

# Introduction







Photo credit: Regional Parks staff



## INTRODUCTION

Tolay Lake was once the largest freshwater lake in Sonoma County and was revered by the indigenous people, the Alaguali, a Coast Miwok tribe, as a sacred spiritual center and gathering place due to diverse habitat, abundant wildlife, lush valley lakebed, and spectacular vistas. Today, Tolay Lake continues to be a premiere locale within Sonoma County and continues to resonate with residents and visitors alike. The acquisition of Tolay Lake Ranch and Tolay Creek Ranch properties and its transition to a Regional Park will make this area widely accessible to residents of Sonoma, Marin, Napa, and Solano counties.

The Native American archeology, history, and culture of the site is unparalleled in California, and has the potential to provide numerous research and education opportunities. Through community partnerships between Sonoma County Regional Parks (Regional Parks), the Federated Indians of Graton Rancheria (Tribe), the Sonoma Land Trust (Land Trust), and the Sonoma County Agricultural Preservation and Open Space District (District), over 3,400 acres of scenic landscape, natural resources, and prehistoric cultural resources have been preserved.

Regional Parks and the Tribe are partnering to co-manage the park and its archaeological resources, while the District and Land Trust provides oversight for natural resource conservation. This interagency collaboration will help preserve the land's heritage and natural resources, in addition to providing educational and recreational opportunities for the public.

### Overview and Purpose of the Master Plan

The Tolay Lake Regional Park Master Plan (Master Plan) is a collaborative effort between Regional Parks and the Tribe. The Tribe has an ancestral connection to the Tolay Valley and serves as the co-stewards of Tolay Lake Regional Park (Park) by overseeing cultural resource preservation and interpretation. This relationship will enable the Park to offer education and research activities that are compatible with cultural resource preservation.

The Master Plan is intended to guide development, improvements, and public access to the Park. Implementation of the Master Plan will enable cultural interpretation and education; full use of the recreational potential of the Park; and restoration and enhancement of the property's diverse natural resources.

The Master Plan provides recommendations for habitat restoration; preservation and protection of prehistoric cultural resources; recreational improvements; interpretation of the prehistoric, historic, and natural resources; and land and agricultural management policies. Restoration includes returning Tolay Lake to a natural but smaller lakebed condition, and enhancing the Tolay Creek watershed within the Park. Strategies are provided for prehistoric cultural resource protection, preservation, and interpretation. Recreational improvements include development and improvements for public access, including park complex, trails, picnicking and camping. Interpretive programs take a holistic approach by exploring the historical interaction of people with the land. Select topics covered by the interpretive program include the site's geology, hydrology, regional significance, land management practices, conservation practices, restoration efforts, agriculture practices, and anthropology. The Resource Management Plan (Chapter 6 of this Master Plan) provides comprehensive policies for protecting preserving or restoring the Park's prehistoric/historic, cultural, and natural resources using adaptive management and best management practices. These policies help balance resource protection with public access.



Photo credit: Regional Parks staff

## Components and Organization of the Master Plan

The Master Plan is organized around two major components: the conceptual design plan for Park facilities and improvements, and management for natural, pre-historical, historical, and cultural resources.

- Chapter 1 outlines the Master Plan process, Park setting, and natural and cultural history of the Park.
- Chapter 2 describes the Master Plan purpose, goals, and objectives.
- Chapter 3 presents a summary of public participation for the Master Plan process.
- Chapter 4 describes the regulatory setting and policy framework surrounding the Master Plan.
- Chapter 5 includes the conceptual site plan alternatives.
- Chapter 6 is the Park Resource Management Plan.
- Chapter 7 includes the Education and Interpretive Elements for the Park.
- Chapter 8 details the Trails Plan.
- Chapter 9 outlines the Master Plan operations, which includes a Business, Operations, and Maintenance Plan; cost estimates; and an Implementation and Phasing Strategy.

## Master Plan Process

The Tolay Lake Regional Park master planning process was divided into 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. It included a variety of public engagement activities designed to solicit stakeholder and community input regarding desired future activities in the Park.

During Phase 2, Plan Development, the project team developed the Master Plan based on input from Phase 1. The first step in Phase 2 was to develop conceptual plan alternatives for 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.

Phase 3 includes preparation of an Environmental Impact Report (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 and public access easements. Once the EIR process is complete, the Master Plan will be adopted as the guiding instrument for development and management of the Park.

## Acquisition

The Master Plan area consists of two properties. The Tolay Lake Ranch (formerly Cardoza Ranch) is open to the public on a limited basis as Tolay Lake Regional Park. The second property is a portion of the former Roche Ranch property, currently referred to as Tolay Creek Ranch. This second property is not open to the public, and is currently being managed by the Land Trust. The combined properties make up the 3,400 acre Tolay Lake Regional Park.

The Tolay Lake Ranch property is approximately 1,737 acres. The Tribe and Regional Parks worked as a team to obtain the necessary funding to acquire the property. The property was purchased in 2005 with more than half of the needed funds provided by the Sonoma County Agricultural Preservation

and Open Space District and the remaining funds for the purchase from the Department of Fish and Game (now California Department of Fish and Wildlife), Wildlife Conservation Board, State Coastal Conservancy, Land and Water Conservation Fund, National Oceanic and Atmospheric Administration, California Proposition 12 funds, and private foundations, businesses, and individual donors.

In 2008 the Tolay Creek Ranch property was purchased by the Land Trust. The property was purchased with supporting funds from the California State Coastal Conservancy, the Wildlife Conservation Board, the Gordon and Betty Moore Foundation, and additional funds through the purchase of a Conservation Easement by the Sonoma County Agricultural Preservation and Open Space District. Tolay Creek Ranch totals approximately 1,665 acres, bordered by Tolay Lake Regional Park to the north and Highway 121 to the south. The Tolay Creek Ranch property title was transferred to Sonoma County Regional Parks in 2017 and the District will hold Conservation Easements over portions of both properties in perpetuity.

