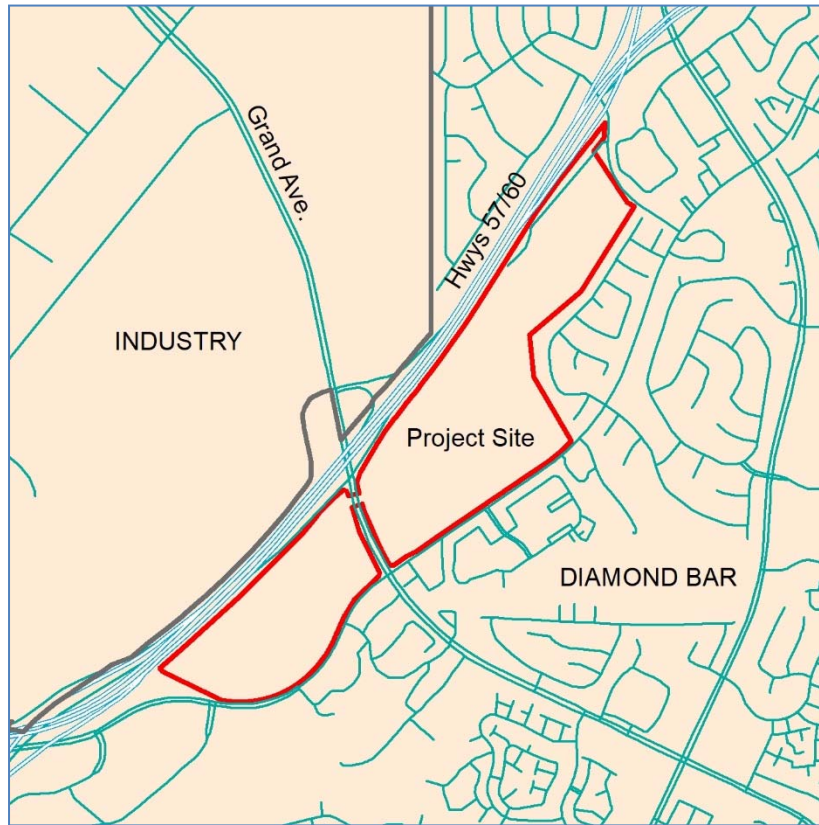


Diamond Bar Golf Course Renovation Project



Biological Survey Report

City of Diamond Bar
County of Los Angeles

May 2020

Prepared for:
San Gabriel Valley Council of Governments
1000 S. Fremont Avenue
Unit 42; Building A-10N, Suite 10-210
Alhambra, CA 91803

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Summary

The San Gabriel Valley Council of Governments (COG) and the County of Los Angeles and Metropolitan Transportation Authority (Metro) propose to renovate the Diamond Bar Golf Course (“Golf Course”) in the city of Diamond Bar, Los Angeles County, California. Grand Avenue divides the existing Golf Course into two parts. There are currently six existing holes on the western part of the course and 12 holes on the eastern part of the course. An existing golf cart tunnel beneath Grand Avenue connects the two parts (i.e., west and east).

Planned freeway improvements to the State Route-57 (SR-57)/State Route-60 (SR-60) Confluence at Grand Avenue Project as approved by Caltrans (SCH No. 2009081062, Dec. 11, 2013) would permanently incorporate 9.4 acres (ac) of the Golf Course, reducing the Golf Course from 171.3 ac to 161.9 ac and require the demolition of an existing maintenance facility. The Final EIR/FONSI for the SR-57/SR-60 Confluence at Grand Avenue Project included mitigation measures to reconfigure the Golf Course so that it continues to function as an 18-hole golf course and the user experience is not diminished.

The Biological Study Area (BSA) for the proposed Diamond Bar Golf Course Renovation Project (Proposed Project) consists of approximately 176.40 ac. It includes the existing golf course, an approximately 1.5-mile segment along the SR57/SR60 confluence to the north, an approximately 1,160 foot segment of Grand Avenue from the existing SR-60 to Goldens Springs Drive, which bisects the golf course, and an approximately 7,580 foot segment of Golden Springs Drive from South Prospectors Drive to Copley Drive to the south.

Biological resources found within the BSA include a few scattered native tree species located within and around the tributaries to Diamond Bar Creek, raptor foraging and jurisdictional waters/wetlands. Portions of Diamond Bar Creek and one concrete-lined channel present within the BSA will be impacted as part of the project. It is anticipated that resource agency permits will be required from the United States Army Corps of Engineers (ACOE), California Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW) under Sections 404 and 401 of the federal Clean Water Act (CWA) and Section 1600 of the State Fish and Game Code, respectively. Native birds protected under the Migratory Bird Treaty Act (MBTA) may also nest within and adjacent to the BSA. Mitigation measures proposed herein avoid and minimize potential effects to nesting birds. The project includes replacement of native trees impacted by the project at a minimum of 3:1 ratio.

Table of Contents

Cover Sheet	i
Summary	iii
Chapter 1. Introduction	1
1.1. Project History	1
1.2. Project Description.....	4
Chapter 2. Study Methods.....	8
2.1. Regulatory Requirements.....	8
2.1.1. Federal Regulations	8
2.1.2. State Regulations	12
2.1.3. Local Regulations	14
2.2. Studies Required.....	15
2.2.1. Biological Reconnaissance Survey.....	15
2.2.2. Jurisdictional Delineation	17
2.2.3. Native Tree Inventory	17
2.2.4. MBTA Nest Survey	18
2.2.5. Nesting Bird Survey.....	18
2.3. Personnel and Survey Dates.....	18
2.4. Agency Coordination and Professional Contacts	19
2.5. Limitations That May Influence Results.....	19
Chapter 3. Results: Environmental Setting.....	20
3.1. Description of the Existing Biological and Physical Conditions..	20
3.1.1. Biological Study Area.....	20
3.1.2. Physical Conditions	22
3.1.3. Biological Conditions in the Biological Study Area.....	23
3.2. Regional Species and Habitats of Concern.....	26
3.3. Vegetation.....	27
3.3.1. Sensitive Plant Species Descriptions	29
3.4. Animals.....	29
Chapter 4. Results: Biological Resources, Discussion of Impacts and Mitigation.....	34
4.1. Natural Communities of Special Concern	34
4.1.1. Discussion of Natural Communities	34
4.1.1.1. Survey Results	34
4.1.1.2. Avoidance and Minimization Efforts.....	35
4.1.1.3. Project Impacts.....	36
4.1.1.4. Compensatory Mitigation	36
4.1.1.5. Cumulative Impacts	37
4.2. Jurisdictional Waters.....	37
4.2.1.1. Survey Results	37
4.2.1.2. Avoidance and Minimization Efforts.....	37
4.2.1.3. Project Impacts.....	38
4.2.1.4. Compensatory Mitigation	38

4.2.1.5.	Cumulative Effects.....	39
4.3.	Special Status Plant Species.....	38
4.4.	Special Status Animal Species Occurrences.....	38
4.4.1.	Nesting Birds	38
4.4.1.1.	Survey Results	47
4.4.1.2.	Avoidance and Minimization Efforts.....	49
4.4.1.3.	Project Impacts.....	49
4.4.1.4.	Compensatory Mitigation	49
4.4.1.5.	Cumulative Effects.....	49
4.4.1.6	Survey Results	50
Chapter 5.	Results: Permits and Technical Studies for Special Laws or Conditions	51
5.1.	Federal Endangered Species Act Consultation Summary	51
5.2.	Federal Fisheries and Essential Fish Habitat Consultation Summary	51
5.3.	California Endangered Species Act Consultation Summary	51
5.4.	Wetlands and Other Waters Coordination Summary.....	51
5.5.	Invasive Species.....	51
5.6.	Other	52
Chapter 6.	References	53

List of Figures

Figure 1:	Regional VicinityMap	2
Figure 2:	Project Location Map	3
Figure 3:	Proposed Golf Course Design	7
Figure 4:	Vegetation Communities.....	21
Figure 5a through 5g:	Jurisdictional Waters Locations	39

List of Tables

Table 2-1:	Personell and Survey Dates.....	17
Table 3-1:	Invasive Plants Located within the BSA.....	25
Table 4-1:	Native Trees Located within the BSA.....	34

List of Appendices

- Appendix A: Site Photographs
- Appendix B: California Natural Diversity Date Base and IPaC Lists

Chapter 1. Introduction

The San Gabriel Valley Council of Governments (COG) and the County of Los Angeles and Metropolitan Transportation Authority (Metro) propose to renovate the Diamond Bar Golf Course (“Golf Course”) located in the city of Diamond Bar, Los Angeles County (Figure 1 and Figure 2). Grand Avenue divides the existing Golf Course into two parts. There are currently six existing holes on the western part of the course and 12 holes on the eastern part of the course. An existing golf cart tunnel beneath Grand Avenue connects the two parts (i.e., west and east).

Planned freeway improvements to the SR-57/SR-60 confluence at the Grand Avenue interchange as approved in Caltrans in (SCH No. 2009081062, Dec. 11, 2013) would permanently incorporate 9.4 ac of the Golf Course, reducing the Golf Course from 171.3 ac to 161.9 ac and require the relocation of an existing maintenance facility. The Final EIR/FONSI for the SR-57/SR-60 confluence at Grand Avenue project included mitigation measures to reconfigure the Golf Course so that it continues to function as an 18-hole golf course and the user experience is not diminished.

The proposed project would be subject to the California Environmental Quality Act (CEQA). The San Gabriel Valley Council of Governments (COG) would be the lead agency under CEQA.

