach multi-use trail on moderate to steep grades to connect the Upland Pond Loop Trail with southern end of the Historic Lakeville Road Trail.
Historic Lakeville Eastside Link (s)	0.40	Short segment of multi-use trail to link existing northern and southern segments of the Historic Lakeville Trail
East Ridge Canyon (k)	1.20	Multi-use trail has moderate to steep grade through secluded canyon along upper Cardoza Creek.
Group Picnic (Park Complex)	0.10	Short hike-only trail has moderate grade and connects Equestrian and Group Camp Trails in Park Complex.
Group Camp (Park Complex)	0.21	Short hike-only trail has a moderate grade and connects group camping area to group picnic area in Park Complex.

Trail Name	Mileage	Description
Group Camp (Park Complex)	0.10	Multi-use trail connecting equestrian parking area to group camp at Park Complex.
Kayne (j)	1.10	Hike-only trail has a gentle grade and runs parallel well above Tolay Creek and connects the Coyote Trail to Meadow Trail.
Phase 3: 10 to 20 Years		
Coyote (t)	0.40	Multi-use trail on moderate grade to connect the Historic Lakeville Road Trail to the Coyote Campground and West Ridge Trail.
Coyote Camp (i)	0.20	Internal circulation trail to backcountry campsites.
Tolay Creek East (u)	0.90	Hike-only trail has a gentle grade, starting in the south entry and follows Tolay Creek to Historic Lakeville Road Trail.
Meadow (u)	0.90	Multi-use trail has a gentle grade starting at the southern park entry through open meadow to Historic Lakeville Road Trail.
Middle Reach Connect (f)	0.80	Hike only trail connecting the Middle Reach Loop Trail to the Historic Lakeville Road Trail.
Toe of Slope (v)	1.0	Hike-only trail with gentle grade follows the base of the East Ridge from the Causeway Trail to the Upland Pond Loop Trail. Provides unique perspective of Park just above the valley floor.
Tolay Lake Boardwalk (Park Complex-Causeway)	0.10	Hike-only boardwalk trail connecting Visitor Center to Causeway Trail in Park Complex.
Phase 4: 20 to 35 Years		
Assess Additional Trail Needs	n/a	n/a
One Tree Knoll	n/a	These trails are tentatively proposed. Specific trail alignments would be determined only if sufficient demand and no impacts to cultural resources and only minor impacts that are mitigated for natural resources. These trails would not exceed three miles in length combined.
Tolay Creek South	n/a	
East Ridge Connect	n/a	
Boardwalk Boat Access	n/a	

Table 3-4: Proposed Trail Bridges

Bridge	Implementation Phase
Bridge #1/TCR Entry – Vehicle Bridge	Phase 1 (1 to 5 years)
Bridge #4/Lakeville Road – Vehicle Bridge	Phase 2 (5 to 10 years)
Bridge #2 – Near Mangel Road (trail bridge)	Phase 3 (10 to 20 years)
Bridge #3 – Replacement (trail bridge)	Phase 3 (10 to 20 years)

Source: Tolay Lake Regional Park Master Plan, 2016.

3.3.6 Interpretive Plan

The Interpretive Master Plan comprises one element of the Tolay Lake Regional Park Master Plan. The Park Master Plan’s purpose is to develop a framework allowing Tolay Lake Regional Park to provide a spectrum of outdoor recreation and environmental education benefits to Sonoma County residents and other visitors, while protecting sensitive habitats and cultural resources. A conceptual diagram, including the location of “story zones” associated with the Interpretive Master Plan is shown in Figure 3-7.

The Interpretive Master Plan identifies and prioritizes potential opportunities to interpret cultural and natural elements of the Tolay Lake Regional Park for visitors. Interpretive programs take a holistic approach lacing the relationship of people with the land throughout its history including but not limited to geology, hydrology, regional significance, land management practices, conservation, restoration, agriculture, and human culture.

As noted above, the Interpretive Master Plan includes self-guided and staff-guided media for interpreting features in the Park offering visitors a range of experiences from overt to subtle, from technologically connected to contemplative and quiet, and from easy to requiring thought and understanding to access. Education and interpretive elements are described fully in Chapter 7 of the Master Plan.

The Interpretive Plan includes concepts for twelve Park zones including the Ranch/Visitor Center, Lake Vista, Petaluma Marsh, Agriculture, Oak Woodland, East Ridge Viewpoints, the Central Ponds, Middle Reach, Historical Route, Tolay Creek, Bay View Point, and the South Entrance. The stories of the people and the land will be told throughout the site through these story zones. The zones and concepts are shown in Table 3-5.

Table 3-5: Tolay Lake Regional Park Interpretive Zones

Zone	Concept
Ranch/Visitor Center	Regional Overview, Site Overview, Native American Story – (prehistoric, historic, living tribe, significance of archeology, culture, land and lake) Vaquero’s Story, Portuguese Farmers’ Story, Present Agricultural Use, Duck Pond and Waste Water System. Comprehensive story of the Tolay Valley throughout history and the possibilities of its future.
Lake Vista	Native American Significance, History, Values, Ethnobotanical Uses, Living Tribe, Story of the Lake, Hydrology, Birds, ecosystems and native flora and fauna.
Petaluma Marsh	Views, Regional Overview, Site Overview, Natural Marsh, Wetland Habitat, Marsh, Wetland Restoration, Native American (ethno-botanical, importance to prehistoric people and living tribe), Climate Change and Local Effects, Lakeville Town Story, Geology and Geomorphology
Agriculture	Restoration, Native American Significance, changes to way of life with Euro-American invasion), Ethnobotanical Uses, Living Tribe, Ranchers’ Story, Vaqueros’ Story
Oak Woodland	Native American Significance and life ways, Ranchers’ Story, Restoration, Bay Oak Woodland
East Ridge View Point	Views, Regional Overview, Site Overview Geology and Geomorphology, Native American relationship of Tolay to surrounding communities and locations. Ancient place names.
Central Ponds	Natural Habitat, Fresh Water Springs, Historical Route, Birds, Fishing Destination, Native American relationship with the land, changes to the environment because of Euro-American agricultural practices.
Middle Reach	Views, Crash Site Memorial, Native Americans, relationship to the land and the living tribe, ancient burning practices and living tribe interest in burning, native grasslands and wildflowers, grazing practices and relationship with managing the land, burning as a land management tool.
Historical Route	Historical Route, Natural Habitat, Riparian, Restoration – Creek Riparian Areas, Native American, relationship of creek to native life, living tribe use of native plants and value of willow burning
Tolay Creek	Historical Route, Natural Habitat, Riparian, Bay Oak Woodland, Restoration – Creek Riparian, Bay Oak Woodland, Native American ethnobotany, willow burning, basket weaving etc., living tribe work and interests, relationship with the land.
Bay View Point	Views, Natural Habitat, Bay Ecosystem, Serpentine Ecosystem, Climate Change and Local Effects, Regional Overview, Native American neighboring tribe locations and relationship, living tribe and climate change.
Southern Entrance	Regional Overview, Site Overview, Native American overall story and significance of the Park historically and living, Visitor Kiosk, Signage

Source: Tolay Lake Regional Park Master Plan, 2016.

3.3.7 Habitat Restoration and Enhancement

The Master Plan includes restoration and enhancement activities for developed and disturbed areas, native habitat areas, stream and riparian habitats, Tolay Lake and other wetland areas, woodlands, grasslands, meadows, and grazing areas. These activities include restoration/enhancement activities, invasive species management, fire management, resource protection guidelines and standards, and adaptive management strategies. As shown on Figure 3-8, the Master Plan would also implement proposed restoration in areas. These activities include native grassland monitoring, riparian and woodland plantings, and wetland and meadow plantings.

More detail on these activities is included in Chapter 6 of the Master Plan for details of the Resource Management Plan.

3.3.8 Lake Restoration

Tolay Lake is a shallow lake, averaging between 4 to 8 feet in depth and filling in the winter and draining in the spring, with a surface area of approximately 200 acres during the rainy season. Tolay Lake would be restored to its original hydrology within the Lake and original wet meadow, and improved to reduce flooding to upstream properties. Restoration activities would maintain an elevation at the lake outlet of 215 feet (msl). The restoration would establish a stable water elevation and high quality wetland habitat on both sides of the Causeway, increase water movement, and return the lake to a more natural, pre-agricultural condition, and reduce upstream flooding.

The goal of the restoration would be to restore, enhance, and increase seasonal wetland habitat, and habitat for shorebirds, dabbling ducks, and waterfowl. This includes providing water depths that range from 0 to 1.5 feet deep for shallow and deeper seasonal wetlands, which would provide foraging habitat for dabbling ducks during annual migrations.

The restoration would include: filling or intermittently damming Central Lakebed Channels A and B and Drainage Channel 2, removing or intermittently damming hillside drainage ditches (North Creek, Eagle Creek, East-West, Pumpkin Patch, and Drainage Channel 1), raising the elevation of the causeway by as much as 4.75 feet at its center and replacing the Causeway Culvert with ten (10) high capacity culverts, removing the Horseshoe Culvert and associated levees, enlarge the outlet at the Farm Bridge, and replacement of the farm bridge. The proposed lake restoration is shown in Figure 3-9.

3.3.9 Cultural Resource Conservation

The Tolay Creek watershed and its surrounding landscape represent a long continuum of significant cultural prehistoric and historic traditional Native American practices, and diverse and numerous archaeological sites.