## Park Setting

The Park is located in a valley between two ridgelines and is characterized by rolling hills, moist grasslands, wetlands, riparian and upland habitat, and remnant stands of coast live oak woodland (see Figure 1-2). This property has a rich history of activity and development, which dates back millennia. Living members of the Tribe can directly trace their heritage to the Alaguali, the indigenous Coast Miwok of the region.



Tolay Lake Regional Park is located approximately five miles southeast of the City of Petaluma, within 30 minutes of Santa Rosa and Sonoma Valley, and within 60 minutes of approximately 1.2 million residents in the adjacent counties of Marin, Napa, and Solano (see Figures 1-1 and 1-2). The primary entrance to the Park is located at 5869 Cannon Lane, a County-maintained road off of Lakeville Highway. Secondary access is provided from Highway 121, near the Tolay Creek undercrossing.

The Park is named for the approximately 200-acre shallow lake in the center of the valley. The first written reference of “Tolay” is in Padre Jose Altimira’s 1823 journal as the name used by local tribes for the Chief of the tribe. The origin and meaning of the word ‘Tolay’ has been lost because the Coast Miwok have suffered from disease, massacre, and the forced loss of language and culture following European settlement. The Park is a cherished place to the Tribe because it connects the descendants of the Aliguali to their ancestors and heritage through prehistoric artifacts, sacred beauty, and unique landscapes.



The Lake is connected to Tolay Creek, which drains the valley to San Pablo Bay. Streams and artificial ponds form other water features on site. The east and west ridgelines that form the Tolay Valley provides spectacular views of the Petaluma River Valley, San Pablo Bay, surrounding cities, and other significant land features surrounding the bay. The first original established ranch includes homes, barns, and corrals, located in the northwest corner of the Tolay Lake property - just west of the lake.

Entry roads from the north and the south end of the Park connect the site to the surrounding community, and ranch roads and trails provide a circulation network within the site. There are also maintenance and emergency access easements to both properties. The roads and trails at the Park include features like gates, fences, and bridges, which relate to the site's historical and current agricultural use. Historic Lakeville Road runs north to south, parallel to Tolay Creek.

This area has served many people over millennia. For the Alaguali, this site served as a gathering place so that they could trade and heal. The arrival of missionaries and settlers in the region changed this way of life - tribal populations diminished by as much as ninety percent as settlement, agriculture, and ranching consumed the land. This pattern lasted for nearly two centuries – between the early-19th century and late-20th century.

Today, the site is transitioning from an agricultural site with limited visitor use to a region-wide gathering space. It is the intent of this Master Plan to preserve the land for native species habitat conservation and restoration, and to protect and to interpret the important prehistoric and historic stories the site provides.



