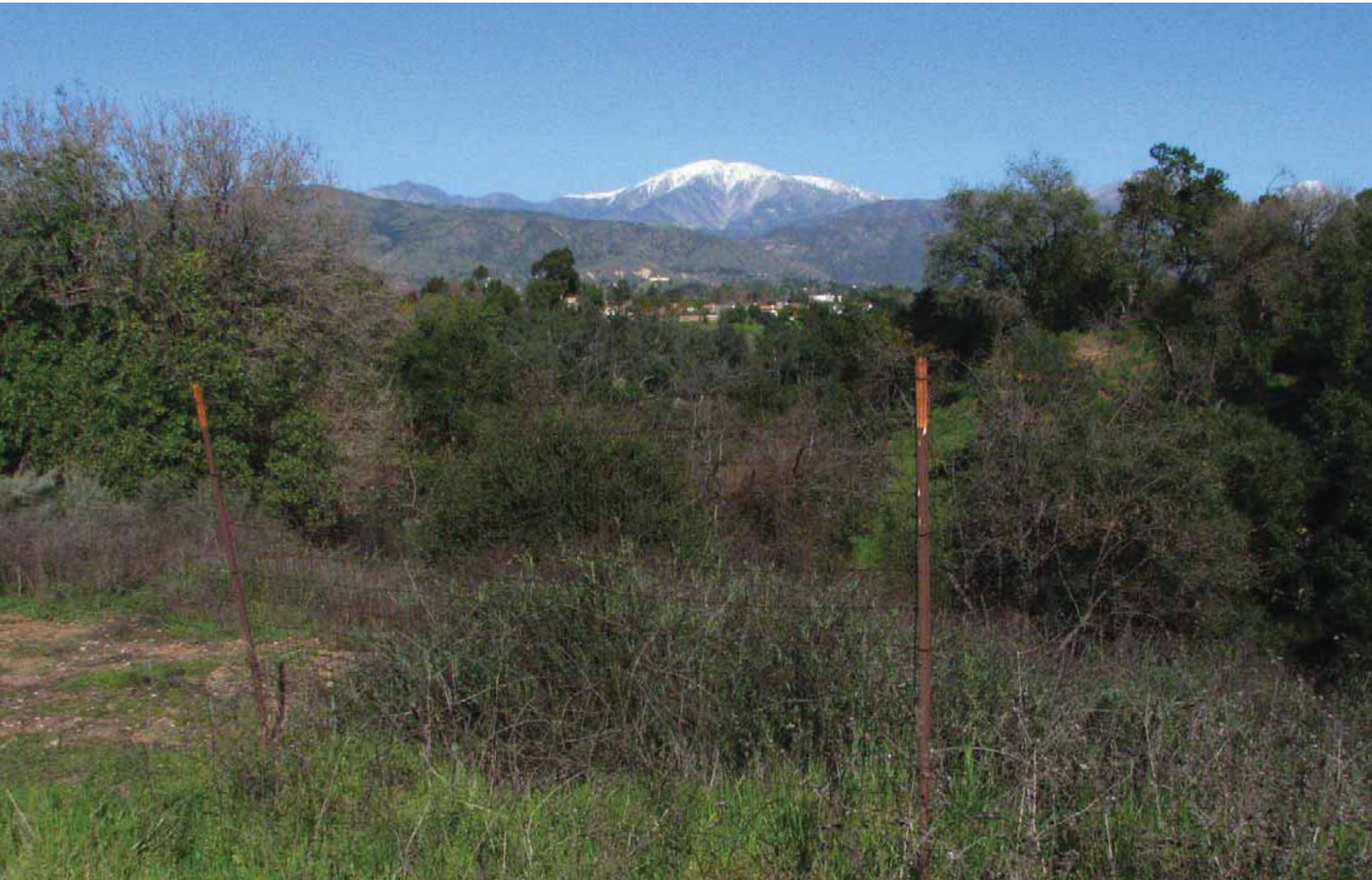


APPENDIX A
Walnut Creek Habitat and Open Space Project
Site Assessment Report





PROJECT TEAM

**WATERSHED CONSERVATION AUTHORITY
THE CITY OF SAN DIMAS**

AHBE LANDSCAPE ARCHITECTS

- ARAGON GEOTECHNICAL
- BONTERRA CONSULTING
- CALIFORNIA WATERSHED ENGINEERS
- JACOBUS AND YUANG
- RESTORATION DESIGN GROUP
- THE ROBERT GROUP
- TOURAINÉ RICHMOND ARCHITECTS

Prime Consultant

- Geotechnical Engineering
- Environmental Service
- Civil Engineering
- Cost Estimating
- Landscape Restoration
- Outreach
- Architecture

PROJECT APPROACH

The Walnut Creek Habitat & Open Space project scope encompasses the conceptual site planning and programming for a 60.9-acre parcel located adjacent to the City of San Dimas, California. The project is led by the Watershed Conservation Authority (WCA), a joint powers entity comprised of the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC) and the Los Angeles County Flood Control District (LACFD). AHBE Landscape Architects is facilitating the process based on two key phases: Site Analysis and Assessment, and Outreach and Concept Development.

TASK 1: SITE ANALYSIS AND ASSESSMENT

In this phase, the project team's goal was to develop a clear understanding of the issues and opportunities around the site, evaluating site characteristics that can be used as inspiration for the conceptual design development, and identifying a list of key stakeholders that will be engaged in the design process. This work is summarized herein in this *Site Assessment Report*.

TASK 2: OUTREACH AND CONCEPT DEVELOPMENT

In this phase, AHBE and the Design Team will build upon this *Site Assessment Report* and outreach to a larger audience to initiate development of a Preferred Conceptual



Design Alternative for the Walnut Creek Habitat and Open Space property. The process for generating this alternative includes targeted meetings with project stakeholders, regular meetings with a project steering committee, vetting of technical design issues via a technical advisory committee, meetings with the necessary regulatory agencies, three visioning workshops with the community, development of three distinct conceptual design alternatives validated by cost estimates, and a clear understanding of the necessary permit requirements and required agency approvals. In addition to the design itself, the preferred conceptual design product will identify design standards, technical criteria and guidelines to be considered by WCA as the project moves forward.

TABLE OF CONTENTS

EXECUTIVESUMMARY.....5

01 PROJECT CONTEXT8

02 COMMUNITY OUTREACH12

03 CULTURAL SITE HISTORY.....16

04 SITE RESOURCES.....28

06 HABITAT36

05 JURISDICTIONAL RESOURCE LIMITS52

APPENDIX

A GEOTECHNICAL FEASIBILITY

B BIOLOGICAL CONSTRAINTS ANALYSIS

C CULTURAL RESOURCES ANALYSIS

D HYDROLOGICAL EVALUATION

E PLANT PALETTE & HABITAT ASSESSMENT

F STAKEHOLDER INTERVIEWS

G ARCHITECTURAL EVALUATION

H JURISDICTIONAL ASSESSMENT



Right: View of Smith Hall (center) and Uncle Charley's Cottage (right). Both buildings served as residential units and are a part of the "core" Voorhis School for Boys Architectural/Historical District.

EXECUTIVE SUMMARY

Located within the residential community of San Dimas, adjacent to existing regional recreational resources and within proximity to valuable environmental resources, the Walnut Creek Habitat and Open Space project holds tremendous potential as a highly valuable open space that can benefit the adjacent social and environmental communities. This report outlines an initial evaluation of the site's multi-faceted resources as a departure point for the development of an Open Space Master Plan/Conceptual Site Plan.

The 60.9 acre site, which has laid vacant in its most recent history, has valuable ecological and cultural resources that should be used as inspirational drivers for the development of a conceptual site plan and program itinerary. The master plan/conceptual site plan process is expected to last approximately 9-12 months and will include, in addition to this site evaluation, an extensive outreach process to engage the community (the site users) in all aspects of the planning and design process.

Ecologically, the site is home to some patches of native Californian vegetation communities, including Coastal Sage Scrub, Black Walnut and Coast Live Oak Woodland. These resources, in combination with the other vegetated areas, create a wildlife habitat for common species of amphibians, reptiles, mammals and birds. The site is also part of the proposed East San Gabriel Valley Significant Ecological Area that is intended to increase wildlife richness

and movement. Preserving, adding to and enriching the existing vegetative communities on site should be seen as a priority — not only as a site amenity, but also as a contribution to the larger regional ecological well being.

The site has a rich human history, where man, nature and the landscape have had a close and beneficial relationship. Dating as far back as 500 BCE, Native Americans lived here and were inherently dependant on the natural landscape. Acorns from Coast Live Oaks were a staple food for the Tongva, supplemented by roots, leaves, seeds and fruit. In the mid-1800's the community of San Dimas was a part of the last Spanish land grants, and turned into a Rancho devoted to raising sheep and cattle. The Rancheros of California established many land-use patterns that are still recognizable in the California landscape today.

The site was also home to the Voorhis School for Boys and later the Southern California Campus for the California Polytechnic State University. Both schools shared a philosophy of education that celebrated and exemplified the close connection and dependence between man and the landscape. Today there are some remnant campus buildings that could be re-purposed as part of the master plan development.

Part of this initial phase included a series of stakeholder interviews to familiarize key constituents with the project's goals and planning processes. These interviews were

also utilized as an opportunity to receive input on the site's existing resources and future possibilities. The stakeholders overwhelmingly agreed that the site should primarily be dedicated to nature-oriented passive programs that emphasize a *wilderness experience* with minimal site interventions, versus a site dominated by active programs, such as playing fields. A consensus was also apparent when discussing concerns about the project's development, access, public safety and disturbance of the surrounding neighborhood. While creating access points that are accessible by multiple modes of transportation is desired, the exact location of these points, in addition to attracting large numbers of site visitors, was raised as a common concern.

**OPPORTUNITIES/ PROGRAM
POSSIBILITIES FOR THE SITE**

ECOLOGICAL

- Ecological restoration
- Naturalized open space (minimal intervention and program)
- Creating, preserving and enriching native California habitat
- Connection to Antonovich Trail
- Wildlife animal shelter/sanctuary

EDUCATIONAL

- Nature center
- Outdoor education facility
- Ropes course
- Permaculture demonstration area
- Habitat and wildlife viewing education
- Ranger station
- Gallery space
- Water-wise garden demonstration area
- Sculptures representative of area wildlife
- Bird viewing platforms
- Bird houses
- Firefighter training area
- Search and rescue training area
- California native garden and habitat Gardens
 - Oak woodland
 - Sage scrub
 - Meadow
- Native plant nursery

- Orchard
- Interpretive walks (educational signage or mobile docents)
 - Human site history
 - Flora and fauna
 - California land use history
 - Land conservation strategies
 - Watershed awareness
 - Exploring biodiversity

RECREATIONAL

- Recreational trails for hikers and horseback riders
- BBQ area
- Picnic area
- Outdoor kitchen for larger school group events
- Outdoor theatre
- Camping area
- Benches
- Swings
- Children's play space
 - Typical playground
 - Natural/Interpretive play space
- Outdoor fitness area
- Multi-purpose deck area
- Multi-modal access
- Restaurant
- Bathroom

- Parking area
- Horse staging area
- Multi-purpose lawn area
- Kite flying area

**PRIMARY CONSTRAINTS TO
THE SITE'S DEVELOPMENT**

- Access continues to be a significant concern to all the stakeholders involved in the site.
- Attracting too many users
- Fire safety
- Noise pollution



Above: Historic photo of Walnut Creek (circa 1960)

01

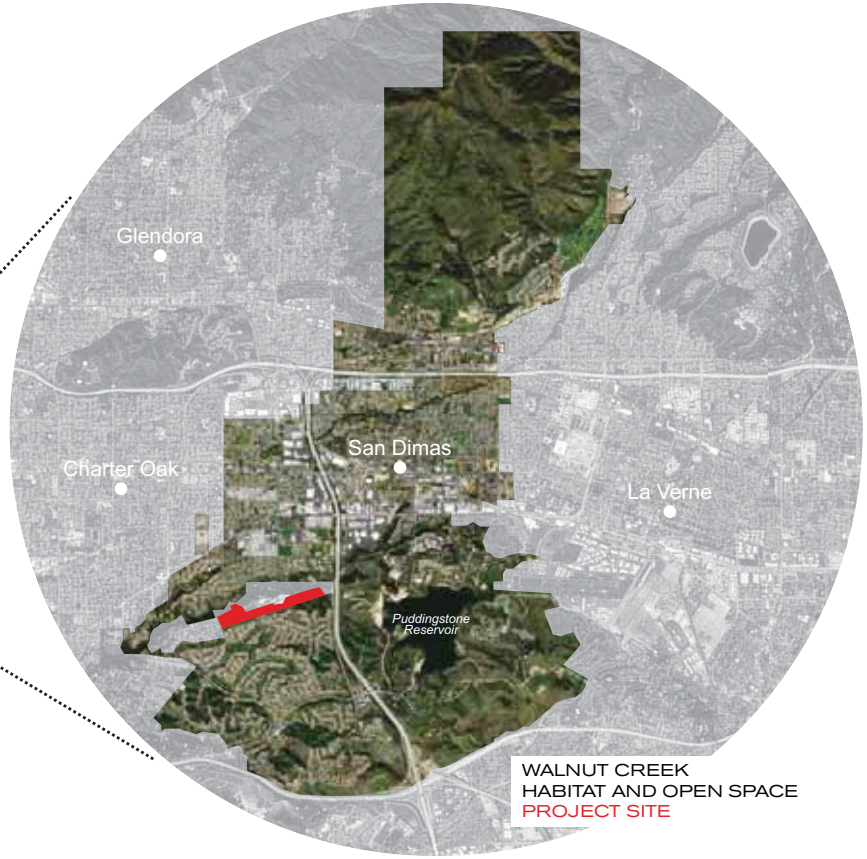
PROJECT CONTEXT

The proposed project site, consisting of 60.9 acres, is located in an unincorporated portion of Los Angeles County. It is a joint partnership between the City of San Dimas and the Watershed Conservation Authority, the two land owners of the project site.

The eastern portion of the project site supports rugged, naturally vegetated hillsides that drain in a north-western direction into Walnut Creek. Walnut Creek traverses the area along the northern boundary in an east-west direction. The central portion of the site was previously occupied by the Voorhis School for Boys and the California Polytechnic University, Pomona (San Dimas Branch) campuses. To the north of the site are campus facilities occupied by the Tzu Chi Foundation. The western portion of the site is open space, with Walnut Creek traversing along the northwestern edge of the project site in this area. The project site is west of the Orange freeway (State Route 57). Surrounding areas to the south of the project site are zoned and developed for residential purposes, including the Woodwalk subdivision. Areas to the north are zoned as light agricultural and open space.

The project location is shown on the U.S. Geological Survey's (USGS) San Dimas 7.5-minute topographic quadrangle in Township 1 South; Range 9 West (S.B.B.M). The project site elevation ranges from approximately 650 to 910 feet above mean sea level (msl), with the areas of highest elevation along the eastern edge of the site. The

lowest elevations at the project site are within the stream bed of Walnut Creek in the northwestern portion of the site. Regional topography is shown as sloping toward the southwest.



