To: Office of Planning and Research P.O. Box 3044, Room 113	From: (Public Agency):City of Walnut Creek
Sacramento, CA 95812-3044	1666 North Main Street, Walnut Creek, CA 94596
County Clerk County of: Contra Costa	(Address)
555 Escobar Street	(/ tdd/ 000)
Martinez, CA 94553	
Project Title: Heather Farm Park Sports Fig. Project Applicant: City of Walnut Creek	elds Renovation Project
Project Applicant:	
Project Location - Specific:	
The project site consists of two sport	s fields at the southern end of Heather Farm Park
Project Location - City: Walnut Creek	Project Location - County: Contra Costa
Description of Nature, Purpose and Beneficiari	es of Project:
excavated to a maximum depth of 24 inches and replaced with synthetic	s at Heather Farm Park with synthetic all weather turf sports fields. The existing turf would be c turf infill. The synthetic turf would be installed on a composite drainage/shock attenuation pad neable. In addition to the synthetic sports fields, the proposed project would include installation of ne fields and landing in adjacent parking lots, walkways, or the creek.
Name of Public Agency Approving Project: Cit	y of Walnut Creek
	ot:
Exempt Status: (check one): Ministerial (Sec. 21080(b)(1); 15268); Declared Emergency (Sec. 21080(b)(3)) Emergency Project (Sec. 21080(b)(4); Categorical Exemption. State type and Statutory Exemptions. State code num	
Reasons why project is exempt:	
and installation of perimeter fencing/netting. The profields nor change their use for outdoor recreation.	the two existing turf fields at Heather Farm Park with synthetic turf oposed project would not expand the size or capacity of the existing herefore, the proposed project properly qualifies for an exemption 15303. Additionally, the project or its circumstances would not es Section 15300.2.
Lead Agency Contact Person: Michael Hawthorne	Area Code/Telephone/Extension: 925-943-5899 x2245
Signature Lew Sulphus Signature Si	finding. In the public agency approving the project? Yes No Date: 7/11/2 Title: Public Works Director By Applicant
Authority cited: Sections 21083 and 21110, Public Resou Reference: Sections 21108, 21152, and 21152.1, Public Resources 21108, and 21152.1, Public Resources 21108, and 21152.1, and 21152.1	



CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: July 8, 2024

To: Mike Vickers, Public Works Manager, City of Walnut Creek

Mike Hawthorne, Associate Engineer, City of Walnut Creek

FROM: Shanna Guiler, AICP Associate/Environmental Planner

Theresa Wallace, AICP Principal/Environmental Planner

Subject: Categorical Exemption Memorandum for the Heather Farm Park Sports Fields

Renovation Project

This memorandum was prepared to support a Categorical Exemption (CE) under the California Environmental Quality Act (CEQA) for the proposed Heather Farm Park Sports Fields Renovation project (herein referred to as "proposed project") in the City of Walnut Creek, California. The City of Walnut Creek (City) is proposing to renovate two existing sports fields at the southern end of Heather Farm Park.

Article 19 of the *State CEQA Guidelines* includes, as required by Public Resources Code (PRC) Section 21084, a list of classes of projects that have been determined not to have a significant effect on the environment and, as a result, are exempt from review under CEQA. This document has been prepared to serve as the basis for compliance with CEQA as it pertains to the proposed project. This document demonstrates that the proposed project qualifies for a CEQA Exemption as Replacement or Reconstruction (Class 2) and New Construction or Conversion of Small Structures (Class 3), consistent with the provisions of *State CEQA Guidelines* Sections 15302, 15303, and 15300.2, and provides information for the City as the Lead Agency regarding a finding that the proposed project is exempt under CEQA.

PROJECT DESCRIPTION

The following describes the proposed project that is the subject of this memorandum prepared pursuant to CEQA. The proposed project would replace the existing two natural grass fields at Heather Farm Park with synthetic all-weather turf sports fields.

Project Location and Setting

The project site consists of two sports fields (fields), sometimes referred to as HF1 and HF2, that are situated at the southern end of Heather Farm Park (Park) in the City of Walnut Creek, Contra Costa County. The Park is approximately 102 acres in size and is located northwest of the intersection of North San Carlos Drive and Heather Drive (APN 144-050-109). The Park is bounded by single family

and residential uses to the north and east, recreational and commercial uses to the south, and single-family residential units and Diablo Hills Golf Course to the west.

The project site itself is bound by Heather Farm Park sports field number three to the north, North San Carlos Drive to the west, Ygnacio Valley Road to the south, and single family homes to the east. The 15 acre project site includes the existing HF1 and HF2 sports fields, adjacent parking lots, two public restroom facilities, walking trails, and Crawdad Creek (creek). The project's location and regional vicinity is shown in Figure 1 and an aerial photo of the project site and surround land uses are shown in Figure 2 in Attachment A.

Existing Conditions

HF1 is located at the southeastern corner of Heather Farm Park, just to the south of HF2 and the fields are separated by a creek that runs in a southeasterly manner. HF1 includes lighting improvements consisting of eight poles and 45 lamps and HF2 includes lighting improvements of four poles and 22 lamps. HF1 is primarily used for youth soccer and adult softball leagues and was utilized for 2,400 hours of play from 2021-2022. HF2 is primarily used for youth soccer and soccer classes and was utilized for 3,300 hours of play from 2021-2022. There are two public restrooms on the project side both located adjacent to HF1.

The park is designated as Open Space-Recreation in the City of Walnut Creek General Plan and is within the Open Space (O) zoning district on the City's Zoning Map.

Project Vicinity and Surrounding Land Uses

As previously discussed, the project site is located within the 102-acre Heather Farm Park. In addition to the HF1 and HF2 sports fields, the park includes Heather Farm Community Center and Clarke Memorial Swim Center, an all-abilities playground, baseball fields, basketball courts, an equestrian center, a garden center, and off-leash dog park, in addition to other amenities. The Park currently includes approximately 806 public vehicle parking spaces within its boundaries. Parking is provided in surface lots adjacent to the sports and ball fields, Heather Farm Community Center, Clarke Memorial Swim Center, equestrian center, garden center, and along Heather Drive.

A variety of land uses are located within the vicinity of the project site. The Park is surrounded by Diablo Hills Golf Club golf course to the west; single family residential development and the Seven Hills Ranch and School to the northwest; the Contra Costa Canal, Briones-Las Trampas Regional Trail and single-family residential development to the north; single family residential to the east; and commercial and single-family residential development along the opposite side of Ygnacio Valley Road to the south.

Project Background

The Walnut Creek Soccer Club approached the City in 2021 with an interest in contributing to the funding of artificial turf fields at Heather Farm Park. This interest was consistent with the Your Parks, Your Future initiative, which is a multi-phased planning process that will ensure parks, community facilities, and programs serve the greater Walnut Creek community into the future. This project would be funded by two sources: City of Walnut Creek funds and contributions from the Walnut

Creek Soccer Club. The City's funds are a combination of general funds as well as proceeds from an enhanced sales tax, known as Measure O. In 2022, Walnut Creek voters approved Measure O, a ten year, half cent sales tax measure to fund current and future quality of life needs. A portion of the dollars collected as part of Measure O would contribute to the funds of the construction of the new facility proposed for the Heather Farm Park site.

Proposed Project

The proposed project would replace the existing two natural grass fields at Heather Farm Park with synthetic all weather turf sports fields. The existing turf would be excavated to a maximum depth of 24 inches and replaced with synthetic turf infill consisting of organic material, such as cork, olive, thermoplastic elastomer (TPE)¹ or ethylene propylene diene monomer (EPDM)². These materials provide a durable and safe finished playing surface, with limited reprocessed materials or toxins. The synthetic turf would be installed on a composite drainage/shock attenuation pad atop a 6-inch drain rock base, which would allow the turf to remain permeable.

In addition to the synthetic sports fields, the proposed project would include installation of 8-foot high perimeter fencing and netting to prevent balls from leaving the fields and landing in adjacent parking lots, walkways, or the creek. The conceptual designs for each field are presented in Figure 3 (Attachment A).

Project Construction

Construction would take approximately 12 months and would occur in a single phase. Project construction is expected to start in summer 2025 and be completed by 2026. Typical working hours would be from 7:00 a.m. to 6:00 p.m., Monday through Friday, in compliance with the City's Noise Ordinance. Construction staging would occur within the existing parking area. The staging area would be used for construction worker parking and staging of equipment and debris containers. The amount of material to be excavated and off-hauled is estimated at 5,100 cubic yards. It is anticipated that general grading would consist of approximately 2 feet or less of cut and fill to develop final grades.

Due to the proximity of the project site to Crawdad Creek, the City would implement the following measures to avoid encroachment of construction activities into the creek area and minimize any indirect effects of project construction on the creek:

 Prior to the start of construction, the riparian zone associated with Crawdad Creek would be temporarily staked in the field by a qualified biologist. Temporary construction fencing would be placed between the edge of the construction disturbance zone and the riparian area to prevent entry of persons or deposition of construction materials or debris into the stream throughout the construction period.

Thermoplastic elastomer, or TPE, is sometimes referred to as thermoplastic rubber. TPEs are a class of copolymers or a physical mix of polymers that consist of materials with both thermoplastic and elastomeric properties.

EPDM rubber is a specialty elastomer, which is a polymer with elastic or rubber-like characteristics.

- Prior to the start of construction, temporary silt fencing would be placed along the exterior base
 of the temporary construction fencing to prevent discharge of silt or sediment into the creek
 throughout the construction period. The temporary construction and temporary silt fencing
 would be maintained throughout the construction period and would be inspected by City staff
 on a daily basis.
- Trash generated by the project would be promptly and properly removed from the site.
- No construction or maintenance vehicles would be refueled within 100 feet of the wetland areas unless a bermed and lined refueling area is constructed and hazardous material absorbent pads are available in the event of a spill.
- Appropriate erosion-control measures (e.g., fiber rolls, filter fences) would be used on site to
 reduce siltation and runoff of contaminants into the wetlands. Filter fences and mesh would be
 of material that would not entrap reptiles and amphibians. Erosion control blankets would be
 used as a last resort because of their tendency to biodegrade slowly and to trap reptiles and
 amphibians.
- Fiber rolls used for erosion control would be certified as free of noxious weed seed and would not contain plastics of any kind.
- Seed mixtures applied for erosion control would not contain invasive nonnative species.

The above actions would be incorporated into the project conditions and construction contracts.

Project Operation

As described above, the existing sports fields are currently used for youth soccer and adult softball leagues. Implementation of the proposed project would allow the City to better accommodate these uses year-round. However, operation of these fields would essentially remain the same as under current conditions.

EXEMPTIONS

Article 19 of the *State CEQA Guidelines* includes, as required by PRC Section 21084, a list of classes of projects that have been determined not to have a significant effect on the environment and, as a result, are exempt from review under CEQA. This document has been prepared to serve as the basis for compliance with CEQA as it pertains to the proposed project, and to demonstrate that the proposed project qualifies for a CEQA Exemption as a Replacement or Reconstruction (Class 2) and New Construction or Conversion of Small Structures (Class 3), consistent with the provisions of *State CEQA Guidelines* Sections 15302, 15303 and 15300.2. Specifically, the information provided herein shows the following:

a. The project qualifies for an exemption under *State CEQA Guidelines* Sections 15302 (i.e., Class 2) and 15303 (i.e., Class 3) and as a result, would not have a significant effect on the environment.

b. The analysis shows there are no exceptions to qualifying for the exemption, as identified in *State CEQA Guidelines* Section 15300.2.

State CEQA Guidelines Section 15302, Replacement or Reconstruction, defines Class 2 projects as the replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced. Specifically, Section 15302(b) the replacement of a commercial structure with a new structure of substantially the same size, purpose, and capacity.

State CEQA Guidelines Section 15303, New Construction or Conversion of Small Structures, defines Class 3 projects as those consisting of the following: "construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure. The numbers of structures described in this section are the maximum allowable on any legal parcel." Section 15303(e) allows for accessory (appurtenant) structures including garages, carports, patios, swimming pools, and fences.

As described in the Project Description, the proposed project would include replacement of the two existing turf fields at Heather Farm Park with synthetic turf and installation of perimeter fencing/netting. The proposed project would not expand the size or capacity of the existing fields nor change their use for outdoor recreation. Therefore, the proposed project properly qualifies for an exemption under *State CEQA Guidelines* Sections 15302 and 15303.

As the proposed project properly qualifies for an exemption under *State CEQA Guidelines* Sections 15302 (i.e., Class 2) and 15303 (i.e., Class 3), the proposed project would not have a significant effect on the environment. Additionally, the following analysis shows there are no exceptions to qualifying for the CE, as identified in *State CEQA Guidelines* Section 15300.2.

EXCEPTIONS TO CATEGORICAL EXEMPTIONS

In addition to investigating the applicability of *State CEQA Guidelines* Sections 15302 (Class 2) and 15303 (Class 3) to the proposed project, this memorandum assesses whether any of the exceptions to qualifying for the CE are present. The following analysis compares the criteria of *State CEQA Guidelines* Section 15300.2 (Exceptions) to the proposed project. As described in the analysis below, LSA has determined that none of the exceptions are applicable to the proposed project.

Criterion 15300.2(a): Location

a. Location. Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located – a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply in all instances, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, State, or local agencies.

The project does not qualify for an exception under Classes 3, 4, 5, 6 or 11. The project is located within an existing community park. As discussed under Criterion 15300.2(c): Significant Effect below, the proposed project would not result in significant effects on the environment. In addition, the project would not result in any impacts on an environmental resource of hazardous or critical concern. Therefore, the exception under CEQA Guidelines Section 15300.2(a) does not apply to the project.

Criterion 15300.2(b): Cumulative Impact

b. Cumulative Impact. All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.

A cumulative impact from several projects is the change in the environment that results from the incremental impact of a project when added to other closely related past, present, and reasonably foreseeable probable future projects (*State CEQA Guidelines §15355(b)*). Related projects considered to have the potential of creating a cumulative impact in association with the proposed project consist of projects that are reasonably foreseeable and that would be constructed or operated during the life of the proposed project.

The Heather Farm Park Aquatic and Community Center Project is the only probable future project or related project that would occur within the vicinity of the project site. Like the proposed project, construction of the Heather Farm Park Aquatic and Community Center Project is anticipated to commence in summer/fall 2025. As such, both projects could be under construction concurrently. However, the Initial Study/Mitigated Negative Declaration prepared for the New Aquatic and Community Center at Heather Farm Park Project identified no significant impacts and no significant cumulative impacts.³

The proposed project would not result in any long-term or growth-inducing impacts that would be cumulatively considerable when viewed in conjunction with the Heather Farm Park Aquatic and Community Center Project or any subsequent projects in the same location. No permanent or long-term effects, such as loss of wetlands or other sensitive natural communities, take of special-status species, significant increase in vehicle trips (beyond existing visitation to Heather Farm Park), or creation of stationary sources of air and noise emissions, would occur as part of the proposed project. Furthermore, the effects of the proposed project would provide upgraded recreational facilities to serve the local and regional community. Thus, the project's contributions to potential cumulative impacts would not be cumulatively considerable, and the exception under *State CEQA Guidelines* Section 15300.2(b) does not apply to the proposed project.

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The Draft Initial Study/Mitigated Negative Declaration for the New Aquatic and Community Center at Heather Farm Park Project is anticipated to be released for public review in late June 2024.

Criterion 15300.2(c): Significant Effects

c. Significant Effect. A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.