Photo credit: Regional Parks staff





Figure 1-1

Regional Location



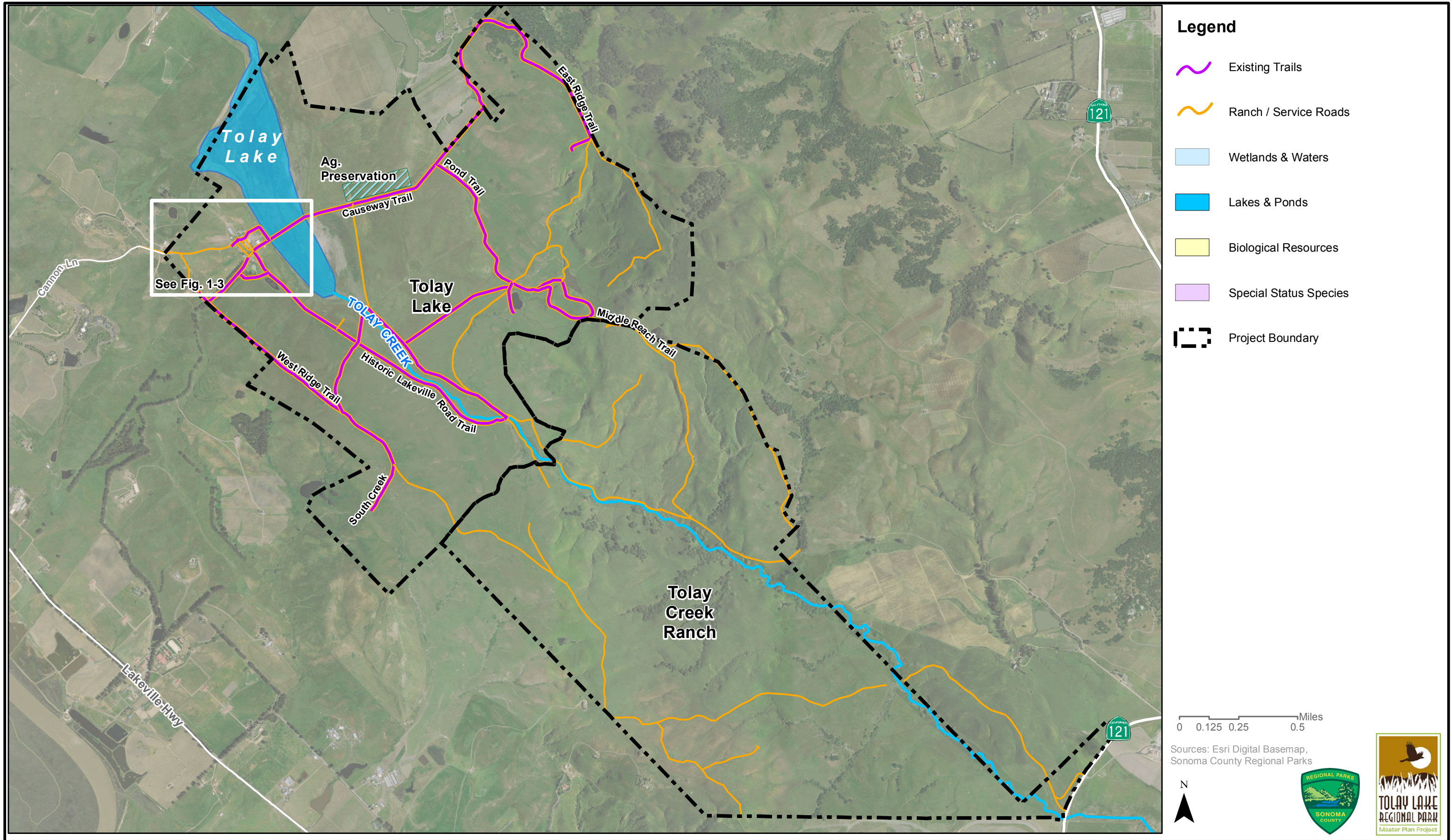
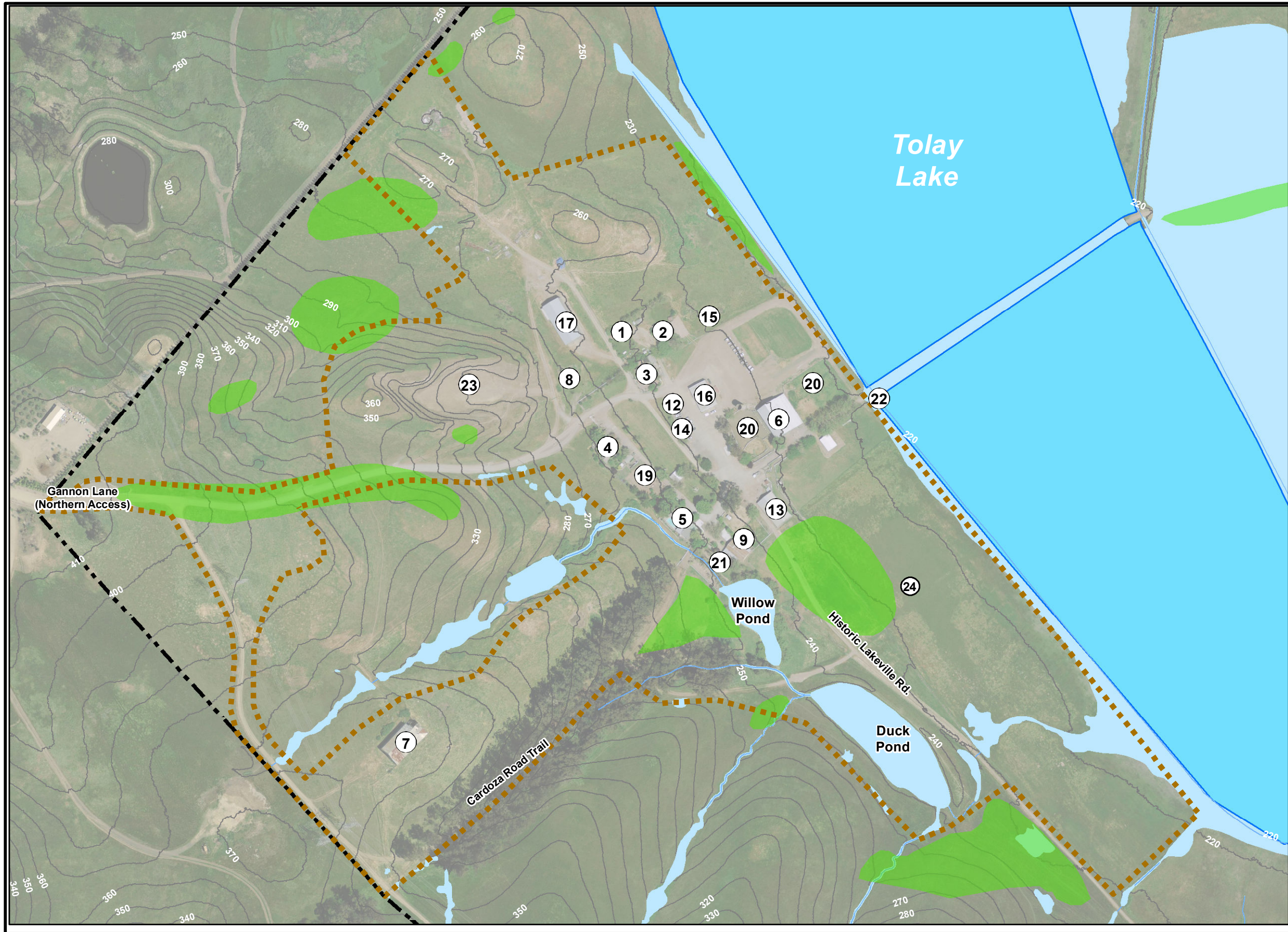


Figure 1-2  
Existing Project Site





- ### 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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## History of the Park

### Natural History

The Tolay Lake Master Plan project area consists of approximately 3,400 acres of upland habitat and riparian corridors that are characteristic of bayside Sonoma County. The Park contains most of the historic Tolay Lakebed and 4.5 miles of Tolay Creek. Sweeping views from the Park include Mt. Tamalpais, Mt. Diablo, Mt. Burdell, Mt. St. Helena, the Petaluma River basin, San Pablo Bay, San Francisco Bay, the Golden Gate Bridge, the San Francisco-Oakland Bay Bridge, and the skylines of many cities surrounding the bay.

Several thousand acres of conserved lands, either through ownership or easement, are adjacent to or within the vicinity of the Park. The Park provides habitat linkages and wildlife corridors between the Petaluma and Sonoma-Napa Marshes and between Cougar Mountain and the greater Mayacama Mountains region. Its relative size, geologic diversity, and topographic range help support a diversity of plant and wildlife species, which contributes to regional genetic diversity and overall species resiliency.