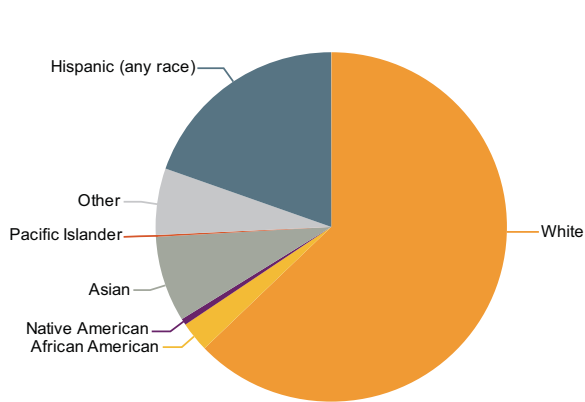
SAN DIMAS DEMOGRAPHICS

The 2010 United States Census (All data are derived from the United States Census Bureau reports from the 2010 United States Census, and are accessible on-line) reported that San Dimas had a population of 34,980. The population density was 2,163.1 people per square mile (835.2/km²).

The racial makeup of San Dimas is: 26,116 White (74.7%); 1,156 African American (3.3%); 243 Native American (.7%); 3,286 Asian (9.4%); 73 Pacific Islander (.2%); 2,569 Other Races (7.3%); 1,537 two or more races (4.4%); and 8,163 Hispanic (of any race) (23.3%).

The Census reported that 33,771 people (96.5% of the

ETHNIC BACKGROUND

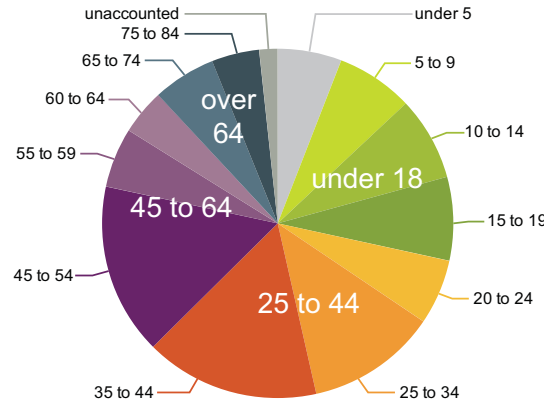


population) lived in households, 837 (2.4%) lived in non-institutionalized group quarters, and 372 (1.1%) were institutionalized.

The population age distribution is spread out with 9,950 people (28.4%) under the age of 18, 2,113 people (6%) aged 18 to 24, 9,825 people (28.1%) aged 25 to 44, 8,933 people (25.5%) aged 45 to 64, and 4,159 people (11.9%) who were 65 years of age or older.

(US Census 2010)

AGE DISTRIBUTION

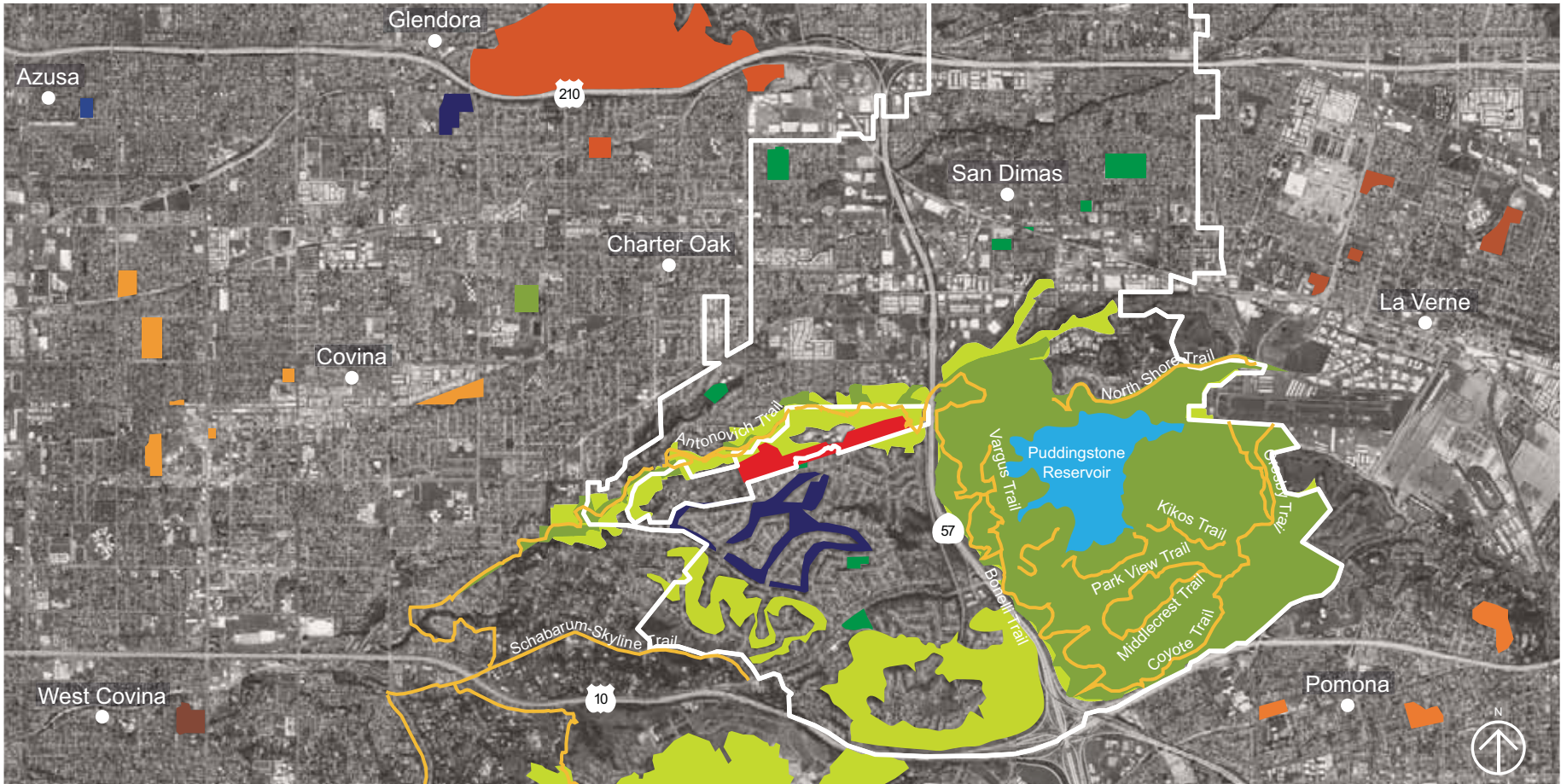


REGIONAL ECOLOGICAL CONTEXT

The Project site and immediate surrounding area abuts the northern flank of the San Jose Hills. The San Gabriel Mountains are located approximately 5 miles north of the Project site, Puddingstone Reservoir and the Frank G. Bonelli Park are located to the east of the Project site and to the east of the I-57 Freeway. Its proximity to such a variety of natural areas has allowed the project site to be part of the Los Angeles County Significant Ecological Area (for more information on this SEA, see pages 44-45).

The site is also located within the South Coast Air Basin, which is defined by local mountain systems including the San Gabriel Mountains on the north, the San Bernardino Mountains on the east, and the Santa Monica Mountains on the west.

The Walnut Creek Park Trail/Michael D. Antonovich Trail is located north and east of the Project site. This is a hiking and equestrian trail that winds through several San Gabriel communities, offering trail users excellent views of the surrounding area and the San Gabriel Mountains. The trail links to the Frank G. Bonelli Regional Park trail and is part of the Los Angeles Trail Linkage System (Section 04 Draft EIR Vista Verde Ranch).



RECREATIONAL RESOURCES

- | | | | |
|---|---|--|--|
|  Designated Open Space |  City of Glendora Parks |  City of Pomona Parks |  Golf Courses |
|  LA County Parks |  City of La Verne Parks |  City of Covina Parks |  Multi-Use Trails |
|  City of San Dimas Parks |  City of West Covina Parks |  City of Azusa Parks |  Project Site |

Preservation of Open Space



Trail Systems



Habitat Restoration



02

COMMUNITY OUTREACH

In Summer 2011, the Watershed Conservation Authority (WCA) and the City of San Dimas began work on the Site Planning of the Walnut Creek Habitat & Open Space property. The goals for the Site Planning Effort are to enhance and expand upon open space potential and recreational opportunities of the site, while following the WCA's core mission of conservation, restoration and environmental enhancement of the San Gabriel and Lower Los Angeles Rivers Watershed area. A thorough community outreach effort has been incorporated into the larger planning effort for the Walnut Creek Habitat and Open Space Project to ensure that the public is heard at critical milestones in the decision-making process, and that their input is incorporated as the project moves forward.

A range of community stakeholders and leaders participated in the community outreach and public engagement process. Sixteen interviews were conducted in total — designed to solicit feedback from key stakeholders about their visions for the site, and to identify their priorities and concerns as the planning process commences. Information gathered from the interviews will help apprise the project team about the issues that may arise as the planning process moves forward.

Representatives from the following stakeholder organizations and governmental agencies were interviewed:

- Adjacent Homeowners Associations
- California Department of Fish & Game
- City of San Dimas Commissioners (Equestrian, Parks & Recreation, Planning)

- City of San Dimas Elected Officials
- City of San Dimas Staff
- Los Angeles County Department of Parks & Recreation
- Los Angeles County Fire Department
- Los Angeles County Sheriff's Department
- Mountains Recreation & Conservation Authority
- Office of Supervisor Michael Antonovich
- San Gabriel Mountains Regional Conservancy
- Tzu Chi Foundation
- U.S. Army Corps of Engineers
- Watershed Conservation Authority

Interpretive Signage



Educational Opportunities



Site History



VISION FOR THE SITE

Stakeholders overwhelmingly envision the site as an area for passive recreation. They are interested in the preservation of open space and the naturally existing habitat and ecosystem, including wildlife corridors. Making regional connections with other open spaces and parks is seen as a priority, particularly connecting multi-modal trails into a *loop* to increase recreational opportunities. Integrating the trail system with Walnut Creek Park, Bonelli Park and the Antonovich Trail is recommended.

Some interviewees also expressed an interest in expanding the active recreational opportunities of Loma Vista Park. Conserving the natural habitat for plants and animals, while still expanding green space for the community, is identified as

a central goal of the planning effort. Amenities and features that stakeholders see as important include:

- Improved access to the site.
- Connectivity of trails.
- Presence of staging areas.
- Restrooms (though a few interviewees feel that restrooms could create cost and public safety issues due to the potential for vandalism and misuse).
- Adaptive reuse of existing structures for ranger housing, educational purposes, storage or other creative uses.

Maintaining a focus on sustainable planning and environmentally friendly practices is stressed at all levels of the planning effort.

Long-term care and stewardship of the park is suggested to come through partnerships with local community organizations and non-profits, or using a similar model to the Sheriff's Department of combining paid staff and volunteer staff.

ISSUES OF CONCERN

Central stakeholder concerns include possible impacts to both the natural site and the neighborhoods within the local proximity. Potential disturbance of the surrounding neighborhood is identified as a key issue. This can be mitigated by the creation of a greenbelt, or barrier, placed between the adjacent homes and areas used for passive recreation. Several interviewees believe that the potential for increased vehicular traffic in the area will be a challenge

as more vehicles will encroach the neighborhood to visit the site. Speeding and increased use of street parking in the neighborhood is also a concern.

There are public safety concerns about fire hazards (particularly fuel modification), the isolated nature of the site, human-wildlife interaction, graffiti, vandalism, and misuse of any on-site structures. Although unlawful activity has not been common on the site, past misconduct has included users trespassing onto adjacent properties and youth consuming alcohol and creating noise disturbances on the premises. Interviewees suggest the area should have formalized security such as an on-site park ranger or patrolling by local law enforcement, and that the site needs to accommodate emergency vehicle access.

The largest stakeholder concern is access to the site. Planning multi-modal access through several points is identified as important to increasing regional connectivity, but the issue of where to place access points is highly contested. Access points are recommended through Loma Vista Park, Calle Bandera, San Dimas Avenue and the west end of the Tzu Chi Foundation's "Butterfly Property". An entrance through Loma Vista Park will expand access through an existing developed area and will also enhance active recreational opportunities at Loma Vista Park. Access through Calle Bandera is identified as an option, however the street is currently blocked off by a locked gate. The local homeowners have fought past attempts to open this street to public traffic, however the City controls the gate and use

through prior litigation with the Bible College. Access from San Dimas Avenue would require a bridge into the site. This is recognized to be costly and will have environmental impacts. Finally, access could eventually be achieved through the west end of the "Butterfly Property", but this will require coordination of land exchange and easements between the City of San Dimas, the Tzu Chi Foundation, the County of Los Angeles and the WCA. The Tzu Chi Foundation and Los Angeles County currently own the property necessary to accomplish this public access.

SITE USES

Stakeholders identified a wide range of users as likely to visit the site, from local residents to regional visitors from the greater Los Angeles area. Interviewees believe that the site could have both local and regional appeal, particularly with connecting multi-modal trails to surrounding sites. In addition, stakeholders believe visitors will be likely to use the park for a smaller, more local *wilderness experience*, and as an alternative for local residents to the more distant and larger sites of Bonelli Park, or the San Gabriel Mountains. Stakeholders identify the site as having the potential for educational opportunities, and recommend partnering with local school districts to plan field trips and provide educational exploration opportunities for children. Another suggestion is for the site to include interpretive signage, or installations, about the local habitat in order to educate visitors about sustainability issues, including fire safety, plant and animal conservation, local water systems and geological history. In addition to the natural history of the site, the cultural

and social history is identified as important – particularly the Native American history, and the past use of the site at various times for the Baptist Bible College, Voorhis School, and Cal Poly Campus.

COMMUNITY ENGAGEMENT

Interviewees believe that the local community will be inherently interested in the site as a community resource. Stakeholders envision that most community feedback will be about the contested issue of access, but that the area has a long history of volunteer engagement and stewardship of other community resources. Interviewees recommend using local media outlets such as city newsletters, public access television, homeowners associations' newsletters, and distributing flyers at targeted locations to promote community engagement and increase participation in the planning process.