No unusual circumstances have been identified in or around the project site that would result in significant environmental impacts. The proposed project would include replacement of turf at two existing sports fields with synthetic turf and construction of perimeter fencing and netting around the fields. The construction/installation methods that would be utilized as part of the proposed project are typical for a project of this type, and no specialized equipment or methods would be required to complete construction. Therefore, the proposed project would not include any unusual circumstances that would have a significant effect on the environment, as further demonstrated below.

Furthermore, based on field reviews of the project site and review of the pertinent literature, as described below, the potential for significant adverse environmental impacts as defined under CEQA is negligible. With the implementation of standard regulatory compliance measures, there would be no significant environmental impacts under CEQA. Therefore, the exception under *State CEQA Guidelines* Section 15300.2(c) does not apply to the proposed project.

Aesthetics

The proposed project is located in Heather Farm Park, which is currently developed with the Heather Farm Community Center, Clarke Memorial Swim Center, an all-abilities playground, sports fields, basketball courts, an equestrian center, a garden center, and off-leash dog park, in addition to other amenities. The proposed project would replace the existing sports fields – HF1 and HF2, which are situated at the southern end of Heather Farm Park, east of North San Carlos Drive. The existing sports fields are visually characterized by the natural turf, striping and associated facilities (e.g., restroom, light poles/lighting, paved pathways, parking areas). Although the existing natural turf fields would be replaced with synthetic material, this material is made to look and feel much like the natural surface. Proposed perimeter fencing and netting would be approximately 30-feet tall and would be visually consistent with the existing facilities and adjacent recreational facilities associated with Heather Farm Park. As further described below under the discussion of Criterion 15300.2(d), Scenic Highway, no scenic vistas or scenic highways are located within the vicinity of the proposed project. No new sources of light or glare would be constructed as part of the proposed project. Therefore, the proposed project would not impact scenic views or scenic resources, degrade the existing visual character or quality of the project site, or create a new source of substantial light or glare.

Agriculture and Forestry Resources

The project site is located within Heather Farm Park and no agricultural or forestry resources occupy the site. According to the California Department of Conservation, Farmland Mapping and Monitoring

Program (FMMP), the project site is classified as "Urban and Built-Up Land". The City of Walnut Creek General Plan Land Use Map designates the project site as Open Space – Recreation (OS-R). The City of Walnut Creek Zoning Map identifies the project site as Planned Development (PD). Neither of these land use designations allows for agricultural or forestry uses. In addition, the project site is not under a Williamson Act contract. Therefore, no impacts to agriculture and forestry resources would occur with implementation of the proposed project.

Air Quality

Air pollutant emissions associated with the proposed project would occur over the short-term in association with construction activities, such as vehicle and equipment use. The project would not generate long-term regional emissions as described below.

Short-Term (Construction) Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by demolition, grading, hauling, and other activities. Emissions from construction equipment are also anticipated and would include carbon monoxide (CO), nitrogen oxide (NO_x), reactive organic gases (ROG), directly-emitted particulate matter (PM_{2.5} and PM₁₀), and toxic air contaminants (TACs) such as diesel exhaust particulate matter.

Construction activities would involve site preparation, grading, paving, and other construction activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM₁₀ emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM₁₀ emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emissions reductions of 50 percent or more. The BAAQMD has established standard measures for reducing fugitive dust emissions (PM_{10}). With the implementation of these Basic Best Management Practices for Construction-Related Fugitive Dust Emissions, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, sulfur dioxide (SO_2), NO_x , ROG, and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those

⁴ California Department of Conservation (DOC). 2022. Division of Land Use Resource Protection. California Important Farmland Finder. Website: maps.conservation.ca.gov/dlrp/ciff (accessed February 5, 2024).

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vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using the California Emissions Estimator Model (CalEEMod) version 2022.1, consistent with BAAQMD recommendations. Construction of the proposed project is anticipated to start in summer 2025 and occur for 12 months, which was included in CalEEMod. This analysis assumes that approximately 5,100 cubic yards of material would be excavated and off-hauled, which was also included in CalEEMod. In addition, this analysis assumes use of Tier 2 construction equipment. Other detailed construction information is currently unavailable; therefore, this analysis utilizes CalEEMod default assumptions. Construction-related emissions are presented in Table A. CalEEMod output sheets are included in Attachment B.

Table A: Project Construction Emissions (in Pounds per Day)

Project Construction	ROG	NO _x	Exhaust PM ₁₀	Fugitive Dust PM ₁₀	Exhaust PM _{2.5}	Fugitive Dust PM _{2.5}
Maximum Average Daily	1.4	49.9	1.4	7.8	1.4	4.0
Emissions						
BAAQMD Thresholds	54.0	54.0	54.0	BMP	82.0	BMP
Exceed Threshold?	No	No	No	No	No	No

Source: LSA (June 2024).

BAAQMD = Bay Area Air Quality Management District

BMP = best management practices

NO_X = nitrogen oxides

 $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter PM_{10} = particulate matter less than 10 microns in diameter

ROG = reactive organic gases

As shown in Table A, construction emissions associated with the project would not exceed the BAAQMD's thresholds for ROG, NO_x , CO, exhaust PM_{10} , and exhaust $PM_{2.5}$ emissions. In addition to the construction period thresholds of significance, the BAAQMD requires the implementation of Basic Best Management Practices (BMPs) for Construction-Related Fugitive Dust Emissions to reduce construction fugitive dust impacts to a less than significant level. Therefore, with implementation of the BAAQMD's Basic BMPs, short-term construction period air quality impacts would be less than significant.

Long-Term (Operational) Emissions. Long-term air emission impacts are those associated with area sources and mobile sources related to the proposed project. In addition to the short-term construction emissions, the project would also generate long-term air emissions, such as those associated with changes in permanent use of the project site. These long-term emissions are primarily mobile source emissions that would result from vehicle trips associated with the proposed project. Area sources, such as natural gas heaters, landscape equipment, and use of consumer products, would also result in pollutant emissions.

The BAAQMD has developed screening criteria to provide lead agencies with a conservative indication of whether the proposed project would result in potentially significant air quality impacts. If all of the screening criteria are met by a proposed project, then the lead agency would not need to

perform a detailed air quality assessment of the proposed project's emissions. These screening levels are generally representative without any form of mitigation measures taken into consideration. In addition, the screening criteria do not account for project design features, attributes, or local development requirements that could also result in lower emissions.

For city park land uses, the BAAQMD screening size for operational criteria pollutants is 175 acres. The total project site is 15 acres, which would be well below the screening size. Further, the proposed project is not anticipated to increase vehicle trips to the project site and operation of the existing fields would essentially remain the same as under current conditions. Additionally, the proposed project would not require mowing or other combustion engine maintenance equipment for natural turf care. Therefore, based on the BAAQMD's screening criteria, operation of the proposed project would result in a less-than-significant impact to air quality from criteria air pollutant and precursor emissions.

Localized CO Impacts. The BAAQMD has established a screening methodology that provides a conservative indication of whether the implementation of a proposed project would result in significant CO emissions. According to the BAAQMD CEQA Guidelines, a proposed project would result in a less-than significant impact to localized CO concentrations if the following screening criteria are met:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, and the regional transportation plan and local congestion management agency plans.
- Project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- The project would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, or below-grade roadway).

Implementation of the proposed project would not conflict with the policies or programs of the Contra Costa County Transportation Authority. The project site is not located in an area where vertical or horizontal mixing of air is substantially limited. In addition, the proposed project would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour and would not result in localized CO concentrations that exceed State or federal standards. Therefore, the proposed project would not result in localized CO impacts.

Based on the analysis presented above, construction and operation of the proposed project would not result in the generation of criteria air pollutants that would exceed BAAQMD thresholds of significance. Implementation of BAAQMD Basic Best Management Practices, as required by the BAAQMD, would further reduce construction dust impacts. The proposed project is not expected to produce significant emissions that would affect nearby sensitive receptors. The project would also not result in objectionable odors affecting a substantial number of people. Therefore, the proposed project would not result in significant air quality impacts.

Biological Resources

A biological resources study ⁵ was prepared for the Heather Farm Park Aquatic and Community Center Project, which also included the project site. The biological resources study, which included background research and field surveys, is included as Attachment C.

A biological resource records search was conducted of the most current versions of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB), the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, and the United States Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) database. The National Wetlands Inventory (NWI) Wetlands Mapper was also accessed to determine if there were any known drainages or wetlands on or near the site. Historic aerial imagery and previous studies conducted at the project site were also reviewed. A site visit, including a focused search for Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*) was conducted on July 28, 2023.

The Park site is entirely developed with parking lots, sidewalks, sports fields, playground, swim center, buildings, and associated infrastructure, such as lighting and fences. At the time of the site visit, there were many visitors using the sports fields and other recreation areas. Several people were walking dogs. Dogs are permitted to be off leash in the dog park at the north end of the park.

The vegetation communities on the project site are almost entirely planted or ornamental. There are some native trees, but nothing that could be considered an intact woodland community. Small portions of the park that have not been actively maintained would best be described as ruderal.

No special-status plant species were observed during the reconnaissance-level site visit. Congdon's tarplant was identified in a prior study as the only special-status plant species with potential to occur. However, the 2023 survey was conducted during the flowering period for Congdon's tarplant, when it would have been identifiable if it were present. Therefore, it has been determined that Congdon's tarplant has no potential to occur. One special-status plant species—slender-leaved pondweed (*Stuckenia filiformis* subsp. *alpina*)—was determined to have a moderate potential to occur within the Nature Lake; however, this species would not occur within Crawdad Creek because of a lack of suitable habitat. A subsequent focused rare plant survey was conducted in May of 2024 and it was determined that the species is absent from the Nature Lake.

As described in the biological resources study, 13 of the 17 species identified during the records search were determined to have no potential to occur due to a total lack of suitable habitat within the Park (e.g., tidal salt marshes, vernal pools, caves) and/or because they have not been found within the past 50 years and are therefore likely considered no longer present in the region. Four species were determined to have some potential to occur within the vicinity of Heather Farm Park; however, no special-status wildlife species are expected to occur in the developed areas (including the turf sports fields) or Concrete Pond.

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⁵ LSA. 2023. Biological Resources Technical Memorandum for Heather Farm Park, North San Carlos Drive, Walnut Creek. December 14.

Project construction could disturb habitat that provides suitable nesting habitat for a variety of resident and migratory bird and raptor species. Nesting birds are protected under the federal Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. If vegetation removal or construction activities during the nesting season (February 1 to August 31) are not avoidable, project contract specifications would stipulate that, in compliance with the MBTA and the California Fish and Game Code, the City should retain a qualified biologist to conduct a pre-construction survey within 36 hours prior to construction activities. The survey area should include the proposed construction site and surrounding habitat areas that could be indirectly impacted by increased noise and vibration. If active bird nests are observed within the direct and/or indirect disturbance limits, the qualified biologist should identify an appropriately-sized exclusion zone around the nest in which no work would be allowed until the qualified biologist determines that the nest is no longer active.

Several waters that are likely to be considered under the jurisdiction of the United States Army Corps of Engineers (USACE), CDFW, and Regional Water Quality Control Board (RWQCB) were identified in the larger project site. The only feature in proximity to the proposed project is Crawdad Creek. This channelized and perennial drainage runs along the northeastern boundary of HF1 and the southern boundary of HF2. The creek enters the Park via a culvert under Ygnacio Valley Road and supports cattails and other hydrophytic vegetation. Native willows and oaks also grow along the banks. Portions of the creek are so densely vegetated that they were impassable during the field survey. Ruderal non-native vegetation, including a fig tree, grows in the channel. As outlined in the project description, the proposed project would be restricted from entering the riparian area associated with Crawdad Creek; therefore, the proposed project would not result in impacts to any sensitive natural community or any potentially jurisdictional aquatic resource areas.

In accordance with Chapter 3-08 of the City of Walnut Creek Municipal Code, projects resulting in tree removals on private land are required to apply for a tree removal permit from the City and either plant replacement trees at a value equal to the value of the removed trees or pay an in-lieu fee in an amount equal to the value of the removed trees. In addition, Chapter 11-1.056 of the City of Walnut Creek's Municipal Code protects all park trees, regardless of size or species. The proposed project would not require any tree removal; therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources. Furthermore, no portion of the project site is covered under an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other adopted local, regional, or State approved habitat conservation plan.

Cultural Resources

Please refer to the discussion under Criterion 15300.2(f), Historical Resources.

Energy

Energy use from utilizing construction equipment (i.e., fuel, electricity, diesel) would be short-term and temporary. The proposed project is not anticipated to increase vehicle trips to the project site and operation of the proposed project would essentially remain the same as under current conditions. Therefore, energy usage is not expected to increase with operation of the proposed project. As such, construction and operation of the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy. Furthermore, the proposed

project would not conflict with or obstruct a State or local plan for renewable energy or for addressing energy efficiency.

Geology and Soils

The project site, like most of California, would be subject to seismic ground shaking in the event of an earthquake. The project site is not located on an Alquist-Priolo Earthquake Fault Zone and the nearest active fault, the Concord Fault, is located approximately 2.5 miles from the project site.⁶ According to mapping by the California Geological Survey (CGS), the project site is located in an area mapped as a liquefaction hazard zone. In addition, expansive soils are present on the project site. The project site is located on a relatively flat area and is not located next to any hills. The project site is considered Flatland, and therefore would not be susceptible to landslides. No habitable structures would be constructed as part of the proposed project and design and construction for the proposed project would be required to conform with, or exceed, current best standards for earthquake resistant construction in accordance with the most recent California Building Code (CBC) adopted by the City and with the generally accepted standards of geotechnical practice for seismic design in Northern California. In addition, the Geotechnical Engineering Report¹⁰ completed for the proposed project includes design recommendations for earthwork, subgrade preparation, soil stabilization, fill material, and site drainage, which would be incorporated into the project design. Compliance with the CBC and incorporation of the design recommendations identified in the project-specific geotechnical report would ensure that the proposed project would not exacerbate an existing geologic or seismic hazard. Therefore, the proposed project would not result in impacts related to geology and soils.

Greenhouse Gas Emissions

Short-Term (Construction) Emissions. Construction activities, such as site preparation, excavation and grading, on-site heavy-duty construction vehicles, equipment hauling materials to and from the project site, and motor vehicles transporting construction crews, would produce combustion emissions from various sources. During construction, greenhouse gas emissions (GHGs) would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossilbased fuels creates GHGs such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Furthermore, CH₄ is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using CalEEMod, it is estimated that the annual emissions

Terracon. 2024. Heather Farm Park Sports Field Conversion Geotechnical Engineering Report. February 29.

⁷ California Geological Survey. 2019, op. cit.

Terracon. 2024. op. cit.

Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG). 1997. Landslide Hazard (Rainfall Induced) Map. Website: https://mtc.maps.arcgis.com/apps/webapp viewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8 (accessed February 2024).

Terracon. 2024. Heather Farm Park Sports Field Conversion Geotechnical Engineering Report. February 29.

associated with construction of the proposed project would be approximately 315.0 metric tons of CO_2e per year. The CalEEMod results are provided in Attachment B.

Long-Term (Operational) Emissions. The City of Walnut Creek adopted a Sustainability Action Plan ¹¹ on July 18, 2023. The City's Sustainability Action Plan meets the requirements for a Qualified Greenhouse Gas Reduction Strategy and is designed to streamline environmental review of future development projects in the City, consistent with *State CEQA Guidelines* Section 15183.5(b). Therefore, the proposed project is evaluated for consistency with the Sustainability Action Plan.