The dominant feature of the Park is Tolay Lake, which is a naturally occurring lakebed. When unaltered, this lake floods in the wet season, followed by a draw-down in spring and early summer. The lake accumulates water since it is situated on heavy clay soils (which causes slow permeability), and there was an earthen barrier that prevented rapid outflow. Tolay Creek runs through the valley and is connected to numerous tributaries from both the West and East Ridge. The banks and historic floodplains of the creek support intermittent riparian woodland and herbaceous riparian species. The Park offers a rare opportunity to preserve and restore a large portion of the Tolay Creek watershed.

The availability of year-round water and riparian cover provide wildlife with critical resources. Mammals and birds rely on water in the deeper pools of Tolay Creek and tributaries, utilizing the creek for breeding and foraging habitat. The lake, creek, and various water bodies support a number of wildlife species and populations. This includes waterfowl, mammals, amphibians, and reptiles; some special status species include western pond turtle and California red-legged frog.

The large area, shallow depth, and extensive vegetation of Tolay Lake attracts ducks and other waterfowl. The lake supports egret rookeries observed in large eucalyptus along Lakeville Highway and downtown Petaluma. The seasonal drawdown of the lake provides insect hatches in the spring, which is an important food resource for bats, swallows, and other insectivores.

The Park woodlands and groves provide acorns, seed, fruit, and cover for nesting for a variety of bird and mammal species. Mature trees and snags provide roost sites for bat and birds species. Dozens of birds are dependent upon oak woodlands for survival including raptors. Particularly, golden eagle species have been observed within and around the Park in addition to frequently nesting in oak or blue gum trees adjacent to the Park.

The once extensive native grasslands and wildflower fields that dominated the Park diminished rapidly in the 19th century in part due to overgrazing. Now non-native grasses are the dominant remaining vegetation communities. Native communities are located on slopes, ridgelines, and in serpentine soils within the park. These conditions support purple needlegrass and associated native grasses and wildflowers that are uniquely adapted to these soils and out-compete the non-native grasses in these areas. The grasslands provide the largest, most contiguous habitat for wildlife, which includes dozens of common bird species that forage and nest in the Park. Additionally, grasslands provide foraging and hunting grounds for mammals and raptors.

Natural rock outcrops are located throughout the Park, particularly on the West Ridge. Historic rock walls function similarly to rock outcrops, and are located on the East Ridge. Rock outcrops and rock walls features provide cover and nesting habitat for wildlife such as ground squirrels, burrowing owls, and western fence lizards. The dense wildflowers in and around rock outcrops provide nectaring and larval host support for a variety of butterflies and moths. The presence of Dutchman's pipe, a native



plant, in more shaded positions around coast live oak woodlands, provides larval food for the pipevine swallowtail.

## GEOLOGY/GEOMORPHOLOGY

Sonoma County is immediately east of the San Andreas Fault zone, which is the junction between two crustal plates: the North American plate which forms the land mass to the east, and the Pacific plate which is mostly under water in the vicinity of the region. The land masses west of Tomales Bay and along the Sonoma coast north of Fort Ross are part of the Pacific plate. The Pacific plate on the west side of the San Andreas Fault is moving northerly relative to the North American plate. The movement between these two plates has produced the northwest trending ridges and valleys present in Sonoma County during the past millions of years. The plate boundary is defined by many subparallel faults, which, together with the San Andreas Fault, dominate the seismic activity in the project region. The Tolay fault runs northwest through the park. The fault is inactive, but due to its proximity (about 1 mile southwest) to the active Rogers Creek fault, some sympathetic movement could occur.

The Tolay Valley is underlain by the Petaluma Formation (claystone and sandstone), Sonoma Volcanics (andesite, basalt, rhyolite, and ash flow tuff), and Franciscan Complex. The Franciscan Complex consists of mélangé, a mixture of intact masses of sandstone, greenstone, chert, and blue schist in a sheared shaley and clayey matrix; it is the oldest geologic unit in the park, dating back to the Jurassic and Cretaceous age.

The Park also has areas of serpentine rocks and soils, a soil formation that harbors unique vegetation. Due to its low calcium-to-magnesium ratio, serpentine soils create a harsh growing environment for most plants. This environment can lead to increased specialization in plant species, creating rare and often endemic sub-species.

Regionally, Tolay Lake valley is an elevated valley bounded by the Sonoma Mountains to the northeast and low line hillsides that border the valley to the southwest. These serve as a natural barrier from Petaluma Valley directly to the west. The lake basin results from an elevated depression within Tolay Creek. A natural earthen barrier formed Tolay Lake itself, existing about 14 feet higher than the lakebed (RUST Environment and Infrastructure 1996).

## HYDROLOGY

Surface hydrology in the park includes Tolay Lake, Tolay Creek, artificial ponds, and irrigation ditches. Tolay Creek empties into San Pablo Bay, joining with Petaluma River and Sonoma Creek in the Napa-Sonoma Marsh in the southernmost tip of Sonoma County. The site is also home to several seeps and springs representing localized groundwater, old landslide deposits, and local sandstone beds within the Petaluma Formation.

Median annual precipitation — based on 50-plus year records from nearby Petaluma Fire Station — is approximately 24 inches. Most precipitation, nearly 80 percent of the total annual rainfall, occurs between November and March, with little to no rainfall in the other months. Rainfall replenishes the surface and underground water supply, and abundant spring and seep sources from surrounding hillsides also serve as a water source.

Both Tolay Lake and Creek have experienced periods of drought and heavy inundation from precipitation, with minimum and maximum annual precipitation varying considerably (9.7 and 49.8 inches, respectively). Most surface water runoff infiltrates the dry ground supply, contributing to little runoff, with median annual runoff estimated at 6.1 inches, with drier years only producing 1.8 inches of median annual runoff per year. These estimates are based on a total watershed area around Tolay Lake, measured at 3,084 acres (RUST Environment and Infrastructure 1996).