Stakeholder Recommended Site Access Locations

03 CULTURAL SITE HISTORY

PREHISTORY

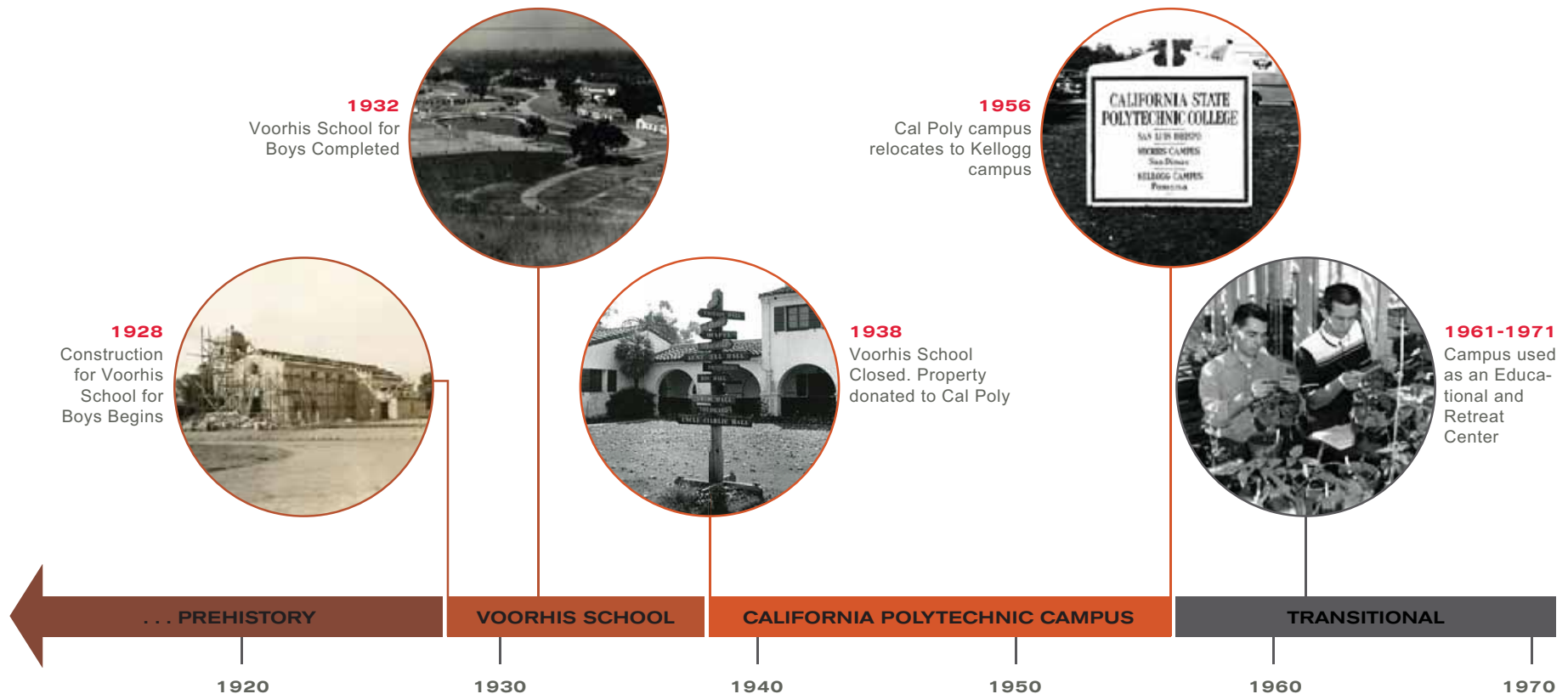
The later prehistoric periods of the Southern California coastal region are generally described in *cultural horizons* developed by William Wallace more than 50 years ago. These four chronologies are generally defined by the temporal and spatial distribution of cultural traits:

- Horizon I: Early Man or Paleo-Indian Period (11,000 BCE to 7,500 BCE)
- Horizon II: Milling Stone Assemblages (7,500 BCE to 1,000 BCE)
- Horizon III: Intermediate Cultures (1,000 BCE to 750 CE)
- Horizon IV: Late Prehistoric Cultures (750 CE to 1769 CE)

The Late Prehistoric Period includes the first few centuries of early European contact (1542-1769 CE). It is known as the Prehistoric Period due to the low level of interaction between native Californians and Europeans prior to Portola's overland expedition in 1769. Archaeological records reveal a substantial increase in the indigenous population the few centuries prior to European contact. Some sites may have contained as many as 1,500 individuals. Many of these village sites are believed to have been occupied throughout the year rather than seasonally.

The Walnut Creek Habitat and Open Space Park project area was the home of the Gabrielino, or Tongva. The Gabrielino Community of Weniinga (aka: Guinibit) is documented to

SEPTEMBER 2011



have existed in the vicinity. The ancestral Gabrielino arrived in the Los Angeles Basin probably before 500 BCE as part of the Shoshonean (Tatic speaking) Wedge from the Great Basin region and gradually displaced the indigenous peoples. They were primarily hunters and gatherers, living off the bounty of the varied mountains, foothills, valleys, deserts and coasts. Acorns were the staple food, supplemented by roots, leaves, seeds and fruit. Fresh and saltwater fish, shellfish, birds, insects and mammals were also exploited.

Gabrielino communities and culture began to decline with the arrival of the Mission de San Gabriel in 1771. The Mission was established in South-Central Los Angeles County, in what has since been called the San Gabriel Valley. Many Gabrielinos joined the mission and left their villages. This association with the Mission San Gabriel gave the Gabrielino their Europeanized name Gabrielino. By the time the first American settlers arrived in the Los Angeles area, the Gabrielino were dispersed and working on Mexican land grants.

The community of San Dimas, initially called Mud Springs after the adjacent Mud Springs Marsh, was part of the last Spanish land grant issued by Mexican Governor Alvarado. Rancho San Jose, started by Ygnacio Palomares and Ricardo Vejar in 1837, was created from land from the Mission de San Gabriel. The rancho had sheep and cattle operations in addition to growing crops for consumption by the residents of the rancho. In the late 1800s, the city's name was changed by the San Jose Land Company to reflect the San Dimas Canyon to the north when the Santa Fe Railroad came through.

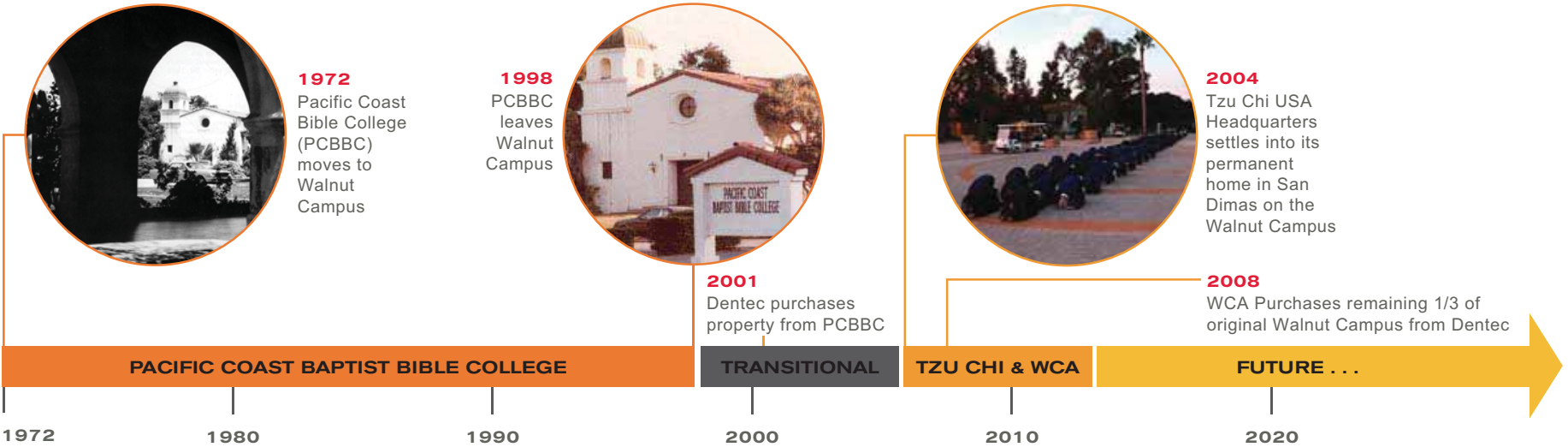
VOORHIS SCHOOL

In the early 1900s the project area was a secluded, undeveloped span of 157 acres of arroyo and mesa known as Oak Knoll Ranch. Walnut Creek wash and other streams ran through the property amongst a lush variety of California native Oaks and chaparral.

With a vision of starting a school for underprivileged boys, Charles B. Voorhis (one of the early executives of General

Motors) saw that the land was very suitable for a campus site, with its rich soil and ample land for horticultural and livestock endeavors and playing fields. He purchased the property in 1927 and assembled an architectural staff to begin the design and construction of a beautifully crafted Mediterranean Spanish Colonial style campus. The campus boasted five dormitory cottages, an administration building, library, chapel, infirmary, classrooms, cafeteria and faculty residences. In addition to the architectural enhancements, groves of citrus, avocados and deciduous fruit trees were planted and nurtured. The Voorhis School for Boys operated for the next decade as a *home away from home* for boys who were in need of a better living environment. The design and construction of the facility was clearly linked to a creative *philosophy of education*. This is eloquently described in a 1928 Guidebook/Brochure of the Voorhis School for Boys, as written by H. Jerry Voorhis. He writes:

The school is situated in the San Jose hills about half way between San Dimas and Covina. Much of the 150 acres is in rich, level ground which will



be devoted to horticulture, gardening, and the raising of small stock. Here, under proper direction, the boys may learn to till the soil, plant and care for the trees or crops, and perfect themselves in whichever of these industries they may wish to pursue. Part of the acreage is composed of rough, hilly country on the banks of Puddingstone Creek. This is the "Boy Preserve" where nature will be studied at first hand, where ardent explorers will wind their toilsome way, and where, no doubt, occasional scenes of tribal conflict will be enacted.

The buildings are on an oak-dotted mesa from which an unobstructed view of Mount San Antonio (Old Baldy) and his lesser associates offers inspiration..... The ideal of this school-home is "home" life in the fullest sense of that word, that is, understanding, educative, guiding, and loving home life. The ideal is, further, that this home life be offered to such boys, without schools of this type, would never know it. Here the orphan boy, the boy from the broken home, the boy whose "home" lacks most of the elements which give the word meaning, or the boy of a widowed or overburdened mother, may find comfort, understanding, and shelter. This ideal of the Voorhis School must be apart of the atmosphere of the place, something taken entirely for granted by every member of the community, old and young alike, a part of the fabric



Above: Charles B Voorhis (1870-1961)
 Below: Jerry and Louise Voorhis (circa 1975)

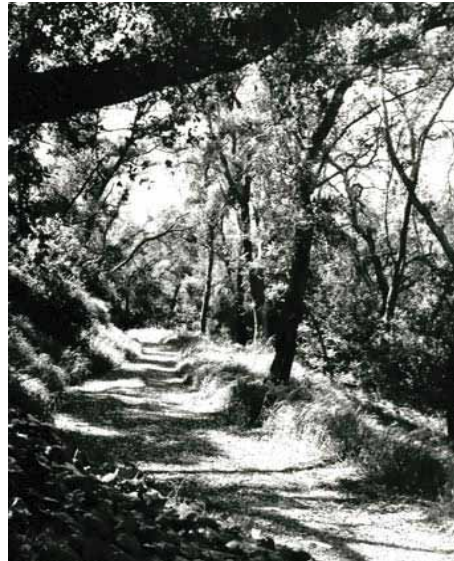


Above: Voorhis School for Boys construction (1928)
 Below: Recreational activities on the Walnut Campus grounds (1939)





Above: Dedication of the Voorhis Unit of Cal Poly (April 22, 1950)
 Below: Horticulture was a key component of the educational philosophy at both the Voorhis School for Boys and Cal Poly



Above: Inclusion and respect for nature
 Below: The Cal Poly Agricultural department testing of new practices on the Citrus Groves



of things about which no one will do much talking, because its fulfillment is too fundamental and too sacred to be made a matter of any evident effort.

CALIFORNIA POLYTECHNIC CAMPUS

The last Voorhis School for Boys class graduated in the spring of 1938. While looking to find a new owner for the property, Charles was informed that Cal Poly was interested in the potential of extending their campus to Southern California. He researched their *learn-by-doing* educational philosophy and was enthusiastic to find it coincided with his own. In the summer of 1938, the campus was donated to the Cal Poly institution with apparently only one string attached: a provision that if the campus was no longer in use by the college, it would be passed on to another educational based institution. Thus the birth of the Cal Poly's Southern California campus, initially a satellite extension of the San Luis Obispo institution.

Three courses of study were initially offered at the southern campus: Citrus Production, Ornamental Horticulture and Agricultural Inspection. Students could work towards a two-year vocational certificate or a three-year technical certificate. Several of the original Voorhis classrooms were converted to laboratories for entomological studies as the school focused much of its training on Agricultural Inspection of diseases or insects such as the Oriental fruit fly.

The Voorhis student body outgrew the San Dimas facility less than two decades after its doors opened. In 1956, 550 students and 30 faculty members moved one mile away to the Kellogg campus, an 813-acre horse ranch donated in 1949 by breakfast cereal magnate W.K. Kellogg.²

PACIFIC COAST BAPTIST BIBLE COLLEGE

From 1961 until the early 1970s, the Walnut Campus was used as an educational center and retreat by numerous groups and industries. In 1972, the Pacific Coast Baptist Bible College (PCBBC) leased the Walnut Campus from the State until it purchased the property in December 1977. Enrollment at Pacific Coast Baptist Bible College reached 500 students in the late 1970s, with students coming mainly from 300 churches in the western United States. In 1995, Pastor Terry Randolph led the college through a time of financial crisis and declining enrollment which eventually forced the relocation of the college from the Walnut Campus to Oklahoma City in June of 1998.

TZU CHI FOUNDATION AND WATERSHED CONSERVATION AUTHORITY

During a transitional period, the campus was purchased by Daniel Singh of Dentec who named the project site Vista Verde and split the property into two ownerships in 2001. Currently, roughly 2/3 of the original acreage is owned by the Tzu Chi Foundation, the remaining 1/3 is owned by the Watershed Conservation Authority (WCA) and City of San Dimas.



Above: Cal Poly Stock Building (1953)
Below: Transitional use as an Educational Center in the 1960s



Above: Athletic fields of the Voorhis Unit at Cal Poly included a running track, football, field house and a baseball field
Below: Pacific Coast Baptist Bible College on Walnut Campus





Above: Tzu Chi celebration of Mother's Day, Buddha's Birthday and 45th anniversary at Walnut Campus US Headquarters (2011)
Below: Tzu Chi partners with San Dimas to clean Walnut Creek (2010)

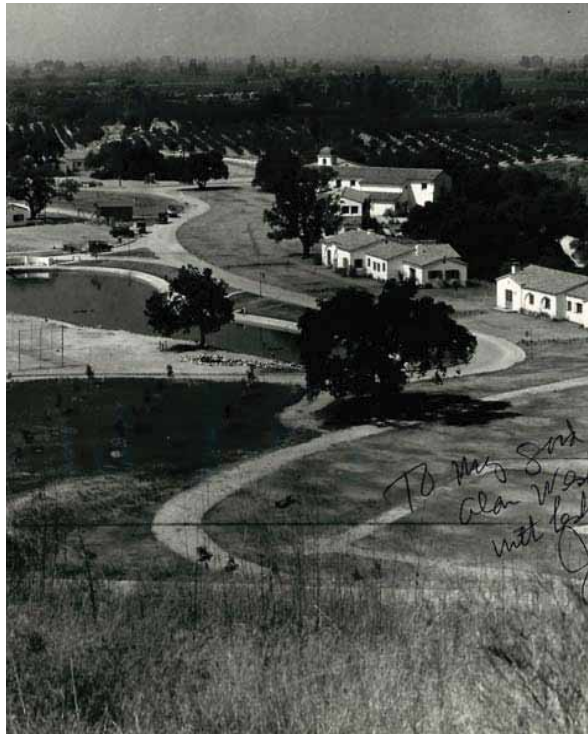
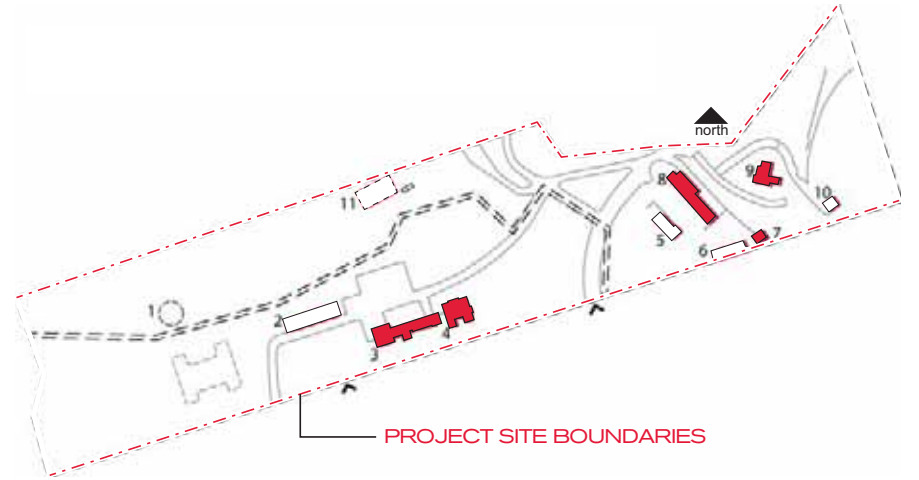


The Tzu Chi Foundation is an international non-profit, non-government humanitarian organization founded on four major missions which embody the translation of the name Tzu Chi: *compassion and relief*. These missions include charity, medicine, education and humanistic culture.