The Sustainability Action Plan focuses on the actions that the community will take in order to address climate change and improve the health and wellbeing of everyone in Walnut Creek. The Sustainability Action Plan will continue the City's efforts to address climate change by reducing GHG emissions 40 percent below 1990 GHG emission levels by 2030 and 85 percent below 1990 GHG emission levels by 2045. The Sustainability Action Plan identifies 21 GHG reduction strategies related to Buildings and Energy Supply, Transportation and Land Use, Water and Wastewater, Waste, Outdoor Equipment, and Community Health and Resilience. The following strategies apply to the proposed project:

Transportation and Land Use

- 8: Promote sustainable development, which reduces vehicle miles traveled and greenhouse gas. emissions.
- 9: Ensure safe, efficient, and reliable mobility options throughout the community.

Water and Wastewater

12: Expand City-led efforts to reduce water use community-wide.

Outdoor Equipment

• 15: Transition to pollution-free outdoor equipment.

Once operational, the proposed project is not anticipated to increase vehicle trips to the project site and operation of the proposed project would essentially remain the same as under current conditions. As such, operation of the proposed project would not increase GHG emissions associated with vehicle trips, electricity, water usage, or activities such as routine maintenance. Therefore, the proposed project would be consistent with the applicable City of Walnut Creek Sustainability Action Plan strategies. The proposed project would not generate substantial GHG emissions that may have a significant impact on the environment and would not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

City of Walnut Creek. 2023. *City of Walnut Creek Sustainability Action Plan*. July 18. Website: https://www.walnutcreekca.gov/home/showpublisheddocument/30592/638264039182030000 (accessed March 2024).

Hazards and Hazardous Materials

Please refer to the discussion below under Criterion 15300.2(e), Hazardous Waste Sites.

Hydrology and Water Quality

Construction activities would involve disturbance, grading, and excavation of soil, which could result in temporary erosion and movement of sediments into the surrounding drainage areas of Crawdad Creek, particularly during precipitation events. Because the proposed project would involve over 1 acre of land disturbance, it would be required to comply with the Construction General Permit. As compliance with the Construction General Permit is required, the City and its contractor would be required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) and best management practices (BMPs), including, but not limited to, erosion control and sediment control BMPs designed to minimize erosion and retain sediment on site, and good housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters (i.e., Crawdad Creek).

Additionally, proposed improvements would not substantially alter the existing drainage pattern of the project site or area, and the resulting increase in storm water runoff associated with implementation of the proposed project would be minimal due to the small increase in impervious surface as compared to existing conditions. The proposed synthetic turf is considered permeable and would have a 6-inch-thick layer of rock to facilitate drainage and improve stormwater storage capacity. Given the low infiltration rates of the existing site soils, the proposed project would also include biotreatment areas to manage peak stormwater flows. Overall, the proposed project would not result in impacts associated with hydrology and water quality.

Land Use and Planning

The proposed project would replace the existing turf sports fields at Heather Farm Park with synthetic turf and install perimeter fencing and netting around the renovated sports fields. Due to the type of development and its location within an existing City park, the proposed project would not divide an established community. In addition, the proposed project does not propose or require any changes to the land use or zoning designations of the project site. Therefore, the proposed project would have no impact associated with land use and planning.

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State Water Resources Control Board (SWRCB). 2022b. National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (CGP), Order No. 2022-0057-DWQ, NPDES No. CAS000002. Website: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2022/wqo_2022-0057-dwq.pdf (accessed February 2024).

Mineral Resources

According to the Contra Costa County General Plan, 13 the proposed project is not located within, adjacent to, or near a Mineral Resource Zone. Therefore, the proposed project would not impact mineral resources.

Noise

Construction activities would result in short-term noise impacts on nearby sensitive receptors. Construction-related short-term noise levels would be higher than existing ambient noise levels currently in the project area but would no longer occur once construction of the project is completed. Based on typical construction equipment noise levels (Lmax) recommended for noise impact assessments obtained from the Federal Highway Administration (FHWA) Roadway Construction Noise Model, ¹⁴ average maximum noise levels range up to 85 dBA L_{max} at 50 feet during the noisiest construction phases. The site preparation and grading phases, including excavation of the site, tend to generate the highest noise levels because earthmoving machinery is the noisiest construction equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

Pursuant to the City of Walnut Creek's discretion in determining applicable significance thresholds, construction noise impacts are evaluated based on compliance with the City's Noise Ordinance found in Chapter 6, Article 2, of the Municipal Code. This ordinance limits the permissible hours of noiseproducing construction activities to non-holiday weekdays from 7:00 a.m. to 6:00 p.m.; construction activities are not permitted outside of these hours unless an exemption is permitted by the Chief of Code Enforcement or by the City Engineer.

The closest sensitive receptors include the multi-family residential uses located just north of the project site approximately 235 from the center of HF1 and 125 feet from the center of HF2. Project construction would result in short-term noise impacts to these sensitive receptors. Maximum construction noise would be short-term, generally intermittent depending on the construction phase, and variable depending on receiver distance from the active construction zone. The duration of noise impacts generally would be from one day to several days depending on the phase of construction. Typical construction hours would be 7:00 a.m. to 6:00 p.m., Monday through Friday, which would comply with the City's Municipal Code. Therefore, construction noise impacts would be less than significant. After construction, the proposed project would not result in an increase in the vehicle trips and would not be a source of operational noise. Therefore, the proposed project would not expose persons to noise levels in excess of local standards. Operational noise impacts would be considered less than significant.

County of Contra Costa. 2005. Contra Costa County General Plan 2005-2020: Conservation Element, 8.9 Mineral Resource Areas, pg. 8-33.

Federal Highway Administration (FHWA). 2006. Roadway Construction Noise Model.

Typical sources of groundborne vibration are construction activities (e.g., operating earthmoving equipment), and occasional traffic on local roads. In general, groundborne vibration from standard construction practices is only a potential issue when it occurs within 25 feet of sensitive uses. During construction, with distance attenuation, groundborne vibration levels from the operation of heavy construction equipment that would be used in construction activities would not cause damage to residential buildings of normal northern California construction. Therefore, groundborne vibration impacts from project-related construction activities were determined to be less than significant. After construction, the proposed project would not be a source of vibration.

Population and Housing

The proposed project would replace the existing turf sports fields at Heather Farm Park with synthetic turf and install perimeter fencing and netting around the renovated sports fields. The proposed project would not directly induce population growth in the region, as it is intended for use by the existing population that visits Heather Farm Park and uses the existing sports fields facilities. The proposed project would not involve the construction or extension of existing infrastructure (e.g., roads or sewer lines) that would indirectly induce population growth. Operation of the proposed project would not require any additional staff; therefore, the proposed project would not result in an indirect increase in population in areas around the project site. Finally, the proposed project is located within the existing Heather Farm Park and therefore would not displace existing people or housing. Therefore, the proposed project would not result in impacts to population and housing.

Public Services

The proposed project would replace the existing turf sports fields at Heather Farm Park with synthetic turf and install perimeter fencing and netting around the renovated sports fields. The proposed project improvements would not require additional public services (e.g., fire protection, police protection, schools, or parks) beyond what currently exists. Therefore, the proposed project would not result in impacts to public services.

Recreation

The proposed project would include improvements within the existing Heather Farm Park, including replacement of the turf at HF1 and HF2 and installation of perimeter fencing. To address use and maintenance of all City fields, the Parks and Recreation Department has an active and dedicated field maintenance program. The City will continue to manage and maintain the project site pursuant to standard City practices to ensure that substantial physical deterioration of the field would not occur as a result in the change in turf surface. Additionally, the proposed project involves improvements to the sports fields at Heather Farm Park and therefore would not require the construction or expansion of other recreational facilities that may have adverse physical effects on the environment. Therefore, the proposed project would not result in impacts associated with recreational facilities.

Transportation

The City's Transportation Impact Analysis Guidelines and the Contra Costa Transportation Authority (CCTA) Implementation Guide have established 100 net new peak-hour trip thresholds for requiring

preparation of a traffic impact analysis. Implementation of the proposed project would result in the replacement of the existing turf at the existing sports fields, HF1 and HF2 and installation of perimeter fencing. The proposed project would not increase the capacity of the fields or the hours of field operation. Therefore, no changes to the operation or trip generation is anticipated due to implementation of the proposed project.

The proposed project would not alter public roadways or access to the Park from public roadways. As such, the proposed project would not result in hazards due to incompatible uses and would not result in inadequate emergency access with the proposed project.

Tribal Cultural Resources

As discussed under Criterion 15300.2(f): Historic Resources below, given the previous disturbance of the project site and the limited depth of excavation required for project construction, it is not anticipated that project construction would encounter subsurface tribal cultural resources. Furthermore, Assembly Bill (AB) 52 consultation is not required for categorically exempt projects. Therefore, impacts to tribal cultural resources would not occur.

Utilities and Service Systems

The project site is currently served by existing utility service providers. The proposed project would replace the existing sports fields with synthetic turf; no new restrooms or drinking water fountains would be provided. Replacement of the existing turf would reduce the amount of irrigation required to maintain the existing sports fields; therefore, overall water demand for the project site would be less than existing conditions. The minimal quantities of construction waste generated during construction of the proposed project would be collected and disposed of at off-site landfills that have adequate capacity to serve the project. Given the nature of the proposed project, demand for water, wastewater treatment, storm water drainage, electricity, and solid waste disposal would be negligible. Therefore, the proposed project would have no impact on utilities or service systems.

Wildfire Hazard

The project site is located in a Local Responsibility Area (LRA), but not located within a Very High Fire Hazard Severity Zone (VHFHSZ) according to CAL FIRE mapping. ¹⁵ Although the project site is not designated as a VHFHSZ, the project site and adjacent areas includes areas of vegetation and trees, particularly on the northern side of the proposed building and around the Nature Lake. The City's General Plan indicates that the project site is located within a Very High Wildland/Urban Interface Fire Threat Area. ¹⁶ Fire services to the City of Walnut Creek are provided by the Contra Costa County Fire Protection District (CCCFPD). The nearest CCCFPD station is located at 1050 Walnut Avenue (approximately 1.6 miles from the project site).

The purpose of the proposed project is to improve the existing sports fields within an existing City park. The uses planned for the proposed project (i.e., soccer and softball games and practices)

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California Department of Forestry and Fire Protection (CAL FIRE). n.d. Fire Hazard Severity Zone Viewer. Website: https://egis.fire.ca.gov/FHSZ/ (accessed February 5, 2024).

¹⁶ City of Walnut Creek. 2006. Walnut Creek General Plan 2025. April 4.

would not introduce a new potential ignition source or alter existing access roads, which serve as evacuation routes during an emergency such as a wildfire, to and from the project site. Therefore, the proposed project would not exacerbate wildfire risks, impair an adopted emergency response plan or evacuation plan, expose people or structures to significant risks from wildlife, or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

Conclusion

As described above, the proposed project would not result in any significant effect on the environment due to unusual circumstances. Therefore, the exception under *State CEQA Guidelines* Section 15300.2(c) does not apply to the proposed project.

Criterion 15300.2(d): Scenic Highway

d. A categorical exemption shall not be used for a project, which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a State Scenic Highway. This criterion does not apply to improvements required as mitigation by an adopted Negative Declaration or certified EIR.

Interstate 680 (I-680) is the closest officially designated State scenic highway to the project site. At its closest, I-680 is located approximately 2.5 miles southwest of the project site. ¹⁷ Given this distance and the intervening development and topography, the proposed project would not be visible from this State Scenic Highway. Therefore, no scenic resources within view of a State Scenic Highway would be altered as part of the proposed project, and the exception under *State CEQA Guidelines* Section 15300.2(d) does not apply to the proposed project.

Criterion 15300.2(e): Hazardous Waste Sites

e. A categorical exemption shall not be used for a project located on a site, which is included on any list compiled pursuant to Section 65962.5 of the Government Code.

The project site does not include any active storage sites listed on the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) Leaking Underground Storage (LUST) database or the RWQCB's site cleanup program, ¹⁸ two of the component databases that comprise the State Hazardous Waste and Substances Sites (Cortese) List ¹⁹ of known hazardous materials compiled pursuant to Government Code Section 65962.5. Active sites are not listed for the project site on other components of the Cortese List, including the California Department of Toxic

State Water Resources Control Board (SWRCB). 2024. Geotracker Database. Website: https://geotracker. waterboards.ca.gov/ (accessed February 5, 2024).

¹⁹ California Environmental Protection Agency (Cal/EPA). 2024. Cortese List Data Resources. Website: calepa.ca.gov/sitecleanup/corteselist/ (accessed February 5, 2024).

Substances Control's (DTSC) hazardous waste and substance list.²⁰ Therefore, no impacts associated with locating a project on a site included on a list of hazardous materials would occur, and the exception under *State CEQA Guidelines* Section 15300.2(e) does not apply to the proposed project.

Criterion 15300.2(f) Historical Resources

f. A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.

A cultural resources study²¹ was conducted for the nearby proposed New Aquatic and Community Center at Heather Farm Park Project and is applicable to the project site. The study consisted of background research and a field survey, which also included the proposed project site. A records search was performed on July 25, 2023 (NWIC File #23-0055) and a supplemental records search was conducted on February 23, 2024 (NWIC File #23-1135). The Northwest Information Center (NWIC) records searches identified no previously conducted cultural resource studies within the project site, and no previously recorded cultural resources within the project site. Eleven cultural resource studies have been conducted within a 0.25-mile radius of the project site. Three previously recorded cultural resources were identified within a 0.25-mile radius of the project site, including a historic period residence (P-07-002540); the San Carlos Bridge, a historic period bridge structure (P-07-002946); and the Contra Costa Canal, a historic period canal (P-07-002695), which has been determined eligible for listing on the National Register of Historic Places.

On February 2, 2024, a pedestrian survey of the project site was conducted that focused on visible/accessible areas. No archaeological cultural resources were identified during the field survey. It is likely that little of the original ground surface remains in the project site as much of the topography has clearly been contoured and sculpted for drainage and recreation purposes. Buried utilities (including stormwater, irrigation, and electrical) are present in many locations and are an additional source of past disturbance. It is unclear how deep below the surface past disturbances from park developments may extend.

Based on the age and type of landforms in the project vicinity (e.g., Holocene alluvium), the project site has potential for containing buried pre-contact archaeological resources. This is underscored by earlier discoveries of buried archaeological sites elsewhere in the Walnut Creek floodplain. Because the alluvium underlying the project site reaches considerable depths, the potential for buried archaeological resources also could extend deep below surface. The archaeological sensitivity of the project site is offset to some extent by past ground-disturbing activities associated with the development of Heather Farm Park that included contouring of the ground surface for drainage and recreation purposes.

There are no known historical resources as defined by CEQA that would be impacted by the proposed project. Given the limited depth of excavation, it is not expected that the project would

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California Department of Toxic Substances Control (DTSC). 2024. EnviroStar Database Website: https://www.envirostor.dtsc.ca.gov/public/ (accessed February 5, 2024).

²¹ LSA Associates, Inc. 2024. Cultural Resources Study, Community Center and Aquatic Facility Project, Heather Farm Park, Walnut Creek, Contra Costa County, California. June.

unearth artifacts or resources during project construction. However, in the event that a previously unknown pre-contact archaeological deposit is unearthed during construction activities, the City would implement standard conditions of approval that are required of all ground-disturbing development projects within the City. Specifically, should project excavation unearth intact archaeological deposits, all activities would be redirected away from the deposit and a qualified archaeologist would be notified to assess the situation. The City of Walnut Creek, Contra Costa County Coroner's Office, and qualified archaeologist would evaluate the significance of the deposit and make recommendations regarding the treatment of the deposit in accordance with local and State regulations.