The primary purposes of the proposed project is to reconfigure the Golf Course so that it continues to function as an 18-hole golf course and the user experience is not diminished as a result of implementation of the SR-57/SR-60 confluence at the Grand Avenue interchange improvement project.

1.1. Project History

Planned freeway improvements to the SR-57/SR-60 confluence at the Grand Avenue interchange as approved by Caltrans (SCH No. 2009081062, Dec. 11, 2013) would permanently incorporate 9.4 ac of the Golf Course, reducing the Golf Course from 171.3 ac to 161.9 ac and require the relocation of an existing maintenance facility. The Final EIR/FONSI for the SR-57/SR-60 confluence at Grand Avenue project included mitigation measures to reconfigure the Golf Course so that it continues to function as an 18-hole golf course and the user experience is not diminished.



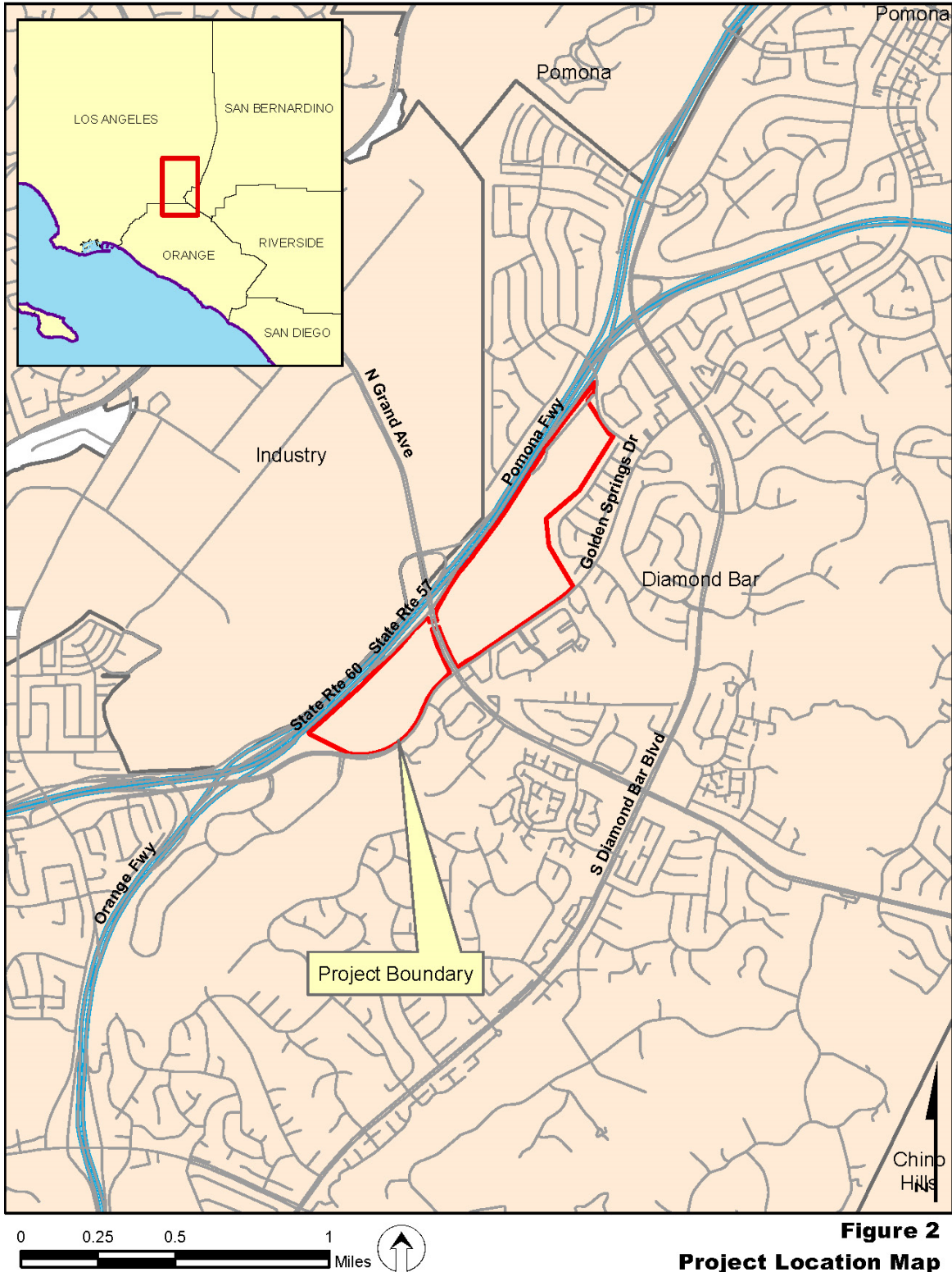


Figure 2
Project Location Map
Diamond Bar Golf Course Renovation Project

1.2. Project Description

This section describes the proposed project developed by a multi-disciplinary team to achieve the project purpose and need while avoiding or minimizing environmental impacts.

The San Gabriel Valley Council of Governments (COG) and the County of Los Angeles) and Metropolitan Transportation Authority (Metro) propose to renovate the Diamond Bar Golf Course (“Golf Course”) in Los Angeles County. Grand Avenue divides the existing Golf Course into two parts. There are currently six existing holes on the western part of the course and 12 holes on the eastern part of the course. An existing golf cart tunnel beneath Grand Avenue connects the two parts (i.e., west and east). Figure 1 and Figure 2 show the regional location and project vicinity respectively.

The proposed Project would realign and reconfigure six holes in the western part of the course and three in the eastern part of the course (Figure 3). This includes reconstructing bunkers and tee and green complexes for all holes. Holes 1, 2, 3, 4, 8, and 9 would be reconstructed in their entirety with new fairways, bunkers, and tee and green complexes. The proposed project would increase the overall existing course yardage from 6,801 yards to 6,848 yards. The total course par would remain unchanged at 72.

The following features of the Golf Course would be reconfigured:

- All remaining 18 tee complexes would be renovated.
- The six holes located in the western part (#3, #4, #5, #6, #7, #8) will be realigned and increased in length in order to maintain course yardage and renumbered from #4 through #9.
- Existing Hole #9, located in the eastern part, will be shortened and renumbered to hole #3.
- The existing Hole #9 green, located adjacent to the clubhouse, will be reconstructed as a practice chipping green with bunkers.
- Hole #10 through hole #18 will be maintained in the same configuration and hole numbering with the relocation of hole #15 green, hole #11 green and the hole #16 tee.
- All fairway sand bunkers would be renovated or reconstructed.
- Approximately 2,600 linear feet of existing landscape concrete gutters would be removed (excavation depth of six inches) and replaced with approximately 7,676 linear feet of underground, low-flow drainage pipes across fairways and driving ranges (excavation depth of three feet and installation depth of two feet).

- The existing wall-to-wall cart path system would be retained; however, the existing concrete cart paths would be reconfigured and replaced.
- The practice putting green would be reconstructed.
- The practice range tee would be located approximately 50 feet farther south to create a safer relationship between the practice range and Hole 2.
- Protective netting and trees would be installed as required for safety and playability at the golf course. Existing netting adjacent to SR-57/SR-60 would be removed. Approximately 130-foot tall netting would be installed along the west side of the proposed Hole 8 (existing Hole 7) to prevent golf balls from reaching the freeway. Netting would also be installed along the proposed Holes 2 and 9 and along the practice range.
- The existing maintenance facility, which is located adjacent to SR-57/SR-60, would be demolished. A new maintenance facility would be constructed approximately 700 feet west of the existing maintenance facility. The new maintenance facility would be up to 40,000 square feet in overall size and would include a maintenance building of up to 9,000 square feet. Water, power, and sewer utilities would be installed to serve the new maintenance facility.
- The project would require the removal of between 150 to 200 trees, including approximately 29 native trees. Mature native trees would be replaced at a 3:1 ratio within the Diamond Bar Golf Course and immediately surrounding areas consistent with the SR-57/SR-60 Confluence at Grand Avenue Project mitigation requirements. Source materials for replacement of native trees will be of the same subspecies and/or variety locally present and from seeds or cuttings gathered within coastal southern California to ensure local provenance.

Construction Activities and Staging

Night work is not anticipated. If renovation were to occur in two phases, with only half of the course (nine holes) closed at any one time, a total of approximately 17 months would be required for construction (8 months to reconfigure Holes 1, 2, 4, 8, and 9 and renovate all other green complexes and fairways). If renovation were to occur in a single phase, construction would last approximately 12 months, during which time the Golf Course would be closed to the public. It is assumed for purposes of this IS that renovation would occur in two phases (i.e., approximately 17 months). Construction is anticipated to begin in January 2021 and end in July 2022.

The proposed Project would not require the acquisition of any right-of-way. A new Los Angeles County Flood Control District easement and relocation of Southern California Edison utility easements are needed within the Golf Course. All construction activities, including staging, would occur within the boundaries of the existing Golf Course. Construction staging would be located west of Grand Avenue at the existing Hole 8 and east of Grand Avenue at the existing maintenance facility. Construction activities for the SR-57/SR-60 confluence at Grand Avenue project is scheduled to begin in 2022.



Sources: ESRI 2019.

Figure 3
Proposed Golf Course Design
Diamond Bar Golf Course Renovation Project

Chapter 2. Study Methods

In support of the IS/MND that is being prepared for the proposed project, several biological surveys were conducted, including native tree inventory and jurisdictional delineation.

A biological reconnaissance survey was conducted in winter 2019 for the Diamond Bar Golf Course Renovation Project as summarized herein. Based on the reconnaissance survey findings, a native tree inventory and a jurisdictional delineation were completed in winter 2019. A nesting bird survey was completed in spring 2020.