The WCA is a joint powers entity of the Rivers and Mountains Conservancy (RMC) and the Los Angeles County Flood Control District (LACFCD). Its focus is on projects that will provide open space, habitat restoration and watershed improvement in the watersheds of both the San Gabriel River and the Lower Los Angeles River. In partnership with the City of San Dimas, the WCA is embracing the history of the campus while envisioning a future site that is a model for sustainable watershed projects, provides open space recreation and follows the educational-based philosophies that were the founding principles of the original Walnut Campus.

**VOORHIS UNIT / CALIFORNIA
STATE POLYTECHNIC CAMPUS**

A historical map of the Voorhis Unit Campus drawn circa 1938 is shown on the opposite page. The project boundary outline (in red) can be compared to the quick reference guide to the right, illustrating the full site extents and buildings that remain within the current landscape. These maps indicate that although five building features are located on the project site, they are physically and visually removed from the core of any potential Voorhis School for Boys architectural/historical district.



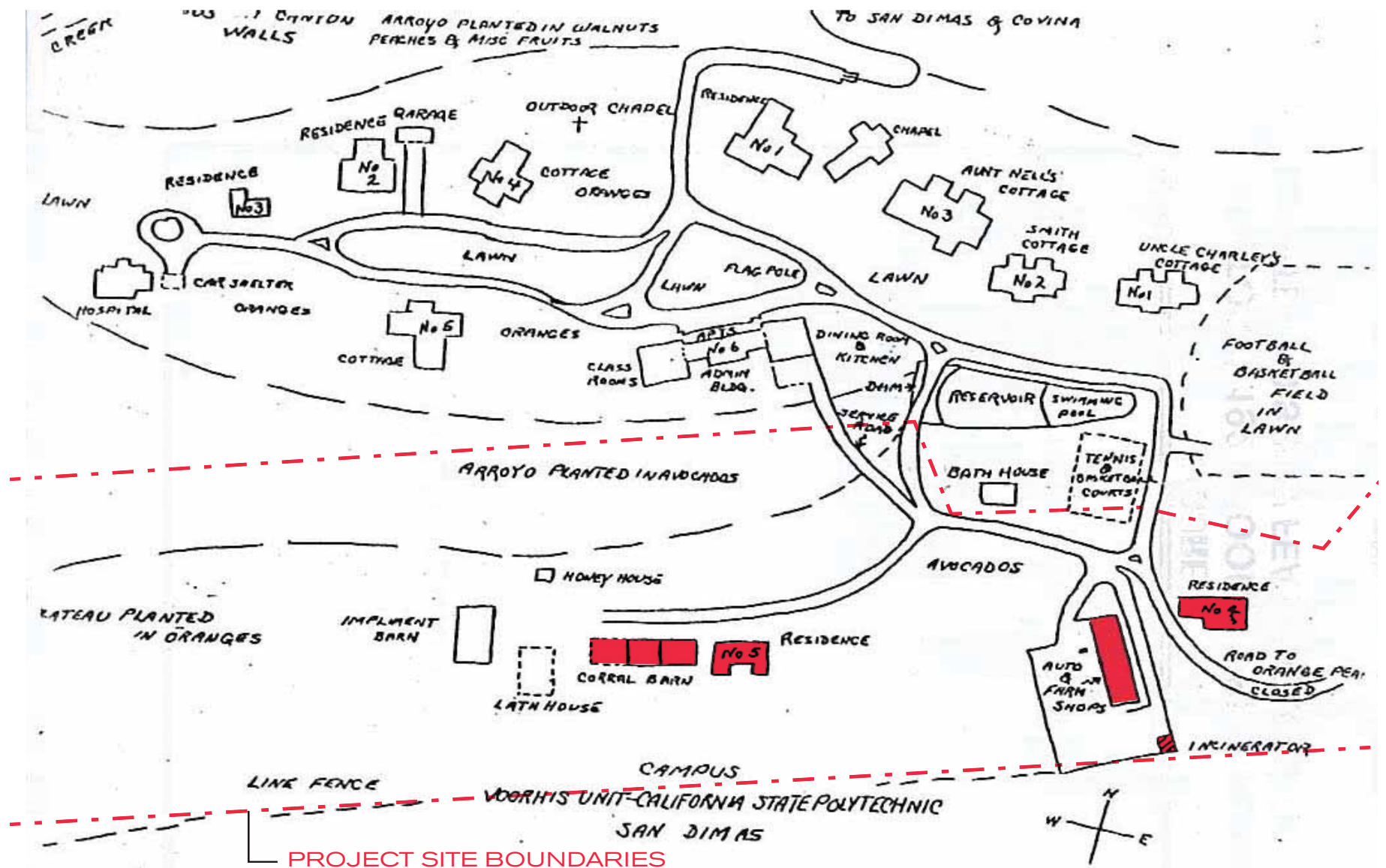
Left: Voorhis Campus circa 1931 showing the original buildings and agriculture fields in the background.

Top Right: Quick reference guide to the historical buildings that remain on the project site.

Bottom Right: Auto and Farm Shops (as seen highlighted as #8 on the above quick reference guide).

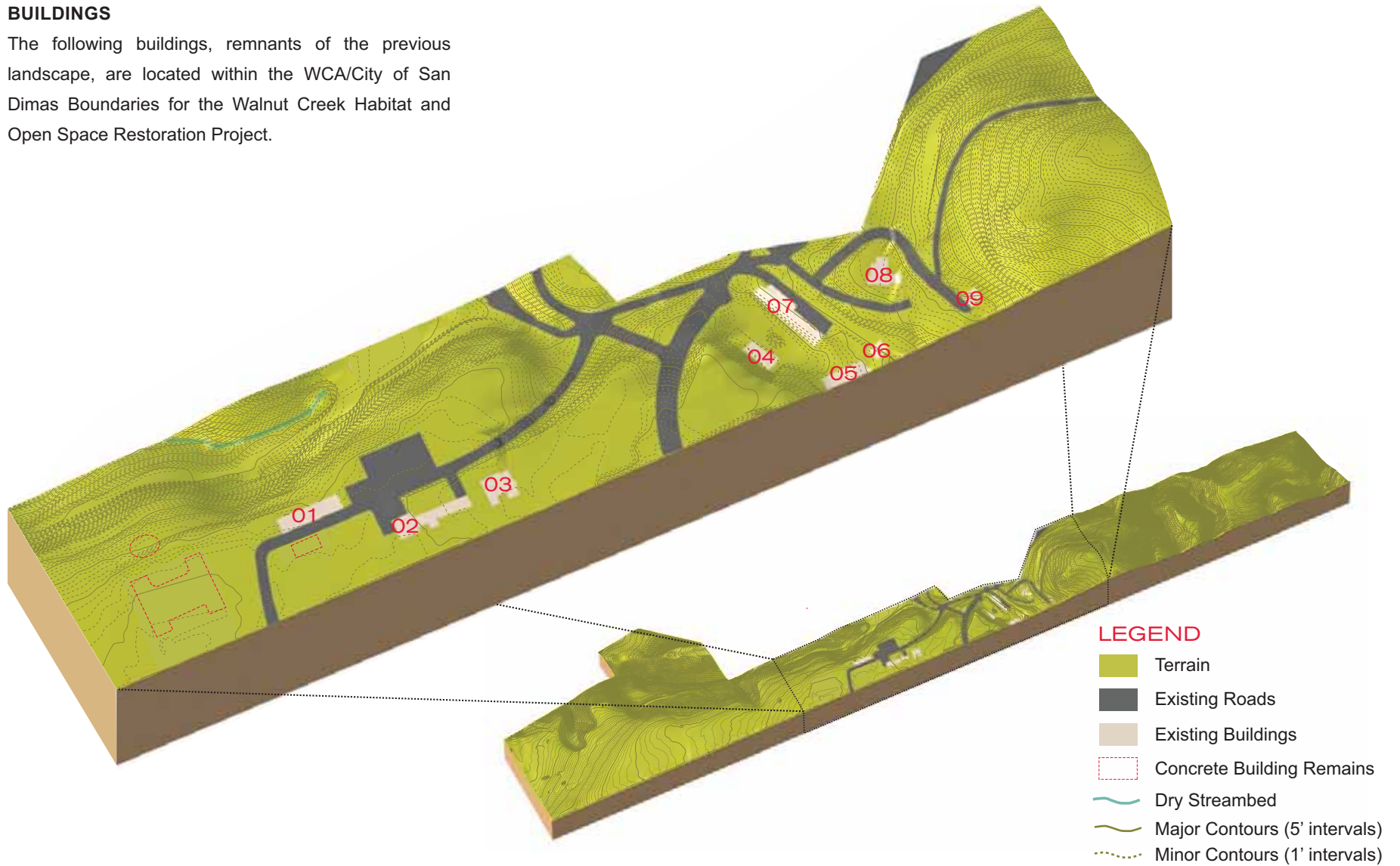


HISTORICAL CAMPUS MAP (CIRCA 1938)



BUILDINGS

The following buildings, remnants of the previous landscape, are located within the WCA/City of San Dimas Boundaries for the Walnut Creek Habitat and Open Space Restoration Project.





HUGHES HALL (c.1940s)

This 1-story classroom building is rectangular in plan and has undergone window, doorway and surface wall alterations. The design and construction are utilitarian and hold “no [historic] architectural merit or value.” The structure has friable lead/asbestos penetration in mastic adhesives, window putty, drywall and joint compounds.



PRINT SHOP (c.1940s)

This 1-story, post-*Voorhis* period, utilitarian building is located in an area once serving as a corral barn. The structure has a very low pitched gable roof and has been altered by new doorways and windows. It holds “no [historic] architectural merit or value,” and has friable lead/asbestos penetration in mastic adhesives, window putty, drywall and joint compounds.



ORIGINAL “RANCH COTTAGE” (1928)

This Spanish Colonial Revival building belongs to the *Voorhis* period of occupancy. It is constructed with a wood frame and covered in a gunite-like surface that visually appears as stucco. The one-story structure is virtually unaltered and retains significant architectural and historical values. Lead and asbestos are assumed to be present in the duct insulation and transit pipe.



04

LAUNDRY BUILDING/SHED (c. 1940)

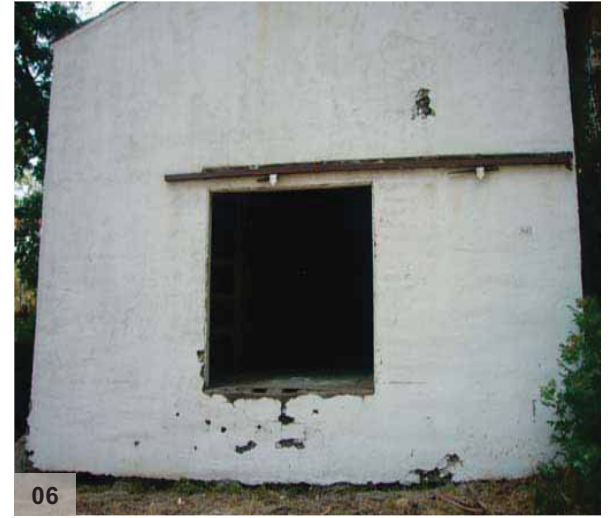
This small, one-story, utilitarian structure is constructed of stucco, gunite and clapboard and is associated with a concrete loading dock and metal shed. It was built during the “Cal Poly” period of occupancy and has “no [historic] architectural design value.” The building and shed tested negative for asbestos, however they have lead-containing exterior paint, and suffer overall structural damage.



05

OPEN STORAGE SHED (YEAR UNKNOWN)

This small, one-story, utilitarian structure is constructed of wood with a corrugated metal shed roof, however appears unfinished. It was built during the *Cal Poly* period of occupancy and holds “no [historic] architectural design value.” The open structure tested negative for asbestos and lead contamination.



06

ORIGINAL “INCINERATOR” VACANT SHED (1928)

This marginally influenced Spanish Colonial style building from the *Voorhis* period contains no decorative detailing. The structure has been altered, but remains a minor contributing historical feature. No asbestos is present, however the exterior stucco has very low levels of lead. Associated ash material sampled from the structure contains elevated levels of metals, the extent of which is unknown.



07 ORIGINAL "AUTO SHOP" (1928)

This Spanish Colonial Revival style building is from the *Voorhis* period. It is a 2-story structure containing industrial maintenance bays on the lower level with classrooms on the second floor. Wood shutters, ornamental ironwork, decorative vents and chimneys contribute to the architectural and historic value of the unit. No asbestos is present, however lead was found in paint on window trim, doors and jambs.



08 ORIGINAL "COTTAGE J" (1928)

This L-shaped Spanish Colonial style Cottage belongs to the *Voorhis* period of occupancy. The arched entry, wood shutters, ornamental ironwork and circular vents in the gable area contribute to the buildings architectural and historic value. The structure is in good condition and reported negative results for asbestos. Lead was found in ceramic tile in the restroom.

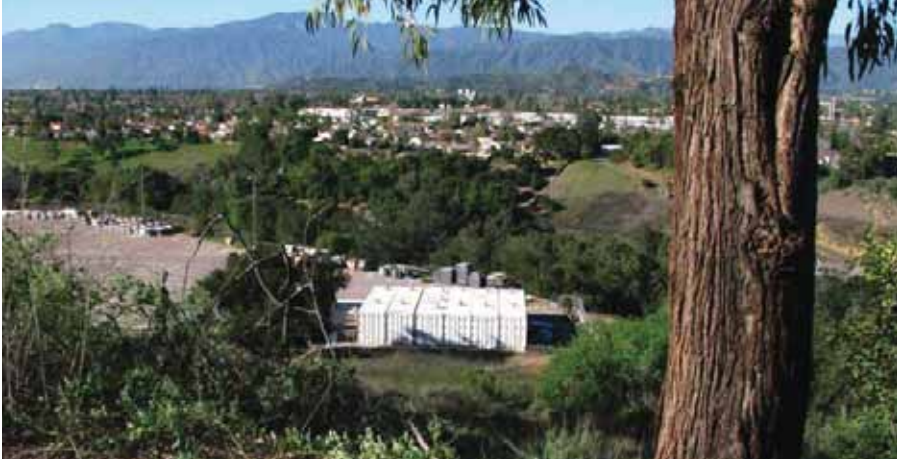


09 GARAGE/STORAGE SHED (YEAR UNKNOWN)

This 1-story structure from the *Cal Poly* period of occupancy has a wood frame construction with clapboard siding. It has been altered by the removal of the garage door and by the partial enclose of the opening. It has "no historic architectural value" and tested negative for asbestos. Lead was found in the green paint on the exterior wood siding.