If human remains are encountered during construction activities, the regulatory process outlined in Health and Safety Code §7050.5 must be followed, which involves coordination with the Native American Heritage Commission and a Native American Most Likely Descendant. Adherence to this code and PRC §5097.98, which addresses the treatment of Native American human remains, means that the proposed project would not knowingly disturb human remains but would appropriately address any human remains should any be encountered during project work.

With compliance with applicable regulatory requirements, no substantial adverse change in the significance of a historical resource would occur from the proposed project; therefore, the exception under *State CEQA Guidelines* Section 15300.2(f) does not apply to the proposed project.

SUMMARY

As described above, none of the exceptions set forth in CEQA guidelines Section 15300.2 are applicable to the proposed project. On the basis of the evidence provided above, the proposed project is eligible for a Class 2 and Class 3 CE in accordance with Sections 15302, Replacement or Reconstruction, and 15303, New Construction or Conversion of Small Structures, of the *State CEQA Guidelines*. Because the proposed project meets the criteria for a categorically exempt project listed in *State CEQA Guidelines* Sections 15302 and 15303 and it would not have a significant effect on the environment, this analysis finds that a Notice of Exemption may be prepared for the proposed project.

Attachments:

A: Figures

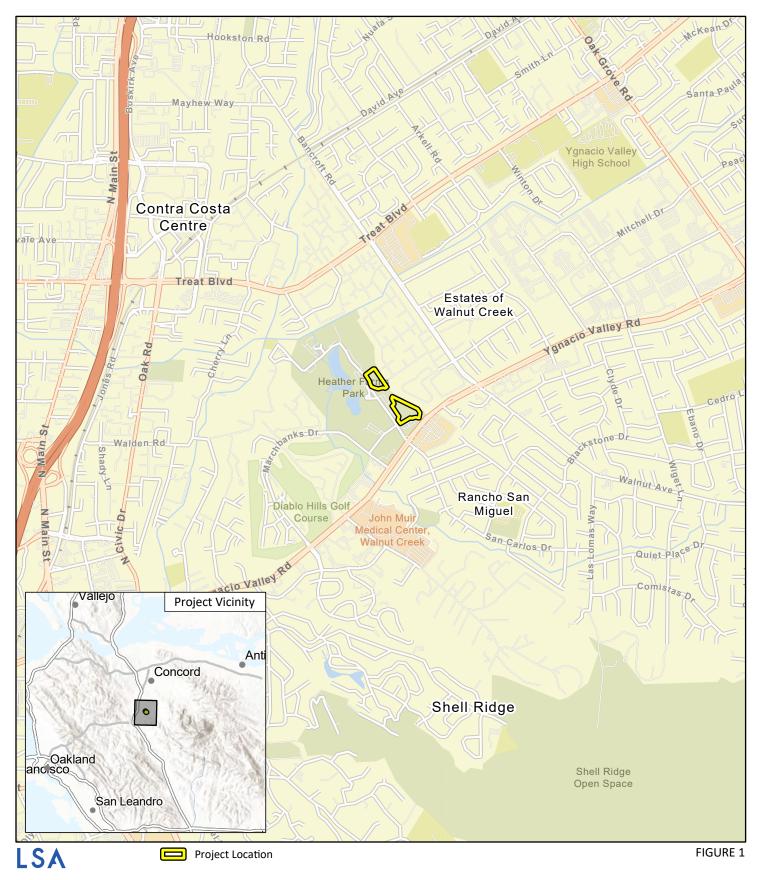
B: CALEEMod Results

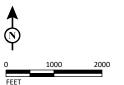
C: Biological Resources Technical Memorandum



ATTACHMENT A

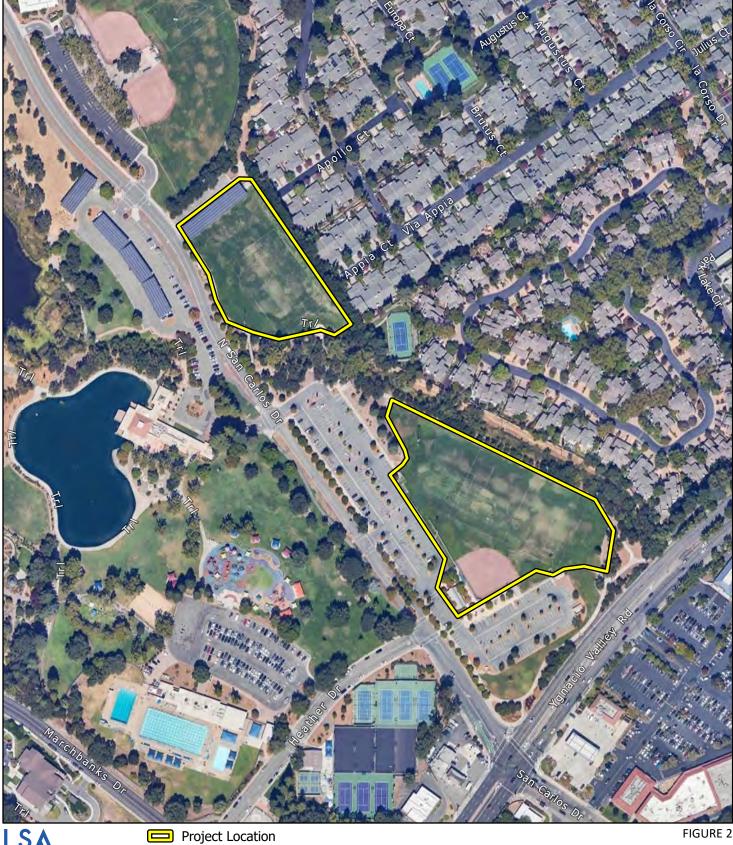
FIGURES





Heather Farm Park Sports Fields Renovation Project
Regional Location

SOURCE: USGS The National Map (2023)





SOURCE: Google Earth 2024

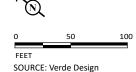
FIGURE 2

Heather Farm Park Sports Fields Renovation Project **Project Site**



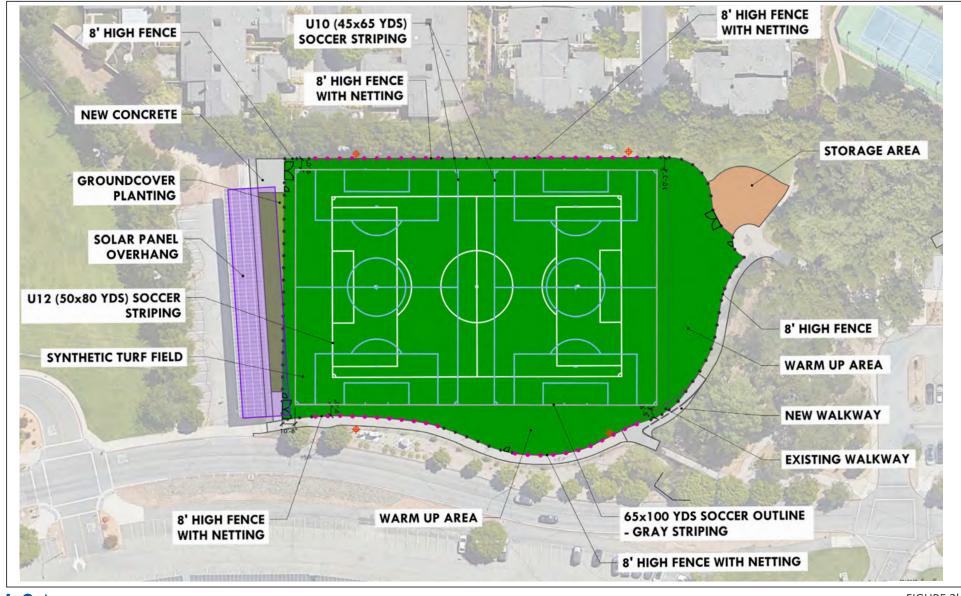
LSA

FIGURE 3a



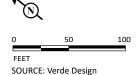
Heather Farm Park Sports Fields Renovation Project

Conceptual Design – Field 1



LSA

FIGURE 3b



Heather Farm Park Sports Fields Renovation Project
Conceptual Design – Field 2



ATTACHMENT B

CALEEMOD RESULTS

Heather Farm Park Sports Fields Renovation Project Custom Report

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 - 5.18.2.1. Unmitigated
- 8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Heather Farm Park Sports Fields Renovation Project
Construction Start Date	6/2/2025
Lead Agency	_
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.60
Precipitation (days)	34.0
Location	Heather Farm Park, 301 N San Carlos Dr, Walnut Creek, CA 94598, USA
County	Contra Costa
City	Walnut Creek
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1381
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.24

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
City Park	15.0	Acre	15.0	0.00	653,400	653,400	_	_

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	1.42	49.9	36.7	0.07	1.37	7.81	8.93	1.24	3.97	4.99	_	7,536	7,536	0.33	0.18	7,600
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.69	18.9	15.0	0.02	0.69	0.17	0.85	0.64	0.04	0.68	_	2,559	2,559	0.10	0.03	2,569
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.40	13.0	9.76	0.02	0.39	0.89	1.29	0.36	0.37	0.72	_	1,892	1,892	0.08	0.04	1,905
Annual (Max)	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.07	2.38	1.78	< 0.005	0.07	0.16	0.23	0.07	0.07	0.13	_	313	313	0.01	0.01	315

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
(Max)																

2025	1.42	49.9	36.7	0.07	1.37	7.81	8.93	1.24	3.97	4.99	_	7,536	7,536	0.33	0.18	7,600
2026	0.55	13.3	11.2	0.01	0.58	0.17	0.70	0.54	0.04	0.57	_	1,640	1,640	0.06	0.02	1,647
Daily - Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.69	18.9	15.0	0.02	0.69	0.17	0.85	0.64	0.04	0.68	_	2,559	2,559	0.10	0.03	2,569
2026	0.68	18.9	15.0	0.02	0.69	0.17	0.85	0.64	0.04	0.68	_	2,555	2,555	0.10	0.03	2,566
Average Daily	_	_	_	_	_	-	-	_	_	_	_	_	_	_	_	_
2025	0.40	13.0	9.76	0.02	0.39	0.89	1.29	0.36	0.37	0.72	_	1,892	1,892	0.08	0.04	1,905
2026	0.14	3.60	2.94	< 0.005	0.14	0.04	0.18	0.13	0.01	0.14	_	483	483	0.02	0.01	486
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2025	0.07	2.38	1.78	< 0.005	0.07	0.16	0.23	0.07	0.07	0.13	_	313	313	0.01	0.01	315
2026	0.03	0.66	0.54	< 0.005	0.03	0.01	0.03	0.02	< 0.005	0.03	_	80.0	80.0	< 0.005	< 0.005	80.4

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	со			PM10D			PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	1.07	39.9	28.3	0.05	1.12	_	1.12	1.02		1.02	_	5,295	5,295	0.21	0.04	5,314
Dust From Material Movement		_	_	_	_	7.67	7.67	_	3.94	3.94	_	_	_	_	_	_

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	-	_	_	_	-	-	-	_	_	_	_	_	_	_
Off-Road Equipment	0.03	1.09	0.78	< 0.005	0.03	_	0.03	0.03	_	0.03	_	145	145	0.01	< 0.005	146
Dust From Material Movement	_	_	_	_	_	0.21	0.21	_	0.11	0.11	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.01	0.20	0.14	< 0.005	0.01	_	0.01	0.01	_	0.01	_	24.0	24.0	< 0.005	< 0.005	24.1
Dust From Material Movement	_	_	_	_	_	0.04	0.04	_	0.02	0.02	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.06	0.04	0.73	0.00	0.00	0.14	0.14	0.00	0.03	0.03	_	154	154	< 0.005	0.01	157
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	-	-	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-

Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	-	3.91	3.91	< 0.005	< 0.005	3.97
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.65	0.65	< 0.005	< 0.005	0.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

	(J,													
ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
1.33	48.8	35.3	0.06	1.36	_	1.36	1.23	_	1.23	_	6,599	6,599	0.27	0.05	6,622
_	_	_	_	_	3.59	3.59	_	1.43	1.43	_	_	_	_	_	_
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
0.22	8.03	5.81	0.01	0.22	_	0.22	0.20	_	0.20	_	1,085	1,085	0.04	0.01	1,088
_	_	_	_	_	0.59	0.59	8/23	0.23	0.23	_	_	_	_	_	_
		ROG NOx — — 1.33 48.8 — — 0.00 0.00 — — 0.22 8.03 — —	ROG NOx CO — — — 1.33 48.8 35.3 — — — 0.00 0.00 0.00 — — — 0.22 8.03 5.81 — — —	ROG NOx CO SO2 — — — — — — 1.33 48.8 35.3 0.06 — — — 0.00 0.00 0.00 0.00 — — — — 0.22 8.03 5.81 0.01 — — — —	ROG NOx CO SO2 PM10E — — — — — — — — 1.33 48.8 35.3 0.06 1.36 — — — — 0.00 0.00 0.00 0.00 — — — — 0.22 8.03 5.81 0.01 0.22 — — — — —	ROG NOX CO SO2 PM10E PM10D — — — — — — — — — — 1.33 48.8 35.3 0.06 1.36 — — — — — 3.59 0.00 0.00 0.00 0.00 0.00 — — — — — — — — 0.22 8.03 5.81 0.01 0.22 — — — — — 0.59	ROG NOX CO SO2 PM10E PM10D PM10T — — — — — — — — — — — — 1.33 48.8 35.3 0.06 1.36 — 1.36 — — — — 3.59 3.59 0.00 0.00 0.00 0.00 0.00 0.00 0.00 — — — — — — — 0.22 8.03 5.81 0.01 0.22 — 0.59 0.59 0.59 0.59 0.59 0.59	ROG NOX CO SO2 PM10E PM10D PM10T PM2.5E — — — — — — — — — — — — — — 1.33 48.8 35.3 0.06 1.36 — 1.36 1.23 — — — — 3.59 3.59 — 0.00 <td>ROG NOX CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D — — — — — — — — — — — — — — — — — — 1.33 48.8 35.3 0.06 1.36 — 1.36 1.23 — — — — — 3.59 3.59 — 1.43 0.00 <td< td=""><td>ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T —</td><td>ROG NOX CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCO2 — — — — — — — — — — — — — — — — — — — — 1.33 48.8 35.3 0.06 1.36 — 1.36 1.23 — 1.23 — — — — — 3.59 — 1.43 1.43 — 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 — — —</td><td>ROG NOX CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCO2 NBCO2 —</td><td>ROG NOX CO SO2 PM10E PM10D PM2.5E PM2.5E PM2.5T BCO2 NBCO2 CO2T —</td><td>ROG NOX CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCO2 NBCO2 CO2T CH4 -</td><td>ROG NOX CO SO2 PM10E PM10D PM2.5E PM2.5D PM2.5T BCO2 NBCO2 CO2T CH4 N2O —<!--</td--></td></td<></td>	ROG NOX CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D — — — — — — — — — — — — — — — — — — 1.33 48.8 35.3 0.06 1.36 — 1.36 1.23 — — — — — 3.59 3.59 — 1.43 0.00 <td< td=""><td>ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T —</td><td>ROG NOX CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCO2 — — — — — — — — — — — — — — — — — — — — 1.33 48.8 35.3 0.06 1.36 — 1.36 1.23 — 1.23 — — — — — 3.59 — 1.43 1.43 — 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 — — —</td><td>ROG NOX CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCO2 NBCO2 —</td><td>ROG NOX CO SO2 PM10E PM10D PM2.5E PM2.5E PM2.5T BCO2 NBCO2 CO2T —</td><td>ROG NOX CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCO2 NBCO2 CO2T CH4 -</td><td>ROG NOX CO SO2 PM10E PM10D PM2.5E PM2.5D PM2.5T BCO2 NBCO2 CO2T CH4 N2O —<!--</td--></td></td<>	ROG NOx CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T —	ROG NOX CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCO2 — — — — — — — — — — — — — — — — — — — — 1.33 48.8 35.3 0.06 1.36 — 1.36 1.23 — 1.23 — — — — — 3.59 — 1.43 1.43 — 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 — — —	ROG NOX CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCO2 NBCO2 —	ROG NOX CO SO2 PM10E PM10D PM2.5E PM2.5E PM2.5T BCO2 NBCO2 CO2T —	ROG NOX CO SO2 PM10E PM10D PM10T PM2.5E PM2.5D PM2.5T BCO2 NBCO2 CO2T CH4 -	ROG NOX CO SO2 PM10E PM10D PM2.5E PM2.5D PM2.5T BCO2 NBCO2 CO2T CH4 N2O — </td