The Biological Study Area (BSA) for the proposed Project consists of approximately 176.40 ac and includes the golf course, an approximately 1.5 mile segment along the SR-57/SR-60 confluence and an approximately 1,600 foot segment of Grand Avenue from the existing SR-60 westbound on-ramp to Golden Springs Drive. The limits of the BSA include the current Caltrans right-of-way and adjacent private/public property required for the on-ramp and ancillary improvements, including retaining walls, drainage facility extensions, utility relocation, water quality treatment BMPs, and temporary construction easements and staging areas.

2.1. Regulatory Requirements

NEPA and CEQA require consideration of impacts to biological resources prior to implementing any projects. Other relevant laws and guidelines regarding biological resources are described below.

2.1.1. Federal Regulations

Federal regulations that apply to biological resources include the Federal Endangered Species Act (FESA), Sections 404 and 401 of the federal Clean Water Act, and the Migratory Bird Treaty Act.

Federal Endangered Species Act

Section 7 of the FESA of 1973 requires federal agencies to consult with the United States Fish and Wildlife Service (USFWS) if the project may affect federally listed threatened or endangered species. Section 9 of FESA prohibits the “take” (e.g. harm, harassment, pursuit, injury, kill) of federally listed wildlife. Take incidental to

otherwise lawful actions can be authorized under Sections 7 (federal consultations) and 10 (habitat conservation plans) of the FESA.

If a proposed project is authorized, funded, or carried out by a federal agency and may affect a listed species, then the federal agency must consult with USFWS on behalf of the applicant, pursuant to Section 7 of the FESA. During the Section 7 process, measures to avoid and minimize project effects to listed species and their habitat will be identified and incorporated into a biological opinion that includes an incidental take statement that authorizes incidental take by the federal agency and applicant.

Sections 404 of the Federal Clean Water Act

Section 404 of the CWA establishes a permit program, administered by the ACOE, that regulates the discharge of dredged or fill material into waters of the United States (including wetlands). The discharge of dredged or fill material (temporarily or permanently) into areas delineated as waters of the United States typically requires prior authorization from the ACOE.

The Code of Federal Regulations (CFR) defines “waters of the U.S.” as intrastate lakes, rivers, streams, mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. The Code defines wetlands as “areas that are inundated or saturated by surface water or ground water 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.” In the absence of wetlands, the ACOE jurisdiction in non-tidal waters extends to the Ordinary High Water Mark (OHWM). The limits of the ACOE jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM, which is defined at 33 CFR 328.3(e) as:

“that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.”

In order to be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied.

In 2006, the United States Supreme Court further considered the ACOE jurisdiction of “waters of the United States” in the consolidated cases *Rapanos v. United States* and *Carabell et al v. United States* (126 S. Ct. 2208), collectively referred to as *Rapanos*. The Supreme Court concluded that wetlands are “waters of the United States” if they significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as navigable. On June 5, 2007, the ACOE issued guidance regarding the *Rapanos* decision. This guidance states that the ACOE will continue to assert jurisdiction over traditional navigable waters (TNW), wetlands adjacent to traditional navigable waters, relatively permanent nonnavigable tributaries (RPW) that have a continuous flow at least seasonally (typically three months), and wetlands that directly abut relatively permanent tributaries. The ACOE will determine jurisdiction over waters that are nonnavigable tributaries that are not relatively permanent and wetlands adjacent to nonnavigable tributaries that are not relatively permanent (non-Relatively Permanent Waters, or "non-RPW"s) only after making a significant nexus finding.

Furthermore, the preamble to ACOE regulations (Preamble Section 328.3, Definitions) states that the ACOE does not generally consider the following waters to be waters of the U.S. The ACOE does, however, reserve the right to regulate these waters on a case-by-case basis.

- Nontidal drainage and irrigation ditches excavated on dry land
- Artificially irrigated areas that would revert to upland if the irrigation ceased
- Artificial lakes or ponds created by excavating and/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 and/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 purposes 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 waters of the United States.

Should it be necessary, the FESA and the National Historic Preservation Act requires that the ACOE initiate consultation with these trustee agencies before it can issue a permit. The purpose is to ensure that its actions, including the issuance of a permit, do not jeopardize the continued existence of listed species or adversely modify designated critical habitat or historic resources. Authorization also requires the applicant to ensure that the project is consistent with all state and local government requirements.

In 2015, the ACOE, Department of the Army, Department of Defense, and Environmental Protection Agency (EPA) published a final rule defining the scope of waters protected under the Clean Water Act by revising the definition of “waters of the United States”. The rule did not establish any new regulatory requirements but clarified the scope of “waters of the United States”. In October 2019, the ACOE and EPA rescinded the 2015 rule.

In January 2020, the ACOE and EPA published the Navigable Waters Protection Rule to define “waters of the United States” (WOTUS) essentially consistent with the 2006 *Rapanos* decision. The revised definition identifies four clear categories of waters that are federally regulated under the Clean Water Act: the territorial seas and traditional navigable waters (TNW); perennial and intermittent tributaries (RPW), which flow to TNW; certain lakes, ponds, and impoundments, and wetlands that are adjacent *and* with direct hydrologic surface connection to jurisdictional waters (non-RWP). The 2020 final action also details what waters are not subject to federal control, including features that only contain water in direct response to rainfall; groundwater; many ditches, including most farm and roadside ditches; prior converted cropland; farm and stock watering ponds; and waste treatment systems. The Navigable Waters Protection Rule became effective on June 22, 2020.

Sections 401 of the Federal Clean Water Act

Section 401 of the Clean Water Act requires that any applicant for a federal permit for activities that involve a discharge to waters of the State, obtain a certification from the regulating State agency that specifies the discharge will comply with the applicable provisions under the Federal Clean Water Act. The RWQCB administers the certification program in California. Therefore, before the ACOE will issue a

Section 404 permit, applicants must apply for and receive a Section 401 water quality certification from the Los Angeles RWQCB.

The RWQCB can require mitigation measures above and beyond those required by the ACOE or CDFW. However, typically the mitigation proposed to satisfy the ACOE and CDFW meets RWQCB requirements to offset impacts to water quality.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 USC § 703-712) (MBTA) prohibits the take of any migratory bird. This treaty defines take as the action of or attempt to pursue, hunt, take, capture, or kill migratory birds, or their nests, or their eggs. Under this act, it is unlawful to take, possess, import, export, transport, sell, offer for sale, purchase, or barter any migratory bird, or any part, nest, or eggs of any such bird except under the terms of a valid permit. In January 2020, the U.S. Fish and Wildlife Service (USFWS) proposed to adopt a regulation that prohibits the direct take of any migratory bird. Under the proposed rule, injury to or mortality of migratory birds that results from, but is not the purpose of, an action (i.e. including incidental taking or killing) would not be prohibited by the MBTA. In April 2020, the USFWS published a final rule revising the list of species protected under the MTBA resulting in a net increase of 67 to bring the total number of species protected to 1,093.

2.1.2. State Regulations

State regulations that apply to biological resources include the California Endangered Species Act (CESA), Native Plant Protection Act, Section 1601-1603 of the Fish and Game Code, and Porter-Cologne Water Quality Control Act.

California Endangered Species Act

The CESA establishes the policy of the State to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that State agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. Sections 2081(b) and (c) of the CESA allow the CDFW to issue an incidental take permit for a State listed threatened and endangered species only if specific criteria are met. Measures to minimize the take of species covered by the permit and to mitigate the impacts caused by the take will be set forth in one or more attachments to the permit. This attachment will generally be a mitigation plan (possibly a Habitat Conservation Plan) prepared and submitted by

the applicant in coordination with CDFW staff. The mitigation plan should identify measures to avoid and minimize the take of State-listed species and to fully mitigate the impact of that take.

For projects that affect both a state and federal listed species, compliance with the FESA will satisfy CESA requirements if CDFW determines that the federal incidental take authorization is "consistent" with CESA under Fish and Game Code Section 2080.1. For projects that will result in a 'take' of a state-only listed species, project proponents must apply for a take permit under section 2081(b).

Native Plant Protection Act

California's Native Plant Protection Act, Fish and Game Code Sections 1900-1913, requires all state agencies to utilize their authority to carry out programs to conserve endangered and rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification to the CDFW at least 10 days in advance of any change in land use. This allows CDFW to salvage listed plant species that would otherwise be destroyed. The project proponent is required to conduct botanical inventories and consult with CDFW during project planning to comply with the provisions of this act and sections of CEQA that apply to rare or endangered plants.

Streambed Alteration Agreement (California Fish and Game Code Section 1600)

Section 1600 of the California Fish and Game Code states that "it is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream or lake designated by the department, or use any material from the streambeds, without first notifying the department of such activity." CDFW jurisdiction includes ephemeral, intermittent and perennial watercourses (including dry washes) characterized by 1) the presence of hydrophytic vegetation, 2) the location of definable bed and banks, and 3) the presence of existing fish or wildlife resources.

Under Sections 1601-1603 of the Fish and Game Code, project applicants are required to notify CDFW prior to any project that would divert, obstruct or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occur during the environmental process. CDFW must inform the project applicant of the existence of any fish and wildlife resources that may be substantially adversely affected by project related activities. If

impacts to resources are identified, the CDFW must include a Streambed Alteration Agreement for measures to protect fish and wildlife resources.