04

SITE RESOURCES





SITE UTILITIES

Utility systems (i.e. hydrants, drains, former fire prevention systems, power poles with mounted transformers, etc.) are present in the project site. Other improvements include:

- Chain-link fencing (various areas north of and within the project site).
- A concrete lined drainage swale located along the southern boundary of the project site adjacent to the former incinerator/current storage shed.
- Unimproved trails and paths north of and within portions of the project site.
- Two circular concrete features that were at one time utilized for irrigation purposes are present in the western portion of the project site (former grove area). Metal components were observed in the structures, as was some standing water. A water line connects each structure to a hydrant.

to the former print shop building. Electrical and natural gas service is provided by Southern California Edison and the Southern California Gas Company, respectively.

According to online resources provided by the California Department of Conservation, Division of Oil, Gas and Geothermal Resources, there are no oil, gas or geothermal wells located on the project site (Phase 1 Environmental Site Assessment, Advantage Environmental Consultants, LLC).



Above: Portion of a drainage ditch along the southern boundary of the project site.

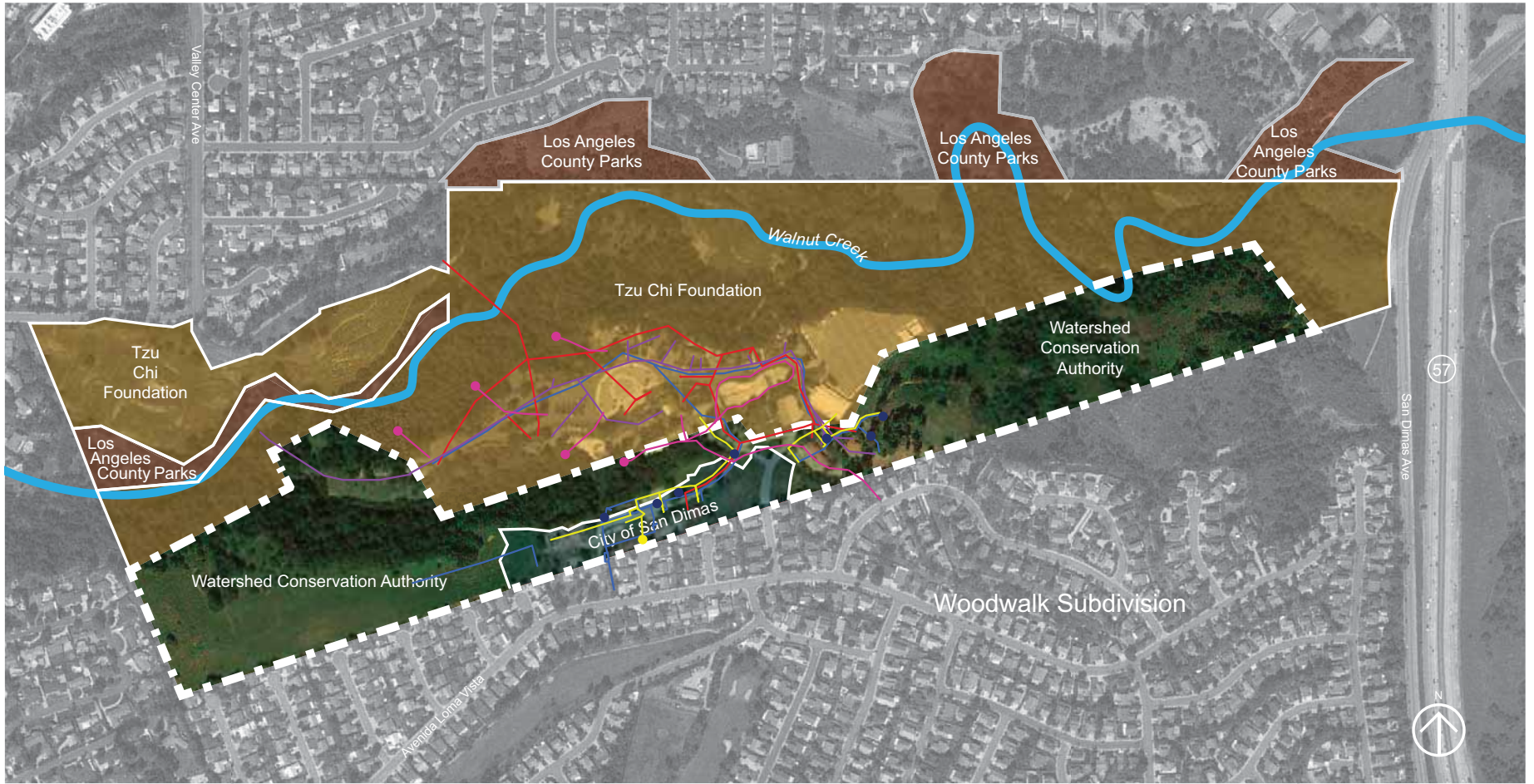
Below: Concrete structure (former irrigation devices) in the western portion of the project site.











Below: Excavated pit area (suspect underground storage tank) located west of the garage building located on the project site.



Potable water and sanitary sewer service in the vicinity of the project site are provided by Golden State Water and the Los Angeles County Sanitation District, respectively. However, it is possible that water and sewer services within the project area are currently, or were historically, private systems (i.e. wells, septic tanks/systems, etc.). A subsurface vault and what appear to be pumping systems for a well or water distribution system are present adjacent



UTILITIES LEGEND

-  Storm Drains
-  Gas Meter
-  Water Line
-  Storm Drain Outlets
-  Sewer Line
-  Fire Hydrants
-  Gas Line
-  Electrical Conduit

HYDROLOGY

The San Dimas area enjoys a typical Southern California Mediterranean climate regime typified by cool, wet winters and warm dry summers. Almost all rain falls from November through April. Weather records for the San Dimas Fire Station indicate average annual precipitation between 1906 and 2009 was 18.5 inches. The wettest month of the year is January with an average rainfall of about 4.3 inches in the project area (Western Regional Climate Center, 2010).

Site contour maps show that all surface runoff from the Walnut Creek Habitat and Open Space project site eventually empties into Walnut Creek. Believed to currently flow year-round from a mix of natural and anthropic runoff sources, Walnut Creek drains more than 58 square miles upgradient of the project. The watershed encompasses the northern San Jose Hills and Puddingstone areas, the suburban community of San Dimas plus parts of Covina, La Verne, and Glendora, and several smaller tributary canyons in the San Gabriel Mountains. Regulated flows exit from an earth and rockfill dam for Puddingstone Reservoir east of the site. The reservoir and surrounding Frank G. Bonelli Regional Park are Los Angeles County facilities maintained for flood control and recreation benefits. Elevation 971 is the reservoir spillway elevation, although the lake is contractually maintained at about elevation 942 to protect surrounding recreational uses. To our knowledge, it has spilled only twice in the last 40 years. The reservoir is quite likely a significant recharge source for downstream reaches of Walnut Creek and deep permanent aquifers in the area.

Only a tiny sliver of the Walnut Creek Habitat and Open Space project site touches the creek bed in the northeastern part of the study area. Developed or low-relief parts of the site in the central and western parts of the project are generally at least 130 feet higher than the incised canyon bottom. Cobble and boulder stream sediments atop bedrock occur near the northeastern project limits, while sand and gravel bottom conditions appear to predominate farther downstream.

The Walnut Creek Habitat and Open Space project area receives off-site runoff from several very small tributary watersheds southeast of the site; and an indeterminate portion of the Tzu Chi complex. The tributary watersheds drain natural, vegetated mountain slopes spanning an estimated 22 acres in aggregate. Anthropic contributions to runoff in these natural watersheds are close to nil. Runoff from the Tzu Chi property originates from a mix of natural slopes, landscaped areas, roofs, and paved surfaces. The school complex pre-dates requirements for water quality management plans, implementation of source control, and treatment control practices. There are no features on the site that are suggestive of active water quality management. Surface drainage at the site is currently facilitated by a series of area drains.

In addition to the aforementioned off-site runoff, the project area receives some discharge from the Woodwalk residential tract. Most of the street and lot runoff from the adjacent properties is directed via side streets to Avenida

Loma Vista, however there is a concrete channel that collects water from the subdivision and enters the project site into a storm drain near the CII Frondosa area.

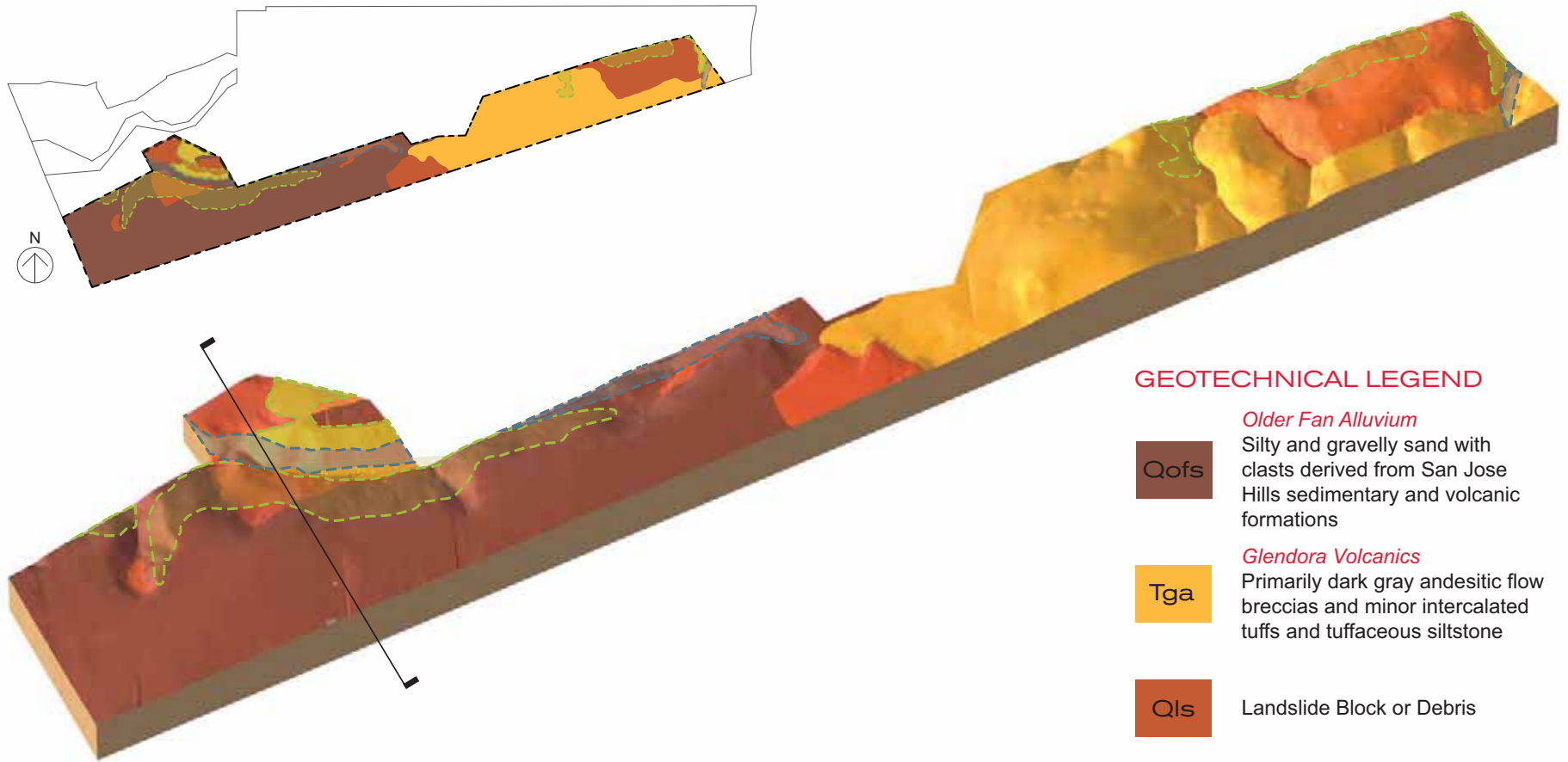
The Walnut Creek Habitat and Open Space project area discharges runoff to the north and northwest. Principal lines of concentrated flow would be four steep-sided natural ravines in the eastern part of the site and one large ravine in the central and western areas. Infiltration capacity is limited in the eastern area due to slopes and shallow bedrock. Some surface runoff could thus be expected from most typical winter storm events. The flatter parts of the site are judged to have much greater infiltration capacity. Surface runoff would be less common and would generally move by sheetflow. All tributary ravines to Walnut Creek appear to support only transient, seasonal water flows. One small 60- to 80-foot-long zone of seepage or surface flow was seen in the upper western ravine during AGI's reconnaissance; however, the location suggested a possible man-made origin from the Tzu Chi property. (Geotechnical Feasibility Evaluation, AGI).



HYDROLOGY LEGEND

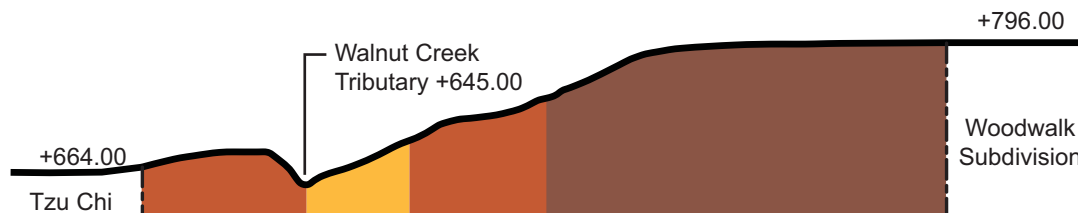
- Storm Drains
- Storm Drain Outlets
- Drainage Areas
- Walnut Creek
- Jurisdictional Streambed

GEOTECHNICAL INFORMATION



GEOTECHNICAL LEGEND

- Qofs** *Older Fan Alluvium*
 Silty and gravelly sand with clasts derived from San Jose Hills sedimentary and volcanic formations
- Tga** *Glendora Volcanics*
 Primarily dark gray andesitic flow breccias and minor intercalated tuffs and tuffaceous siltstone
- Qls** Landslide Block or Debris
- Approximate limits of landslide seismic hazard zone. (California Geological Survey, 1998)
- Approximate limits of liquefaction seismic hazard zone. (California Geological Survey, 1998)



GEOLOGIC SETTING

At the site scale, the site area exhibits two quite different sets of geomorphic and geologic characteristics. The eastern half of the Project site is hilly, brushy, steeply sloped, and crossed by several deep ravines. Geological materials in the eastern half consist of volcanic rocks of the Glendora Volcanic series, mantled with usually thin horizons of topsoil and colluvium. Major rock types consist of cemented or welded andesite breccia and some interpreted andesite flows. Units are believed to dip steeply south, forming part of the north limb of a major synclinal fold.

The western half of the project includes a gently inclined and low-relief older alluvial fan surface. Older alluvium appears to comprise granular mixtures of gravel, sand, and silt with low clay content. Layering or bedding is not obvious. Near-surface alluvium has been disturbed by agricultural practices, weed abatement and burrowing fauna. The western half also includes smaller areas of steep ravine and canyon slopes peripheral to Walnut Creek. Close to the creek in the northwestern corner of the site, slope areas may be underlain by the La Vida Member of the Puente Formation, a landslide-prone sedimentary unit composed mostly of bedded siltstone.