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.04	1.47	1.06	< 0.005	0.04	_	0.04	0.04	_	0.04	_	180	180	0.01	< 0.005	180
Dust From Material Movement	_	_		_	-	0.11	0.11	_	0.04	0.04	-	_	-	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.07	0.05	0.84	0.00	0.00	0.17	0.17	0.00	0.04	0.04	_	176	176	< 0.005	0.01	179
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.97	0.46	< 0.005	0.01	0.20	0.21	0.01	0.05	0.06	_	761	761	0.06	0.12	800
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Worker	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	26.8	26.8	< 0.005	< 0.005	27.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.16	0.08	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	_	125	125	0.01	0.02	131
Annual	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	4.44	4.44	< 0.005	< 0.005	4.50
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	20.7	20.7	< 0.005	< 0.005	21.7

3.5. Building Construction (2025) - Unmitigated

Location	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	_	0.69	0.64	_	0.64	_	2,398	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	_	0.69	0.64	_	0.64	_	2,398	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.12	3.73	2.83	< 0.005	0.14	_	0.14	0.13	_	0.13	_	474	474	0.02	< 0.005	476
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.02	0.68	0.52	< 0.005	0.02	_	0.02	0.02	-	0.02	_	78.5	78.5	< 0.005	< 0.005	78.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
Worker	0.07	0.05	0.84	0.00	0.00	0.17	0.17	0.00	0.04	0.04	_	176	176	< 0.005	0.01	179

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.07	0.06	0.71	0.00	0.00	0.17	0.17	0.00	0.04	0.04	_	161	161	< 0.005	0.01	163
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	_	32.2	32.2	< 0.005	< 0.005	32.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	<u> </u>	_	_	_
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005		5.33	5.33	< 0.005	< 0.005	5.41
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

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Location	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	_	0.69	0.64	_	0.64	_	2,397	2,397	0.10	0.02	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.08	2.40	1.82	< 0.005	0.09	_	0.09	0.08	-	0.08	_	305	305	0.01	< 0.005	306
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.01	0.44	0.33	< 0.005	0.02	_	0.02	0.01	-	0.01	_	50.5	50.5	< 0.005	< 0.005	50.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	-	_	-	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	-	_	-	_	_	_	_	_	-	_	_	_	_
Worker	0.06	0.06	0.66	0.00	0.00	0.17	0.17	0.00	0.04	0.04	_	158	158	< 0.005	0.01	160
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	20.3	20.3	< 0.005	< 0.005	20.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	3.37	3.37	< 0.005	< 0.005	3.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00

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3.9. Paving (2026) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Off-Road Equipment	0.50	13.3	10.6	0.01	0.58	_	0.58	0.54	_	0.54	_	1,511	1,511	0.06	0.01	1,516
Paving	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.50	13.3	10.6	0.01	0.58	_	0.58	0.54	_	0.54	_	1,511	1,511	0.06	0.01	1,516
Paving	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.04	1.09	0.87	< 0.005	0.05	_	0.05	0.04	-	0.04	_	124	124	0.01	< 0.005	125
Paving	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.01	0.20	0.16	< 0.005	0.01	_	0.01	0.01	-	0.01	-	20.6	20.6	< 0.005	< 0.005	20.6
Paving	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
Worker	0.05	0.03	0.59	0.00	0.00	0.12	0.12	0.00	0.03	0.03	_	130	130	< 0.005	< 0.005	132
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.04	0.04	0.50	0.00	0.00	0.12	0.12	0.00	0.03	0.03	_	119	119	< 0.005	0.01	120
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	9.86	9.86	< 0.005	< 0.005	10.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	-
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.63	1.63	< 0.005	< 0.005	1.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2026) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	_	0.07	0.06	_	0.06	_	134	134	0.01	< 0.005	134
Architectu ral Coatings	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	< 0.005	0.09	0.08	< 0.005	0.01	_	0.01	0.01	_	0.01	_	11.0	11.0	< 0.005	< 0.005	11.0
Architectu ral Coatings	0.00	_	-	_	_	_	-	_	_	_	_	-	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	< 0.005	0.02	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	1.82	1.82	< 0.005	< 0.005	1.82
Architectu ral Coatings	0.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	-	-	_	_	_	_
Worker	0.07	0.04	0.78	0.00	0.00	0.17	0.17	0.00	0.04	0.04	_	173	173	< 0.005	0.01	176

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Average Daily	_	_	_	_	_			_	_		_	_			_	_
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	13.1	13.1	< 0.005	< 0.005	13.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	2.18	2.18	< 0.005	< 0.005	2.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Ontona i	onatanto	(ID/ day 10	n dany, to	ii/yi ioi a	inidal, an	u 01100	(ID/ day 10	i dany, ivi	17 y 1 101 a	iniaaij						
Vegetation	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequester ed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequester ed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequester ed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/2/2025	6/13/2025	5.00	10.0	Site Preparation
Grading	Grading	6/30/2025	9/19/2025	5.00	60.0	Grading and Removal of Material

Building Construction	Building Construction	9/22/2025	3/6/2026	5.00	120	Installation of Turf, Fencing, and Netting
Paving	Paving	3/9/2026	4/17/2026	5.00	30.0	Paving of Walkway
Architectural Coating	Architectural Coating	4/20/2026	5/29/2026	5.00	30.0	Field Striping

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backh oes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 2	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 2	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backh oes	Diesel	Tier 2	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backh oes	Diesel	Tier 2	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 2	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation		—	—	—
	Worker		11.7	LDA,LDT1,LDT2
Site Preparation		17.5		
Site Preparation	Vendor	_	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT
Grading	_	_	_	_
Grading	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	_	8.40	HHDT,MHDT
Grading	Hauling	10.6	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	20.0	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	0.00	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	_	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	20.0	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	8.40	HHDT,MHDT

Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	0.00	0.00	_

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	_	_	15.0	0.00	_
Grading	_	5,100	90.0	0.00	_
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

Water Demolished Area 2	36%	36%
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5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Managed Condition Time	Manager Call Time	Latet at Alaman	Final Asses
Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Unitial	l Acres	Final Acres
Diomass Cover Type	Illiuai	1 Acres	i iliai Adies

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
31 -		111 1 9 111 11 (1911)	,

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	The proposed project would replace the existing two natural grass fields at Heather Farm Park with synthetic all weather turf sports fields. In addition to the synthetic sports fields, the proposed project would include installation of 8-foot high perimeter fencing and netting and walkways. Construction would take approximately 12 months and would start in summer 2025 and be completed by 2026.
Construction: Off-Road Equipment	Assuming default construction equipment list and use of Tier 2 engines.
Construction: Trips and VMT	Assuming 20 worker trips for building construction and architectural coating (default was zero).



ATTACHMENT C

BIOLOGICAL RESOURCES TECHNICAL MEMORANDUM



CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

Date: December 14, 2023

To: Steve Waymire, City Engineer, City of Walnut Creek

FROM: John Kunna, Senior Biologist, LSA

SUBJECT: Biological Resources Technical Memorandum for Heather Farm Park, North San

Carlos Drive, Walnut Creek

INTRODUCTION AND PURPOSE

This memo presents the results of LSA's biological survey of Heather Farm Park. This study was conducted to assess the potential presence of special-status species and other protected biological resources. This study could form the basis for the California Environmental Quality Act (CEQA) analysis on biological resources for projects, such as replacing turfgrass with synthetic turf and filling part of the concrete pond. This memorandum includes:

- A description of the methods
- A discussion of the general regulatory background
- A discussion of the soils, plant communities, and other land cover types
- Identification and discussion of areas that may potentially be considered jurisdictional wetlands, waters of the United States (WOTUS), waters of the State, or streambeds, as defined by the United States Army Corps of Engineers (USACE), the California State Water Resources Control Board, and the California Department of Fish and Wildlife (CDFW)
- A description of observed or otherwise detected special-status species
- An assessment of potential habitat value for special-status species
- Recommendations for protection of biological resources

METHODS

Literature Review

LSA conducted a biological resource records search of the most current versions of the CDFW California Natural Diversity Database (CNDDB), the California Native Plant Society (CNPS) Electronic



Inventory of Rare and Endangered Vascular Plants of California, and the United States Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) database (Appendix A). For the CNDDB query, LSA used a 5-mile radius of the site. For the CNPS query, LSA searched for all records of special-status species on the *Walnut Creek*, California United States Geological Survey (USGS) quadrangle.

LSA accessed the National Wetlands Inventory (NWI) Wetlands Mapper¹ to determine if there were any known drainages or wetlands on or near the site. LSA used the United States Department of Agriculture Web Soil Survey to map the soils on the site (USDA n.d.).

LSA also reviewed historic aerial imagery of the site and the following documents:

- 2003 Draft Initial Study/Mitigated Negative Declaration (IS/MND) for the Heather Farm Park Master Plan Update (Wagstaff and Associates et al. 2003)
- 2010 memo from ICF to the City of Walnut Creek (City) (Walter 2010)
- 2022 Annual Report Summary for Aquatic Pesticide Monitoring at Heather Farm Park Agency Submittal, Heather Farm Park Waters, City of Walnut Creek, California (Joyce 2022)
- 2023 memo from Balance Hydrologics, Inc. to Nomad Ecology regarding stream and pond enhancement opportunities (Balance Hydrologics, Inc. 2023)

Site Visit

LSA Senior Biologist John Kunna conducted a site visit on July 28, 2023. Mr. Kunna has conducted wildlife studies in Contra Costa County and the greater Bay Area since 2005. He holds an Endangered Species Act Section 10(a)(1)(A) recovery permit from the USFWS that allows him to work independently with the California tiger salamander (*Ambystoma californiense*), Alameda striped racer (*Coluber lateralis euryxanthus*), and California red-legged frog (*Rana draytonii*). He also has expertise with all other special-status wildlife species that occur in Contra Costa County.

Weather conditions were conducive to observing bird nests and other wildlife activity and sign, with warm temperatures and minimal winds. The biologist used binoculars to observe bird behavior and look for nests. The biologist traversed the entire site on foot, plus a 100-foot buffer around the park boundary where accessible and appropriate. Plant and wildlife species observed during the survey were recorded in field notes and representative photographs were taken.

Although the site visit was not intended to be a protocol-level botanical or rare plant survey, the biologist conducted a focused search for Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*) to the north and west of Concrete Pond and Nature Lake.

https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.

As part of the fieldwork, potential jurisdictional WOTUS and streambeds, riparian vegetation, wetlands subject to State jurisdiction, and/or features considered sensitive by local jurisdictions were also assessed.

All accessible areas of Heather Farm Park were visited. The irrigation reservoir northwest of the park was not surveyed.

REGULATORY BACKGROUND

Federal Endangered Species Act

The USFWS has jurisdiction over federally listed threatened and endangered plant and animal species. The Federal Endangered Species Act (FESA) protects listed species from harm or "take," which is broadly defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Any such activity can be defined as a "take," even if it is unintentional or accidental. Listed plant species are typically provided less protection than listed animals.

An endangered species is one that is considered in danger of becoming extinct throughout all or a significant portion of its range. A threatened species is one that is likely to become endangered in the foreseeable future. Federal agencies involved in permitting projects that may result in take of federally listed species (e.g., USACE) are required under Section 7 of FESA to consult with the USFWS prior to issuing such permits. Any activity that could result in the take of a federally listed species and is not authorized as part of a Section 7 consultation requires an FESA Section 10 take permit from the USFWS.

Clean Water Act Section 404 (33 U.S.C. Sections 1251 to 1376)

The USACE is responsible under Section 404 of the Clean Water Act (CWA) to regulate the discharge of fill material into WOTUS. The CWA provides the primary means for the protection of "waters of the United States," including wetlands. Under Section 404 of the CWA, the USACE, under the United States Environmental Protection Agency (USEPA), regulates the discharge of dredged and fill material into WOTUS, including wetlands.

The CWA addresses "navigable waters," defined in the statute as WOTUS. The USACE has further refined the definition through various Clean Water Rules, including wetlands as a subset of WOTUS. Wetlands are those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include swamps, marshes, bogs, and similar areas (33 Code of Federal Regulations [CFR] 328.3[b]; 40 CFR 230.3[t]). Wetlands contain three distinct parameters: hydrophytic vegetation, hydric soils, and wetland hydrology.

WOTUS generally not considered to be USACE-jurisdictional include nontidal drainage and irrigation ditches excavated on dry land, artificially irrigated areas, artificial lakes or ponds excavated on dry land used for irrigation or stock watering, small artificial water bodies such as swimming pools, and



water-filled depressions (51 Federal Register 41, 217 1986). In addition, a Supreme Court ruling (South Waste Agency of North Cook County [SWANCC] vs. USACE, January 9, 2001) determined that the USACE exceeded its statutory authority by asserting CWA jurisdiction over "an abandoned sand and gravel pit in northern Illinois, which provides habitat for migratory birds." Based solely on the use of such waters by migratory birds, the Supreme Court's holding was strictly limited to waters that are "non-navigable, isolated, and intrastate."

The Supreme Court further addressed the extent of the USACE's jurisdiction in the consolidated cases *Rapanos v. United States* (No. 04-1034) and *Carabell v. United States* (No. 04-1384 [USACE and USEPA 2007], referred to as "*Rapanos*." In *Rapanos*, a sharply divided Court issued multiple opinions, none of which garnered the support of a majority of the Justices. This created substantial uncertainty as to which jurisdictional test should be used in routine jurisdictional determinations. The Ninth Circuit Court of Appeal, which encompasses California, answered this in *Northern California River Watch v. City of Healdsburg* (August 11, 2006). In this case, the Court held that Justice Kennedy's opinion in *Rapanos* provided the controlling rule of law. Under that rule, wetlands or other waters that are not navigable are subject to USACE jurisdiction if they have "a significant nexus to waters that are navigable in fact." As Justice Kennedy explained, whether a "significant nexus" exists in any given situation will need to be decided on a case-by-case basis, depending on site-specific circumstances. The USEPA and USACE subsequently developed an instructional guidebook on how to apply these rulings for all future jurisdictional determinations (USACE and USEPA 2007), as well as a memorandum providing guidance to implement the U.S. Supreme Court's decision in *Rapanos* (Grumbles and Woodley 2007).