State Porter-Cologne Water Quality Control Act (Porter-Cologne Act)

The State of California (State) regulates discharge of material into waters of the State pursuant to Section 401 of the federal Clean Water Act, as discussed above, and the California Porter-Cologne Water Quality Control Act (Cal. Water Code, Div. 7, §13000 et seq.). Waters found to be isolated and not subject to the federal CWA regulation are often still regulated by the RWQCB under the State Porter-Cologne Water Quality Control Act. Porter-Cologne reserves the right for the State of California to regulate activities that could affect the quantity and/or quality of surface and/or ground waters, including isolated wetlands, within the State. Waters of the State determined to be jurisdictional for these purposes require, if impacted, waste discharge requirements. The State Water Resources Control Board (SWRCB) and the local RWQCB are the relevant permitting agencies. Limits of jurisdiction include isolated waters, isolated wetlands, and any other feature that has an effect on surface or subsurface water quality within California.

2.1.3. Local Regulations

Local regulations that apply to biological resources include general plans and policies. Diamond Bar Golf Course is a County of Los Angeles owned facility located within the incorporated City of Diamond Bar city limits. Both the County of Los Angeles and the City of Diamond Bar have adopted local ordinances for the protection of native trees. There are no other local plans or ordinances relevant to the project area. The site of the Proposed Project is not located in any approved Habitat Conservation Plan or Natural Community Conservation Plan.

Tree Preservation and Protection Ordinance

City of Diamond Bar's Tree Preservation and Protection Ordinance (Municipal Code, Title 22 *Development Code*, Article 3 *Site Planning and General Development Standards*, Chapter 22.38 *Tree Preservation and Protection*) (Ordinance) is designed to protect native oak (*Quercus* sp.), walnut (*Juglans* sp.), western sycamore (*Platanus racemosa*), and willow (*Salix* sp.) measuring eight inches or more in diameter at breast height (DBH) within City jurisdiction. According to the Ordinance, no person shall remove or relocate a protected tree or develop within the protection zone of a protected tree without first obtaining a Tree Removal Permit from the Director of the City's Community and Development Services Department. In accordance with the Ordinance, replacement trees shall be planted at a minimum of 3:1 for residential

parcels greater than 20,000 square feet and commercial and industrial properties; however, the Director or Commission has final approval.

The Los Angeles County Oak Tree Ordinance is included in Title 22, Part 6, Chapter 22.56 of County Code. The ordinance applies to all unincorporated areas of the County. Under the ordinance, a person shall not cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any tree of the oak tree genus, which is 8" or more in diameter four and one-half feet above mean natural grade or in the case of oaks with multiple trunks a combined diameter of twelve inches or more of the two largest trunks, without first obtaining a permit. Required replacement trees shall consist exclusively of indigenous oak trees and shall be in the ratio of at least two to one. Each replacement tree shall be at least a 15-gallon size specimen and measure at least one inch in diameter one foot above the base.

The project area is located within the incorporated City of Diamond Bar city limits; therefore, the project is not subject to the Los Angeles County Oak Tree Ordinance. County owned facilities are not subject to City ordinance; therefore, the project is not subject to the City of Diamond Bar's Tree Ordinance. Therefore, the project will not conflict with any local policies or ordinances protecting biological resources.

Although the project is not subject to either the City of Diamond Bar's Tree Preservation Ordinance or the Los Angeles County Oak Tree Ordinance, consistent with the SR-57/SR-60 Confluence at Grand Avenue Project mitigation requirements, the project includes tree protection and replacement measures consistent with the requirements of both ordinances.

2.2. Studies Required

Several biological technical reports have been prepared for the Golf Course Renovation Project. These include a native tree inventory, and jurisdictional delineation.

The data and analysis contained in this Biological Survey Report is based on the biological reconnaissance survey findings and technical reports and is specific to the Diamond Bar Golf Course Renovation Project BSA.

2.2.1. Biological Reconnaissance Survey

A general biological reconnaissance survey for the Diamond Bar Golf Course Renovation Project study area was conducted in November 2019 to generally define

the Biological Resource baseline condition for the proposed project footprint and immediately adjacent areas and to define additional surveys, tree assessments, and jurisdictional determinations that may be required to appropriately evaluate the project's potential impact to biological resources present.

Prior to conducting the field survey, available literature was reviewed to identify any special status plants, wildlife, or sensitive habitats known within the vicinity of the project site. The California Natural Diversity Database (CNDDDB 2020) and the California Native Plant Society's Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPSEI 2020) were reviewed for the quadrangles containing and surrounding the project site (i.e., *Azusa*, *Glendora*, *Mt. Baldy*, *Ontario*, *San Dimas*, *Baldwin Park*, *La Habra*, *Yorba Linda*, and *Prado Dam* California USGS 7.5 minute quadrangles). These databases contain records of reported occurrences of federal and state-listed endangered, threatened, proposed endangered and threatened species, former Federal Species of Concern (FSC), delisted species, California Species of Special Concern (SSC), and otherwise sensitive species or habitats that may occur in the vicinity of the project site. Other existing documentation relevant to the project site was also reviewed for this report, including prior survey results reported associated with the SR-57/SR-60 confluence at the Grand Avenue interchange improvement project.

Sensitive plant species include all federal and state-listed endangered and/or threatened species and those that have been identified by the California Native Plant Society (CNPS) as having a limited distribution in California and throughout their range.

A sensitive wildlife species (i.e., federal and state-endangered, threatened, proposed, SSC, or otherwise sensitive species) would be considered a potential inhabitant of the project vicinity if known occurrences and/or its geographical distribution encompassed part of the study area or if its distribution was near the site and general habitat requirements (i.e., wintering, roosting, nesting, or foraging habitat, or a permanent water source) of the species were present in the study area. The potential for each species to occur within the study area was then assessed based on these and other factors, including levels of disturbance, proximity to existing developments, connectivity to source populations, relative abundance, population trends, habitat quality and size, age of historical records, and the amount of development and disturbance that has occurred during the time subsequent to the latest records. A combined foot survey and windshield survey was conducted along the study area to

document existing conditions and to assess the area for its potential to harbor sensitive biological resources and jurisdictional features. Aerial images of the footprint were carried into the field to record additional notes about the biology of the study area. Recorded notes included the locations of sensitive habitats, including various riparian habitats, patches of California walnut and coast live oak, and several large isolated natural trees.

2.2.2. Jurisdictional Delineation

A Jurisdictional Delineation was conducted for the Diamond Bar Golf Course Renovation Project study area in September and October 2019. Prior to beginning the field delineation, high-resolution aerial photographs, National Wetlands Inventory maps and USGS topographic maps of the project site were examined to determine the potential areas of USACE / RWQCB / CDFW jurisdiction. In the field, boundaries and dimensions of jurisdictional features were recorded on aerial photographs and GPS. Features within the survey area were investigated for the presence of drainages, water bodies, riparian habitats, potential wetlands and connectivity. Only features that exhibited the potential to be three-parameter wetlands (i.e., vegetation, soils, and hydrology) were investigated and recorded onto standardized data sheets. Recorded data typically includes present vegetation and percent covers, soil profiles in dug soil pits, and evidence of hydrology. Potential wetland habitats were evaluated using the methodology set forth in the *U.S. Army Corps of Engineers Wetland Delineation Manual* (ACOE 1987) and the 2006 Arid West Supplement (Arid Supplement). Data related to USACE-defined wetlands is recorded onto Wetland Determination Data Forms – Arid West Region for each individually numbered soil pit. Features with no evidence of wetland hydrology, and which supports only upland vegetation, were evaluated for the upward limits of jurisdiction only and not for wetland parameters.

Potential CDFW jurisdictional riparian habitats were evaluated using the guidance described in *A Field Guide to Lake and Streambed Alteration Agreements Sections 1600-1607* (CDFW 1994).

2.2.3. Native Tree Inventory

A tree inventory was conducted for the Diamond Bar Golf Course Renovation Project study area in November 2019. Within the Proposed Project BSA, native trees were inventoried by species and recorded onto standardized data sheets and locations identified and catalogued using GPS.

2.2.4. MBTA Nest Survey

A raptor nest survey was conducted for the Diamond Bar Golf Course Renovation Project BSA and immediately adjacent areas in April 2020 to identify nesting activity of avian species protected under MBTA. The number of tall mature trees present on the golf course and abutting freeway right-of-way provide suitable nesting habitat for raptors protected under the MBTA. Prior nesting bird surveys resulted in negative findings.

2.2.5. Nesting Bird Survey

A nesting raptor survey was conducted for the Diamond Bar Golf Course Renovation Project study area in April 2020 to identify any raptor nesting and/or nesting activity in and adjacent to the Proposed Project BSA in compliance with the federal Migratory Bird Treaty Act and California Fish & Game Code.

2.3. Personnel and Survey Dates

Table 2-1: Personnel and Survey Dates

DATE	SURVEY FOCUS	SURVEYORS
November 1 & 8, 2019	Biological Reconnaissance Survey	Biologist Michael D. Misenhelter (TE837309-5, SC1868)
September 24, 2019 October 7, 8 & 11, 2019	Jurisdictional Delineation	Biologist Kris Alberts (TE039640-2) Biologist Seth Reamers
November 1, 8 & 15, 2019	Native Tree Inventory	Biologist Michael D. Misenhelter (TE837309-5, SC1868) Certified Arborist William McKinley (#WE-4578A)

Table 2-1: Personnel and Survey Dates

DATE	SURVEY FOCUS	SURVEYORS
April 14 & 20, 2020	Nesting Raptor Survey	Biologist Michael D. Misenhelter (TE837309-5, SC1868)

2.4. Agency Coordination and Professional Contacts

As part of the regulatory compliance process to be conducted for the Diamond Bar Golf Course Renovation Project, resource agency authorizations are anticipated under Section 404 of the federal CWA, Section 401 of the federal CWA, and Section 1600 of the California Fish and Game Code related to loss of jurisdictional waters of the United States and State.

2.5. Limitations That May Influence Results

There are no known limitations or constraints affecting the survey results. The surveys were conducted using standard protocols.