The Master Plan project components have been developed to avoid, protect and monitor sensitive cultural resources in the Park. The Master Plan includes objectives and standards developed allowing for adaptive management to best protect cultural and tribal resources within the Park. See Chapter 6 of the Master Plan for details of the Cultural Resource Management Plan.

3.3.10 Circulation and Access Improvements

Northern park access via Cannon Lane would be improved to serve the anticipated annual average daily vehicle traffic following buildout of the Park in 2035. Currently, the paved width of Cannon Lane ranges from 14 to 24 feet, with degraded edges and potholes. Improvements would include repaving, establishing uniform road width, and improved shoulders for bicycle use. In order to accommodate projected visitor increases as well as high traffic volumes during the Fall Festival, Cannon Lane would be paved to a 22-foot standard road width, with two nine-foot travel lanes, two 2-foot shoulders for bicycle travel, and an additional three feet of graded shoulder as feasible along both sides. These improvements would apply to the entire roadway length, where feasible. Figure 3-10 shows conceptual improvements to travel lanes on Cannon Lane.

Circulation and access improvements also include vehicle bridges needed on trails that would provide access for emergency and maintenance vehicles. These vehicle bridges are shown in Table 3-4: Trail Bridges.

3.3.11 Environmental, Cultural, and Agricultural Study and Education

The mission of Regional Parks is to create healthy communities and contribute to the economic vitality of Sonoma County by acquiring, developing, managing and maintaining parks and trails county-wide. Regional Parks preserves irreplaceable natural and cultural resources, and offers opportunities for recreation and education to enhance the quality of life and well-being of residents and visitors to Sonoma County.

The Master Plan includes environmental, cultural, and agricultural study and education activities, including programs. Programs would be an important interrelated aspect of the Park and vital to its operation. Interpretation of the Park's rich cultural and natural history is fundamental to a full understanding and appreciation of all the Park has to offer. Through program run school field trips an opportunity for learning in context and showcasing the value of the Park in the community is realized.

Existing exciting education programs are successfully being implemented at the Park now, Healthy Earth, Healthy Bodies, Acorn to Oaks, and the Tolay Fall Festival. Park programs would be based on but necessarily limited to the region and Parks history, cultural, agricultural, and natural resources. Programs at the Park may include; specialist led interpretive hikes and outings including group overnight stay opportunities, Native American interpretive historical culture, Native American ceremonies, teaching garden, historical and modern agricultural practices, climate and geology, and incorporating programs with the Tolay Fall Festival throughout the month of October. Regional Parks will continue in its endeavor to enhance quality of life and well-being to residents and park visitors with a broad outlook on interpretive and educational opportunities through innovative program development.

3.3.12 Special Events

The Park would also host special events. Some events, like the Tolay Fall Festival, are currently held at the Park under the Interim Public Access and Resource Management Plan. These events would continue under the Master Plan. Events like the Tolay Fall Festival integrate aspects of both an event and program. The event occurs exclusively in the month of October in alignment

with the Cardoza Pumpkin Festival, which was historically held by the previous land owners. Organized school groups attend Monday through Friday facilitated by educational programs through the week. The event is opened to the public on weekends. The Fall Festival includes a strong element of education throughout the family oriented event, but includes an aspect of celebration and entertainment. The Fall Festival includes games and events, food, music and miscellaneous vendors on site throughout the event. No events would be staged outside of the Park Complex.

Although events in the park may be based on the Parks cultural and natural resources; most events would be more celebratory, fund raising, or entertainment oriented. Events may include, but not be exclusive to; the Tolay Fall Festival held in October, run race events, equestrian focused events, and all may also include live entertainment and vendors.

As shown in Table 3-6, the Master Plan would allow for scheduled special events and would be scaled to accommodate the number of attendees shown below.

Table 3-6: Tolay Lake Regional Park Special Events

Activity/Program	Occurrence	Estimated Attendees	Day	Time	Hours
Tolay Fall Festival (TFF)– Park Center	October	Not to exceed 30,000/event	6-24 days	M-F Sat & Sun	8a – 4p 8a – 10p
Large Event not TFF – Park Center	Nov-Sept	Not to exceed 1,200/day	4 days	Sat &Sun only	8a – 10p
Medium Event	Nov-Sept	Not to exceed 500/day	10 days	M-F Sat & Sun	3p-10p 8a-10p
Small Event	Nov-Sept	Not to exceed 150/day	20 days	Sun - Sat	8a-10p

3.3.13 Infrastructure

The Master Plan includes the construction and installation of water supply and wastewater infrastructure to accommodate the increase in visitation and proposed project components and programming.

The Park currently does not include potable water for public day use. A spring is currently located on the east side of the Lake, which was developed for the ranger residence and employees of the park. The spring has the capacity to produce 18 gallons per minute. To accommodate potable water for public use a new source of potable water would be established as part of the project. In the course of the Master Plan preparation, Regional Parks considered two options for potable water: developing a surface water source or a groundwater source of potable water.

From a water quality standpoint, and to minimize operational and maintenance requirements, Regional Parks chose to develop a new well as the best method to meet the Park’s future potable water requirements. A waterline would be required to convey water from the well heads to the

service areas of the Park. The proposed well location and water line route are shown in Figure 3-11.

Construction of new visitor facilities, including flush toilets and showers, would require waste and wastewater treatment facilities. The wastewater system would include a dual chamber septic tank, a duplex pump system, grease trap, trickling filter, treatment wetland, and potential spray irrigation area. The system would use passive aeration, clarifier tanks, and wetlands to provide the aerobic and anaerobic environments for treatment of the wastewater. The system would remove suspended solids and organic loading to the final wetland.

The treatment plant would have a 19,460-gallon treatment capacity during peak use of the system. The septic tank and duplex pump system would be located within the Park Complex area, located northeast of the Old Stone Floor Barn and adjacent to the proposed visitor center. The grease trap would be located near the proposed kitchen building. The trickling filter, treatment wetland and irrigation area would be located on the north and east sides of the Duck Pond. Treated water from the ponds would be used to drip irrigate restoration projects or used to spray non-food producing agricultural fields. The proposed wastewater facilities are shown in Figure 3-12.

A camp host site would be constructed at the southern entrance. The camp host site would be located within the District Approved Conservation Easement 5-acre Residential Envelope. The camp host would help with daily maintenance at the south entrance and help to secure the south entrance, monitor daily activity and protect the sites sensitive archeological resources. A leveled area for a trailer or other RV type would be graded and parking surface area rock-paved, picnic table and storage will be included in the site development. Outdoor lighting would be motion sensor Dark-Sky-Association compliant and associated with only the camp host site.

3.3.14 Operations and Management

The Master Plan O&M Plan includes a Business Plan, Operations and Maintenance Element, and an Implementation and Phasing Strategy. Regional Parks anticipates that visitation to the Park would increase as public access and attractions increase. Regional Parks' staff would monitor changes in visitation in terms of demand and specific timing for proposed new facilities; costs of developing, operating and maintaining those facilities; and revenues and potential funding sources to offset new costs associated with Park build-out. The Master Plan includes Operations and Maintenance (O&M) guidelines to address changes in use and associated costs. The O&M includes a business plan, O&M guidelines and standards, a phasing plan for new development, and a list of potential funding sources.

The business plan for Tolay Lake Regional Park includes an estimate of expenditures and revenue stream to offset as much of the operational costs as possible. The Operations and Maintenance (O&M) element would provide guidelines and standards for the Park. These guidelines and standards were designed for flexibility to accommodate potential legal, regulatory, and social changes in the future. Guidelines provide general direction about how particular actions would be completed. Standards are more specific and in some cases include a quantifiable action. Guidelines and standards were developed from review of other similar Master Plans and based on current management practices at Regional Parks. The Master Plan O&M Plan is included in Chapter 9 of the Master Plan.

The Master Plan would be implemented in phases over the course of the next 35 years. Within the Master Plan area there are a number of distinct project areas that can be implemented in both the near and long term. Some of these improvements can be completed independently as stand-alone projects, while others are dependent on other projects or project areas being completed or constructed concurrently. The main project type categories, followed their respective examples, include:

- Trail Network, Camping and Picnic Areas: new trails construction, trail bridges for creek crossings, decommissioning trails, viewpoints, picnic areas and tent camping areas
- Buildings and Utilities: visitor center, wastewater treatment plant, spray irrigation, restrooms, showers, historic buildings (i.e., Creamery/wine storage building)
- Interpretive Features: story zone locations
- Traffic and Circulation Improvements: Cannon Lane improvements, traffic signal additions, parking facilities improvements
- Tribal Projects: cultural gathering area
- Environmental Restoration: Tolay Lake, native grassland, and riparian/wetland restoration

Development of any components identified in the Master Plan may be done as one project or in multiple sub-phases, based on numerous factors including but not limited to funding sources and availability, capital improvement plan priorities, available infrastructure, cultural and other environmental constraints, and community volunteerism and support. Overall project phasing and implementation is shown in Table 3-7.