On January 18, 2023, the USACE published in the Federal Register the final *Revised Definition of "Waters of the United States* (88 Federal Register 2004). On March 25, 2023, the United States Supreme Court modified the January 2023 definition of WOTUS in *Sackett v. Environmental Protection Agency* (No. 21-454), herein referred to as "*Sackett*." Specifically, the Court considered the "significant nexus" standard established under *Rapanos* to be inconsistent with the CWA while upholding the plurality standard that the USACE jurisdiction is limited to WOTUS that are "relatively permanent, standing or continuously flowing bodies of water" that can be described in ordinary parlance as "streams, oceans, rivers, and lakes." The Supreme Court further affirmed that wetlands can be considered WOTUS when a continuous surface connection to bodies that are WOTUS are present and that no clear boundary exists between WOTUS and wetlands. *Sackett* further revised the CWA by removing interstate wetlands from consideration as WOTUS.

On September 8, 2023, the USACE published a final rule conforming the January 2023 rule with the *Sackett* decision, removing the "significant nexus" standard. The amended rule is operative in California.

Features currently **included** in the definition of WOTUS per 33 CFR 328.3(b) include:

- (1) Waters which are:
 - (i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
 - (ii) The territorial seas; or
 - (iii) Interstate waters;
- (2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;
- (3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water
- (4) Wetlands adjacent to the following waters
 - (i) Waters identified in paragraph (a)(1) of this section, or
 - (ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters
- (5) Intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section

Features currently excluded from identification as WOTUS per 33 CFR 328.3(b) include:

- Intrastate streams and wetlands.
- Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the CWA.
- Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease
 upon a change of use, which means that the area is no longer available for the production of
 agricultural commodities. Notwithstanding the determination of an area's status as prior
 converted cropland by any other federal agency, for the purposes of the CWA, the final
 authority regarding CWA jurisdiction remains with the USEPA.
- Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water.
- Artificially irrigated areas that would revert to dry land if the irrigation ceased.

- Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and
 used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
- Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons.
- Water-filled depressions created in dry land incidental to construction activity and pits
 excavated in dry land for the purpose of obtaining fill, sand, or gravel, unless and until the
 construction or excavation operation is abandoned and the resulting body of water meets the
 definition of WOTUS.
- Swales and erosional features (e.g., gullies, small washes) characterized by low-volume, infrequent, or short-duration flow.

In general, a USACE permit must be obtained before placing fill or grading in jurisdictional wetlands or other WOTUS. The USACE will be required to consult with the USFWS and/or National Marine Fisheries Services (NMFS) under Section 7 of FESA if the action subject to CWA permitting could result in take of federally listed species.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits the taking, hunting, killing, selling, purchasing, etc., of migratory birds, parts of migratory birds, and their eggs and nests. As used in the MBTA, the term "take" is defined as "to pursue, hunt, shoot, capture, collect, kill, or attempt to pursue, hunt, shoot, capture, collect, or kill, unless the context otherwise requires." This act covers most bird species native to the United States.

California Endangered Species Act

CDFW has jurisdiction over State-listed endangered, threatened, and rare plant and animal species under the California Endangered Species Act (CESA). In addition, species designated as "candidates" for listing under CESA are protected by its provisions. CDFW also maintains a list of Species of Special Concern, defined as species that appear to be vulnerable to extinction because of declining populations, limited ranges, and/or continuing threats. Species of Special Concern are not afforded legal protection under CESA.

California Fish and Game Code Section 86 defines "take" as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

California Fish and Game Code

CDFW is also responsible for enforcing the California Fish and Game Code, which contains several provisions potentially relevant to construction projects. For example, Section 1602 of the California Fish and Game Code governs the CDFW's issuance of Lake and Streambed Alteration Agreements. Lake and Streambed Alteration Agreements are required whenever proposed project activities would substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated as such by CDFW.

The California Fish and Game Code also designates some animal species as fully protected, which may not be taken or possessed without a permit from the California Fish and Game Commission and/or the CDFW. These take permits do not allow "incidental take" (except in limited circumstances) and are more restrictive than the take allowed under Section 2081 of CESA. Fully protected species are listed in Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code.

Section 3503 of the California Fish and Game Code prohibits the take, possession, or needless destruction of the nest or eggs of any bird. Subsection 3503.5 specifically prohibits the take, possession, or destruction of any birds in the order of Falconiformes (hawks and eagles) or Strigiformes (owls) and their nests. These provisions, along with the federal MBTA, essentially serve to protect nesting native birds. Non-native species are not afforded any protection under the MBTA or the California Fish and Game Code (except that hunting regulations apply to some non-native species listed as game birds).

California Environmental Quality Act

CEQA applies to "projects" proposed to be undertaken or requiring approval by State or local government agencies. Projects are defined as having the potential to have physical impact on the environment.

RESULTS

Existing Conditions

The site is entirely developed with parking lots, sidewalks, sports fields, playground, swim center, buildings, and associated infrastructure, such as lighting and fences. At the time of the site visit, there were many visitors using the sports fields and other recreation areas. Several people were walking dogs. Dogs are permitted to be off-leash in the dog park at the north end of the park.

Soils

The soils on and near the site are mapped as Clear Lake Clay, Tierra Loam, and Zamora Silty Clay Loam. The entire survey area has been altered by grading and development. Clear Lake Clay is classified as nonsaline to very slightly saline. There are no serpentine soils on the site.

Vegetation Communities

The vegetation communities are almost entirely planted or ornamental. There are some native trees, but nothing that could be considered an intact woodland community. Small portions of the park that have not been actively maintained would best be described as ruderal.

Special-Status Plant Species

Special-status plants species are rare due to a combination of factors, including restriction to rare soil types, vegetation communities or vernal pools, inability to persist in developed or grazed areas, and inability to compete with non-native invasive species. The IPaC list (provided in Attachment B) contained one federally protected plant species, Contra Costa goldfields (*Lasthenia conjugens*). The



CNDDB query returned 22 special-status plant species with occurrences within 5 miles of the site. The CNPS query returned 11 special-status plant species, 8 of which were also in the CNDDB. The resulting combined list of 25 species is shown in Table A (provided in Attachment C).

Of these 25 species, 24 were determined to have no potential to occur due to a total lack of suitable habitat within the project site (e.g., serpentine and alkaline soils, vernal pools, coastal habitats) and/or because they have not been found within the past 50 years and are therefore likely considered no longer present in the region. No special-status plant species were observed during the reconnaissance-level site visit.

One of the 24 species with no potential to occur—Congdon's tarplant (*Centromadia parryi* ssp. *Congdonii*)—was identified in the ICF memo as the only special-status plant species with potential to occur. There are two CNDDB occurrences for Congdon's tarplant within 5 miles of the site, but both are listed as extirpated. The ICF memo states that one individual Congdon's tarplant had been observed northwest of the site but does not provide a citation for that observation. If there was a population of Congdon's tarplant prior to 2010, it was likely extirpated in subsequent years. The survey was conducted during the flowering period for Congdon's tarplant, when it would have been identifiable if it were present. Therefore, LSA has determined that Congdon's tarplant has no potential to occur.

One special-status plant species—slender-leaved pondweed (*Stuckenia filiformis* subsp. *Alpina*)—was determined to have a moderate potential to occur and is discussed in further detail below.

Slender-Leaved Pondweed. This taxon was added to the CNPS Inventory of Rare and Endangered Plants of California in 1994, under its old name, *Potamogeton filiformis*. The slender-leaved pondweed has a California Rare Plant Rank of 2B.2, meaning that the subspecies is rare, fairly threatened, or endangered in California but more common elsewhere. This plant is an aquatic, perennial, rhizomatous herb that generally occurs in shallow freshwater environments. In California, this plant occurs from the Klamath Ranges to the San Joaquin Valley, in the San Francisco Bay area, along the Central Coast, on the Modoc Plateau, and east of the Sierra Nevada. Pondweeds are an important food source for ducks and can support complex communities of unicellular organisms on their leaf surfaces. Pondweeds also provide important habitat for aquatic invertebrates and fish. There is one CNDDB occurrence within 5 miles of Heather Farms Park, although the subspecies may be more common than observed due to aquatic habitats generally being less surveyed by botanists than terrestrial habitats. The subspecies can grow in fresh, calcareous, brackish, or saline waters, as well as in developed areas. A specimen was collected from the city pond at the city hall in Fairfield, California, in 1981 (Wiebush 2021).

There is suitable habitat for the slender-leaved pondweed in Nature Lake and some potential that it may occur there. The plant is not expected to occur in the Concrete Pond due to the ongoing vegetation management activities.

Wildlife

A few California ground squirrels (*Otospermophilus beecheyi*) and their burrows were seen. At least five non-native red-eared sliders (*Trachemys scripta elegans*) were observed in Nature Lake. One turtle that could not be identified to species was also observed. American bullfrogs (*Lithobates catesbeiana*) were observed in Nature Lake and the adjacent portion of Crawdad Creek. Bullfrogs likely breed in Nature Lake.

Bird species observed include American crow (*Corvus brachyrhynchos*), house finch (*Haemorhous mexicanus*), California scrub jay (*Aphelocoma californica*), mourning dove (*Zenaida macroura*), California towhee (*Melozone crissalis*), oak titmouse (*Baeolophus inornatus*), hooded merganser (*Lophodytes cucullatus*), Canada goose (*Branta canadensis*), and mallard (*Anas platyrhynchos*).

The patches of trees, shrubs, and even turf grass likely provide some value for foraging, cover, and refuge for use by other bird species, as well as by dispersing terrestrial animals. Many animals likely to move through the site despite the development and human activity. Therefore, any additional work on the site would not result in significant further fragmentation of natural habitats or substantial impediments to wildlife movement and any common, urban adapted species that currently move through the project site would continue to be able to do so. As such, the project would not significantly interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors.

The site does not provide extensive and/or high-quality habitat areas that would support large breeding populations of any terrestrial wildlife species; therefore, no native wildlife nursery sites are present. However, several native bird species likely nest within the park each year.

Special-Status Wildlife

The IpaC list contains nine federally protected animal species. The CNDDB query returned 11 special-status animal species with occurrences within 5 miles of the site, 4 of which are also on the IpaC list. LSA also analyzed the potential for one additional species, white-tailed kite (*Elanus leucurus*), to occur on the site. The resulting 17 species and their potential to occur are shown in Table B.

As summarized in Table B, 13 of these 17 species were determined to have no potential to occur due to a total lack of suitable habitat within the park (e.g., tidal salt marshes, vernal pools, caves) and/or because they have not been found within the past 50 years and are therefore likely considered no longer present in the region. For birds, the potential to occur refers only to nesting, as many species may fly over or perch on the site.

The IS/MND stated in the text that, although unlikely, California red-legged frog had some potential to occur in the park. However, CRLF is not included in the IS/MND Appendix 4.5, which includes a list of wildlife species with potential to occur on or near the park. As summarized in Table B, LSA determined the species has no potential to occur in the park.

No special-status wildlife species were observed during the reconnaissance-level site visit, but four species were determined to have some potential to occur and are described in further detail below.

Western Pond Turtle. The western pond turtle (*Emys marmorata*) is classified as a State Species of Special Concern. The species is also known as the northwestern pond turtle (*Actinemys marmorata*), and it is warranted as being listed as a Threatened species under FESA (USFWS 2023). This species will likely be listed under FESA in 2024. The IS/MND states that one western pond turtle was detected basking on a floating log in the northern portion of the lake during a field survey conducted on August 12, 2003. The ICF memo states that an exclusion fence was installed and five turtle eggs were uncovered. The memo states that the eggs were "likely" red-eared slider eggs but provides no rationale for that determination. The ICF memo also states that the eggs were relocated to a "suitable off-site location." California Fish and Game Code Title 14, Section 679, generally prohibits the possession or relocation of wildlife without CDFW approval.

Nesting using occurs in the spring or early summer. Female pond turtles excavate nests in friable soils in areas with short or sparse vegetation and usually on south- or west-facing slopes to allow for exposure to direct sunlight. The nest can be up to 1,600 feet from the water body the female uses but is typically located within 300 feet of the waterbody (Thomson et al. 2016). After depositing the eggs, the female covers them and tamps the soil down. In northern California, the hatching turtles may emerge in the fall or overwinter in the nest and emerge in the spring.

Western pond turtle numbers in Heather Farm Park and the surrounding area are likely suppressed due to competition from the non-native red-eared slider for food and basking locations. Western pond turtle numbers could also be depressed by predation by American bullfrogs, which have been observed eating hatchling western pond turtles. Surrounding development and reduction of habitat also likely has impacted the western pond turtle population.

Due to the lack of protected basking areas and fringing vegetation, western pond turtles are not expected to use Concrete Pond.

Monarch Butterfly. The monarch butterfly (*Danaus plexippus* plexippus) is a Candidate species for listing under FESA. Candidate species have no legal protection under FESA, but the monarch does meet the CEQA definition of a special-status species. In July 2022, the monarch butterfly was classified as "endangered" on the International Union for Conservation of Nature (IUCN) Red List. This classification does not afford legal protection.

Overwintering monarch butterfly populations have declined by over 95 percent since the 1980s (Western Association of Fish and Wildlife Agencies. 2019). The cause of this decline is likely due to some combination of habitat loss, insecticides, climate change, parasites, disease, and predators. Due to longstanding concern over population declines, the CNDDB was already tracking overwintering populations of monarch butterflies.

The species has a multigenerational migration. During the spring and summer, adult monarchs feed on nectar from flowers and mate. They lay eggs on several species of milkweed plants, including tropical milkweed (*Asclepias curassavica*), which is not native to the Bay Area. The final generation in fall migrates to overwintering sites.

There is a recording of monarch caterpillars on tropical milkweed in the park in October 2022 (Western Monarch Milkweed Mapper n.d.). Large overwintering aggregations of monarch butterflies are not expected in Walnut Creek because overwintering sites are typically close to the coast.

San Francisco Dusky-Footed Woodrat. The San Francisco dusky footed woodrat subspecies (*Neotoma fuscipes annectens*) is classified as a State Species of Special Concern. These woodrats build conspicuous, large stick houses. The woodrat is one of the few animals that can feed on oak leaves despite their high tannin content. They also feed on a variety of fruits, nuts, seeds, and foliage. Woodrats are considered a keystone species because their houses also provide shelter for a variety of other small animal species. Woodrats are a prey item for owls, snakes, and carnivorous mammals.

Although no woodrat houses were seen during the site survey, the species does occasionally persist in suburban areas. There is a low potential for San Francisco dusky-footed woodrat to occur in the park.

White-Tailed Kite. The white-tailed kite is considered Fully Protected under the California Fish and Game Code but is not listed under CESA. This raptor hunts in grasslands and savannahs and is known to nest in Contra Costa County. The white-tailed kite is commonly seen hovering over grasslands, where it hunts for the small mammals and reptiles that form the bulk of its diet. Nonnesting white-tailed kites have been seen in the park and there is a low potential that the species could nest in the park.

Sensitive Natural Communities

The CNDDB contains occurrences for one sensitive natural community—Serpentine Bunchgrass—within 5 miles of the site. This sensitive natural community is not present on the site. There are no serpentine soils on the site.

Waters and Wetlands

There are several waters that are likely to be considered under the jurisdiction of the USACE, CDFW, and Regional Water Quality Control Board (RWQCB).

Concrete Pond (also known as Heather Farms Pond)

The NWI classifies Concrete Pond as palustrine, unconsolidated bottom, permanently flooded, and excavated. The lake was built in the 1960s as a decorative feature. The surface areas is approximately 2.3 acres. The pond is surrounded by a paved walkway and its concrete banks preclude the growth of any shoreline vegetation. The lake appears to be dyed in order to reduce the penetration of sunlight, thereby preventing overgrowth of aquatic weeds and algae. The pond is stocked with trout by CDFW. According to a fishing website (Fishbrain n.d.), other species caught in the pond include largemouth bass, bluegill, and channel catfish. The pond has fountains to keep the water aerated and circulated.