Chapter 3. Results: Environmental Setting

The following section addresses the regional context, and general conditions and biological resources observed within the project vicinity, including the area's topography, soils, vegetation, watercourses and level of human or natural disturbance.

3.1. Description of the Existing Biological and Physical Conditions

The Project area consists entirely of previously developed properties and includes a golf course and its support buildings, parking lots, and roadways and their rights-of-way. The surrounding area is primarily composed of residential, recreational, commercial, and industrial development, as well as open space. The open space occurs along the north and west sides of the Grand Avenue/SR-57/SR-60 intersection. This open space is currently under development except for a 0.75 mile strip of mature, mixed riparian woodland, a remnant of Diamond Bar Creek, located west of Grand Avenue and north of SR-57/SR-60 within a conservation easement. South and east of SR-57/SR-60, a mosaic of existing industrial, recreational, commercial, and residential development exists adjacent to the Project area.

Several drainages flow into Diamond Bar Creek from the south and east of the golf course. These exit the golf course through culverts under the SR-57/SR-60 freeway. The largest of these drainages being the upstream portion of Diamond Bar Creek potentially provides a narrow wildlife corridor between the eastern portion of the golf course and the Chino Hills to the east. Easy wildlife access along this corridor is blocked by Golden Springs Road and South Diamond Bar Boulevard. A chain-link fence blocks access to the golf course. Vegetation along the stream is dominated by mature, mixed riparian woodland bounded by scrub covered hillsides of coastal sage scrub and chaparral and walnut and live-oak woodlands. Another narrow wildlife corridor of scrub and hillside oak and walnut woodland vegetation located behind Diamond bar City Hall is potentially connected to the western portion of the golf course if not for a chain-link fence and Golden Springs Road. This corridor would eventually wind its way to the Puente Hills west of SR-57 if not for being blocked by the highway just north of Pathfinder Road.

3.1.1. Biological Study Area

The Biological Study Area (BSA) for the Diamond Bar Gold Course Renovation Project is depicted on Figure 4. The 176.20 ac BSA includes the approximately



Figure 4
Vegetation Communities
Diamond Bar Golf Course Renovation Project

171.3-ac Diamond Bar Golf Course, an approximately 1.5 mile segment along the SR-57/SR-60 confluence, an approximately 1,160 foot segment of Grand Avenue from the existing SR-60 to Goldens Springs Drive, which bisects the golf course, and an approximately 7,580 foot segment of Golden Springs Drive from South Prospectors Drive to Copley Drive to the south. An additional 50 ft buffer outside the Proposed Project BSA limits was also evaluated to address potential indirect impacts.

3.1.2. Physical Conditions

The Proposed Project is located in Diamond Bar, Los Angeles County, California in the *San Dimas* U.S. Geological Service (USGS) 7.5 minute quadrangle (quad) map in Township 2 South, Range 9 West, Sections 9 and 10. The topography of the site is mostly flat with a slight slope down to the northwest. The elevation of the site is approximately 700 feet above mean sea level (amsl) at its lowest point and 912 feet amsl at its highest point.

Soils

The following soils were identified as occurring within the BSA based on a search of the USDA Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov>).

Urban land-Sorrento-Arbolado complex (79% of the BSA). This soil complex typically occurs on alluvial fan aprons with a 2-9% slope and is found at elevations of 160 to 1,390 feet. It is not classified as a hydric soil. The soils in this complex are typically human-transported materials derived from sedimentary rock reflecting the developed nature of the BSA area.

Counterfeit-Urban land complex (16.9% of the BSA). This complex is typically found on hillsides with a slope of 10 to 35% at elevations ranging from 160 to 1,330 feet. This is not classified as a hydric soil. This is a human-transported soil complex consisting mostly of weathered sediment from sedimentary rock reflecting the developed nature of the BSA area.

Drainage Features

The drainage features crossing the BSA flow to the northwest into Diamond Bar Creek on the north side of the freeway via cement culverts and pipelines under SR-57/SR-60 freeway. Within the BSA, these include Diamond Bar Creek, which contains native riparian vegetation including mature native trees, and two concrete box culverts associated with the existing freeway. These drainage features are considered jurisdictional waters and/or wetlands of the United States and/or state. Several upland cement-lined v-ditches

which drain the golf course turf areas and one artificial pond (approximately 3.07 ac) are located on the golf course; these features are not considered jurisdictional waters or wetlands.

Just downstream of the site, Diamond Bar Creek is perennial stream course containing native riparian habitat within an approximately 0.75 mile Conservation Easement area owned by the City of Industry. North and west of the project area, the Diamond Bar Creek transitions to a cement-lined flood control channel and undergrounds at the Union Pacific railroad tracks just east of South Lemon Avenue. Diamond Bar Creek then daylight to merge with San Jose Creek (also a cement-lined flood control channel) a short distance to the north-west. San Jose Creek continues west to the San Gabriel River. The San Gabriel River is a cement sided but dirt bottomed flood control channel maintained for flood control but partially vegetated with natural riparian vegetation in various locations. It continues west where it flows into the Pacific Ocean. Diamond Bar Creek, San Jose Creek, and the San Gabriel River are considered Relatively Permanent Waters (RPW) of the U.S., and the Pacific Ocean is considered a Traditionally Navigable Water (TNW) of the U.S.

3.1.3. Biological Conditions in the Biological Study Area

Natural Vegetation Communities

The entire BSA has been previously developed and is covered with golf course including the club house, grounds keeper out-building, and parking lot, roads and sidewalks. Little to no open space is left for natural vegetative communities. Mixed riparian woodland exists within portions of the Diamond Bar Creek where it crosses the golf course but these areas also include ornamental/landscape trees. Native riparian species found at this location include red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), black willow (*Salix gooddingii*), California sycamore (*Platanus racemosa*), and white alder (*Alnus rhombifolia* Nutt.).

Native plant species are sometimes used in landscaping including native shrubs like toyon (*Heteromeles arbutifolium*) and oak trees such as coast live oak (*Quercus agrifolia*), which were found planted along the surface streets and mixed with non-native species. Coast live oak, elderberry (*Sambucus nigra*), and California walnut (*Juglans californica*) were found in the margins of the golf course along Golden Springs Road. While the larger of these trees may have been planted for landscaping, others appeared to be young volunteers.

The existing vegetation is mostly comprised of ruderal and ornamental plants. Ruderal vegetation generally occurs in the margins along the sides of the paved roads within the BSA. Ruderal areas typically have heavily compacted or frequently disturbed soils. These areas are dominated by pioneering herbaceous plants, grasses (i.e., *Bromus* and *Avena* spp.), and noxious weeds, including mustards (i.e., *Brassica* spp., *Hirschfeldia incana*), thistles (i.e., *Silybum marianum*, *Carduus pycnocephalus*, *Centaurea melitensis*), and fennel (*Foeniculum vulgare*). Ornamental vegetation includes commonly-found non-native landscape species used within the Diamond Bar Golf Course and roadway landscaped areas and includes species of turf grasses, flowering annuals, and trees and bushes including eucalyptus trees (*Eucalyptus* spp.), pepper trees (*Schinus* spp.), non-native oak trees (*Quercus ilex* & *Q. suber*), pine trees (*Pinus* spp.), and the London planetree (*Platanus x hispanica*). The vegetative communities found within the BSA are shown in Figure 4, above.

Migration Corridors

Wildlife corridors provide specific opportunities for individual animals to disperse or migrate between other areas. Adequate cover, minimum physical dimensions, and tolerably low levels of disturbance and mortality (e.g., limited night lighting and noise, low vehicular traffic levels) are common requirements for corridors.

The BSA is characterized by ruderal and ornamental vegetation. The drainage tributaries located within the BSA are either piped underground or are concrete channels with high steep walls, and freeway noise and night lighting are currently present. Given some of the physical man-made constraints present for mammals, it is likely that the project site does not provide an important value to the movement of mammals. There is little opportunity for movement of mammal species to the west or north. However, there may be a potential for animals to move from the Diamond Bar Creek Conservation Easement area through the golf course to the Puente Hills, an open space area located to the southwest.

Aquatic Resources

A Jurisdictional Delineation was conducted for the Diamond Bar Golf Course Renovation Project area in September and October 2019. Within the BSA, these include Diamond Bar Creek, which contains native riparian vegetation including mature native trees, and two concrete-lined drainage features associated with the existing freeway.

Invasive Species

As discussed earlier in this Section, the dominant habitat types in the BSA consist of non-native ruderal vegetation and developed areas dominated by ornamental vegetation (Developed/Ornamental).

During the biological reconnaissance surveys conducted for this report, 17 exotic plants on the California Invasive Plant Council's (Cal-IPC) Invasive Plant Inventory were identified in the BSA. Each plant in the inventory is given an overall rating of high, moderate, limited, or unknown. Plants with a rating of high have severe ecological impacts. Plants with a rating of moderate have a substantial and apparent but not severe ecological impact.

Plants with a limited rating are invasive, but their ecological impacts are minor on a Statewide level. The invasive species identified in the BSA and the applicable Cal IPC rating are provided in Table 3.1-1.