Table 3-7: Tolay Lake Regional Park Master Plan Phasing

Type of Project	Project Name
Phase 1 – First 5 Years	
Trails/Camping/Picnic	TCR Entry to West Ridge (Multi-Use Trail)
	Bridge #1/TCR Entry – Vehicle Bridge
	South Springs (Service road)
	Lake Vista (Story Zone 2)
	Burrowing Owl (New alignment Multi-Use Trail)
	Fish Pond (Multi-Use Trail)
	Equestrian (Multi-Use Trail)
	Oak Knoll (Hiking Trail)
	West Ridge Interpret (Hiking Trail)
	South Creek (Multi-Use Trail)
	Ghost Rock (Hiking Trail)
	Coyote Trail (Multi-Use Trail)

Type of Project	Project Name
	Picnic Tables and Benches
Buildings and Utilities	New Equipment Shop
	Screen Plantings
	Old Dairy Barn – Partial Preserve
	Park Complex Landscape and Culinary Garden
	Well and Water System
Traffic and Circulation	Signage improvements for wayfinding, Maintain existing conditions for opening
	Equestrian Parking
	Overflow Parking
	Park Complex Service Yard Road
	Equestrian Entry Road and Viewpoint
	Cannon Lane Improvements
	Pave Park Center Entry Road
Interpretive Features	Park Complex
	Lake Vista (Story Zone 2)
Environmental Restoration	Various wetland restoration areas
Phase 2 - 5-10 years	
Trails/Camping/Picnic	Middle Reach Hike (Hiking Trail)
	East Ridge South (Multi-Use Trail)
	Group Camping & Trail Park Center (Group Site Facility)
	Historic Lakeville Eastside Link (Multi-Use Trail)
	Bridge #4/Lakeville Road – Vehicle Bridge
	East Ridge Canyon (Multi-Use Trail)
	Tolay Creek West Creek (Hiking Trail)
	Group Picnic & Trail (Facilities Park Center)
Buildings and Utilities	Move Historical Corral
	Additional Overflow Parking
	Sales/Group Picnic Shelter
	Park Office
	Vera/Green House Demolition
	New Ranger Residence
	John Sr. House – Range Manager Residence
Traffic and Circulation	South Entry Road – A/C Pave

Type of Project	Project Name
	South Parking Lot
Interpretive Features	Comprehensive Plan
	Entry Road Vista
	East Ridge View Point (Story Zone 6)
	Oak Woodland (Story Zone 5)
	Park Center Interpretive Programs (Story Zone 1)
	Ghost Rock
	Agriculture (Story Zone 4)
	Petaluma Marsh (Story Zone 3)
	South Entrance
Environmental Restoration	Lake Restoration (Design and Initial Activities)
FIGR Projects	Cultural Gathering Area
Phase 3 – 10-20 Years	
	Coyote Camp & Trail (Individual hike in backpack camp sites)
	Bridge #2 – Near Mangel Road (trail bridge)
	Bridge #3 – Replacement (trail bridge)
	Meadow (Multi-Use Trail)
	Toe of Slope (Hiking Trail)
	Tolay Creek East (Hiking Trail)
	Middle Reach Connect (Hiking Trail)
	Group Camping Ponds
Buildings and Utilities	Waste Water Facility
	Visitor Center with Restroom
	Boardwalk
	Visitor Center Parking and Stormwater/Drainage for Parking
	Outdoor Class Stage
Interpretive Features	Central Ponds (Story Zone 7)
	Middle Reach (Story Zone 8)
	Historical Route (Story Zone 9)
	Tolay Creek (Story Zone 10)
	Bayview Point (Story Zone 11)
	Portable Interpretation Display
Environmental Restoration	Lake Restoration
Phase 4 – 20-35 Years	

Type of Project	Project Name
Trails/Camping/Picnic	Parkwide Assessment of Additional Trail Needs
	One Tree Knoll (Hiking Trail)
	Tolay Creek South (Hiking Trail)
	East Ridge South Connect (Hiking Trail)
Buildings and Utilities	Hay Barn/Stone Floor Barn – preserve
	Animal Pen
	Temporary Residence/Artist Residence
	Kitchen and Dining
	New Bunk House
	Showers
	Restroom
	Creamery – preserve
	Old shop – preserve
	Equipment shed – preserve
	Slaughter house – preserve
	Ranch Manager Residence

Source: Tolay Lake Regional Park Master Plan, 2016.

3.3.15 Fire Safety and Emergency Access

The Master Plan includes an emergency evacuation plan. The overall Park and Park Complex emergency evacuation plans are shown in Figures 3-13 and -14, respectively. Emergency access routes include primary and secondary emergency evacuation routes, emergency vehicle access routes using existing roads and existing and proposed trails, fire suppression water sources, and helicopter landing zones.

3.4 PROJECT OBJECTIVES

The objectives of the project include:

- Preserve a land that is sacred with deep spiritual significance;
- Preserve a land that reflects California’s long and storied heritage;
- Create an outdoor destination in the region for all ages and cultures;
- Create a recreation resource to inspire;
- Restore and preserve a thriving, ecologically rich landscape;
- Create a place for innovative and interactive education and experiences;
- Preserve a landscape to experience and learn about its natural and cultural history; and
- Create a space to find peace and respite.

3.5 REQUIRED PERMITS AND APPROVALS

For the proposed project, Sonoma County Regional Parks is the Lead Agency. Approvals that may be required for implementation of the project include the following.

Table 3-8: Potential Permits and Approvals

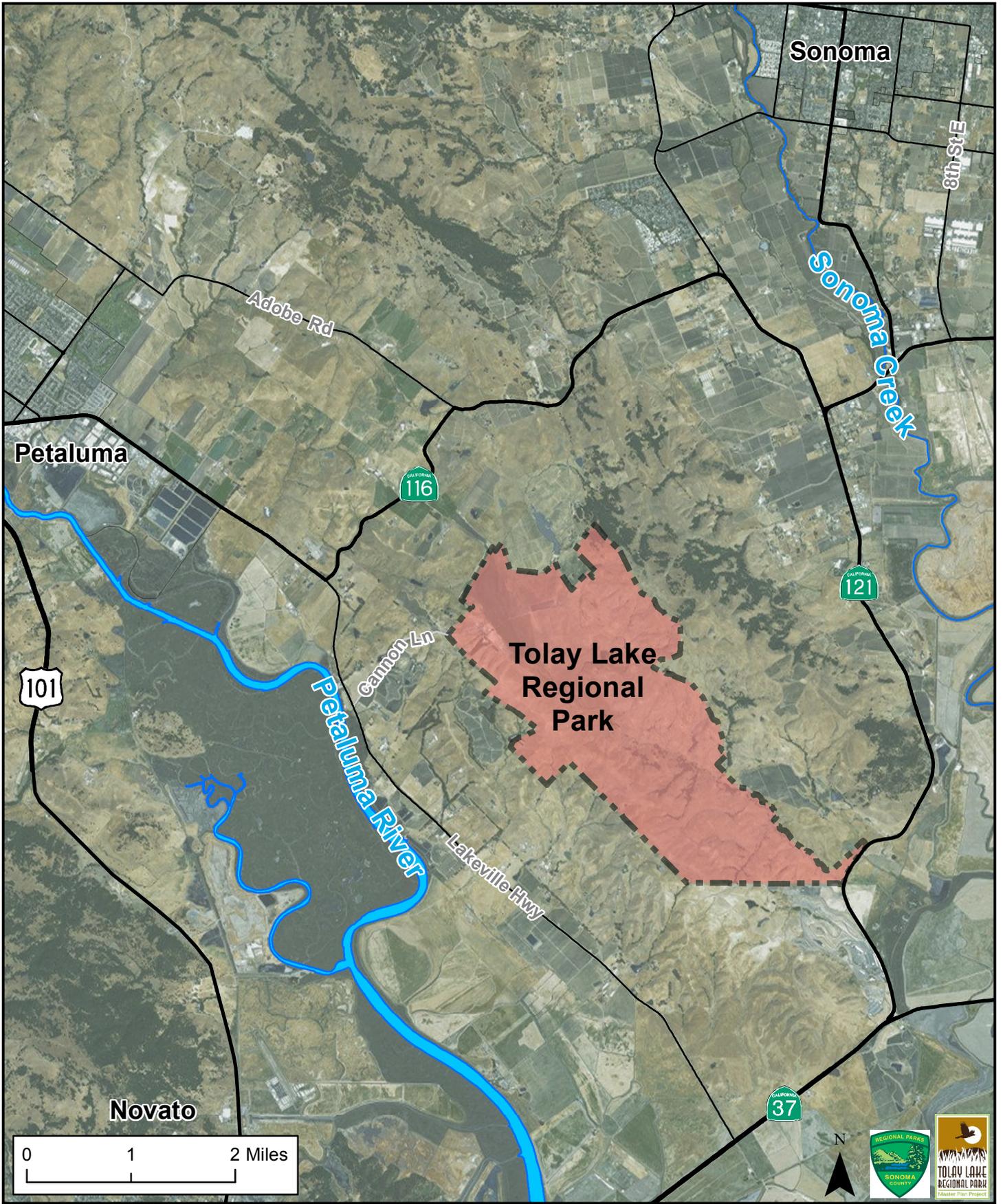
Lead Agency	Permit
Sonoma County	Project approval, EIR certification, General Plan Amendment
Sonoma County Agricultural Preservation and Open Space District	Master Plan approval (per Tolay Lake Conservation Easement and Tolay Creek Conservation Easement)
California Department of Transportation (Caltrans)	Encroachment Permit for Southern Entrance
U.S. Army Corps of Engineers (Corps)	Wetland Delineation Approvals and Permit
United States Fish and Wildlife Service (USFWS)	Consultation with USFWS regarding fish and wildlife resources
California Regional Water Quality Control Board, North Coast Region (RWQCB)	National Pollution Discharge Elimination System (NPDES) Permit Section 401 certification for water quality
California Department of Fish and Wildlife (CDFW)	Section 1602 Streambed Alteration Agreement Review and comment on wetlands impacts and sensitive species
Marin-Sonoma Mosquito and Vector Control District	Mosquito abatement monitoring and abatement coordination