## CLIMATE

Tolay Lake Regional Park is located in the Cotati and Petaluma Valley climatic sub-region. Weather patterns here are strongly influenced by the Petaluma Gap, a geographical expanse between the Pacific Ocean and the San Pablo Bay. The western edge of the gap is located in the coastal lowlands of Bodega and Tomales Bays, while the eastern edge is located in San Pablo Bay. The physical characteristic of this landform, combined with two, large marine bodies, create a microclimate within the sub-region characterized by robust wind patterns. The predominant wind pattern is created through the movement of marine air toward the east of the Petaluma Gap, with additional flow northward into the Cotati and Petaluma Valleys, and southward toward the Carquinez Straits in San Pablo Bay. Winds near the park are primarily out of the northwest, with occasional bay breezes.

Because of the consistent movement of air through the Petaluma Gap, air pollution is relatively low in the Petaluma Valley vicinity. There is some potential for stagnant air and elevated levels of pollution, primarily during morning hours, when there is minimal ocean flow and a weak bay breeze.

Rainfall for nearby Petaluma averages around 24 inches annually. Average wind speeds at Petaluma airport are around 7 mph, and seasonal weather patterns are marked by mild, wet winters and dry, warm summers, consistent with California's Mediterranean climate. Based on data from the Petaluma Fire Station, summertime highs are generally in the low to mid 80s (°F), averaging around 70°F, with temperatures dropping to 50-51°F. Winter minimum temperatures are generally 36°F - 40°F, with highs in the low 60s (°F). Extreme weather patterns, such as snow, are a rare occurrence, with the only snowfall in the area occurring twice (2002 and 1916) in the last century (3 and 1.5 inches, respectively).

## Cultural History

### COAST MIWOK PEOPLES

Prior to European contact, Tolay Valley consisted of open grassland with extensive stands of shrubs and oak groves on hilltops and in ravines. This is based on tribal oral history, ethnography, ethnohistory, archaeological studies, and biological studies.

Tolay Lake Regional Park is located within the area identified as Coast Miwok territory. The Federated Indians of Graton Rancheria (Tribe), a federally recognized tribe, is made up of families from both the Coast Miwok and Southern Pomo territories. Coast Miwok territory contained large stretches of coast and bay-shore with beaches, cliffs, extensive bays, lagoons, sloughs, marshes, interior valleys, and foothills (Kelly 1978:415). Settlements were commonly located near water sources with abundant resources; examples include estuaries or along present interior watercourses (Kr





## Tribal Organization

Within each tribal territory were several semi-permanent settlements, along with campsites in outlying areas that were used on a seasonal basis. Settlement locations were chosen based on access water, fire wood, food resources, and well-drained soils. Smaller occupation sites were often clustered around the tribe's principal village, which was the location of the ceremonial roundhouse. Traditionally, the tribe's principal village was central to camps distributed throughout the territory and in outlying areas near seasonal water and resources.

A large village typically contained conical grass-covered dwellings, each accommodating six to ten persons, and a semi-subterranean earth-roofed sweathouse, which served as a social and work center for the men. Major settlements also had a dance house that served as a "secret society" ceremonial center. The dance house was of similar construction to that of the sweathouse. A secret society that included both sexes had a ceremonial chamber excavated about two feet into the ground and about 15 feet in diameter. If there was a separate female society, their chamber was smaller and roofed with grass or tule (Kelly 1978).

A large village had a male chief who cared for the people, gave advice, and addressed the people daily. A chief and female elder tutored the future headman; when the successor was ready, the incumbent was replaced. Two important females were in charge of organizing and providing the supplies for various ceremonies and new dance house construction. One of these women was the head of the women's ceremonial house (Kelly 1978).

## Alaguali Environmental Practices

The Alaguali living in the Tolay Valley were integral to the land for many thousands of years. The Alaguali valued their place within the greater environment of flora and fauna, and there is evidence from archaeological data and tribal oral knowledge that the Alaguali actively managed the land. One example includes controlled burning, which is supported by Jose Altimira's journal notes, dated 1823. He documents burned/blackened hillsides through the Petaluma and Sonoma area. Other tribal management practices included tending, weeding, pruning, and seed broadcasting to regenerate native vegetation.

Photo credit: Regional Parks staff



## Hunting, Gathering, and Diet

The Coast Miwok can be characterized as "collectors" who engaged in hunting and plant gathering. Collectors had a complex economy and settlement organization in order to address the high variability in the quantity and seasonal distribution of resources (Bettinger 1991). In such an economy, "logistically organized collectors supply themselves with specific resources through specially organized task groups characterized by the storage of food for at least part of the year" (Binford 1980).

The seasonal round involved traveling to and residing in differing environmental zones during various



seasons to take advantage of resources that were locally unavailable or were available only at certain times of the year. This resulted in a more varied and plentiful diet that drew from different environmental zones and allowed for rejuvenation of resources. During the winter, people would concentrate in the main villages, while during the summer, much of the population would disperse among smaller village and camp sites, occupying them for a few days to many weeks while resources were collected and processed. During these times, the elderly, ill, specialists, and/or those that so desired stayed at the main villages.

The acorn was an important part of the Coast Miwok diet. After roasting, the nuts were cracked and eaten or were ground and shaped into cakes to be baked as bread (Balls 1962). These nuts could be stored for long periods of time and processed when needed. The Coast Miwok animal diet was varied and included deer and crab year-round, seasonal salmon runs, geese in the winter, clams, rabbit, elk, squirrels, birds, and a wide assortment of fish. Fish were caught with various methods and tools, which included a circular dip net, a seine strung between two tule balsas, on line, in weirs, and spears (Kelly 1978). Despite their availability in the coastal environment, sea mammals were not eaten.