Table 3.1-1 Invasive Plants Located within the BSA

Common Name	Scientific Name	Cal-IPC Rating
Cyclops acacia	<i>Acacia cyclops</i>	Watch
Wild oats	<i>Avena</i> sp.	Moderate
Ripgut grass	<i>Bromus diandrus</i>	Moderate
Red brome	<i>Bromus rubens</i>	High
Italian thistle	<i>Carduus pycnocephalus</i>	Moderate
Tocalote	<i>Centaurea melitensis</i>	Moderate
Fennel	<i>Foeniculum vulgare</i>	Moderate
Ngaio tree	<i>Myoporum laetum</i>	Moderate
Tree tobacco	<i>Nicotina glauca</i>	Moderate
Olive tree	<i>Olea europea</i>	Limited
Castor bean	<i>Ricinis communis</i>	Limited
Russian thistle	<i>Salsola tragus</i>	Limited
Peruvian Pepper Tree	<i>Schinus mole</i>	Limited
Brazilian Pepper Tree	<i>Schinus terebenthifolius</i>	Moderate
Milk thistle	<i>Silybum marianum</i>	Limited
Mexican fan palm	<i>Washingtonia robusta</i>	Moderate

Source: Cal-IPC Invasive Plant Inventory (www.cal-ipc.org/plants/inventory/ accessed November 2019) and Sage Environmental Group, 2019.

3.2. Regional Species and Habitats of Concern

Plant and animal species are considered to have special status if they have been listed as such on maintained lists with explicit criteria by federal or state agencies or one or more special interest groups, such as the CNPS. This generally excludes species not concluded to be currently under threat or endangerment (e.g., those simply on “watch” lists or for which further information is solicited). The CDFW publishes comprehensive lists for habitats, plants, and animals through the CNDDDB. These include taxa officially listed by the state and federal governments as endangered, threatened or rare, and candidates for state or federal listing. The USFWS and the National Marine Fisheries Service (NMFS) publish comprehensive lists for habitats, plants, and animals through the USFWS Information for Planning and Consultation (IPaC) and NMFS Species Directory, respectively. As part of the Biological Reconnaissance Survey for the Diamond Bar Golf Course Renovation Project, a query of the CNDDDB for the California Natural Diversity Database (CNDDDB 2020) and the California Native Plant Society’s Inventory of Rare and Endangered Vascular Plants of California (CNPS 2020) were reviewed for the quadrangles containing and surrounding the project site (i.e. *Azusa, Glendora, Mt. Baldy, Ontario, San Dimas, Baldwin Park, La Habra, Yorba Linda, and Prado Dam* California USGS 7.5 minute quadrangles). This covers an area of approximately 21.5 miles x 25.8 miles or approximately 356,000 ac in size. This large of an area will invariably include species and habitats not found within the BSA but the review is useful in that it identifies sensitive species that have either been previously observed within the BSA or within habitats similar to the BSA nearby. The USFWS IPaC resource list NMFS Species Directory were also queried and reviewed.

The review identified 43 special-status plant species, 60 special-status animal species, and 9 sensitive natural communities as historically occurring in the vicinity of the BSA identified from the database query and a determination of the likelihood of occurrence for each species within the study area.

None of the 9 sensitive habitats identified as having a potential to occur are present within the Diamond Bar Golf Course Renovation Project BSA.

Absent

<u>Habitat Type</u>	<u>Status</u>
California Walnut Woodland	S2.1
Southern Arroyo Willow Riparian Forest	S2.1
Southern Sycamore Alder Riparian Woodland	S4
Riversidean Alluvial Fan Sage Scrub	S1.1

Southern Coast Live Oak Riparian Forest	S4
Canyon Live Oak Ravine Forest	S3.3
Southern California Arroyo Chub/Santa Ana Sucker Stream	Unranked
Southern Cottonwood Willow Riparian Forest	S3.2
Walnut Forest	S1.1

Status Codes

S1	=	Critically imperiled in the state because of extreme rarity or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state
S2	=	Imperiled in the state because of rarity because of restricted range, very few populations, steep declines, or other factors making it very vulnerable to extirpation from the nation or state
S3	=	Vulnerable in the state because of a restricted range, relatively few populations, recent or widespread declines, or other factors making it vulnerable to extirpation
S4	=	Uncommon but not rare; some cause for long-term concern because of declines or other factors

Extensions

0.1	=	very threatened
0.2	=	moderate threat
0.3	=	few or no current known threats

3.3. Vegetation

According to the literature review and the reconnaissance survey, a total of 43 sensitive plant species were identified as having a potential to occur within the Diamond Bar Golf Course Renovation Project study limits. Thirty-three (33) of these 43 sensitive plant species are assumed or confirmed absent from the study area, and 10 of these 43 sensitive plant species have a low potential to occur within the study area. The 43 sensitive plant species and their potential to occur within the study area are listed below. A key to the status codes follows this list.

Absent

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status</u>
<i>Arbronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena	CNPS 1B.1
<i>Arctostaphylos glandulosa</i> ssp. <i>Gabrielensis</i>	San Gabriel manzanita	CNPS 1B.2
<i>Atriplex coulteri</i>	Coulter's saltbush	CNPS 1B.2
<i>Atriplex parishii</i>	Parish's brittlebush	CNPS 1B.1
<i>Berberis nevini</i>	Nevin's barberry	FE, SE , CNPS 1B.1
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	FT, SE , CNPS 1B.1
<i>Calochortus clavatus</i> var. <i>gracilis</i>	slender mariposa lily	CNPS 1B.2
<i>Calystegia felix</i>	lucky morning-glory	CNPS 1B.1
<i>Castilleja gleasoni</i>	Mt. Gleason paintbrush	S-Rare, CNPS 1B.2
<i>Cladium californicum</i>	California saw-grass	CNPS 2B.1
<i>Dodecahema leptoceras</i>	slender-horned spineflower	FE, SE , CNPS 1B.1
<i>Dudleya cymosa</i> ssp. <i>Crebrifolia</i>	San Gabriel River dudleya	CNPS 1B.2
<i>Dudleya densifolium</i>	San Gabriel Mountains dudleya	CNPS 1B.1
<i>Dudleya multicaulis</i>	many-stemmed dudleya	CNPS 1B.2
<i>Eriastrum densifolium</i> ssp. <i>Sanctorum</i>	Santa Ana River woollystar	FE, SE , CNPS 1B.1
<i>Fimbristylis thermalis</i>	hot springs fimbristylis	CNPS 2B.2
<i>Galium grande</i>	San Gabriel bedstraw	CNPS 1B.2

<i>Horkelia cuneata</i> ssp. <i>Puberula</i>	mesa horkelia	CNPS 1B.1
<i>Lasthenia glabrata</i> ssp. <i>Coulteri</i>	Coulter's goldfields	CNPS 1B.1
<i>Lilium parryi</i>	lemon lily	CNPS 1B.2
<i>Linanthus concinnus</i>	San Gabriel linanthus	CNPS 1B.2
<i>Monardella australis</i> ssp. <i>Jokerstii</i>	Jokerst's monardella	CNPS 1B.1
<i>Monardella macrantha</i> ssp. <i>Hallii</i>	Hall's monardella	CNPS 1B.3
<i>Muhlenbergia californica</i>	California muhly	CNPS 4.3
<i>Muhlenbergia utilis</i>	aparejo grass	CNPS 2B.2
<i>Navarretia prostrata</i>	prostrate navarretia	CNPS 1B.2
<i>Oreonana vestita</i>	woolly mountain-parsley	CNPS 1B.3
<i>Orobanche valida</i> ssp. <i>valida</i>	Rock Creek broomrape	CNPS 1B.2
<i>Phacelia stellaris</i>	Brand's phacelia	FC, CNPS 1B.1
<i>Senecio aphanactis</i>	rayless ragwort	CNPS 2B.2
<i>Sidalcea neomexicana</i>	Salt Spring checkerbloom	CNPS 2B.2
<i>Symphyotrichum greatae</i>	Greata's aster	CNPS 1B.3
<i>Thelypteris puberula</i> var. <i>sonorensis</i>	Sonoran maiden fern	CNPS 2B.2
<i>Thysanocarpus rigidus</i>	rigid fringepod	CNPS 1B.2

Ten sensitive plant species were determined to have a **low** potential to occur on the study area, due to the presence of moderately disturbed habitat associated with these species. One of these 10 species, Braunton's milk-vetch (*Astragalus brauntonii*), is a federally endangered species.

Low

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status</u>
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	FE, CNPS 1B.1
<i>Calochortus plummerae</i>	Plummer's mariposa lily	CNPS 4.2
<i>Calochortus weedii</i> var. <i>intermedius</i>	intermediate mariposa lily	CNPS 1B.2
<i>Centromadia parryi</i> ssp. <i>Australis</i>	southern tarplant	CNPS 1B.1
<i>Centromadia pungens</i> ssp. <i>Laevis</i>	smooth tarplant	CNPS 1B.1
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	CNPS 1B.1
<i>Imperata brevifolia</i>	California satintail	CNPS 2B.1
<i>Lepidium virginicum</i> var. <i>Robinsonii</i>	Robinson's pepper-grass	CNPS 4.3
<i>Pseudognaphalium leucocephalum</i>	white rabbit-tobacco	CNPS 2B.2
<i>Symphyotrichum defoliatum</i>	San Bernardino aster	CNPS 1B.2

Status Codes

Federal

FE	=	Federally listed; Endangered
FT	=	Federally listed; Threatened
FC	=	Federal Candidate for listing

State

ST	=	State listed; Threatened
SE	=	State listed; Endangered
S-Rare	=	Present in such small numbers throughout its range that it may become endangered if its present environment worsens

CNPS List

1A	=	Plants presumed extinct in California and rare/extinct elsewhere
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1B.1	=	Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California
1B.2	=	Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California
1B.3	=	Plants rare, threatened, or endangered in California and elsewhere; not very threatened in California
2A	=	Plants presumed extirpated in California, but more common elsewhere
2B.1	=	Plants rare, threatened, or endangered in California, but more common elsewhere; seriously threatened in California
2B.2	=	Plants rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California
2B.3	=	Plants rare, threatened, or endangered in California, but more common elsewhere; not very threatened in California
3.1	=	Plants about which more information is needed; seriously threatened in California
3.2	=	Plants about which more information is needed; fairly threatened in California
3.3	=	Plants about which more information is needed; not very threatened in California
4.1	=	Plants of limited distribution; seriously threatened in California
4.2	=	Plants of limited distribution; fairly threatened in California
4.3	=	Plants of limited distribution; not very threatened in California

3.3.1. Sensitive Plant Species Descriptions

The Braunton's milk-vetch is a federally endangered and a CNPS List 1B.1 species. This perennial herb occurs in the carbonate soils of chaparral, coastal sage scrub, closed-cone coniferous forests, and valley and foothill grasslands at elevations up to 2,100 feet amsl. The range of this species includes the hills and basins of Ventura, Los Angeles, Orange, and Riverside counties. Braunton's milk-vetch flowers from March to July and generally germinates following burns and other disturbances. Threats to this species include development and alteration of local fire regimes. This species is considered to be very rare, with little more than ten known occurrences. No suitable habitat for this species occurs with the Diamond Bar Golf Course Renovation Project BSA due to lack of carbonate soils. No focused plant surveys are necessary for this project to address potential impacts to federal- and/or state-listed endangered or threatened plant species.