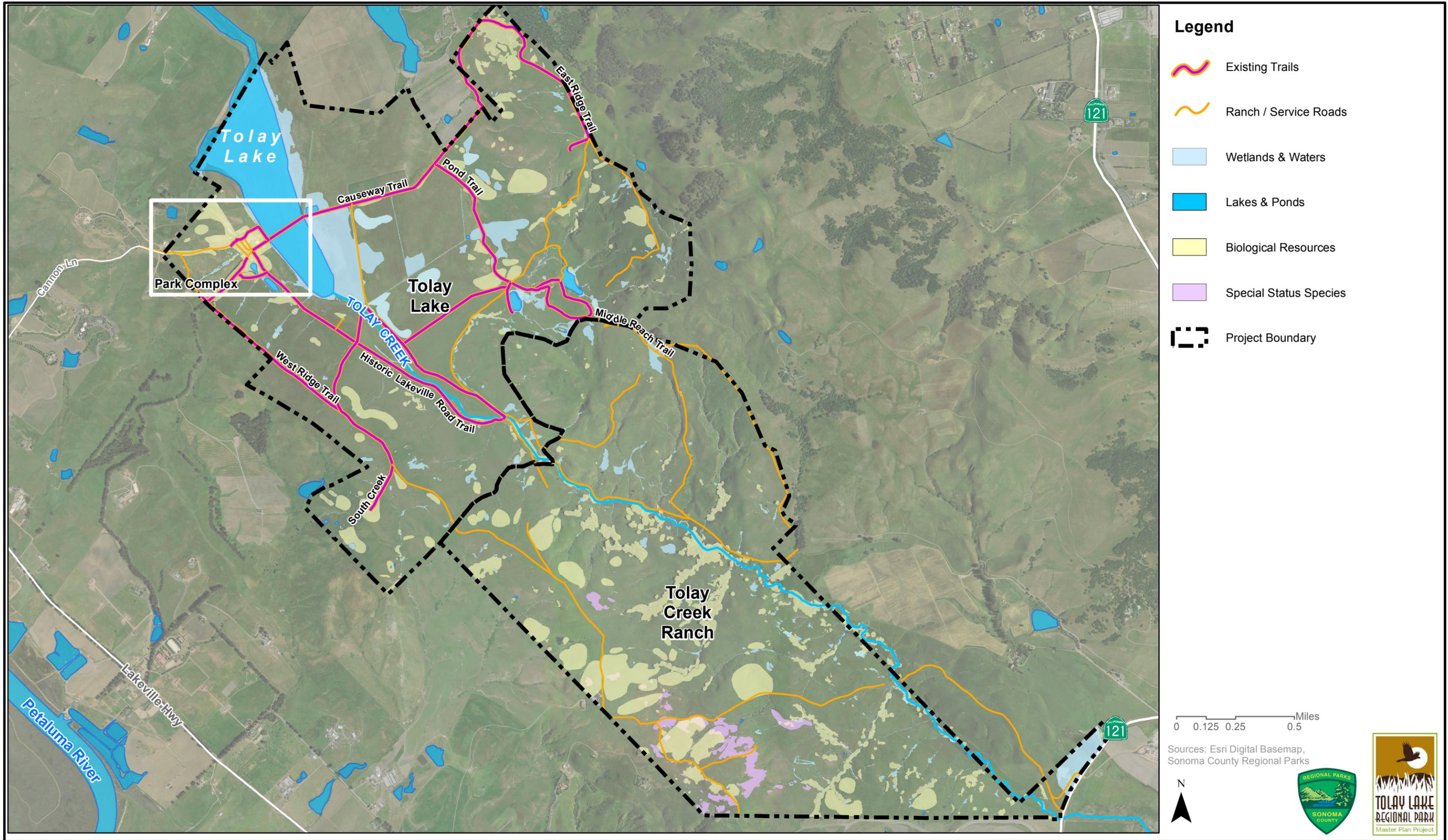
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 Sonoma County, CA

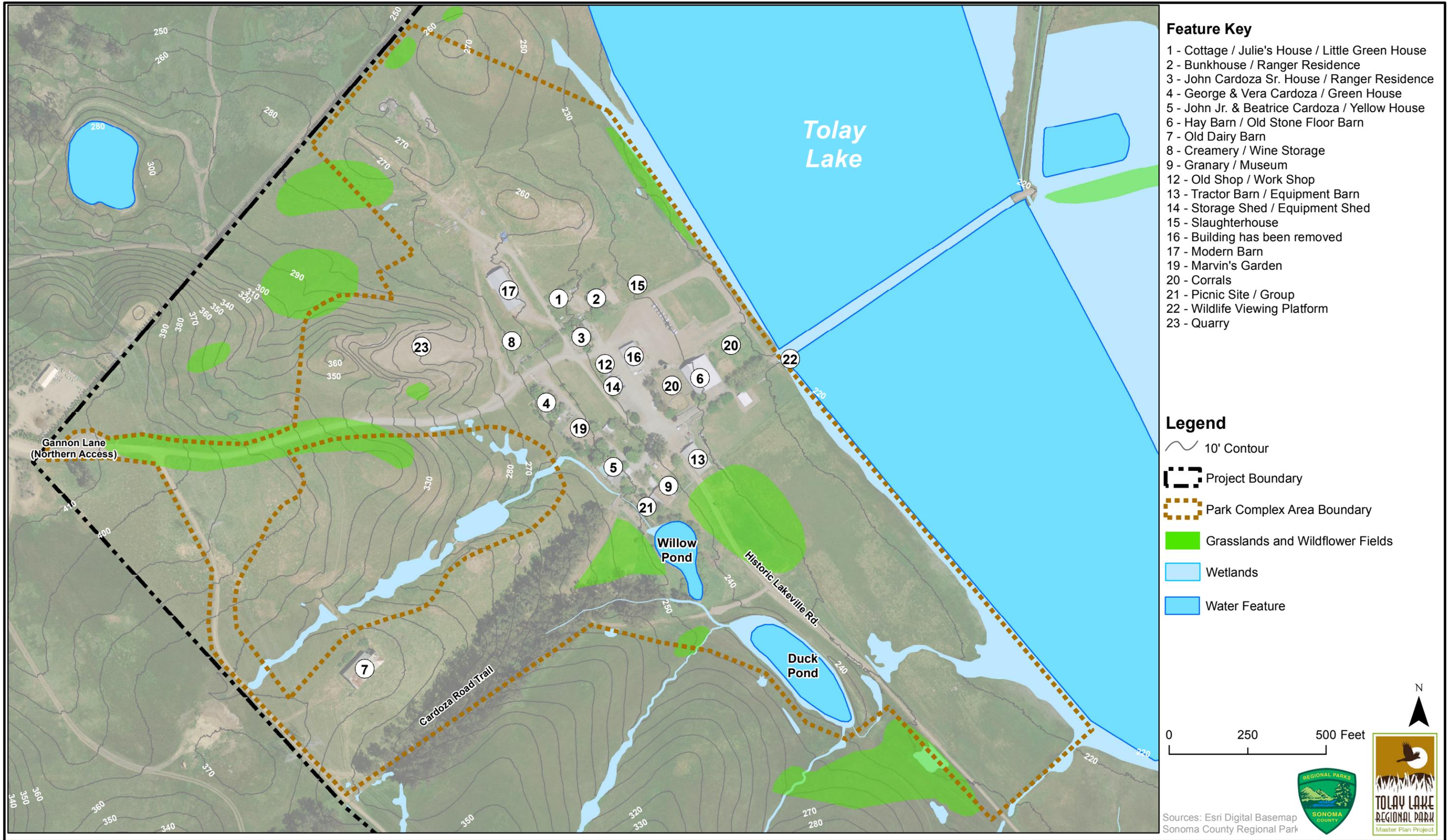
Figure 3-1
 Regional Location





Tolay Lake Regional Park Master Plan
Sonoma County, CA

Figure 3-3
Project Site



- Feature Key**
- 1 - Cottage / Julie's House / Little Green House
 - 2 - Bunkhouse / Ranger Residence
 - 3 - John Cardoza Sr. House / Ranger Residence
 - 4 - George & Vera Cardoza / Green House
 - 5 - John Jr. & Beatrice Cardoza / Yellow House
 - 6 - Hay Barn / Old Stone Floor Barn
 - 7 - Old Dairy Barn
 - 8 - Creamery / Wine Storage
 - 9 - Granary / Museum
 - 12 - Old Shop / Work Shop
 - 13 - Tractor Barn / Equipment Barn
 - 14 - Storage Shed / Equipment Shed
 - 15 - Slaughterhouse
 - 16 - Building has been removed
 - 17 - Modern Barn
 - 19 - Marvin's Garden
 - 20 - Corrals
 - 21 - Picnic Site / Group
 - 22 - Wildlife Viewing Platform
 - 23 - Quarry

- Legend**
- 10' Contour
 - Project Boundary
 - Park Complex Area Boundary
 - Grasslands and Wildflower Fields
 - Wetlands
 - Water Feature