Nature Lake

The NWI classifies Nature Lake as palustrine, unconsolidated bottom, permanently flooded, and excavated. The surface area is approximately 5 acres. Nature Lake receives overflow from Concrete Pond during rainstorms in the winter and is also fed by Crawdad Creek. It drains via Otter Creek to the Contra Costa Canal. Nature Lake has an extensive fringe of emergent vegetation, including bulrush and cattails.

Fishing, boating, swimming, and off-leash dogs are prohibited in Nature Lake. An aquatic harvester machine was in the lake. In 2022, approximately 139 cubic yards of vegetation were removed during the summer months.

Ygnacio Canal

Ygnacio Canal is a man-made, low-gradient canal that emerges from a culvert and runs parallel to the western shore of Nature Lake before ultimately emptying into the Contra Costa Canal. The canal is maintained by the Contra Costa Water District and carries untreated water.

Crawdad Creek

Crawdad Creek is channelized and perennial. This ditch carries runoff from neighboring residential developments and enters the park via a culvert under Ygnacio Valley Road and supports cattails and other hydrophytic vegetation. Native willows and oaks also grow along the banks. Portions of this ditch are so densely vegetated that they were impassable. Ruderal non-native vegetation, including a fig tree, grows in the channel.

Rose Creek

Rose Creek is not included in the NWI. Rose Creek is culverted under Marchbanks Drive and feeds into Concrete Pond. At the time of the survey, the drainage had a small amount of water flow, which in the summer is probably runoff from irrigation in nearby neighborhoods. The drainage is shaded by coast redwoods and has non-native Himalayan blackberry and ivy growing in it.

Horse Creek

Horse Creek is not included in the NWI. The creek is a small, narrow channel that runs from the east into Nature Pond and the banks are incised. There was no water in the drainage at the time of the survey.

Otter Creek

Otter Creek starts at a drain from Nature Pond and runs around the dog park at the north end of Heather Farms Park. There are large, non-native eucalyptus trees nearby, as well as some native trees that could be considered a riparian canopy.

CONCLUSION AND RECOMMENDATIONS

Special-Status Species

*Plants*No special-status plant species were observed, but one species has potential to occur in the park. If work occurs in Nature Lake or the water levels are changed, it could potentially affect slender-leaved pondweed. LSA recommends focused surveys for the species prior to any work that could affect Nature Lake, including work that would alter the water chemistry or water depth.

Wildlife No special-status wildlife species are expected to occur in the developed areas (including the turf sports fields) or Concrete Pond.

There is a high potential for western pond turtle to occur in Nature Lake and some potential for the species to nest in undisturbed uplands near Nature Lake. LSA recommends focused, appropriately timed surveys for western pond turtle well in advance of any work that could impact Nature Lake.

There is a high potential for monarch butterflies to lay eggs on any milkweeds in the park. Any planned work should avoid the removal of milkweeds or occur in the winter, when monarch caterpillars would not be on the milkweed. Planting annual native milkweeds, such as narrowleaf milkweed (*Asclepias fascicularis*) and California milkweed (*Asclepias californica*), would be preferable to maintain perennial tropical milkweed.

There is a low potential for San Francisco dusky-footed woodrat to live in brushy areas in the park. A biologist should survey for woodrat houses prior to any brush or tree removal activities along the creeks.

Although white-tailed kites have not been observed nesting in the park, there is a low potential that they could. By implementing the measures below to protect other nesting birds, the nests of white-tailed kites would also be protected.

Riparian Habitat or Other Sensitive Natural Communities

The trees and vegetation around Nature Lake, Crawdad Creek, and Otter Creek would likely be considered under CDFW jurisdiction. Any projects that could affect those corridors would require consultation with CDFW.

Protected Waters and Wetlands

The City should consult with the relevant regulatory agencies, including the USACE, CDFW, and RWQCB, for any projects that will have impacts below the top of bank and the ordinary high-water mark of the water bodies in the park. The agencies will likely claim jurisdiction over all of the features and require permits. These permits will include conditions and Best Management Practices that will need to be implemented during construction. These permits will also specify mitigation, which the City will have to provide. Impacted features will likely have to be mitigated at a minimum 1:1 ratio, consistent with the USACE "no net loss" policy. If permits require mitigation at a higher ratio than 1:1, that requirement will have to be met.

Native Wildlife Corridors and Nursery Sites

Because it is surrounded by developed areas, Heather Farms Park is not considered a movement corridor. Native bird nests could be considered nursery sites and are protected by the California Fish and Game Code, as well as the MBTA.

According to the Mt. Diablo Audubon Society, at least 22 species of birds are known to nest in Heather Farms Park (Mt. Diablo Audubon Society n.d.). Depending on the species, nests could be on the ground, in shrubs or trees, or on buildings. Nesting birds in the park are acclimated to some level of regular human activity, but significant new activities could disrupt normal nesting behavior, leading to nest destruction or abandonment. To prevent such impacts, we recommend major new work be restricted to the nonnesting season (August 1 through January 31). If that is not possible, a qualified biologist should conduct a preconstruction survey for nesting birds no more than 7 days prior to the initiation of construction-related activity (e.g., clearing, grading, tree trimming or removal) if this activity occurs between February 1 and July 31. If active bird nests are found on or adjacent to the site, an exclusion zone should be established around the nest as specified by the qualified biologist. The exclusion zone should be centered on the nest. Active nests should be monitored weekly to ensure that the exclusion zones are intact and the young are developing. The exclusion zones should remain in place until the young have fledged and are foraging independently as determined by a qualified biologist.

Other Local Ordinances Related to Biological Resources

Any project in the park that requires the removal of trees with a diameter at breast height (measured 4.5 feet above ground) of 9 inches or more should obtain a tree removal permit.

Attachments: A: References

B: IPaC List C: Tables



ATTACHMENT A

REFERENCES

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 Western Monarch Milkweed Mapper. Website: https://www.monarchmilkweedmapper.org/(accessed November 1, 2023).



ATTACHMENT B

IPAC LIST

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Contra Costa County, California



Local office

Sacramento Fish And Wildlife Office

(916) 414-6600

(916) 414-6713

Federal Building

NOT FOR CONSULTATION

2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME STATUS

California Clapper Rail Rallus longirostris obsoletus

Wherever found

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/4240

Endangered

California Least Tern Sterna antillarum browni

Wherever found

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/8104

Endangered

Reptiles

NAME STATUS

Alameda Whipsnake (=striped Racer) Masticophis lateralis

euryxanthus

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/5524

Threatened

Amphibians

NAME STATUS

California Red-legged Frog Rana draytonii

Threatened

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/2891

California Tiger Salamander Ambystoma californiense

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/2076

Threatened

Foothill Yellow-legged Frog Rana boylii

Proposed Threatened

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/5133

Insects

NAME STATUS

Monarch Butterfly Danaus plexippus

Candidate

Wherever found

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/9743

Crustaceans

NAME

Vernal Pool Fairy Shrimp Branchinecta lynchi

Threatened

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/498

Flowering Plants

NAME STATUS

Contra Costa Goldfields Lasthenia conjugens

Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/7058

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the <u>Bald and Golden Eagle Protection Act</u> and the <u>Migratory Bird Treaty Act</u>.

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

Additional information can be found using the following links:

- Eagle Managment https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds
 https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds
 https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON	
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31	
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31	

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (1)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

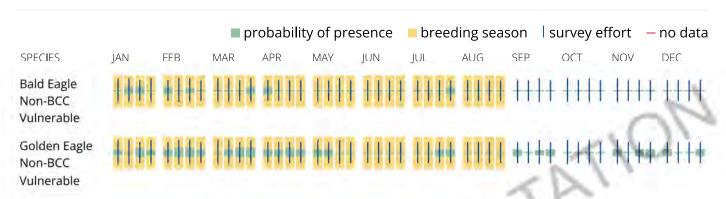
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply). To see a list of all birds potentially present in your project area, please visit the <u>Rapid Avian Information Locator (RAIL) Tool</u>.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern (BCC)</u> and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <u>Rapid Avian Information Locator (RAIL) Tool</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the <u>Eagle Act</u> should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds
 https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds
 https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME BREEDING SEASON

Allen's Hummingbird Selasphorus sasin

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637

Breeds Feb 1 to Jul 15

Bald Eagle Haliaeetus leucocephalus

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Breeds Jan 1 to Aug 31

Belding's Savannah Sparrow Passerculus sandwichensis beldingi

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8

Breeds Apr 1 to Aug 15

Bullock's Oriole Icterus bullockii

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Mar 21 to Jul 25

California Gull Larus californicus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Mar 1 to Jul 31

California Thrasher Toxostoma redivivum

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Jul 31

Common Yellowthroat Geothlypis trichas sinuosa

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084

Breeds May 20 to Jul 31

Golden Eagle Aquila chrysaetos

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

https://ecos.fws.gov/ecp/species/1680

Breeds Jan 1 to Aug 31

Lawrence's Goldfinch Carduelis lawrencei

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464

Breeds Mar 20 to Sep 20

Nuttall's Woodpecker Picoides nuttallii

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410

Breeds Apr 1 to Jul 20

Oak Titmouse Baeolophus inornatus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656 Breeds Mar 15 to Jul 15

Olive-sided Flycatcher Contopus cooperi

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914

Breeds May 20 to Aug 31

Tricolored Blackbird Agelaius tricolor

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910

Breeds Mar 15 to Aug 10

Willet Tringa semipalmata

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Wrentit Chamaea fasciata

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Mar 15 to Aug 10

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

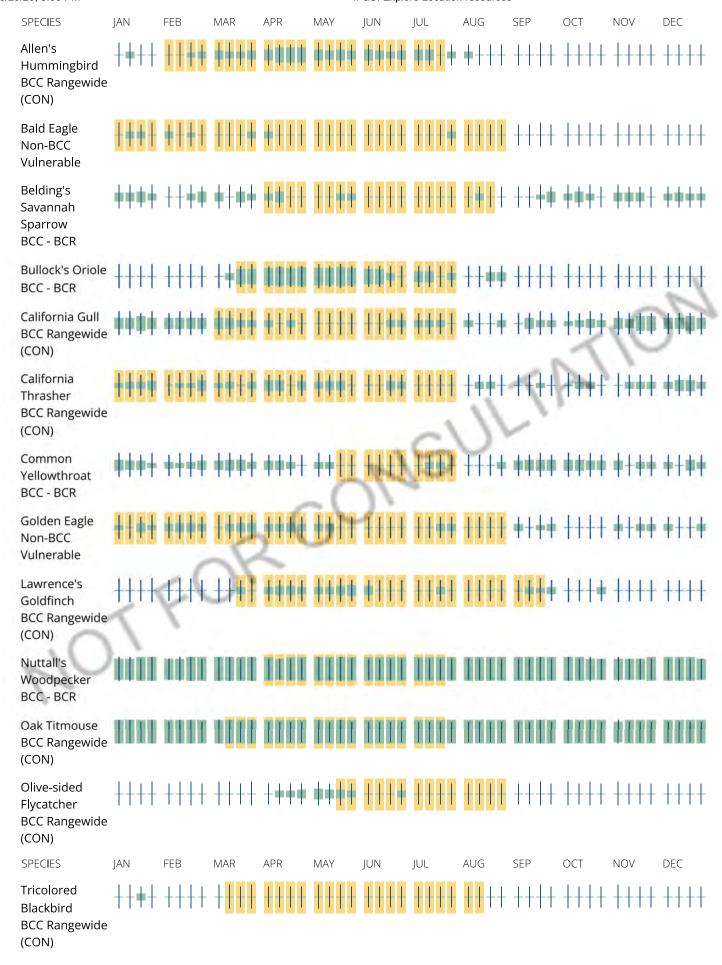
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

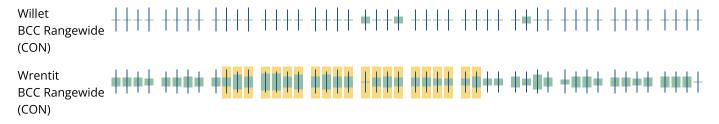
No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern (BCC)</u> and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <u>Rapid Avian Information Locator (RAIL) Tool</u>.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey, banding, and citizen science datasets</u>.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <u>Fagle Act</u> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the <u>Northeast Ocean Data Portal</u>. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the <u>NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.</u>

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability"

of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER POND

PUBHx

A full description for each wetland code can be found at the <u>National Wetlands Inventory</u> website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should

seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION



ATTACHMENT C

TABLES

Table A: Special-Status Plant Species Evaluated Table B: Special-Status Animal Species Evaluated



Species	Status* (Federal/State/RPR)	Habitat/Elevational Range/Blooming Period	Potential to Occur
Amsinckia lunaris Bent-flowered fiddleneck	//1B	Gravelly slopes, grassland, openings in woodland, often serpentine, in coastal bluff scrub, cismontane woodland, and valley and foothill grassland. Elevation: 5–800 m Blooms: March–June	None. There is one CNDDB occurrence within 5 miles of the site. There is no undeveloped habitat on the site. This has an affinity to grow on gravelly slopes and serpentine soils, which are not present in the park.
Arctostaphylos auriculata Mt. Diablo manzanita	//1B	Chaparral (sandstone), cismontane woodland. Elevation: 135–650 m Blooms: January–March	None. There is one CNDDB occurrence within 5 miles of the site. There is no suitable habitat in the form of chaparral on the site. No manzanitas were seen in the park.
Arctostaphylos manzanita ssp. laevigata Contra Costa manzanita	//1B	Chaparral (rocky). Elevation: 233–1,100 m Blooms: January–February	None. There is one CNDDB occurrence within 5 miles of the site. There is no suitable habitat in the form of chaparral on the site. No manzanitas were seen in the park.
Blepharizonia plumosa Big tarplant	-/-/1B	Valley and foothill grassland with clay to clay- loam soils. Elevation: 50–505 m Blooms: July–October	None. There is one CNDDB occurrence within 5 miles of the site, but there is no suitable habitat or undeveloped land on the site.
Calochortus pulchellus Mount Diablo fairy-lantern	//1B	Openings in wooded and brushy slopes/ chaparral, coastal scrub, riparian woodland, and associated grasslands. Elevation: 200–800 m Blooms: April–June	None. There are several CNDDB occurrences within 5 miles of the site, but there is no suitable habitat/undeveloped land on the site.
Centromadia parryi ssp. congdonii Congdon's tarplant	//1B	Grazed and ungrazed annual grasslands with alkaline or saline soils and sometimes described as heavy white clay (saline clay soil). Elevation: 1–230 m Blooms: June–November	None. The site is developed and lacks suitable alkali soils. No Centromadia tarplant species observed during the field survey. There are two CNDDB occurrences for extirpated populations within 5 miles of the park.