3.4. Animals

According to the literature review, a total of 60 sensitive wildlife species were identified as existing within the CNDDDB query area. Note that for some species, two different potential for occurrence may be given for various phases of a life history. For example, a species may be assumed absent for nesting, but may have a low potential to occur as a wintering or migrating species.

Due to a lack of suitable soils, habitats, elevation ranges, or other environmental factors, the following 27 species are considered **absent** from the study area for at least some portion of their life histories:

Absent

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status</u>
<i>Atractelmis wawona</i>	Wawona riffle beetle	None
<i>Bombus crotchii</i>	Crotch bumble bee	SSE
<i>Callophrys mossii hidakupa</i>	San Gabriel Mountains elfin butterfly	None
<i>Diplectrona californica</i>	California diplectronan caddisfly	None
<i>Catostomus santaanae</i>	Santa Ana sucker	FT, SSC
<i>Gila orcuttii</i>	arroyo chub	SSC
<i>Rhinichthys osculus ssp. 3</i>	Santa Ana speckled dace	SSC
<i>Oncorhynchus mykiss irideus pop. 10</i>	steelhead - southern California DPS	FE
<i>Anaxyrus californicus</i>	arroyo toad	FE, SSC
<i>Batrachoseps gabrieli</i>	San Gabriel Mountains slender salamander	None
<i>Ensatina eschscholtzii klauberi</i>	large-blotched salamander	WL
<i>Rana boylei</i>	foothill yellow-legged frog	SCT, SSC
<i>Rana muscosa</i>	mountain yellow-legged frog	FE, SE, WL
<i>Anniella stebbinsi</i>	southern California legless lizard	SSC
<i>Arizona elegans occidentalis</i>	California glossy snake	SSC
<i>Phrynosoma blainvillii</i>	coast horned lizard	SSC
<i>Buteo swainsoni</i>	Swainson's hawk	ST
<i>Campylorhynchus brunneicapillus sandiegensis</i>	coastal cactus wren	SSC, BCC
<i>Coturnicops noveboracensis</i>	yellow rail	SSC, BCC
<i>Eremophila alpestris actia</i>	California horned lark	WL
<i>Laterallus jamaicensis coturniculus</i>	California black rail	ST, FP, BCC
<i>Riparia riparia</i>	bank swallow	ST
<i>Dipodomys merriami parvus</i>	San Bernardino kangaroo rat	FE, SCE, SSC
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	SSC
<i>Nyctinomops macrotis</i>	big free-tailed bat	SSC
<i>Ovis canadensis nelsoni</i>	Nelson's bighorn sheep	FP, SSC

Due to a complete lack of or very low quality habitat, significant obstructions between the study area and outside populations (i.e., aquatic-associated species and some of the terrestrial species), poorly documented US ranges (i.e., pocketed free-tailed bat) or the location of the study area being outside of known nesting areas (i.e., tricolored blackbird and black swift), low relative abundances and no recent records within the vicinity of the project site (i.e., yellow-billed cuckoo), and/or the species never being found on the study area during field surveys, the following 14 species are **assumed absent** from the project site for at least some portion of their life histories:

Assumed Absent

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status</u>
<i>Diplectrona californica</i>	California diplectronan caddisfly	None

<i>Taricha torosa torosa</i>	Coast Range newt	SSC
<i>Salvadora hexalepis virgulata</i>	coast patch-nosed snake	SSC
<i>Thamnophis hammondi</i>	two-striped garter snake	SSC
<i>Actinemys marmorata pallida</i> ;	southwestern pond turtle	SSC
<i>Agelaius tricolor</i>	tricolored blackbird	SE (nesting), SSC, BCC
<i>Aquila chrysaetos</i>	golden eagle	FPS , SSC (nesting)
<i>Asio otus</i>	long-eared owl	SSC (nesting)
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FT , SE , BCC
<i>Cypseloides niger</i>	black swift	SSC (nesting), BCC
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	SSC
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	SSC
<i>Chaetodipus fallax fallax</i>	northwestern San Diego pocket mouse	SSC
<i>Taxidea taxus</i>	American badger	SSC

Due to the presence of moderately suitable to good quality habitat and the location of the study area within the known ranges of the species, 22 sensitive wildlife species were determined to have a **low** potential to occur in the study area for at least some portion of their life histories. Two of these species, SWWFC and LBV, are federally and state-endangered species, and the CAGN is a federally threatened species. Two additional species, golden eagle and white-tailed kite, are California Fully-Protected Species.

Low

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status</u>
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	SSC
<i>Aspidoscelis tigris stejnegeri</i>	coastal western whiptail	SSC
<i>Crotalus ruber ruber</i>	northern red-diamond rattlesnake	SSC
<i>Accipiter cooperii</i>	Cooper's hawk	SSC (nesting)
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	WL
<i>Ammodramus savannarum</i>	grasshopper sparrow	SSC (nesting)
<i>Aquila chrysaetos</i>	golden eagle	FP (migrating/foraging/wintering), WL, BCC
<i>Asio otus</i>	long-eared owl	None (migrating/foraging/wintering)

<i>Athene cunicularia</i>	burrowing owl	SSC, BCC
<i>Cypseloides niger</i>	black swift	None (migrating/wintering)
<i>Elanus leucurus</i>	white-tailed kite	FP (nesting)
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	FE, SE (nesting)
<i>Falco columbarius</i>	Merlin	WL (wintering)
<i>Icteria virens</i>	yellow-breasted chat	SSC (nesting)
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE, SE (nesting)
<i>Antrozous pallidus</i>	pallid bat	SSC
<i>Eumops perotis californicus</i>	western mastiff bat	SSC
<i>Lasiurus cinereus</i>	hoary bat	None
<i>Lasiurus xanthinus</i>	western yellow bat	SSC
<i>Myotis yumanensis</i>	Yuma myotis	None
<i>Polioptila californica californica</i> ¹	coastal California gnatcatcher	FT, SSC

Due to the presence of moderately suitable to good quality habitat, 6 sensitive wildlife species were determined to have a **moderate** potential to occur in the study area for at least some portion of their life histories. In addition, one individual tricolored blackbird within a red-winged blackbird flock was observed within the BSA in 2003 during the SR-57/SR-60 SR-57/SR-60 confluence at the Grand Avenue interchange biological surveys.

Moderate

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status</u>
<i>Agelaius tricolor</i>	tricolored blackbird	SSC, BCC (migrating/foraging/wintering)
<i>Chaetura vauxi</i>	Vaux's swift	None (migrating/foraging/wintering)
<i>Circus cyaneus</i>	northern harrier	None (migrating/foraging/wintering)
<i>Elanus leucurus</i>	white-tailed kite	FP (migrating/foraging/wintering)
<i>Empidonax traillii</i>	willow flycatcher	None
<i>Nyctinomops macrotia</i>	big free-tailed bat	SSC

The following four sensitive species were confirmed **present** adjacent to the BSA since 2007 along the riparian corridor located on the north side of the SR-57/SR-60. The LBV is a federally and state-endangered species and the CAGN is a federally threatened species. The Golf Course BSA does not include suitable foraging or nesting habitat for either species.

Present adjacent to the BSA

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status</u>
<i>Accipiter cooperii</i>	Cooper's hawk	None (migrating/foraging/wintering)
<i>Accipiter striatus</i>	sharp-shinned hawk	WL (migrating/foraging/wintering)
<i>Setophaga petechia</i>	Yellow warbler	SSC (migrating/foraging/wintering), BCC
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE, SE (nesting)

¹ Year 2010 FWS protocol surveys were performed for this species adjacent to the BSA along Diamond Bar Creek. The surveys resulted in negative findings, the species is not present.

The following two sensitive species were confirmed **present** adjacent to the BSA since 2007 along the riparian corridor located on the north side of the SR-57/SR-60. No nests or nesting activities for these two species were observed during prior or current surveys within the Golf Course BSA.