0 250 500 Feet

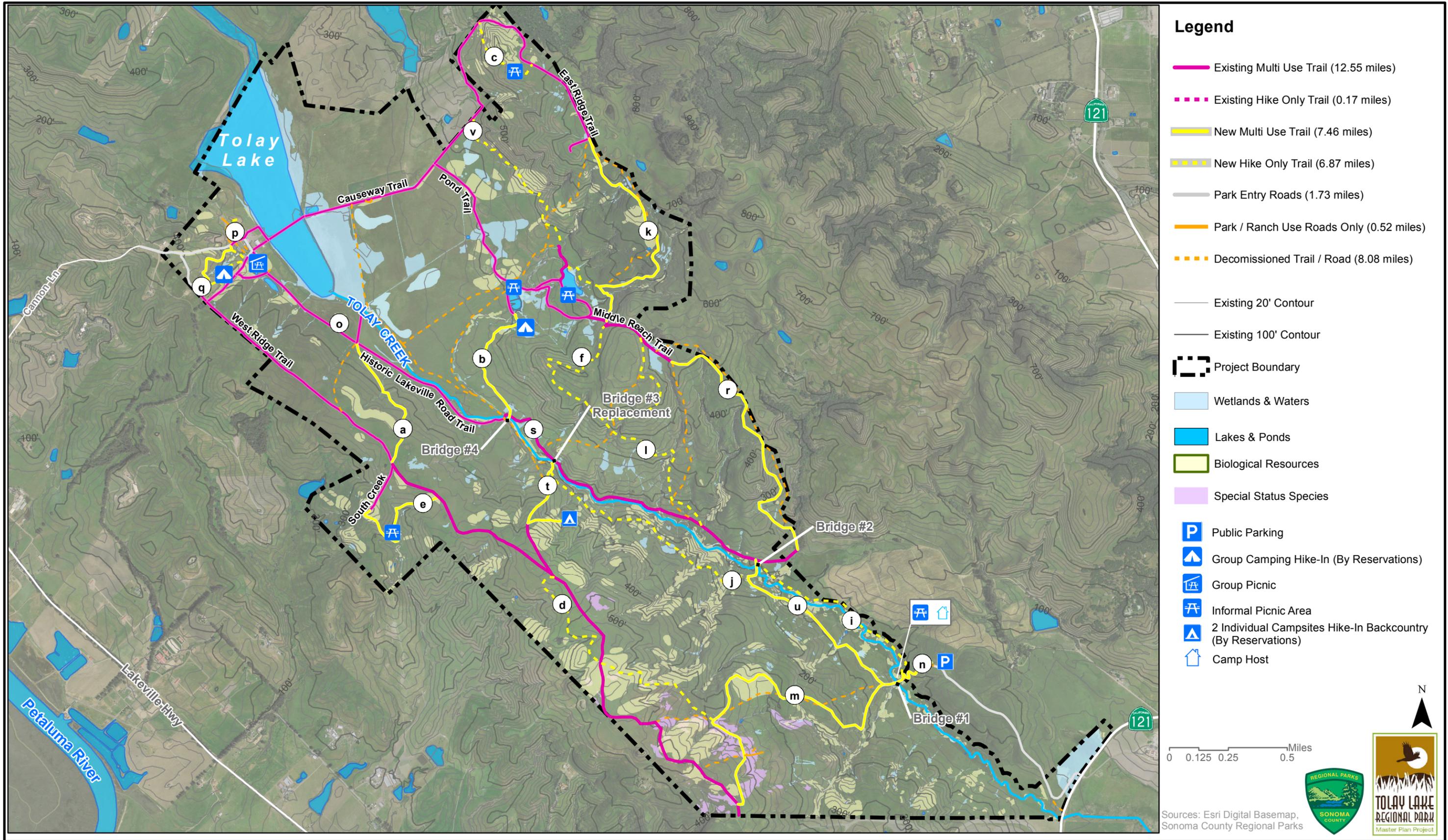
Sources: Esri Digital Basemap
Sonoma County Regional Park

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Tolay Lake Regional Park Master Plan
Sonoma County, CA

Figure 3-4
Existing Park Complex

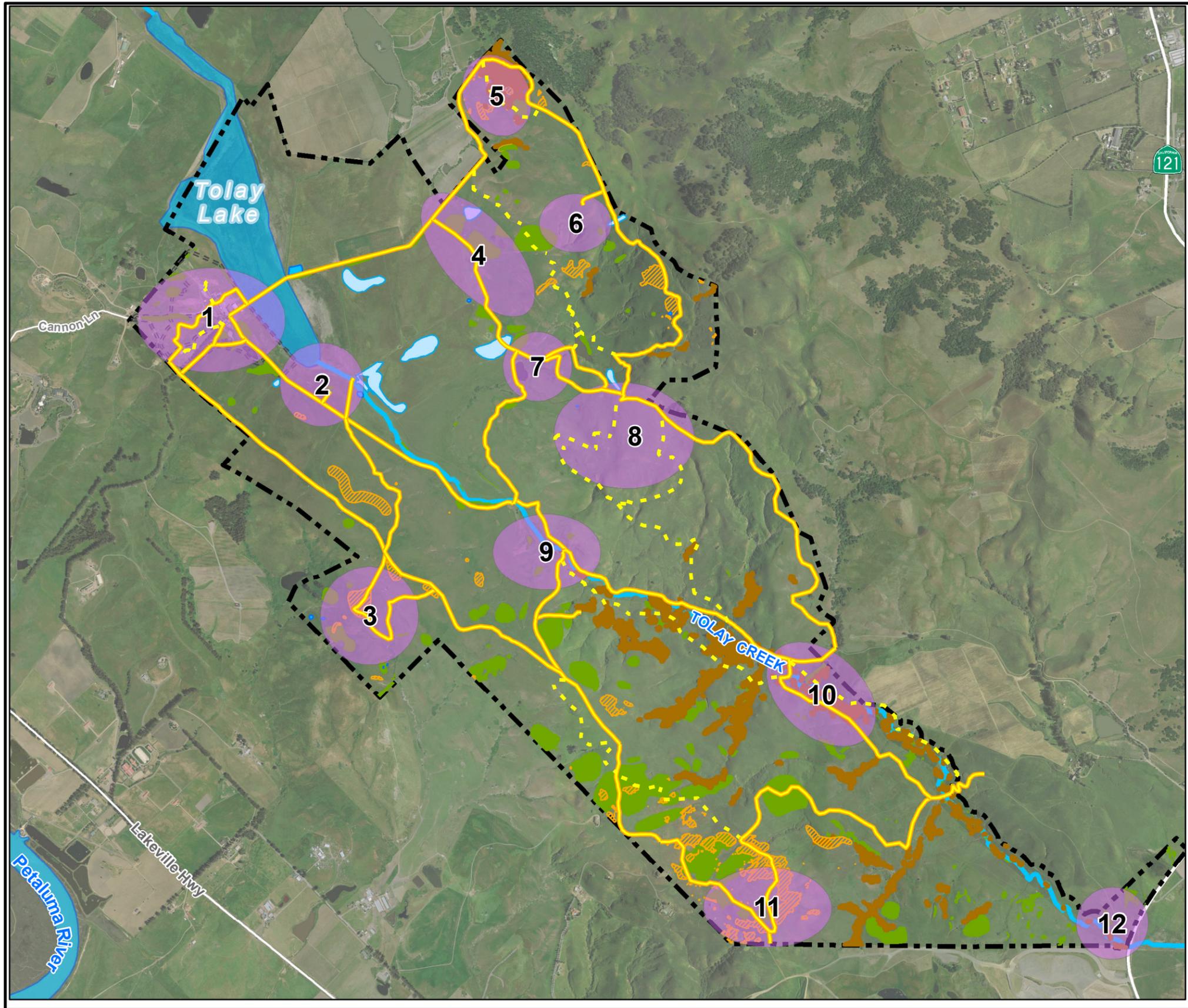


Tolay Lake Regional Park Master Plan
Sonoma County, CA

NOTE: Letter labels correspond to Table 3.3

Figure 3-5
Conceptual Site Plan





STORY FIELDS AND THEMES

- 1 - RANCH / VISITOR CENTER**
 - Regional Overview
 - Site Overview (from turnout near entry gate)
 - Native American Comprehensive Story of Tolay Valley
 - Vaqueros story
 - Portuguese farmers story
 - Present agricultural use
 - Duck pond and wastewater system
- 2 - LAKE VISTA**
 - Native American significance
 - history & values
 - ethnobotanical uses - Living Tribe
 - Story of the Lake
 - Hydrology
 - Birds
 - Ecosystem of native flora / fauna
- 3 - PETALUMA MARSH**
 - Natural habitat - marsh/wetland
 - Restoration - marsh/wetland
 - Climate change and local effects
 - Native American prehistoric tribal values
 - Lakeville town story
 - Geology / geomorphology
- 4 - AGRICULTURE**
 - Restoration - ag ditching and diking
 - Native American significance - land changes
 - ethnobotanical uses - Living Tribe
 - Ranchers story
 - Vaqueros story
- 5 - OAK WOODLANDS**
 - Native American significance
 - history and values
 - ethnobotanical uses - Living Tribe
 - Ranchers story
 - Restoration - Bay oak woodland
- 6 - EAST RIDGE VIEW POINT**
 - Views
 - Native American surrounding community
 - Regional overview
 - Site overview
 - Geology / geomorphology
- 7 - CENTRAL PONDS**
 - Natural habitat - fresh water springs
 - Native American changes through time
 - Historical route
 - Birds
 - Fishing destination
- 8 - MIDDLE REACH**
 - Views
 - Native American land management
 - Crash site memorial
- 9 - HISTORICAL ROUTE**
 - Historical route
 - Natural habitat - riparian
 - Restoration - creek riparian areas
- 10 - TOLAY CREEK**
 - Historical route
 - Natural habitat / Restoration
 - riparian, Bay oak woodland
- 11 - BAYVIEW POINT**
 - Native American regional tribe land uses
- 12 - SOUTH ENTRANCE**
 - Native American overview of story
 - history of Living Tribe