Geologic hazards at the project site consist of highly localized areas of known landslides and some potential for small mudslides or debris flows in eastern ravines.

REGIONAL GEOLOGIC SETTING

San Dimas lies close to the northern margin of the Peninsular Ranges Physiographic Province, one of the eleven provinces recognized in California. The Peninsular Ranges encompass southwestern California west of the Imperial-Coachella Valley trough and south of the elevated terrains of the San Gabriel and San Bernardino Mountains. The province is characterized by youthful, steeply sloped, northwest-trending elongated ranges and intervening valleys.

Structurally, the Peninsular Ranges province in California is composed of a number of relatively stable crustal blocks bounded by active faults of the San Andreas transform system. Although some folding, minor faulting, and random seismic activity can be found within the blocks, intense structural deformation and large earthquakes are mostly limited to the block margins. Exceptions are most notable approaching the Los Angeles Basin, where compressive stresses give rise to increasing degrees of vertical offset along the transform faults and a change in deformation style that includes young folds and active thrust ramps.

LOCAL GEOLOGIC SETTING

The first detailed map of the San Jose Hills, prepared by Olmstead (1950) indicated them to be a west-plunging asymmetric anticline. More-recent work strongly hints the San Jose Hills anticline northeast of the Interstate 10 freeway is paired with a west-plunging syncline. The fold axis is centered more or less coincident with Via Verde (a local street) and Puddingstone Reservoir. Site observations

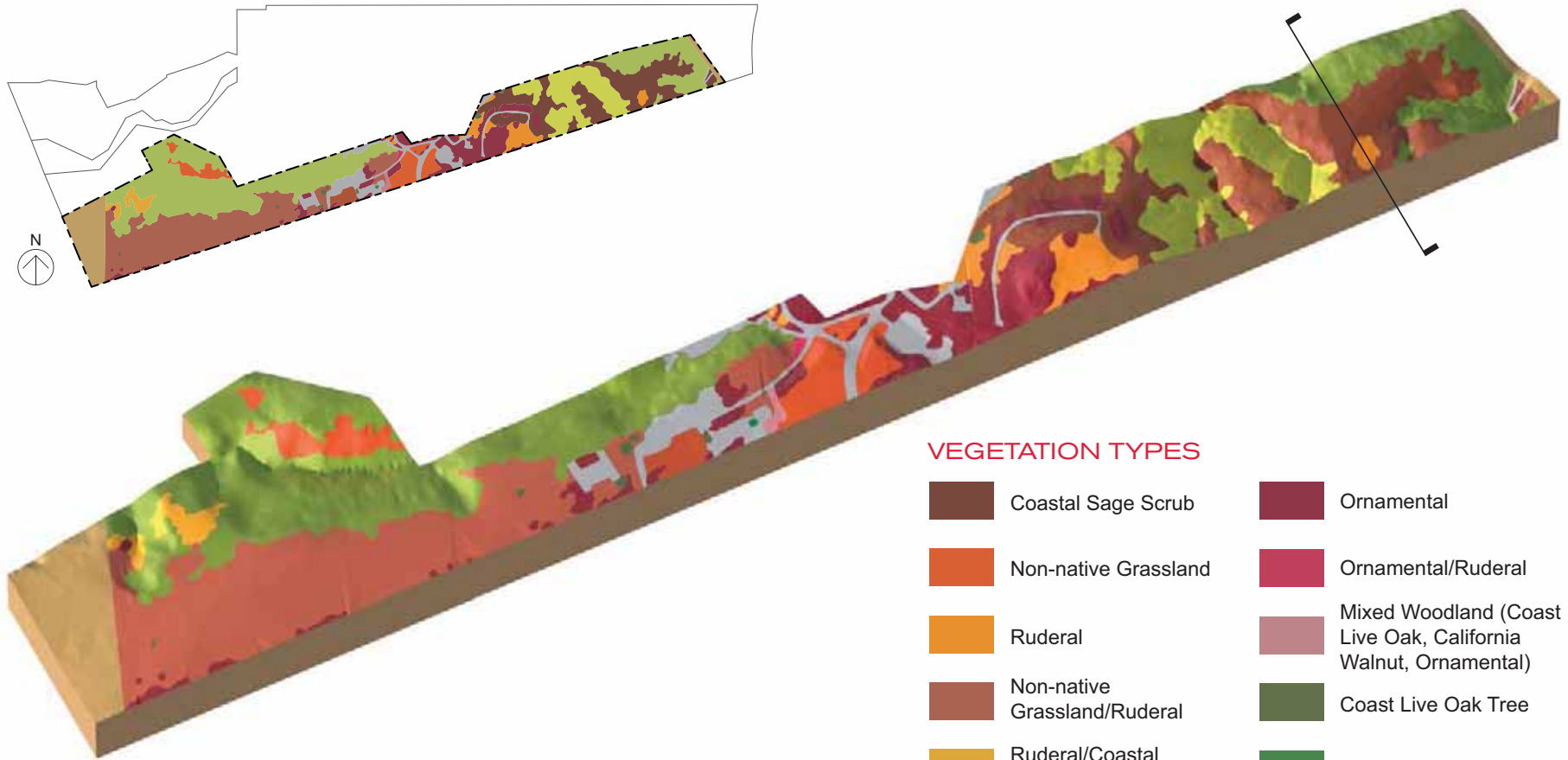
included convincing evidence for steep south dips in project site volcanic units, representative of the north limb of the *San José Hills syncline*. One tiny exposure of in-place sedimentary bedrock close to the northwestern project limits.

GROUNDWATER

Although no detailed accounts of groundwater have been measured, it would be reasonable to conclude static groundwater depths beneath the site should be roughly coincident with the elevation of Walnut Creek. It is considered a line of recharge. It follows that minimum depths to groundwater in the project site probably vary near zero next to the creek up to more than 200 feet in the highest-elevation areas. Map interpretation indicates groundwater would be stored in fractured bedrock, most likely Glendora Volcanics or deeper sandstones of the Topanga Formation. Deep alluvial aquifers are not interpreted for the site.

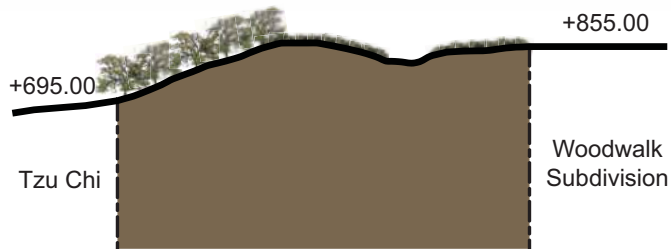
05

HABITAT



VEGETATION TYPES

	Coastal Sage Scrub		Ornamental
	Non-native Grassland		Ornamental/Ruderal
	Ruderal		Mixed Woodland (Coast Live Oak, California Walnut, Ornamental)
	Non-native Grassland/Ruderal		Coast Live Oak Tree
	Ruderal/Coastal Sage Scrub		Western Sycamore Tree
	Ruderal/Non-native Grassland		Disturbed/Developed
	Coast Live Oak Woodland		No Data Available
	California Walnut Woodland/ Coast Live Oak Woodland		



*Artemisia
californica*
California
Sagebrush



*Mimulus
aurantiacus*
Bush
Monkeyflower



*Marrubium
vulgare*
Common
Horehound



*Bromus
diandrus*
Ripgut Grass



*Schismus
barbatus*
Mediterranean
Schismus



BIOLOGICAL ANALYSIS SITE CONDITIONS

In the eastern portion of the project site, the small canyons and drainages are dominated by oak and walnut woodlands. The gentler trending slopes in these areas are dominated by coastal sage scrub, with small areas of ruderal vegetation due to previous disturbance of native vegetation types. The central portion of the project site is dominated by disturbed/developed areas where the structures and roads for the campus facilities are present. Surrounding many of these disturbed/developed spaces are areas dominated by ornamental vegetation and ruderal vegetation. The northwestern portion of the project site is prominently oak and walnut woodlands, while the southwestern portion of the site is dominated by a large expanse of non-native grassland. All special status species are discussed in detail in the Special

Status section (see pgs 46-47).

COASTAL SAGE SCRUB

Coastal sage scrub is present in small scattered patches in the western portion of the project site and in larger, contiguous areas in the eastern portion of the project site. This vegetation type is dominated by California Sagebrush (*Artemisia californica*), California Buckwheat (*Eriogonum fasciculatum*), Deerweed (*Lotus scoparius*), Bush Monkeyflower (*Mimulus aurantiacus*), Black Sage (*Salvia mellifera*), and Western Poison Oak (*Toxicodendron diversilobum*). Other species common in the open areas of the sage scrub canopy include common Horehound (*Marrubium vulgare*), Goldenbush (*Isocoma menziesii*), Fascicled Tarweed (*Deinandra*

fasciculata), Wand Mullein (*Verbascum virgatum*), Tidy-Tips (*Layia platyglossa*), Phacelia (*Phacelia sp.*), Bedstraw (*Galium sp.*), and Common Miner's-Lettuce (*Claytonia perfoliata ssp. perfoliata*).

NON-NATIVE GRASSLAND

A large area of non-native grassland is present in the southwestern portion of the project site, with additional areas scattered within the central portion of the site. These areas include patches of dense annual grasses and forbs, dominated by various non-native species such as Ripgut grass (*Bromus diandrus*), Foxtail Chess (*Bromus madritensis ssp. rubens*), Cheat Grass (*Bromus tectorum*), Wild Oats (*Avena sp.*), Mediterranean Schismus (*Schismus*

Anagallis arvensis
Scarlet
Pimpernel



Datura species
Jimson Weed



Fraxinus species
Ornamental Ash



Schinus molle
Peruvian
Pepper Tree



Agave americana
Century Plant



barbatus), and Doc (*Rumex sp.*).

RUDERAL

Ruderal areas are present with a patchy distribution throughout the project site. These areas have typically been disturbed by past vegetation clearing activities, often for fuel modification near structures, and are dominated by various weedy native and non-native plant species that have re-established. Plant species present in these areas include Scarlet Pimpernel (*Anagallis arvensis*), Radish (*Raphanus sativus*), Tocalote (*Centaurea melitensis*), jimson weed (*Datura sp.*), Shortpod Mustard (*Hirschfeldia incana*), and Black Mustard (*Brassica nigra*).

ORNAMENTAL

Ornamental landscaping is present on portions of the project site, mostly in association with the Voorhis School, Cal Poly Pomona campuses and adjacent Tzu Chi Foundation property. Additional ornamental landscaping occurs along the southern boundary of the project site, where plant and trees from adjoining residences have encroached upon the project site. Ornamental areas are those landscaped with non-native vegetation, including shrubs, trees, and vines planted for aesthetic purposes. Common tree species observed in these areas include Ornamental Ash (*Fraxinus sp.*), Kaffir Plum (*Harpephyllum caffrum*), Mexican Fan Palm (*Washingtonia robusta*), Ornamental Pine (*Pinus sp.*), Olive (*Olea europea*), Peruvian Pepper Tree (*Schinus molle*),

Brazilian Pepper Tree (*Schinus terebinthifolius*), and Gum (*Eucalyptus sp.*). Additional ornamental species present in these areas include Century Plant (*Agave americana*), Oleander (*Nerium oleander*), Greater Periwinkle (*Vinca major*), Mission Prickly-Pear (*Opuntia ficus-indica*), and Garden Nasturtium (*Tropaeolum majus*).

Several native California tree species appear to have been planted on the project site, due to their location immediately adjacent to building sites on the property. In addition, several of these trees appear to have been pruned for their aesthetic value. These ornamental native trees include Western Sycamore (*Platanus racemosa*), California Black Oak (*Quercus kelloggii*), and Coast Live Oak. It should be

Platanus racemosa
Western Sycamore



Juglans californica
Black Walnut



Quercus agrifolia
Coast Live Oak



Baccharis salicifolia
Mulefat



Heteromeles arbutifolia
Toyon



noted that due to the proximity of residential and campus properties to native habitat areas within the project site, non-native ornamental plants are also present to some degree in many native habitat areas, especially in moist canyon bottoms along Walnut Creek.

WOODLANDS

The woodlands on site are dominated by Southern California Black Walnut (*Juglans californica*) and Coast Live Oak (*Quercus agrifolia*). The dominance of one species over the other varies on the project site, with the lower portions of the slopes closer to the creek bottom generally supporting a higher occurrence of Oaks, while the Walnuts generally occur on the upper margins of the slopes, with more direct

exposure to light source. Other shrub species common to both trees in these mixed woodland settings include Mulefat (*Baccharis salicifolia*), Mexican Elderberry (*Sambucus nigra* ssp. *caerulea*), Laurel Sumac (*Malosma laurina*), Western Poison Oak, Toyon (*Heteromeles arbutifolia*), and Hollyleaf Redberry (*Rhamnus ilicifolia*).

DISTURBED/DEVELOPED

Disturbed/developed areas are generally devoid of vegetation and dominate the areas previously occupied by the Voorhis School and the Cal Poly Pomona campuses. These areas include vacant clearings with compacted soils, fuel modification areas with exposed soils that have been recently altered by mechanical activity, existing building,

concrete building pads, parking lots and paved roads.

Didelphis virginiana
Virginia Opossum



Spermophilus beecheyi
California Ground Squirrel



Peromyscus maniculatus
Deer Mouse



Canis latrans
Coyote



Eptesicus fuscus
Big Brown Bat



WILDLIFE HABITAT

Wildlife species observed or expected within the vegetation types on the project site are discussed below. All special status species mentioned below are discussed in greater detail in the Special Status Wildlife section (see pages 48-51).

MAMMALS

Common mammals species observed or expected to occur onsite include the Virginia Opossum (*Didelphis virginiana*), California Ground Squirrel (*Spermophilus beecheyi*), Western Gray Squirrel (*Sciurus griseus*), Broad-Footed Mole (*Scapanus latimanus*), Botta's Pocket Gopher (*Thomomys bottae*), Desert Cottontail (*Sylvilagus auduboni*), Raccoon (*Procyon lotor*), and Striped Skunk (*Mephitis mephitis*). The

Deer Mouse (*Peromyscus maniculatus*), California Pocket Mouse (*Chaetodipus californicus*), and Dusky-Footed Woodrat (*Neotoma fuscipes*) are expected to be present in native habitats onsite. Larger mammals potentially present include Coyote (*Canis latrans*), Bobcat (*Felis rufus*), and Mule Deer (*Odocoileus hemionus*). Bats that may occur onsite for foraging and/or roosting include the Big Brown Bat (*Eptesicus fuscus*), Hoary Bat (*Lasiurus cinereus*), California Myotis (*Myotis californicus*), Western Pipistrelle (*Pipistrellus hesperus*), and Brazilian Free-Tailed Bat (*Tadarida brasiliensis*).

BIRDS

A variety of bird species are expected to reside in the project

site throughout the year. Other species are present only during certain seasons. For example, the White-Crowned Sparrow (*Zonotrichia leucophrys*) likely occurs on the project site only during the winter season and then migrates north in the spring to breed during the summer.