A variety of technologies were used to hunt, trap, and fish. Fish and game were obtained through individual and communal efforts, which ranged from simple trapping with snares or hunting with the bow and arrow, to the construction of fish dams and weirs or building brush fences to direct deer during drives. The game not only provided food but also hides and furs, which were used for clothing, bedding, and fashioned into containers. Bone and antlers were made into a variety of tools, as well as ornamental and ceremonial items, such as ear spools and whistles.

Generally, land was not considered privately owned, but Coast Miwok villages would defend certain territories like oak/buckeye gathering grounds and hunting, fishing, and clam digging grounds against trespassers (Kelly 1978). Coast Miwok traded clams, clamshells, clam disc beads, and abalone shells. Beads from these shells served as a form of currency. The Coast Miwok would travel to Wappo territory to collect medicinal plants and used clamshell disc beads to purchase obsidian.

### Spiritual Practices

Tolay Lake supported Native American life and culture and has served as sacred place to gather and commune for thousands of years. Over the millennia, the lake was considered to be a spiritual center that drew Native Americans from across California (Goerke 2007). Tolay Lake is part of a chain of lakes located throughout Sonoma County; this chain begins north of Santa Rosa and ends at Tolay Lake, just above San Pablo Bay. Each of the lakes served a specific ceremonial purpose, as documented by tribal oral history. Tolay Lake, the southernmost lake, was for 'holding sicknesses and doctoring' (Nelson 2016). The lake and the valley also served as a place for prayer and reflection. Its geographical position at the top of San Pablo Bay provided views of mountains the Coast Miwok considered sacred: Cougar Mountain, Mt. Tamalpais, Mt. Diablo, Mt. Burdell, and Mt. St. Helena.

The Alaguali hosted gatherings and invited people that came from as far away as Oregon and Mexico for healing and ceremonies at Tolay Lake. Doctors from tribes throughout the greater region came to share, research, and learn from peers and in advancement of medicine. Tolay Lake was renowned and people traveled many hundreds of miles to seek the best medicine and knowledge of healing at the sacred lake.

Maps of the valley reflect abundant lake conditions until the 1860s. The first historical record of the greater area was by Franciscan missionaries in 1811. Historical maps depict the lake as open water with marshlands to the east and as much as 500 acres of surface area.

### EUROPEAN CONTACT AND SPANISH MISSIONARIES

The Alaguali tribe of the Coast Miwok inhabited the Tolay Lake area at the time of first contact. Other important Coast Miwok tribes in the vicinity include Petaluma (where Mariano Vallejo established the headquarters of his Petaluma Rancho to exploit laborers from the village), Kotati, and Olompali. Local

towns and Olompali State Park derived their names from these tribes.

The first baptisms of Alaguali people took place on August 21, 1811. Father Abella visited the Alaguali Rancheria or village of Cholequibit where he baptized two elders. He reached this village by boat and noted that it had a good disembarking spot. Since Father Abella did not describe this place any further, it cannot be determined where the exact location of this village was within the southern end of the Tolay Valley. However, this account confirms that at least some Alaguali people were living in villages near San Pablo Bay during the early years of contact between Spanish and Coast Miwok people. Other Alaguali people may have lived further north in the valley or possibly even to the east or west of the valley (Peter Nelson: 8) As was the case in other Coast Miwok communities, the Alaguali people probably lived in several smaller village sites around the main or central village. Diverse sites like villages, tool production areas, bedrock mortars for processing food, and boulders with special shapes carved in them for ceremonial purposes have been identified throughout the Tolay Valley and Alaguali territory (Nelson).

Around this time, Governor Luis Antonio Arguello advised Father Jose Altimira to establish a new mission at Sonoma and transfer the missions at San Francisco and San Rafael there due to the deteriorating health conditions of the Native Americans at these missions. Father Altimira, who arrived from Spain in 1819 to assist at Mission San Francisco de Asis, promptly traveled north to explore sites for the new mission. Altimira's June 27, 1823 diary entry noted his visit to Laguna de Tolay while en route to found the new mission. Altimira would establish the last of California's 21 missions, Mission San Francisco Solano, in Sonoma on July 4, 1823. The missions were secularized in 1834.

The Coast Miwok were rapidly incorporated into the mission system, with only a few individuals that escaped forced conversion. This occurred from the time that the missions were established at San Francisco (1776), San Rafael (1817), and Sonoma (1823), which dislocated indigenous populations and resulted in the destruction of life and traditional practices. European settlement of the region began in the early to mid-nineteenth century. Members of the Alaguali tribe were moved into the three closest missions: Mission San Francisco de Asis, Mission San Jose, and Mission San Francisco Solano. From 1811-1817, fifty Alaguali went to Mission San Francisco de Asis and another seventy went to Mission San Jose in 1816 and 1817. Most of the Alaguali survivors from these missions were eventually transferred to Mission San Francisco Solano (LSA 2009).

## VAQUEROS

In 1833, Lieutenant Mariano G. Vallejo was ordered by Governor Jose Figueroa to explore and settle the country north of Mission San Rafael, largely as a means to monitor the nearby Russian colony at Fort Ross. The Mexican government encouraged settlement of territories of California by the establishment of large land grants called ranchos.

American settlers began immigrating to the area in large numbers from 1840-1845 through obtained land grants, and life for Native Americans became difficult as tribes and people continued to be displaced. In 1840, Mariano G. Vallejo applied for and received a 44,000-acre land grant for Rancho Petaluma, which encompassed Tolay Lake, from the governor. In 1843, Rancho Petaluma's area increased by an additional 22,000 acres, which was another land grant given to Vallejo by Governor Manuel Micheltoarena. The Rancho Petaluma grant now included 66,000 acres, which encompassed the entire Tolay Creek Watershed.