POTENTIAL MEDIA TYPES

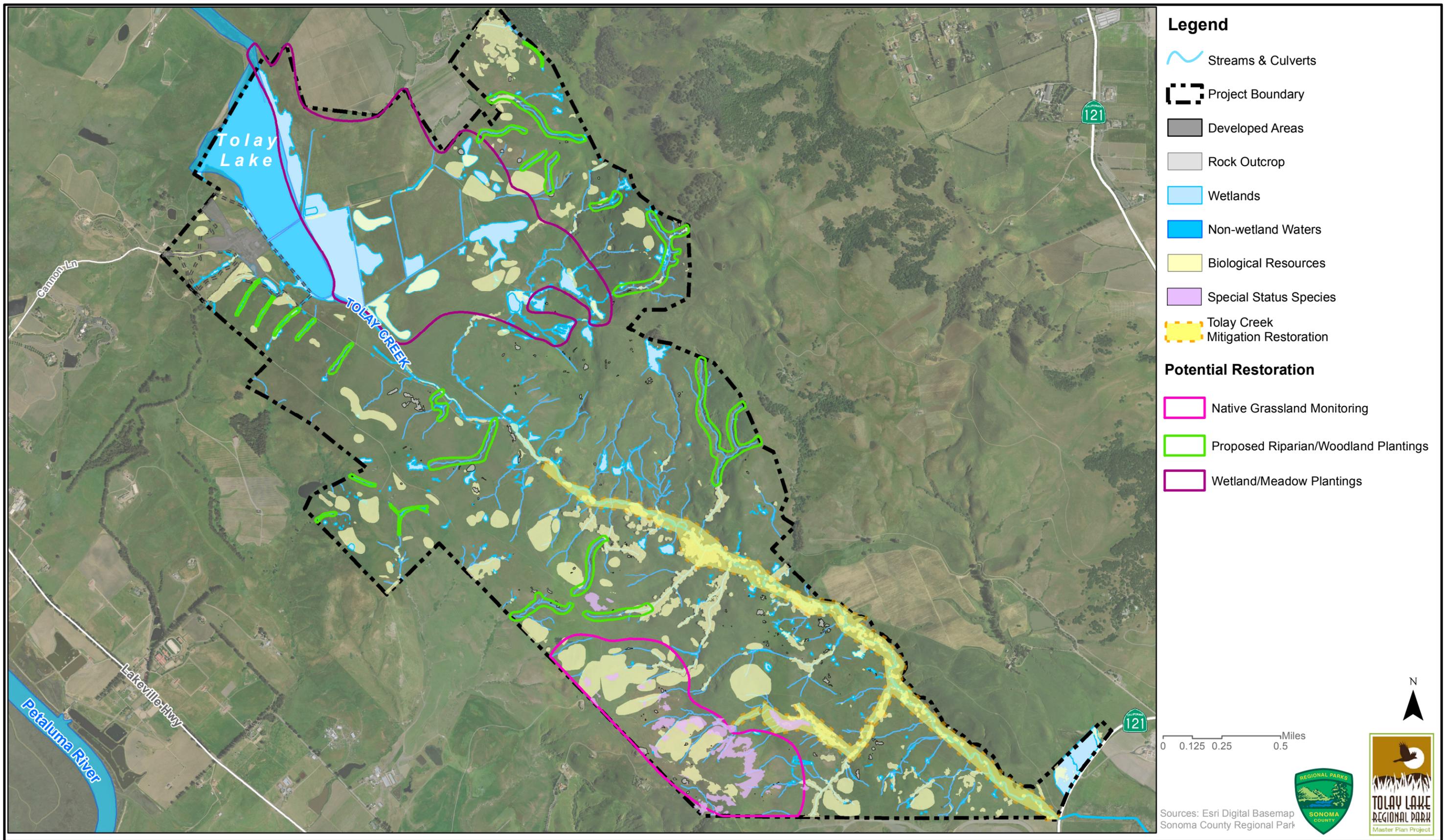
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|--|---|
| Trail maps or site maps | Audio tours |
| Interior interpretive signage / displays | Place-based, cutting-edge art installations |
| Laminated story books | Farm to table educational program |
| Use of #hashtags on social media sites | Horse drawn cart tours |
| Embedded and/or etched interpretive elements | Kiosks |
| Artifact display | Roving bird blind |
| Static or multi-media dioramas | Authentic boat paddle |
| Soundscapes | Smart-phone storytelling app |
| Film and theatre space | Restoration and demonstration areas |

- | | |
|---|--------------------------------|
| Hiking Only Trail | Woodlands |
| Multi Use Trail | Sensitive Biological Resources |
| Upland Grasslands and Wildflower Fields | Water Feature / Wetland |



Sources: Esri Digital Basemap, Sonoma County Regional Parks



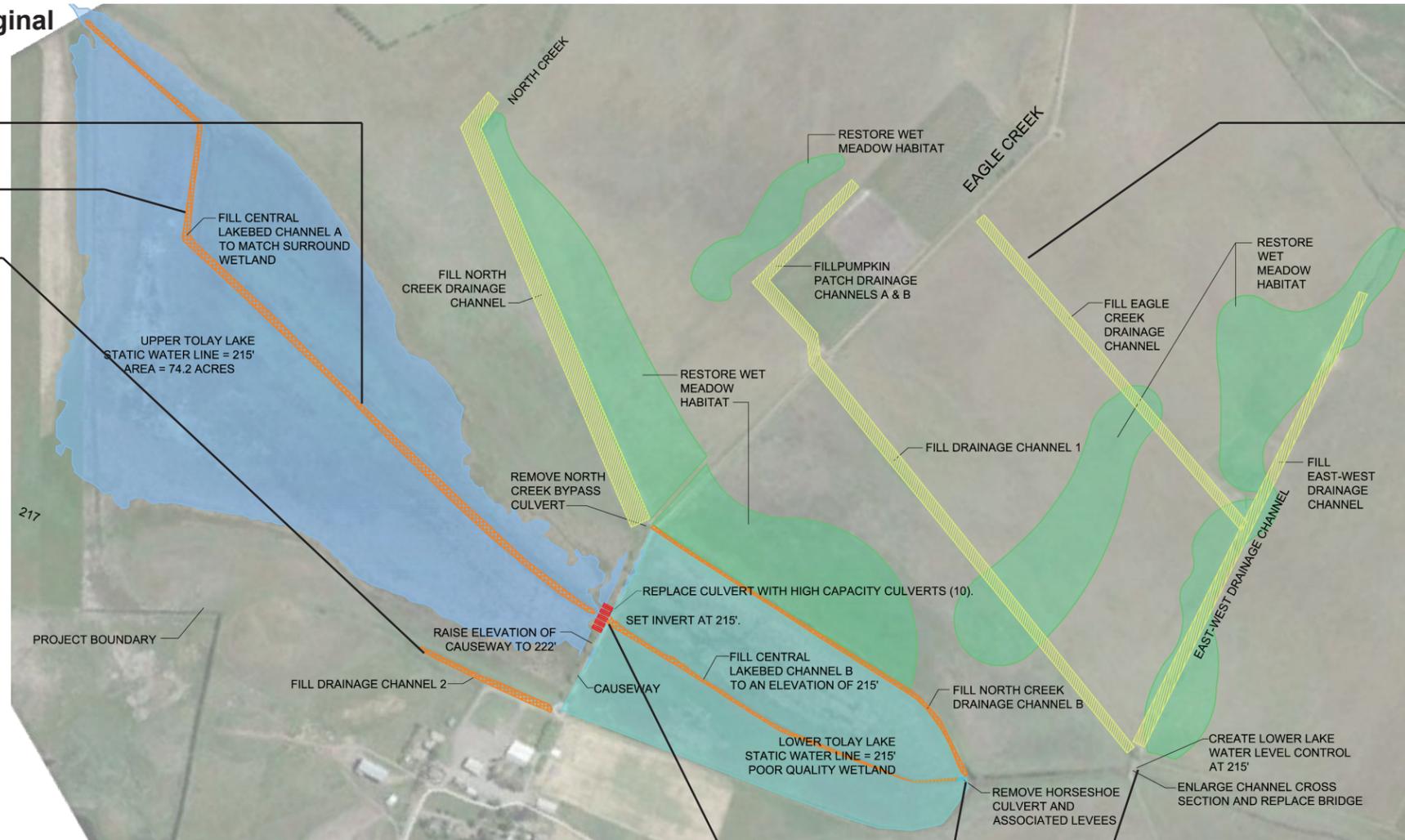


Tolay Lake Regional Park Master Plan
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Figure 3-8
Proposed Restoration Areas and Existing Biological Communities