Scrub vegetation types onsite support an avifauna that is comprised of species adapted to the dense, low vegetation that typifies these areas. Although large numbers of individuals can often be found to inhabit these vegetation types, species diversity is usually low to moderate. Year-round resident species observed or expected to occur in these habitats include California Quail (*Callipepla californica*), Anna's Hummingbird (*Calypte anna*), Bewick's

Calypte anna
Anna's
Hummingbird



Catharus guttatus
Hermit Thrush



Tyrannus verticalis
Western
Kingbird



Picoides nuttallii
Nuttall's
Woodpecker



Buteo jamaicensis
Red-Tailed
Hawk



Wren (*Thryomanes bewickii*), Wrenit (*Chamaea fasciata*), California Thrasher (*Toxostoma redivivum*), Spotted Towhee (*Pipilo maculatus*), California Towhee (*Pipilo crissalis*), and Rufous-Crowned Sparrow (*Aimophila ruficeps*). Migratory birds expected to use this habitat include Costa's Hummingbird (*Calypte costae*) (summer resident), and Blue-Gray Gnatcatcher (*Polioptila caerulea*), Hermit Thrush (*Catharus guttatus*), Fox Sparrow (*Passerella iliaca*), Goldencrowned Sparrow (*Zonotrichia atricapilla*), and White-Crowned Sparrow (winter residents).

Grassland and ruderal areas support fewer bird species than most other vegetation types, though these species can often be numerous, especially during winter. Year-round

residents and migrants to these habitats include Mourning Dove (*Zenaida macroura*), Say's Phoebe (*Sayornis saya*), Western Meadowlark (*Sturnella neglecta*), Western Kingbird (*Tyrannus verticalis*), American Pipit (*Anthus rubescens*), and Savannah Sparrow (*Passerculus sandwichensis*).

Oak and walnut woodland vegetation types provide high-value habitat for birds throughout the year. Resident and migrant species observed or expected include California Quail, Anna's Hummingbird, Nuttall's Woodpecker (*Picoides nuttallii*), Hutton's Vireo (*Vireo huttoni*), Western Scrub-Jay (*Aphelocoma californica*), Oak Titmouse (*Baelophus inornatus*), Bushtit (*Psaltriparus minimus*), Bewick's Wren, House Wren (*Troglodytes aedon*), Acorn Woodpecker

(*Melanerpes formicivorus*), Western Bluebird (*Sialia sialis*), Lesser Goldfinch (*Carduelis psaltria*), and House Finch (*Carpodacus mexicanus*). Raptors expected to nest within the project site include the Cooper's Hawk (*Accipiter cooperii*), Red-Tailed Hawk (*Buteo jamaicensis*), Red-Shouldered Hawk (*Buteo lineatus*), and American Kestrel (*Falco sparverius*). Additional raptors expected to during the winter season include the White-Tailed Kite (*Elanus leucurus*), Northern Harrier (*Circus cyaneus*), and Sharp-Shinned Hawk (*Accipiter striatus*). The Turkey Vulture (*Cathartes aura*), a scavenger, is expected to occur all year but not expected to nest onsite.

*Sceloporus
occidentalis*
Western
Fence Lizard



*Coluber
lateralis lateralis*
California
Striped Racer



*Eumeces
skiltonianus*
Western Skink



Crotalis viridis
Western
Rattlesnake



*Diadophis
punctatus*
Ringneck Snake



REPTILES

Reptilian diversity and abundance typically varies with vegetation type and substrate characteristics. Many species occur in only one or two vegetation types; however, most will forage in a variety of situations. The vegetation types on the project site provide a variety of suitable habitat for varying reptile species. Common reptile species observed within the project site include the Western Fence Lizard (*Sceloporus occidentalis*), Alligator Lizard (*Elgaria multicarinata*), and California Striped Racer (*Coluber lateralis lateralis*). Additional species expected to occur, especially in the native habitats, include the Side-Blotched Lizard (*Uta stansburiana*), Western Skink (*Eumeces skiltonianus*), Western Whiptail (*Cnemidophorus tigris*), Gopher Snake

(*Pituophis catenifer*), Common Kingsnake (*Lampropeltis getulus*), Western Rattlesnake (*Crotalis viridis*), Ringneck Snake (*Diadophis punctatus*), and Coachwhip (*Masticophis flagellum*).

AMPHIBIANS

Amphibians require moisture for at least a portion of their life cycle, and many require standing or flowing water for reproduction. The canyon bottoms of the project site provide suitable habitat for common amphibian species including the Western Toad (*Bufo boreas*) and Pacific Treefrog (*Pseudacris [Hyla] regilla*). The Garden Slender Salamander (*Batrachoseps major major*) and Black-Bellied Salamander (*Batrachoseps nigriventris*) may also be present in habitats

associated with drainages and canyon bottoms.

FISH

Walnut Creek may have year-round water due to urban runoff, and may support habitat for native fish species. The non-native Mosquito Fish (*Gambusia affinis*) is also expected to occur. This species is widely used by vector control for mosquito abatement.

Bufo boreas
Western Toad



Pseudacris
(Hyla) regilla
Pacific Treefrog



Batrachoseps
major major
Garden Slender
Salamander



Batrachoseps
nigriventris
Black-Bellied
Salamander



Gambusia affinis
Mosquito Fish



WILDLIFE MOVEMENT

Local wildlife movement within the project site is expected to occur within most of the naturally vegetated drainages that feed into Walnut Creek. Most of these drainages are oriented north to south, and connect with the east/west trending Walnut Creek and the unnamed tributary that parallels Walnut Creek in the western most portion of the project site. As a result, there is expected to be a general east-west trend to wildlife movement, with wildlife species using the side canyons at high elevations for nesting, denning, and foraging opportunities.

Frank G. Bonelli Regional Park and the open space associated with Puddingstone Reservoir are located approximately 850 feet from the eastern boundary of the project site. However, there are no effective wildlife crossings under San Dimas Avenue and the Orange freeway. Wildlife species capable of flight or traveling within high traffic/urban areas (coyotes, raccoons, etc.) may periodically make the crossing to the Bonelli/Puddingstone area; however, these conditions are perilous to these and other species that occur in both locations.

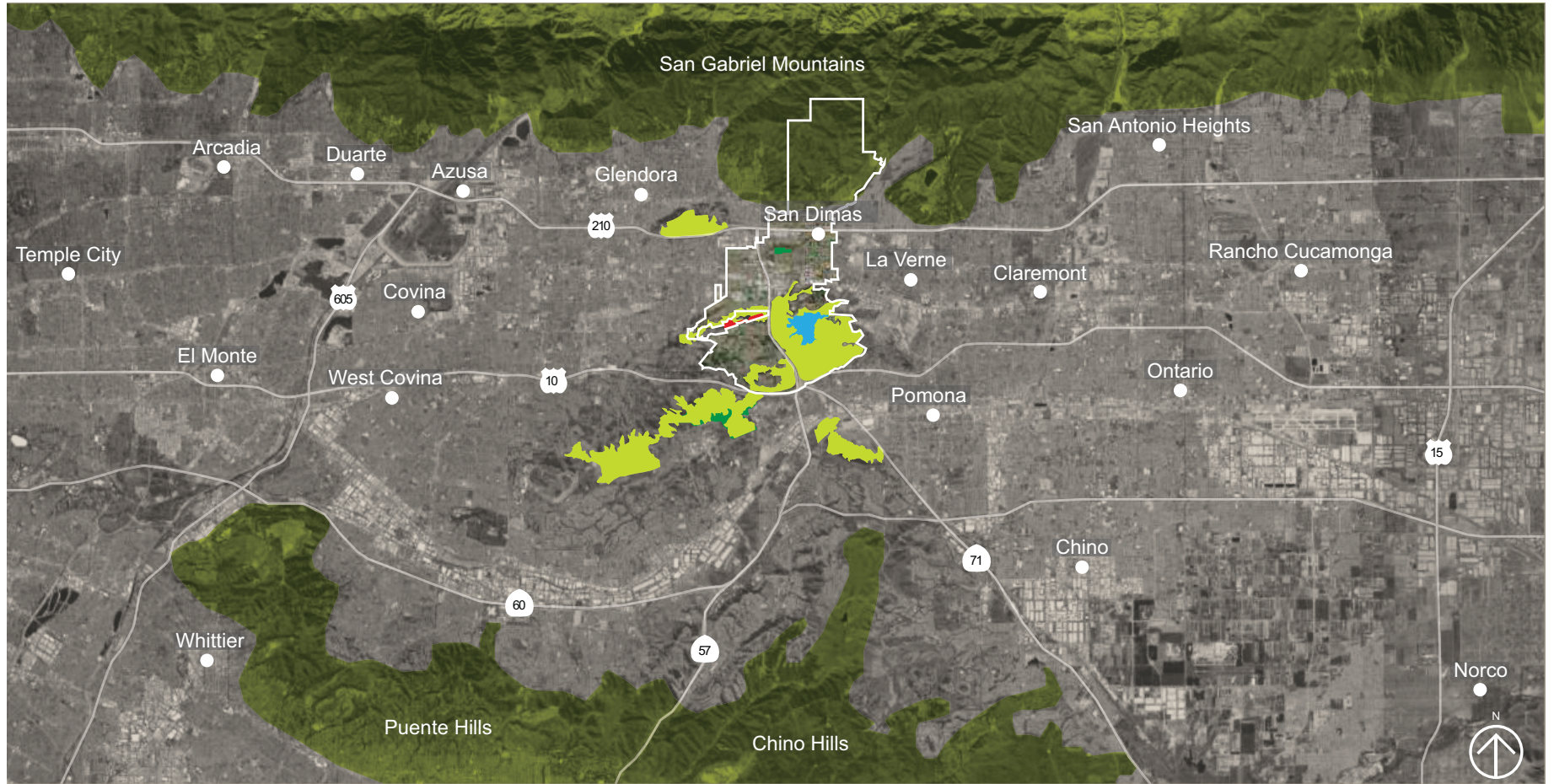
Regional movement to the west of the project site is expected to occur along Walnut Creek; however, the native vegetation and terrain becomes limited as the creek enters a more urbanized setting. Approximately 6,000 feet west of the project site, the creek and natural hillsides narrow to approximately 200 feet, where a natural corridor travels for approximately 2,000 more feet to where it then enters

a concrete-lined flood control facility. Wildlife habitat and movement from this point on, towards the San Gabriel River, is significantly compromised, essentially isolating wildlife species within the Walnut Creek area to the east.

The proposed East San Gabriel Valley Significant Ecological Area (SEA) represents a regional wildlife corridor between the San Gabriel Mountains and the Puente Hills/Chino Hills complex. Unlike the commonly held concept of a corridor, this SEA contains a series of discontinuous habitat blocks and patches rather than an unbroken corridor for movement. As such, this SEA facilitates movement and exchange between larger habitat areas by allowing for terrestrial *island-hopping* between and among the individual SEA components. The manner in which this SEA allows wildlife populations in different areas to interact is less than ideal. The extent of this exchange depends upon urbanization.

The East San Gabriel Valley SEA contains habitats, or plant communities, that are generally considered unique, of relatively limited distribution, or of particular value to wildlife. These are oak woodland, oak riparian forest, walnut woodland, southern willow scrub, and coastal sage scrub. Despite the fragmented nature of this SEA and adverse edge effects from surrounding development, a number of sensitive plant and wildlife species have been observed or may occur here. These species are considered sensitive due to declining, limited, or threatened populations, resulting in most cases from habitat reductions. As an example, the

Cactus Wren population in Bonelli Park is a reference for target species restoration in the Walnut Creek project site.



LEGEND

- Proposed SEA Boundary
- Project Area
- Existing SEA Boundary
- Puddingstone Reservoir

Atriplex serenana
var. *davidsonii*
Davidson's
Saltscale
PO: May Occur



California macrophylla
Round Leaved
Filaree
PO: May Occur



Calochortus plummerae
Plummer's
Mariposa Lily
PO: May Occur



SPECIAL STATUS BIOLOGICAL RESOURCES

The following section addresses special status biological resources observed, reported, or that have the potential to occur in the project site. These resources include plant and wildlife species that have been afforded special status and/or recognition by federal and State resource agencies and private conservation organizations. In general, the principal reason an individual taxon (i.e., species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size, geographic range and/or distribution resulting in most cases from habitat loss. In addition, special status biological resources include jurisdictional drainages, regional linkages and vegetation types and habitats that are either unique, or of relatively limited distribution in the region, or of particularly high wildlife value. These resources have been defined by federal, State and local government conservation programs. Sources used to determine the special status of biological resources are as follows:

Plants: *Electronic Inventory of Rare and Endangered Vascular Plants of California*. (CNPS 2011); the CNDDDB (CDFG 2011); various Federal Register notices from the United States Fish and Wildlife Service (USFWS) regarding

listing status of plant species; and the CDFG's List of Special Vascular Plants, Bryophytes, and Lichens.

Wildlife: The CNDDDB (CDFG 2011); various Federal Register notices from the USFWS regarding listing status of wildlife species; and the CDFG's List of Special Animals.

Habitats: *List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database* (CDFG 2010).

The tables that follow provide a summary of each special status plant and wildlife species potentially occurring in the project site, including the presence/absence of suitable habitat.

SPECIAL STATUS PLANTS

Many special status plant species are known to occur in the vicinity of the project site (i.e., San Dimas USGS 7.5-minute quadrangle). These species are summarized in opposite table.

STATUS

Federal (USFWS)

- FE Endangered
- FT Threatened
- FC Candidate
- SC Candidate

State (CDFG)

- SE Endangered
- ST Threatened
- SR Rare

California Native Plant Society (CNPS)

- List 1A: Plants Presumed Extinct in California
- List 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere
- List 2: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
- List 3: Plants About Which We Need More Information - A Review List
- List 4: Plants of Limited Distribution - A Watch List

California Native Plant Society (CNPS) Threat Rank Extensions

- .1 Seriously threatened in California (high degree/immediacy of threat)
- .2 Fairly threatened in California (moderate degree/immediacy of threat)
- .3 Not very threatened in California (low degree/immediacy of threat or no current threats known)

Calochortus weedii var. *intermedius*
Intermediate Mariposa Lily
PO: May Occur



Dudleya multicaulis
Many-Stemmed Dudleya
PO: May Occur



Phacelia hubbyi
Hubby's Phacelia
PO: May Occur



Senecio aphanactis
Chaprral Ragwort
PO: May Occur



Symphotrichum defoliatum
San Bernardino Aster
PO: May Occur



LIST OF SPECIAL STATUS PLANTS

SCIENTIFIC NAME	COMMON NAME	STATUS	POTENTIAL TO OCCUR (PO)
<i>Androsace elongata</i> ssp. <i>acuta</i>	California androsace	4.2	May occur; suitable habitat is present.
<i>Asplenium vespertinum</i>	Western Spleenwort	4.2	May occur; suitable habitat is present.
<i>Atriplex serenana</i> var. <i>davidsonii</i>	Davidson's Saltscale	1B.2	May occur; limited suitable habitat is present.
<i>California (Erodium) macrophylla</i>	Round-Leaved Filaree	1B.1	May occur; suitable habitat is present
<i>Calochortus catalinae</i>	Catalina Mariposa Lily	4.2	May occur; suitable habitat is present.
<i>Calochortus plummerae</i>	Plummer's Mariposa Lily	1B.2	May occur; suitable habitat is present.
<i>Calochortus weedii</i> var. <i>intermedius</i>	Intermediate Mariposa Lily	1B.2	May occur; suitable habitat is present.
<i>Centromadia (Hemizonia) parryi</i> ssp. <i>australis</i>	Southern Tarplant	1B.1	Not expected to occur; no suitable habitat present.
<i>Dudleya multicaulis</i>	Many-Stemmed Dudleya	1B.2	May occur; suitable habitat is present.
<i>Horkelia cuneata</i> spp. <i>puberula</i>	Mesa Horkelia	1B.1	Not expected to occur; no suitable habitat present.
<i>Juglans californica</i> var. <i>californica</i>	Southern California Black Walnut	4.2	Observed throughout the site.
<i>Microseris douglasii</i> var. <i>platycarpha</i>	Small-Flowered Microseris	4.2	May occur; suitable habitat is present.
<i>Phacelia hubbyi</i>	Hubby's Phacelia	4.2	May occur; suitable habitat is present.
<i>Quercus engelmannii</i>	Englemann Oak	4.2	May occur, suitable habitat is present.
<i>Senecio aphanactis</i>	Chaparral Ragwort	2.2	May occur; suitable habitat is present.
<i>Symphotrichum defoliatum</i> (<i>Aster bernardinus</i>)	San Bernardino Aster	1B.2	May occur; very limited suitable habitat is present.