Species	Status* (Federal/State/RPR)	Habitat/Elevational Range/Blooming Period	Potential to Occur
Delphinium californicum subsp. interius Hospital Canyon larkspur	-/-/1B.2	Generally associated with drainages within chaparral, grassy (and sometimes mesic) openings of cismontane woodland. Elevation: 230–1,095 m Blooms: April–June	None. There is no suitable habitat on the site. There are three CNDDB occurrences within 5 miles of the park.
Eriastrum ertterae Lime Ridge eriastrum	-/CCE/1B.1	Hard packed sand in openings at edge of chaparral (alkaline or semi-alkaline). Elevation: 200–290 m Blooms: June–July	None. There is no suitable habitat on the site. There are two CNDDB occurrences within 5 miles of the park.
Eriogonum truncatum Mt. Diablo buckwheat	-/-/1B	Dry, exposed clay or sandy substrates in chaparral, coastal scrub, and grassland. Elevation: 200–400 m Blooms: April–September	None. There is no suitable habitat on the site. The species was presumed extinct until it was rediscovered on Mount Diablo in 2005 and at Black Diamond Regional Preserve in 2016.
Eryngium jepsonii Jepson's coyote thistle	-/CE/1B	Grows on moist clay soil in valley and foothill grassland and vernal pools. Elevation: 3–30 m Blooms: April–August	None. There are no suitable vernal pools or clay soils on the site. There is one CNDDB occurrence within 5 miles of the site.
Extriplex joaquinana San Joaquin spearscale	//1B	Chenopod scrub, alkali meadow, grassland; in seasonal alkali wetlands or sink scrub. Elevation: 1–250 m Blooms: April–October	None. No suitable habitat is present due to development. There are no CNDDB occurrences within 5 miles of the site.
Fritillaria liliacea Fragrant fritillary	-/-/1B	Coastal scrub, valley and foothill grassland, and coastal prairie. Most often on serpentine soils, but not exclusively as other various soils reported. Elevation: 3–410 m Blooms: February–April	None. There are two CNDDB occurrences within 5 miles of the site, but there is no suitable habitat or undeveloped land on the site.



Species	Status* (Federal/State/RPR)	Habitat/Elevational Range/Blooming Period	Potential to Occur
Helianthella castanea Diablo helianthella	//1B	Open, grassy sites, usually rocky, axonal soils. Partial shade in broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, and valley and foothill grassland.	None. There are several CNDDB occurrences within 5 miles of the site, but there is no suitable habitat/undeveloped land on the site.
		Elevation: 200–1300 m. Blooms: April–June	
Hesperolinon breweri Brewer's western flax	-/-/1B.2	Serpentine chaparral, cismontane woodland, and valley and foothill grassland. Elevation: 30–945 m Blooms: May–June	None. There are two CNDDB occurrences within 5 miles of the site, but there is no suitable habitat (serpentine rock) or undeveloped land in the park.
Isocoma arguta Carquinez goldenbush	-/-/1B	Valley and foothill grassland; alkaline. Species may be present in other areas where subsaline conditions are favorable. Elevation: 1–20 m Blooms: August–December	None. The species has no potential to occur on the site due to lack of suitable habitat (alkaline soils). There are no CNDDB occurrences within 5 miles of the site.
Lasthenia conjugens Contra Costa goldfields	FE/-/1B	Mesic areas in valley and foothill grassland, cismontane woodland in vernal pools, swales, and moist depressions (alkaline grasslands and playa pools). Extirpated from most of its range; extremely endangered.	None. The species has no potential to occur on the site due to the lack of alkaline soils and vernal pools. There are no CNDDB occurrences within 5 miles of the site.
		Elevation: 0–470 m Blooms: March–June	
Malacothamnus hallii Hall's bush mallow	-/-/1B.2	Chaparral, coastal scrub. Some populations on serpentine soils. Elevation: 10–760 m Blooms: May–September (October)	None. The species has an affinity to grow on serpentine and rocky slopes on Mt. Diablo. There are six CNDDB occurrences within 5 miles of the site, but there is no suitable habitat or undeveloped land in the park.
Monolopia gracilens Woodland wooly threads	-/-/1B.2	Openings in broadleaf upland forest, chaparral, cismontane woodland, North Coast coniferous forest, and valley and foothill grassland; serpentine. Elevation: 100–1,200 m Blooms: March–July	None. No suitable habitat is present due to development and lack of serpentine soils. There is one CNDDB occurrence within 5 miles of the site.



Species	Status* (Federal/State/RPR)	Habitat/Elevational Range/Blooming Period	Potential to Occur
Navarretia gowenii	-/-/1B.1	Chaparral, clay and serpentine soils.	None.
Lime Ridge navarretia		Elevation: 180–305 m Blooms: May–June	No suitable habitat is present due to development. There are two CNDDB occurrences within 5 miles of the site, both based on observations made within Lime Ridge Open Space.
Oenothera deltoides ssp.	FE/CE/1B	Interior sand dunes.	None.
howellii Antioch Dunes evening- primrose		Elevation: 0-30 m Blooms: March–September	This species is known only from sandy bluffs and dunes, which are absent from the park. There is one CNDDB occurrence within 5 miles of the site, based on observations made within Lime Ridge Open Space.
Streptanthus glandulosus subsp. glandulosus [S. albidus ssp. peramoenus] Bristly jewelflower	-/-/1B.2	Serpentine or metamorphic (Franciscan formation) soils on rocky, generally barren openings on slopes in chaparral, cismontane woodland, and valley and foothill grassland. Elevation: 150–1,400 m	None. No potential to occur on the site due to the lack of serpentine rocks. There are three CNDDB occurrences within 5 miles of the site.
Characteristics bissides	/ /4.0.2	Blooms: April–July	Nege
Streptanthus hispidus Mt. Diablo jewel-flower	-/-/1B.3	Chaparral, valley and foothill grassland/rocky. Elevation: 365–1,200 m Blooms: March–June	None. There is one CNDDB occurrence within 5 miles of the site, but there is no suitable habitat or undeveloped land on the site.
Stuckenia filiformis subsp.	//2B.2	Shallow, clear water of lakes; drainage	Moderate.
<i>alpina</i> Slender-leaved pondweed		channels in marshes and swamps (assorted shallow freshwater).	Suitable habitat is present in Nature Pond. There is one CNDDB occurrence within 5 miles of the site.
		Elevation: 300–2,150 m Blooms: May–July	
Tropidocarpum capparideum Caper-fruited tropidocarpum	-/-/1B	Alkaline clay soils in low hills and valleys in valley and foothill grassland. Elevation: 1–455 m Blooms: March–April	None. The species has no potential to occur on the site due to lack of alkaline soils. There is only one CNDDB occurrence within 5 miles of the site, and it is based on a collection made in 1896 in Clayton.



Species	Status* (Federal/State/RPR)	Habitat/Elevational Range/Blooming Period	Potential to Occur
Viburnum ellipticum	//2B.3	Chaparral, yellow-pine forest, and generally	None.
Common viburnum		north-facing slopes.	There is one CNDDB occurrence within 5 miles of the
		Elevation: 160–720 m	site, but there is no suitable habitat or undeveloped land
		Blooms: May–June	on the site.

Status:

- FE Federally listed as endangered
- CE California State-listed as endangered
- CC California Candidate for Listing
- CR State Rare
- 1A California Native Plant Society; plants presumed extinct in California
- 1B California Native Plant Society; plants rare, threatened, or endangered in California and elsewhere
- 2A Rare Plant Rank 2A Plants presumed extirpated in California, but common elsewhere
- 2B Rare Plant Rank 2B Plants rare, threatened, or endangered in California but more common elsewhere

CNDDB = California Natural Diversity Database

m = meter(s)

RPR = Rare Plant Rank



Species	Status* (Federal/State)	Habitat Requirements	Potential to Occur			
Amphibians	Amphibians					
Ambystoma californiense California tiger salamander	FT/CT	Spends most of its life in underground burrows. Breeds in vernal pools and ponds, including cattle stock ponds. Breeds after the first rains in late fall and early winter, when the wet season allows the salamander to migrate to the nearest pond, a journey that may be over 1 mile and take several days. Lays eggs in small clusters or singly, which hatch after 14 to 21 days. The pools must hold water for a minimum of 12 weeks for the larvae to successfully metamorphose into their terrestrial form.	None. This species is not known to occur within the park and was extirpated from the area decades ago. There are no suitable breeding pools on or near the site. There are two CNDDB occurrences within 5 miles of the project site, but they are based on observations made in 1920 and 1954 and are now extirpated.			
Rana boylii Foothill yellow-legged frog (Central Coast DPS)	FT/CE	Rarely leaves riparian corridors. Breeds and deposits eggs shortly after streams reach peak flow in the spring after the winter rains end. Egg masses are typically attached to the downstream side or to boulders or cobble, in a sunny, shallow section of low-gradient stream. Breeding rarely occurs in well-shaded (>90 percent closed canopy) sites.	None. This species is not known to occur within the park and was extirpated from the area decades ago. There is no suitable breeding habitat on the site. There is one "possibly extirpated" CNDDB occurrence within 5 miles of the project site, which is based on a collection made in 1920.			
Rana draytonii California red-legged frog	FT/CSC	Inhabits temporary pools, streams, freshwater seeps, and marshes in lowlands and foothills. Can persist in permanent waters as well. Uses adjacent upland habitat for foraging and refuge. Breeds from December through March in slow parts of streams, lakes, reservoirs, ponds, and other waters with emergent vegetation. Lays 300 to 4,000 eggs in a large cluster, which is attached to plants near the water surface. Requires water for 4 to 7 months for tadpoles to complete metamorphosis.	None. The species has never been observed in the park. The presence of non-native predatory fish and bullfrogs in Nature Pond severely limits its suitability for breeding. There are 10 CNDDB occurrences within 5 miles of the site, but the park is isolated from these populations by residential and commercial development.			
Reptiles	1	T	T			
Anniella pulchra Northern California legless lizard	/CSC	Found in sandy or loose loamy soils under sparse vegetation. Prefers soils with high moisture content.	None. There is no suitable habitat on the site due to development. There is one CNDDB occurrence within 5 miles of the site, but it is "possibly extirpated" and is based on an observation made in 1935.			



Species	Status* (Federal/State)	Habitat Requirements	Potential to Occur
Emys marmorata Western pond turtle	/csc	Permanent or nearly permanent water (fresh to brackish) in a wide variety of habitat types. Requires basking sites such as steep banks, logs, or rocks. Upland areas with friable soils are required for egg laying.	High. The species has been observed in Nature Pond. There is one CNDDB occurrence within 5 miles of the site.
Coluber lateralis euryxanthus Alameda striped racer	FT/CT	Lives primarily in scrub and chaparral communities but has also been observed in nearby grasslands and woodlands. Feeds primarily on lizards. Retreats from hot temperatures in the summer and cold temperatures in the winter into burrows or other underground refuges.	None. There are 19 CNDDB occurrences are within 5 miles of the site, but the site lacks suitable habitat and is isolated from known populations by residential and commercial development.
Phrynosoma blainvillii Coast horned lizard	/csc	Found in a variety of vegetation communities, including annual grasslands, woodlands, and chaparral; but it needs friable fine soils or sandy for burrowing and thermoreulation. Feeds primarily on ants but eats other small insects as well.	None. The species has never been seen in the park. The development of the park has likely reduced the prey base of ants and other small insects. There are no suitable loose sandy soils in the park. There are two CNDDB occurrences within 5 miles of the site.
Athene cunicularia Burrowing owl	/csc	Nearly or quite level grassland, prairie, and desert floor with short or sparse vegetation. Subterranean nester that generally uses existing mammal burrows (especially of ground squirrels) but will also excavate its own burrows.	None. There are no burrowing owls sightings within the park in eBird. No suitable burrows were seen on the site. There are two CNDDB occurrences within 5 miles of the site.
Agelaius tricolor Tricolored blackbird	/CT, CSC	Breeds in large colonies near fresh water, preferably emergent wetland such as cattails and tules but also in thickets of willow and other shrubs. Requires nearby foraging areas with large numbers of insects.	None. Although individuals are occasionally seen in the park, the species is not known to nest within the park. There is no suitable foraging habitat on or adjacent to the site. Nature Pond has some marsh with emergent vegetation but not enough to support a breeding colony. There are no CNDDB occurrences within 5 miles of the site.
Aquila chrysaetos Golden eagle	//CFP	Hunts over rolling foothills and mountain areas. Nests in cliff-walled canyons or large trees in open areas. Breeds January 1 to August 31.	None. There is no potential for the species to nest on the site due to the absence of large trees, transmission towers, cliffs, or other suitable nesting sites. May rarely fly over or forage on the site.



Species	Status* (Federal/State)	Habitat Requirements	Potential to Occur
Rallus obsoletus Ridgway's rail (formerly California clapper rail Rallus longirostris obsoletus)	FE/CE/CFP	Tidal salt marshes with sloughs and substantial cordgrass (Spartina sp.) cover.	None. There is no suitable habitat on or near the site. There are no CNDDB occurrences within 5 miles of the site.
Sternula antillarum browni (formerly Sterna antillarum browni) California least tern	FE/CE/CFP	Nest on the ground on sandy beaches, alkali flats, and hard-pan surfaces (salt ponds).	None. There is no suitable habitat on or near the site. There are no CNDDB occurrences within 5 miles of the site.
Elanus leucurus White-tailed kite	-/-/CFP	Open grasslands, meadows, or marshes; requires dense- topped trees or shrubs for nesting and perching. Tolerates human activity and is known to nest in residential neighborhoods in the Bay Area.	Low. A nonnesting individual has been observed in the park. Suitable nesting habitat is present, but the landscaped nature of the site reduces prey availability and suitability for hunting. There are no CNDDB occurrences within 5 miles of the site.
Falco peregrinus anatum American peregrine falcon	/CFP	Typically nests on cliffs. Will also nest on tall office buildings and bridges. Occasionally uses abandoned stick nests built by other raptors or ravens or electrical transmission towers as nest sites.	None. There is no suitable nesting habitat on the site. There are no CNDDB occurrences within 5 miles of the site.
Mammals			
Neotoma fuscipes annectens San Francisco dusky-footed woodrat	/CSC	Primarily found along riparian areas within chaparral and woodlands. Feeds mainly on woody plants but also eats acorns, grasses, and fungi. Builds conspicuous stick houses in trees and on the ground.	Not expected to occur. Small patches of potentially suitable habitat are present, but no woodrat houses were seen during the reconnaissance-level site visit. There are two CNDDB occurrences within 5 miles of the site.
Antrozous pallidus Pallid bat	/csc	Roosts in caves, tunnels, and occasionally buildings and hollow trees. Forages over a variety of habitats.	None. There are three CNDDB occurrences within 5 miles of the site. No potential to roost in the park due to lack of suitable roosting sites. Individuals may forage over the site.



Species	Status* (Federal/State)	Habitat Requirements	Potential to Occur
Invertebrates			
Danaus plexippus Monarch butterfly	FC//	Lays eggs on the larval host plant milkweed and overwinters in large aggregations along the California coast.	High. The CNDDB does not track monarch butterfly observations except at coastal overwintering sites. There is a recording of monarch caterpillars on milkweed in the park in October 2022.1
Bombus occidentalis Western bumble bee	/cc	Feeds upon nectar and pollen from a variety of plants species but is most adapted to native plant species. Nests in abandoned rodent burrows and bird nests. The flight period in California is from early February to late November, peaking from June to September. Little is known about sites where queens overwinter. Species is currently restricted to high-elevation sites in the Sierra Nevada and scattered coastal areas.	None. The species is likely extirpated from the Walnut Creek area. There are three CNDDB occurrences within 5 miles of the site, but they are based on collections made in 1960, 1963, and 1972.
Branchinecta lynchi Vernal pool fairy shrimp	FT/	Inhabits vernal pools and swales during all stages of its lifecycle.	None. There are no CNDDB occurrences within 5 miles of the site. There are no vernal pools in the park.

*Status:

FT = Federally listed as threatened; FE = Federally listed as endangered

CT = California State listed as threatened; CSC = California Species of Special Concern; CFP = California Fully Protected; CC: California Candidate Species

CDFW = California Department of Fish and Wildlife

CNDDB = California Natural Diversity Database

DPS = Distinct Population Segment

¹ Western Monarch Milkweed Mapper. Website: https://www.monarchmilkweedmapper.org/ (accessed November 1, 2023).