This sprawling Rancho Petaluma, one of the largest in the state, stretched eastward from the Petaluma River to Sonoma Creek and from the bayshore north to approximately present-day Glen Ellen. The Rancho Petaluma was given the Coast Miwok name, which means hill backside, in reference to its position to Sonoma Mountain.

Vallejo's Rancho Petaluma operation relied on local tribal labor – many of them were former mission residents - to produce hides and tallow, agricultural products, blankets, candles, and shoes. Vaqueros,



the Spanish word for cowboy or rancher, managed the Tolay Lake margins and foothills which served as rangeland for the large herds of cattle, horses, and sheep owned by Vallejo. Vallejo was once one of the wealthiest men in the state; however, legal challenges to his land-holdings and issues related to squatters forced him to sell his Rancho adobe in 1857.

William Bihler eventually purchased the land in the 1860's and began draining the lake for agriculture. It is believed that Bihler dynamited the natural barrier during his ownership sometime between 1865-1885. Subsequently, the Tolay Creek channel is dredged to dry out the lake and prevent its reversion to historical lake conditions.

## AMERICAN SETTLERS

Granville P. Swift was a trapper and hunter and the great-nephew of trapper Daniel Boone. Swift lived in many areas throughout central and northern California - leading an adventurous life hunting, trapping, mining, and scouting. A map of Lakeville in 1850 denotes the Swift Line (boundary) near the southern end of Tolay Lake acquired from Vallejo's Rancho Petaluma (LeBaron 1987). He moved and built in the cities of Orland, Williams, Maxwell and in combined effort with John Sears in Sonoma. He used Native American labor to build his ranches and used "Indian Vaqueros" to manage the land. Swift left his mark in part due to his services to Sutter's campaign as one of the leaders of the "Bear Flag Party" in 1846, and the eventual formation of California as a part of the United States (Goerke-Shrode 2000).

## RANCHING AND VITICULTURE

William Bihler purchased the area that was to become the 1,737-acre Cardoza Ranch in 1865. He reputedly drained the lake to use it for farming, "The lake was drained by its present owner – a utilitarian – and is now a potato patch." (Robert Thompson History, 1877). In 1870, he undertook one of the area's first large-scale vineyard operations, starting as early as the late 1870's, preceding the viticultural boom of the 1880's. There is indication that the Bihler vineyard was the largest single ownership vineyard in the county for a time, and was one of the largest vineyards in the state by the time it was owned by James G. Fair.

Bihler sold the land to James G. Fair, who had amassed a fortune in the Comstock Lode and served as a United States senator. Between approximately 1885 and 1894, Fair raised thoroughbred horses and cattle, and operated a vast vineyard that produced prize-winning grapes and brandies, as well as operating the "first continuous brandy distillery on the Pacific Coast." The viticultural history at Tolay is of interest, not only in terms of current and regional agricultural priorities, but because the vineyard infrastructure may have been a primary reason Fair and later Arthur W. Foster decided to purchase the Tolay Lake property as an investment.

Arthur W. Foster purchased the ranch in 1905 and operated it for the next two decades. Foster, president of the San Francisco North Pacific Railroad, operated the ranch as the Lakeville Stock Farm. Foster eventually owned most of the land between Petaluma and Sonoma Creek, purchasing small homesteads and combining them into a large landholding located along his railroad line.

Foster also planted the eucalyptus trees along Lakeville Road, with hired men carrying barrels of water to irrigate them. The trees also line the Foster/Cardoza Road (a segment of the Sears Point-Lakeville Road), the original ranch entrance from Lakeville Road, as Foster reputedly did not like to ride in the full sun. Foster, his wife Louisiana, and their nine children never lived on the ranch; they resided instead at their home in San Rafael with numerous servants, in a house now occupied by the Marin Academy as Foster Hall.

Foster continued manipulating the lake for agricultural practices and it appears that the elaborate irrigation and drainage system at the ranch was constructed during his time, as the date "1907" is incised in some of the concrete work. The continued agricultural practice of draining the lakebed ultimately degrades the lake and diminishes ecosystem life support.



## PORTUGUESE FARMERS: CARDOZA RANCH

The ranch was deeded to the North Bay Farms Company in 1922, which retained ownership until 1943, the year that it was sold to John S. Cardoza, Sr., George S. Cardoza, and John S. Cardoza Jr., natives of the Azores, who acquired the property in co-partnership. John Cardoza Sr. was a dairyman who also raised sheep and Hereford cattle on the ranch.

The world-traveling Portuguese were the first Europeans to step on California soil as early as 1542. Their sailing skills were sought by many nations and exploration continued through the ensuing years. Whaling ships and trade ships brought many Portuguese with some deserting in California. By the 1880's California's north coast had over 200 Portuguese working in mining, lumber mills, and farming.

Immigration from Portugal to California peaked in the first years of the 20th century and again in the 1960's and 1970's. Limited land space, weak economy, and famine were some of the many reasons the Azoreans left and migrated to California. By 1919 there were approximately 300,000 people in the Azores while there were 100,000 Azoreans in the United States, drawn by economic opportunity. Additionally, many Portuguese came by way of Hawaii. In 1877, the Hawaiian government needed sugar cane workers. Many from the Azorean islands came to work but became discouraged by their poor treatment and low wages. Between 1890 and 1914, many Portuguese left Hawaii for California, primarily landing in the San Francisco Bay area (Santos 1995).

According to former land owner Marvin Cardoza, the ranch was in poor condition, undoubtedly due to absentee owners, when John Cardoza Sr., purchased the property. The old house on the property was demolished in 1950 and a new California ranch style home built for John Sr. on the site. Two other California Ranch style homes were built for other family members: one for George and Vera Cardoza in 1946, and another for John Jr. and Beatrice in 1947.