Spea hammondii
Western Spadefoot
PO: May Occur



Actinemys marmorata pallida
Southwestern Pond Turtle
PO: Not Expected



Anniella pulchra pulchra
Silvery Legless Lizard
PO: May Occur



Phrynosoma coronatum
Coast San Diego Horned Lizard
PO: May Occur



Salvadora hexalepis virgultea
Coast Patch-Nosed Snake
PO: May Occur



SPECIAL STATUS WILDLIFE

A total of 18 special status wildlife species that are known to occur or potentially occur in the area are listed in the following tables. Several of these species are State- and/or federally listed as Endangered and/or Threatened Species. The remaining species are considered to be “of concern” by the CDFG. Species with potential for occurrence are discussed below. Note that these species are listed taxonomically.

STATUS

Federal (USFWS)

FT Threatened

State (CDFG)

FP Fully Protected

SCC Species of Special Concern

LIST OF SPECIAL STATUS WILDLIFE

SCIENTIFIC NAME	COMMON NAME	STATUS	POTENTIAL TO OCCUR (PO)
Amphibians			
<i>Spea (Scaphiopus) hammondii</i>	Western Spadefoot	SCC	May occur; potentially suitable habitat present.
Reptiles			
<i>Actinemys marmorata pallida</i>	Southwestern Pond Turtle	SCC	Not expected to occur; no suitable habitat present.
<i>Anniella pulchra pulchra</i>	Silvery Legless Lizard	SCC	May occur; potentially suitable habitat present.
<i>Phrynosoma coronatum (blainvillii)</i>	Coast (San Diego) Horned Lizard	SSC	May occur; suitable habitat present.
<i>Salvadora hexalepis virgultea</i>	Coast Patch-Nosed Snake	SSC	May occur; potentially suitable habitat present.

Ammodramus savannarum
Grasshopper Sparrow
PO: May Occur



Aquila chrysaetos
Golden Eagle
PO: May Occur



Athene cunicularia
Burrowing Owl
PO: May Occur



Circus cyaneus
Northern Harrier
PO: May Occur



Elanus leucurus
White-Tailed Kite
PO: May Occur



SCIENTIFIC NAME	COMMON NAME	STATUS	POTENTIAL TO OCCUR (PO)
Birds			
<i>Ammodramus savannarum</i>	Grasshopper Sparrow	SSC	May occur; limited potentially suitable nesting habitat.
<i>Aquila chrysaetos</i>	Golden Eagle (nesting and wintering)	SSC	May occur; potentially suitable foraging but no suitable nesting habitat present.
<i>Athene cunicularia</i>	Burrowing Owl (burrow site, some wintering sites)	SSC	May occur; limited potentially suitable foraging and nesting habitat present.
<i>Circus cyaneus</i>	Northern Harrier (nesting)	SSC	Expected to occur for foraging and may occur for nesting; suitable foraging habitat, limited nesting.
<i>Elanus leucurus</i>	White-Tailed Kite (nesting)	FP	Expected to occur for foraging and may occur for nesting; suitable foraging habitat, limited nesting.
<i>Lanius ludovicianus</i>	Loggerhead shrike (nesting)	SCC	Expected to occur for foraging and may occur for nesting; suitable habitat present.
<i>Polioptila californica californica</i>	Coastal California Gnatcatcher	FT, SSC	Not observed; limited suitable habitat present.

Antrozous pallidus
Pallid Bat
PO: May Occur



Eumops perotis californicus
Western Mastiff Bat
PO: May Occur



Lasiurus xanthinus
Western Yellow Bat
PO: May Occur



Nyctinomops macrotis
Big Free-Tailed Bat
PO: May Occur



Taxidea taxus
American Badger
PO: Not Likely



SCIENTIFIC NAME	COMMON NAME	STATUS	POTENTIAL TO OCCUR (PO)
Mammals			
<i>Antrozous pallidus</i>	Pallid Bat	SSC	May occur; potentially suitable foraging and roosting habitat.
<i>Eumops perotis californicus</i>	Western Mastiff Bat	SSC	May occur; potentially suitable foraging but no suitable roosting habitat.
<i>Lasiurus xanthinus</i>	Western Yellow Bat	SSC	May occur; potentially suitable foraging habitat, no roosting habitat; may occur for foraging; not for roosting.
<i>Nyctinomops femorosaccus</i>	Pocketed Free-Tailed Bat	SSC	May occur; potentially suitable foraging habitat, no suitable roosting habitat; may occur for foraging only.
<i>Nyctinomops macrotis</i>	Big Free-Tailed Bat	SSC	May occur; limited potentially suitable foraging habitat, no suitable roosting habitat; may occur for foraging only.
<i>Taxidea taxus</i>	American Badger	SSC	Not likely to occur; limited potentially suitable habitat present.

06

JURISDICTIONAL RESOURCES

Three main agencies have been identified as having jurisdictional resources within the project site: the U.S. Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Any work conducted within the project site must adhere to the regulations set forth by these departments in accordance with the Clean Water Act (CWA) Section 404 (USACE), CWA Section 401 (RWQCB), and the California Fish and Game Code Section 1600 (CDFG). The guidelines set forth by these agency regulations could impact the proposed project as follows:

USACE JURISDICTIONAL RESOURCES:

All drainages within and/or adjacent to the project site contained evidence of Ordinary High Water Mark. Therefore, impacts to these resources would require regulatory authorization (Section 404 permit) in accordance with CWA Section 404(b)(1) guidelines prior to the implementation of any activity that involves the discharge or fill within these drainages. These fill materials could include sand, rock, clay, construction debris, wood chips, and materials used to create any structure or infrastructure in these Waters. No drainage features within the project site boundaries contained evidence of "Wetland" resources.

RWQCB JURISDICTIONAL RESOURCES:

The RWQCB shares the same jurisdictional boundaries as the USACE when the USACE determines that jurisdictional resources occur within a project site. Since

USACE jurisdictional resources exist within the project site, any discharge of fill within "Waters of the U.S." must be authorized by the RWQCB under a Water Quality Certification pursuant to CWA Section 401.

The Final California 2010 Water Quality Integrated Report developed by the State Water Quality Control Board has implemented new changes within the reach of the Walnut Creek project area. These changes could affect the 401 permit if the Total Maximum Daily Loads (TMDLs) are developed before the WCA applies for a permit. At the time of the 401 Water Quality Certification application, WCA would need to address the water quality effects of the project and demonstrate that the project will not worsen the existing water quality at Walnut Creek and its compliance with any adopted TMDLs for the listed pollutants. The types of improvements that may be proposed on-site are unlikely to create the types and amount of pollutants that would be a major concern to the RWQCB.

CDFG JURISDICTIONAL RESOURCES:

Due to evidence of seasonal water flows and the presence of riparian vegetation associated with all drainage features on the site, these areas fall under the jurisdiction of the CDFG. The limits of CDFG jurisdiction were measured from the top of bank to top of bank. When riparian vegetation was present, the limits of jurisdiction were determined by the outer dripline of vegetation located within or immediately adjacent to the drainage.

See Appendix Report H for full Jurisdictional Assessment Report.



JURISDICTIONAL DRAINAGE AREAS

- Walnut Creek
- CDFG Jurisdictional Streambed
- USACE "Waters of the U.S." (width noted in feet)

REGULATORY PERMIT PROCESS

Any impact to USACE, CDFG, and RWQCB jurisdictional resources will require the following regulatory permit authorizations: USACE CWA Section 404(b)(1) permit as either a nationwide permit (NWP) if impacts are below the impact thresholds or Individual Permit (IP); RWQCB CWA Section 401 Water Quality Certification; and CDFG California Fish and Game Code, Section 1602 Streambed Alteration Agreement. Please note that permits from these agencies generally require that mitigation for potential impacts to jurisdictional resources be provided by the applicant, which may take the form of on-site mitigation, off-site mitigation, in-lieu fees, mitigation bank fees, some combination of these, or other negotiated arrangement.

The permit application packages for the resource agencies generally include a completed application form, project plans, completed studies, proposed impacts, proposed mitigation, and CEQA documentation. More detailed information on the permit application packages can be obtained from the following websites:

- **USACE:** http://www.usace.army.mil/CECW/Pages/reg_permit.aspx
- **Los Angeles RWQCB:** http://www.swrcb.ca.gov/rwqcb4/water_issues/programs/401_water_quality_certification/index.shtml
- **CDFG:** <http://www.dfg.ca.gov/habcon/1600/forms.html>

This regulatory permit process does not include the preparation of a Biological Assessment and focused surveys if a federally listed wildlife species would be impacted and consultation with the U.S. Fish and Wildlife Service (USFWS) is required under Section 7 or Section 10 of the Federal Endangered Species Act (FESA). Also, this permit process does not include approval of a California Endangered Species Act (CESA) Section 2081 if State-listed plant or wildlife species would be impacted by the project.

Mitigation may be satisfied through the purchase of in-lieu fee mitigation credits from an official mitigation bank. The WCA is currently investigating the process of becoming an official mitigation bank or sponsor of an in-lieu fee program. The per-acre fee is estimated to be \$120,000.

The following cost estimate ranges are intended to represent the costs for a consultant to provide mitigation planning and regulatory permitting services. The total cost would range from \$74,000 to \$124,000 and would include the following tasks:

- Pre-Application Meeting: \$2,500 to \$3,000
- Conceptual HMMP: \$12,000 to \$18,000
- Jurisdictional Delineation Report: \$7,500 to \$9,000
- California Rapid Assessment Method (CRAM): \$3,000 to \$4,000
- Regulatory Permit Applications: \$15,000 to

18,000

- Detailed HMMP: \$9,000 to 12,000
- Regulatory Permit Processing/Coordination: \$25,000 to \$60,000

Note: These costs do not include permit application fees, or FESA Section 7 or 10, or CESA Section 2081 permit costs that would be incurred if federally or State-listed species would be impacted by the project (Jurisdictional Assessment for the Proposed Walnut Creek Habitat and Open Space Project, BonTerra Consulting).

PERMIT PROCESSING SCHEDULE

TASK	TIME FRAME
Select the preferred project design alternative.	WCA Determines Time Frame
Schedule a Project Coordination/Pre-Application Meeting with USACE, CDFG, and RWQCB. The U.S. Fish and Wildlife Service should be included if federally listed wildlife may be impacted. Review impacts resulting from project implementation, avoidance and minimization measures, and mitigation. It is recommended that the WCA develop a mitigation strategy in advance of the meeting to identify potential mitigation opportunities.	1 day event
WCA prepares and adopts the CEQA document and approves project. Receives Notice of Determination and CDFG fee receipts.	WCA Determines Time Frame
Prepare conceptual Habitat Mitigation Monitoring Plan (HMMP) for jurisdictional resources impacts.	30 Days
Prepare and submit formal Jurisdictional Delineation Report and Preliminary Jurisdictional Determination Form to the agencies following WCA review and approval. These documents would be completed at the same time as the conceptual HMMP.	30 Days
Prepare the draft application package that includes a USACE 404 Permit, a CDFG 1602 Streambed Alteration Agreement, and an RWQCB 401 Water Quality Certification Notifications/Applications; the CEQA documentation (previously prepared); the Notice of Determination; the CDFG fee receipts; the Jurisdictional Delineation Report; the Mitigation Concept; and the Approved Jurisdictional Determination Form for WCA Review.	30 Days
Prepare the final Permit Application Package including the USACE 404 Permit, the CDFG 1602 Streambed Alteration Agreement, and the RWQCB 401 Water Quality Certification Notifications/Applications with City signatures and applications for CDFG and RWQCB permit applications; the CEQA documentation (previously prepared); the Notice of Determination; the CDFG fee receipts; the Jurisdictional Delineation Report; the Preliminary Jurisdictional Determination (if USACE completes); and the proposed mitigation strategy. Submit the final application package to USACE, RWQCB and CDFG.	1 Week
Contact agencies to discuss applications to determine if any additional information for a complete application is required. (Three weeks from date of application submittal to agencies).	30 Days from Date of Transmittal to Agencies
Agencies must determine if applications are complete within 30 days from date of applications are received.	Last day that an agency can request additional permit application information.
Initiate Draft Detailed HMMP	30 Days
Permit processing. Anticipated permit approvals.	4 to 6 months if a nationwide permit. 1 year if individual permit.

REGULATORY PERMIT COST ESTIMATES

AGENCY	PERMIT APPLICATION	APPLICATION FEES	FEE
USACE	Nationwide Permit		\$0.00
	Individual Permit		\$0.00
CDFG	Lake or Streambed Alteration Notification	Based on Cost of Project:	
		Less than \$5000	\$224.00
		\$5,000 to \$10,000	\$280.25
		\$10,000 to \$25,000	\$560.25
		\$25,000 to less than \$100,000	\$840.25
		\$100,000 to less than \$200,000	\$1,233.25
		\$200,000 to less than \$350,000	\$1,673.00
\$350,000 to less than \$500,000	\$2,521.50		
\$500,000 or more	\$4,482.75		
RWQCB	Water Quality Certification	Initial Application Fee	\$640.00
		Fee Calculator (9/21/09) based on the Discharge by acre or length, whichever is greater (Example 1 acre discharge)	\$5,504.00
USFWS	FESA Section 10 or Section 7 Take Permit/Biological Opinion (BO) where a federally listed wildlife species would be impacted	No application fees for processing Section 10 or Section 7 Permits	\$0.00
CDFG	Section 2080.1 Consistency Determination When a wildlife species is listed by both the federal and state agencies and a BO has been issued by the USFWS.	No fees for processing a Section 2080.1 Consistency Determination request by the State Resources Agency	\$0.00
	CESA Section 2081 Take Permit where a state listed plant or wildlife species would be impacted.	No application fees for processing Section 2081 Take Permits	\$0.00
Mitigation Through Habitat Creation and/or Restoration			
USACE Mitigation	Habitat Mitigation Monitoring Plan (HMMP)	No Fees for HMMP submittal	\$0.00
RWQCB Mitigation	Habitat Mitigation Monitoring Plan (HMMP)	No Fees for HMMP submittal	\$0.00
CDFG Mitigation	Habitat Mitigation Monitoring Plan (HMMP)	No Fees for HMMP submittal	\$0.00