Restoration Activities to Restore Original Hydrology Within the Lake:

- Fill Central Lakebed Channel B
- Fill Central Lakebed Channel A
- Fill Drainage Channel 2

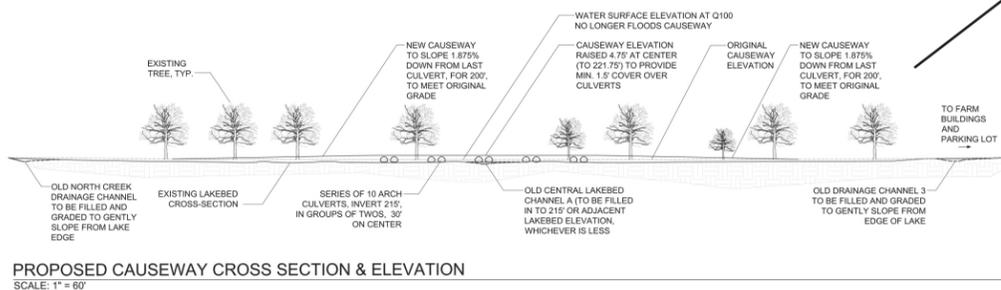
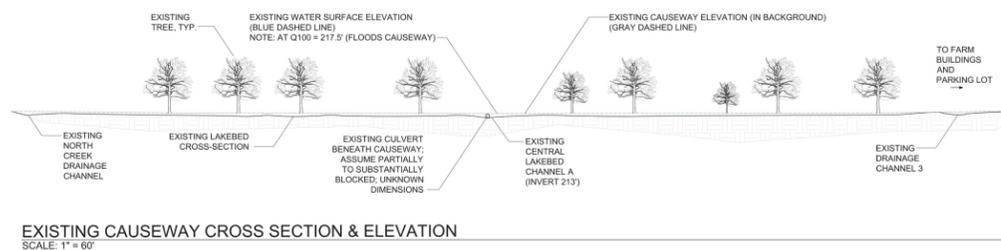


Restoration Activities to Restore Wet Meadow:

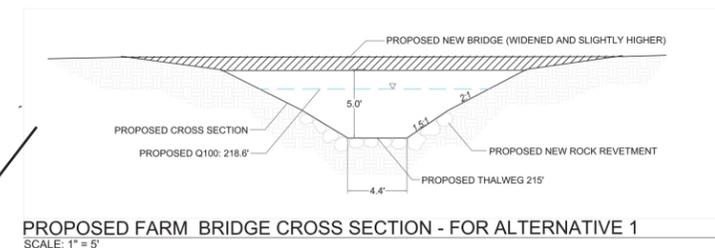
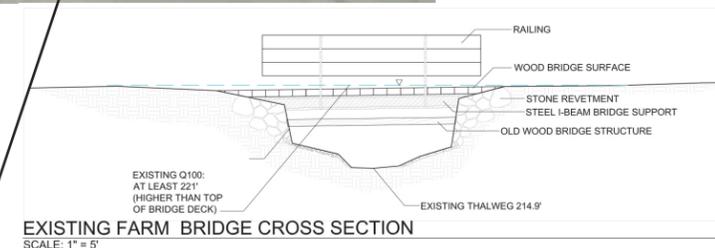
Eliminate hillside drainage ditches as listed below, to keep water on-site; wet meadows will form where topography allows:

- Remove North Creek Drainage Channel and Culvert
- Remove Eagle Creek Drainage Channel
- Fill the East-West Drainage Channel
- Fill Pumpkin Patch Drainage Channels A & B
- Fill Drainage Channel 1

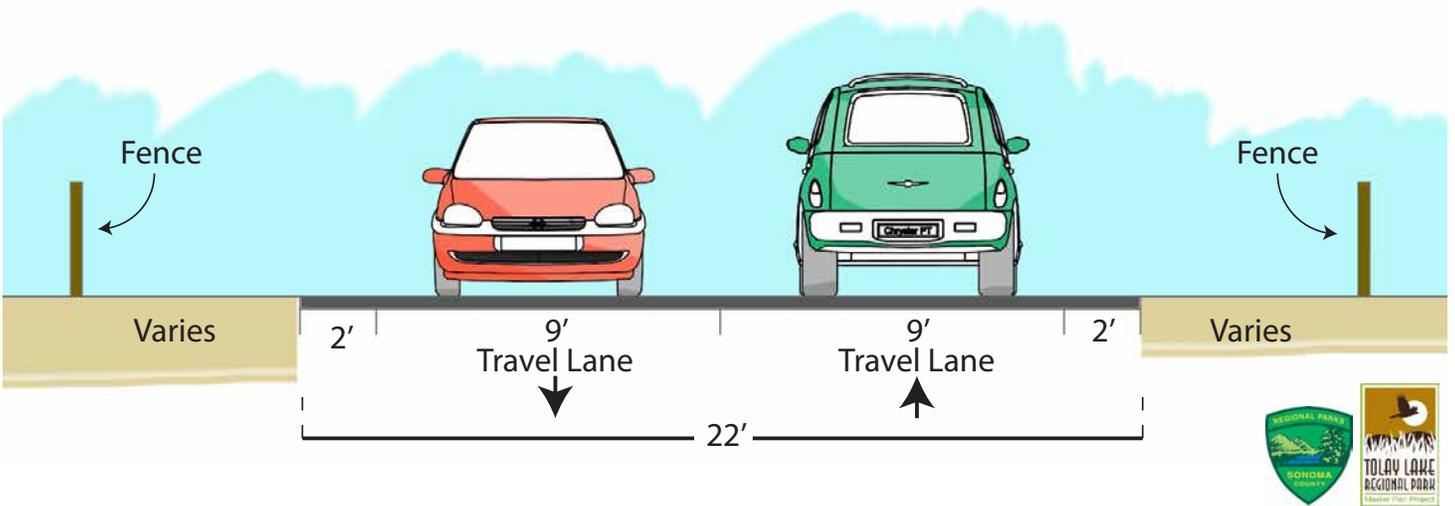
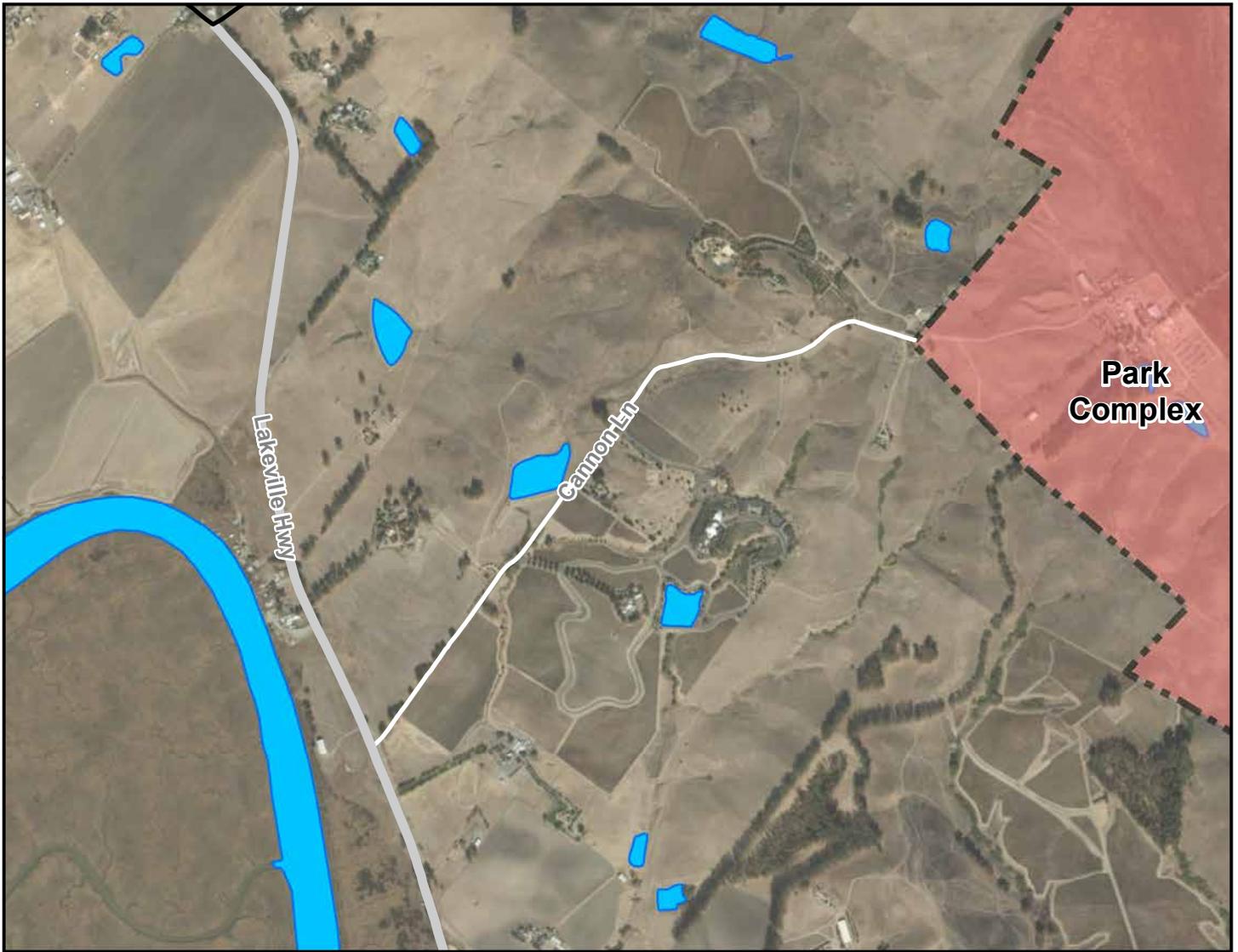
Restoration Activities to Reduce Flooding of Upstream Properties:



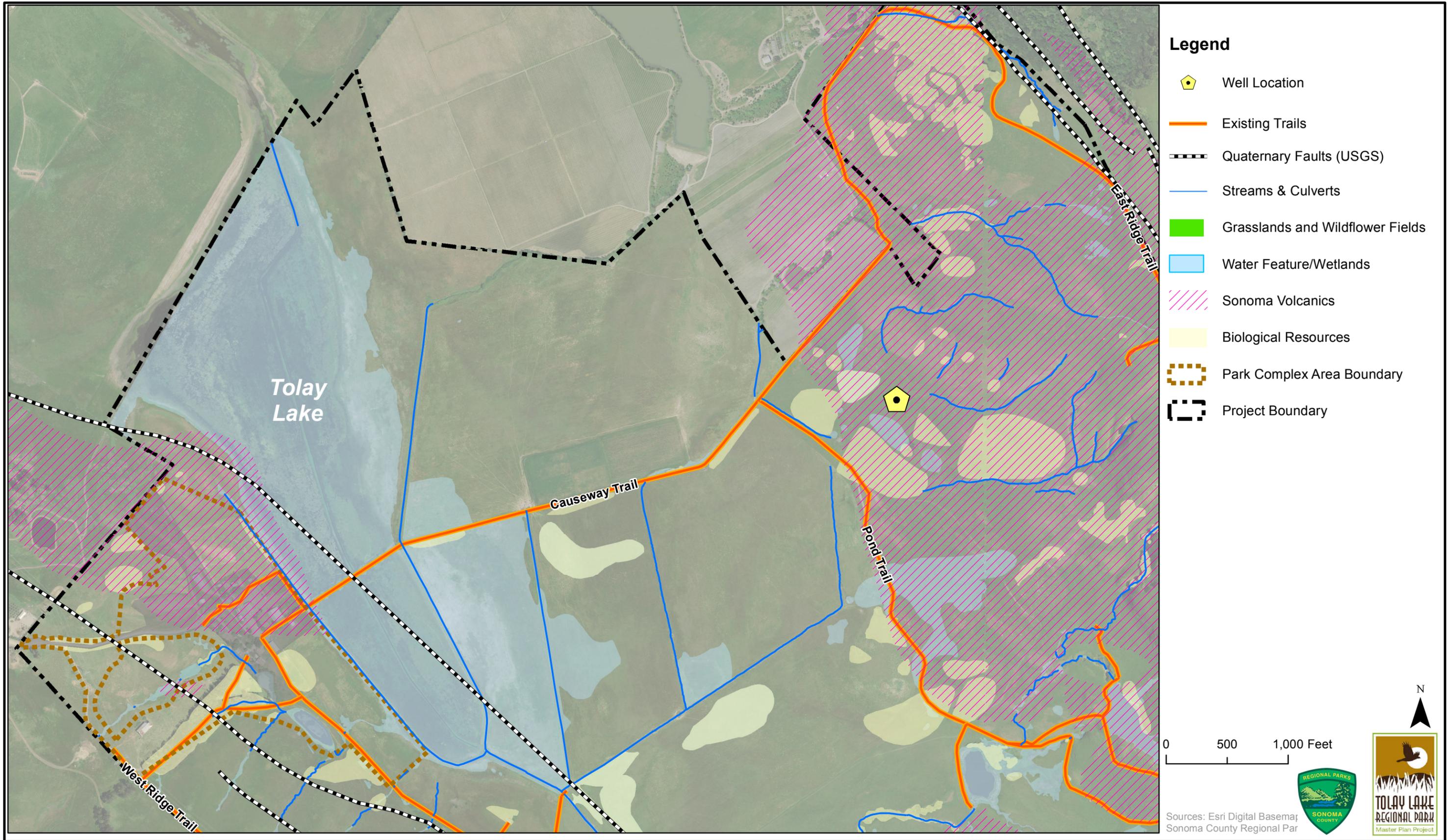
- Replace Causeway Culvert (Raise Causeway to 222')
- Remove Horseshoe Culvert
- Increase outlet cross-sectional area at Farm Bridge

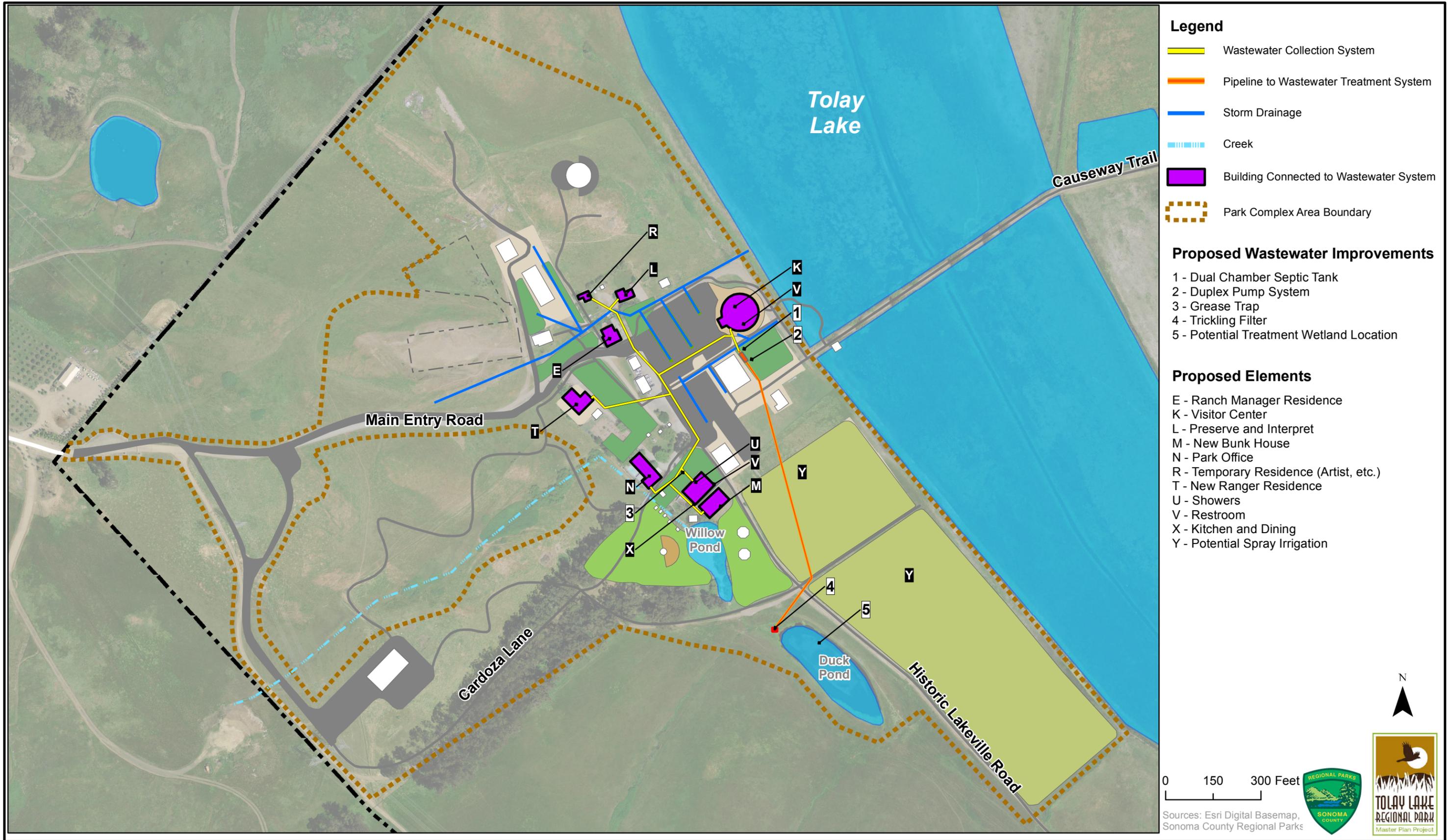


Back of Figure 3-9



Back of Figure 3-10





- Legend**
- Wastewater Collection System
 - Pipeline to Wastewater Treatment System
 - Storm Drainage
 - Creek
 - Building Connected to Wastewater System
 - Park Complex Area Boundary

- Proposed Wastewater Improvements**
- 1 - Dual Chamber Septic Tank
 - 2 - Duplex Pump System
 - 3 - Grease Trap
 - 4 - Trickling Filter
 - 5 - Potential Treatment Wetland Location

- Proposed Elements**
- E - Ranch Manager Residence
 - K - Visitor Center
 - L - Preserve and Interpret
 - M - New Bunk House
 - N - Park Office
 - R - Temporary Residence (Artist, etc.)
 - T - New Ranger Residence
 - U - Showers
 - V - Restroom
 - X - Kitchen and Dining
 - Y - Potential Spray Irrigation

N

0 150 300 Feet

Sources: Esri Digital Basemap, Sonoma County Regional Parks



Figure 3-12
Proposed Wastewater Facilities