The large Dairy Barn on the hill west of the ranch complex was demolished and rebuilt in the late 1940s or early 1950s, with the milk taken to the stone creamery for processing. The creamery was later converted to a winery, and the dairy barn to a sheep shed. The workshop was evidently one of the few buildings untouched by the Cardozas except for regular maintenance. The hay barn and tractor barn were demolished and rebuilt in the early 1950s. A bunkhouse was built during the same period, as was and

equipment shed. Corrals, fencing, water troughs, and other amenities were added or improved.

Cattle were butchered in the slaughterhouse, with the offal fed to the hogs and chickens in pens and sheds located on the hillside below. Hereford cattle grazed the hills, and hay and grains were planted in the field. Grain was processed in the granary, which



Photo credit: Regional Parks staff



had a mill to chop the grain to feed the cattle. In 1979, George Sr. and Vera Cardoza deeded the property to Rita and Marvin Cardoza.

Rita and Marvin Cardoza soon began to produce pumpkins from the denuded lakebed for their annual pumpkin festival, bringing thousands of people and children to the ranch during the festival. The granary is converted to become a museum and event center for the annual Pumpkin Festival, displaying agricultural tools and practices and also some of the charmstones they had collected throughout the years from Tolay Lake (LSA 2006).

#### TOLAY LAKEBED CHARMSTONES

Charmstones are found throughout much of California, often as grave goods. The charmstones at Tolay Lake are unusual in terms of the quantity of charmstones recovered as well as the context in which they were deposited. A variety of charmstone types recovered from the ancient lakebed include phallic, plummet, squat-bodied, round, symmetric, asymmetric, spindle, longitudinally grooved, centrally perforated, and fish form types. Ethnographically, charmstones were used as hunting and fishing amulets, and suspended over water or at hunting areas (Kroeber 1925 and Yates 1890). The Yokuts' medicine man conducted rituals using charmstones to ward off war, sickness, drought, or famine (Latta 1977).

Early reports of Tolay Valley's archaeological resources – specifically, its charmstones, were produced by W. K. Moorehead (1910, 1917) and L. E. Ricksecker (1907). The first systematic archaeological research of the lake was done by U. C. Berkeley archaeologists in the 1950s, Albert Elsasser (1955), who published an article about the "Charmstone Site" located in the Tolay Valley drained lakebed, which was estimated to have covered several hundred acres. Large numbers of charmstones were exposed when the lake was drained, and "some hundreds" have been collected or sold to collectors. At the time, he suggested that the charmstones had been used as slingstones for killing or crippling waterfowl. Tolay Lake sites have yielded a variety of charmstone types, which does not support this



Photo credit: Regional Parks staff

strict utilitarian function, as suggested by Elsasser (Elsasser and Rhode 1996 and Phebus 1990).

Since being drained sometime between 1865 and 1885, the Tolay Lake bottom has yielded hundreds of charmstones that have been collected by visitors to and owners of the ranch. J.B. Lewis, an early settler of the region from the 1850s, collected several artifacts from the lake and surrounding region (Moorehead 1910). In the early 1850s Lewis noted that Native Americans used to stay a day or two at the lake after fishing in a creek by his ranch during the fall season. After William Bihler drained the lake, they did not return. Others, including L. E. Richsecker of Oakland and L. W. Stillwell, collected hundreds of charmstones from the site. Ricksecker donated about 500 charmstones, which he collected from the lake over several years, to the California Academy of Sciences in San Francisco around 1907, while Stillwell and Lewis donated their collections to the Smithsonian Institution (Elsasser and Rhode 1996).

Today, living members of the Tribe theorize that several uses and meanings may apply to the charmstones. For them, Tolay Lake is the healing place of their ancestors and has become an important communal gathering area, and a focal point of healing. By reconnecting to the land taken care of by their ancestors, they experience revitalization and re-engagement with the area now known as Tolay Lake Regional Park (Parrish 2016 and LSA 2008).

## Park History

The Tolay Lake Ranch property was purchased in 2005 and Regional Parks began operation as a park. Regional Parks has been operating the Tolay Lake Ranch property in limited capacity through the Day-Use Permit Program as outlined in the 2008 interim Plan. The Land Trust purchased the Tolay Creek Ranch (formerly a portion of the Roche Ranch) in 2008 and transferred the property to Regional Parks in 2017. The Master Plan includes both properties – Tolay Lake Ranch and Tolay Creek Ranch – which make up Tolay Lake Regional Park.

Today, several thousands of acres of conserved lands surround the Park. The Park is critical to providing habitat linkages and wildlife corridors between the Petaluma and Sonoma-Napa Marshes, and between Cougar Mountain and the greater Mayacama Mountain region. The rich biodiversity of flora and fauna contribute to the diversity and resiliency of species within the region. With the acquisition of the lands that make up Tolay Lake Regional Park, the bulk of the Tolay Creek watershed has been protected and preserved.

Agricultural practices remain integral to park management and interpretation and education of historical ranching uses and practices. Cattle grazing remains across the property and a fundamental and key component of parkland management, pumpkins are grown for the Tolay Fall Festival in the agricultural fields east of the lake (see figure 1-2), and no-til hay production west of the lake (see figure 1-3) for use throughout the park.

The Tribe and Regional Parks are fully committed to protecting the heritage and the archeological artifacts still remaining in the Park. Regional Parks is in full support of the Tribe working to return artifacts that rightfully belong to the Tolay Valley. The California Native American Historical Cultural and Sacred Sites Act apply to both state and private lands. Any person who removes, without authority of law, Native American artifacts or human remains from a Native American grave or cairn with the intent to sell or dissect is guilty of a felony punishable by imprisonment in the state prison as of January 1, 1988. The Tribe and Regional Parks are working together to continue implementing and improving protection of this sacred land.

Regional Parks will continue to work in partnership with the Tribe to manage the land and its important heritage. Lake restoration will return the lake to a “natural” system but will remain only a fraction of its former size. Tolay is a beautiful place of unique significance and will again become a place where native life and natural systems prosper, and where humans may gather in celebration of life and land.