Present within BSA

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status</u>
<i>Accipiter cooperii</i>	Cooper's hawk	None (migrating/foraging/wintering)
<i>Accipiter striatus</i>	sharp-shinned hawk	WL (migrating/foraging/wintering)

Status Codes

Federal

FE	=	Federally listed; Endangered
FT	=	Federally listed; Threatened
FC	=	Federal Candidate for listing
FD	=	Federally Delisted
BCC	=	Birds of Conservation Concern

State

ST	=	State listed; Threatened
SE	=	State listed; Endangered
SCE	=	State candidate; Endangered
SCT	=	State candidate; Threatened
FP	=	CDFW Fully-Protected Species
SSC	=	CDFW Species of Special Concern
WL	=	CDFW Watch List

Chapter 4. Results: Biological Resources, Discussion of Impacts and Mitigation

4.1. Natural Communities of Special Concern

4.1.1. Discussion of Natural Communities

No natural communities of special concern are located within the BSA. Vegetation communities identified and mapped within the BSA include approximately 1.6 ac of ruderal vegetation, 164.0 ac of ornamental vegetation including 2.1 ac of landscaped streambed, 1.6 ac of jurisdictional waters, and 9.0 ac of developed area, including an artificial pond (Figure 4).

4.1.1.1. SURVEY RESULTS

The project would result in temporary and permanent impacts to ruderal, ornamental, jurisdictional waters, and developed areas.

Implementation of Diamond Bar Golf Course Renovation Project would result in temporary impacts to approximately 51.7 ac of ornamental vegetation associated with recontouring of the golf course. Relocation of Hole #8, maintenance facility and protective netting improvements will result in the permanent loss of approximately 0.6 ac of ruderal vegetation, 5.6 ac of ornamental vegetation including 0.5 ac of landscaped streambed, 0.4 ac of jurisdictional waters. None of these communities are considered to be natural communities of special concern.

Although not separate communities, there are a few individual native riparian trees and shrubs located within and around the landscaped Diamond Bar Creek within the BSA. These native trees include coast live oak (*Quercus agrifolia*), red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), black willow (*Salix gooddingii*), California sycamore (*Platanus racemosa*), white alder (*Alnus rhombifolia* Nutt.), and California walnut (*Juglans californica*). Based on review of the proposed site plans, approximately 29 native trees are located within the proposed project's construction footprint. The native trees identified in the BSA and potentially affected by project implementation are provided in Table 4.1-1.

Table 4.1-1 Native Trees Located within the BSA

Common Name	Scientific Name	Within the BSA	Within the Project Construction Footprint
Coast live oak	<i>Quercus agrifolia</i>	33	1
Red willow	<i>Salix laevigata</i>	6	6
Arroyo willow	<i>Salix lasiolepis</i>	8	8
Black willow	<i>Salix gooddingii</i>	2	2
California sycamore	<i>Platanus racemosa</i>	26	6
California cottonwood	<i>Populus fremontii</i>	2	1
California walnut	<i>Juglans californica</i>	24	2
White alder	<i>Alnus rhombifolia</i> <i>Nutt.</i>	21	3
TOTAL		124	29

4.1.1.2. AVOIDANCE AND MINIMIZATION EFFORTS

The proposed project avoids impacts to native trees located within the golf course to the extent feasible. Indirect impacts to roots and canopy of native trees on adjacent property may occur as a result of work within five feet outside the dripline, or 15 feet from the trunks of a tree, whichever distance is greater. If substantial impacts to roots and canopy of trees on adjacent property occur, it may result in the eventual deterioration and loss of the tree. Avoidance and minimization efforts will be implemented as applicable to native trees located in areas adjacent to the impact area (i.e., not planned for removal).

BIO-Avoid 1 To ensure the construction footprint within the BSA is minimized to the extent practicable adjacent to areas containing native trees, a qualified biological monitor will flag and stake the construction limits in the field in coordination with the contractor. The biological monitor will be onsite during construction to ensure the protection of the drip line area of adjacent native trees

and that construction limits are enforced. The biological monitor will have the authority to halt construction if required to ensure compliance.

4.1.1.3. PROJECT IMPACTS

The project would require the removal of between 150 to 200 trees. Of these, up to 29 native trees may be affected, as listed in Table 4.1-1, above. As the design of the project is finalized, field review by a certified arborist to determine the extent of impacts to native trees will be conducted, with removal of native trees avoided to the greatest extent possible.

Short-term indirect effects associated with the construction of the proposed project may include potential fuel or lubricant spills from equipment and vehicles; activities of equipment, vehicles, or personnel outside of designated construction areas; increased erosion, siltation and runoff; increased localized noise and vibration; and increase dust accumulation on plant leaves. Implementation of Best Management Practices (BMPs) as defined in the Storm Water Pollution Prevention Program (SWPPP) and restricting activities to within the designated construction areas would minimize these effects.

Long-term indirect impacts to sensitive riparian habitat could result from impacts to water quality. The proposed project includes long-term water quality treatment facilities designed to accommodate and treat onsite generated runoff to ensure that no substantial adverse impacts occur to Diamond Bar Creek located downstream of the project site as a result of golf course operations. The project is not anticipated to result in other long-term indirect impacts to sensitive habitats, including shading from retaining walls, fragmentation or adverse effects to adjacent habitat.

4.1.1.4. COMPENSATORY MITIGATION

Native trees measuring eight inches more in diameter at breast height (DBH) impacted by project implementation will be mitigated as follows:

BIO-Mitigation 1: Native trees measuring eight inches more in diameter at breast height (DBH) impacted by project implementation will be replaced at a minimum of 3:1 ratio.

BIO-Mitigation 2: . If native tree branches are to be pruned that are over four inches in diameter at the point of the cut, the maximum amount allowed for the pruning of a native tree will be 20 percent, except for oak trees which will be ten percent. Where roots less than one inch in diameter are damaged or

exposed, the roots shall be cleanly saw cut and covered with soil in conformance with industry standards. If more extensive pruning is required, native tree replacement will occur (**BIO-Mitigation 1**).

BIO-Mitigation 3: Source materials for replacement of trees shall be of the same subspecies and/or variety locally present and from seeds or cuttings gathered within coastal southern California to ensure local provenance. Locations for the tree planting will be within the Diamond Bar Golf Course and immediately surrounding areas, including the downstream portion of Diamond Bar Creek owned by the City of Industry, located along the westbound side of the SR57/60 freeway, immediately west of Grand Avenue.

4.1.1.5. CUMULATIVE IMPACTS

Because impacts to mature native trees within the BSA will be offset by planting like-in-kind trees at a minimum 3:1 ratio within the Diamond Bar Golf Course and immediately surrounding areas, including the adjacent portion of Diamond Bar Creek owned by the City of Industry, the project is not expected to contribute to cumulative effects to mature trees in the region.

4.2. Jurisdictional Waters

4.2.1.1. SURVEY RESULTS

The 2019 *Jurisdictional Delineation* indicated the presence of 1.7 ac of waters of the United States, including 0.4 ac of wetlands, and 2.1 ac of additional waters of the State (e.g. associated riparian vegetation), located within the BSA, as shown on Figure 5a-g, below. Current engineering design plans indicate the undergrounding of one segment of Diamond Bar Creek along Hole #8 to accommodate the planned SR-57/SR-60 freeway improvements, and the following golf course-associated improvements: widening of Diamond Bar Creek within the practice range area located west of Hole #1, installation of protective netting, and relocation of one box culvert associated with maintenance facility improvements.

4.2.1.2. AVOIDANCE AND MINIMIZATION EFFORTS

The proposed project avoids and minimizes permanent impacts to jurisdictional waters and wetlands to the extent feasible. Temporary impacts associated with the proposed undergrounding and widening are collectively are minimal.

4.2.1.3. PROJECT IMPACTS

Implementation of Golf Course Renovation Project would result in the permanent loss of approximately 0.8 ac of waters of the State, including 0.4 ac of United States, of which 0.2 ac are wetlands.

It is anticipated that resource agency permits will be required for the proposed undergrounding and widening of jurisdictional waters from the ACOE, RWQCB, and the CDFW under Section 404 and 401 of federal CWA and Section 1600 of the State Fish and Game Code, respectively.

BIO-Mitigation 4: A Nationwide Permit shall be obtained through USACE prior to obtaining grading permits, pursuant to Section 404 of the Clean Water Act. A certification or waiver from the Region 4 RWQCB shall be obtained prior to the initiation of construction. A Streambed Alteration Notification shall be submitted, and authorization from CDFW shall be obtained prior to obtaining grading permits.

Indirect effects to wetlands and other waters may include: (1) changes in hydrology from increased sediment entering drainage areas after vegetation clearing, and/or (2) spread of invasive, non-native plants that are carried on construction equipment during earth-moving activities. These indirect effects would only last during construction.

To minimize the potential for invasive, non-native plant transport, the following measure shall be implemented.

BIO-Minimization 1: Construction equipment shall be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential for spreading noxious weeds (before arriving at the site and before leaving).

4.2.1.4. COMPENSATORY MITIGATION

BIO-Mitigation 5: A Habitat Mitigation Monitoring Plan (HMMP) shall be prepared and approved by USACE, RWQCB and CDFW prior to the commencement of construction within jurisdictional waters. At a minimum, the HMMP shall meet the following criteria:

- a. Jurisdictional waters shall be replaced and/or enhanced at a minimum ratio of 1:1,

- b. The HMMP shall identify a success criterion of at least 80 percent for native riparian vegetation cover of replaced habitat, and
- c. The HMMP shall include a 5-year establishment period for replacement habitat, regular trash removal, and regular maintenance and monitoring activities to ensure the success of the mitigation plan.

4.2.1.5. CUMULATIVE EFFECTS

Because impacts to jurisdictional waters within the BSA will be offset by the expansion of contiguous waters and wetlands at a 2:1 ratio immediately adjacent to the BSA along Diamond Bar Creek within the same watershed, the project is not expected to contribute to cumulative effects to waters and wetlands in the region.

4.3. Special Status Plant Species

No listed sensitive plant species are located within the BSA. No federally-designated critical habitat is present within the BSA.

4.4. Special Status Animal Species Occurrences

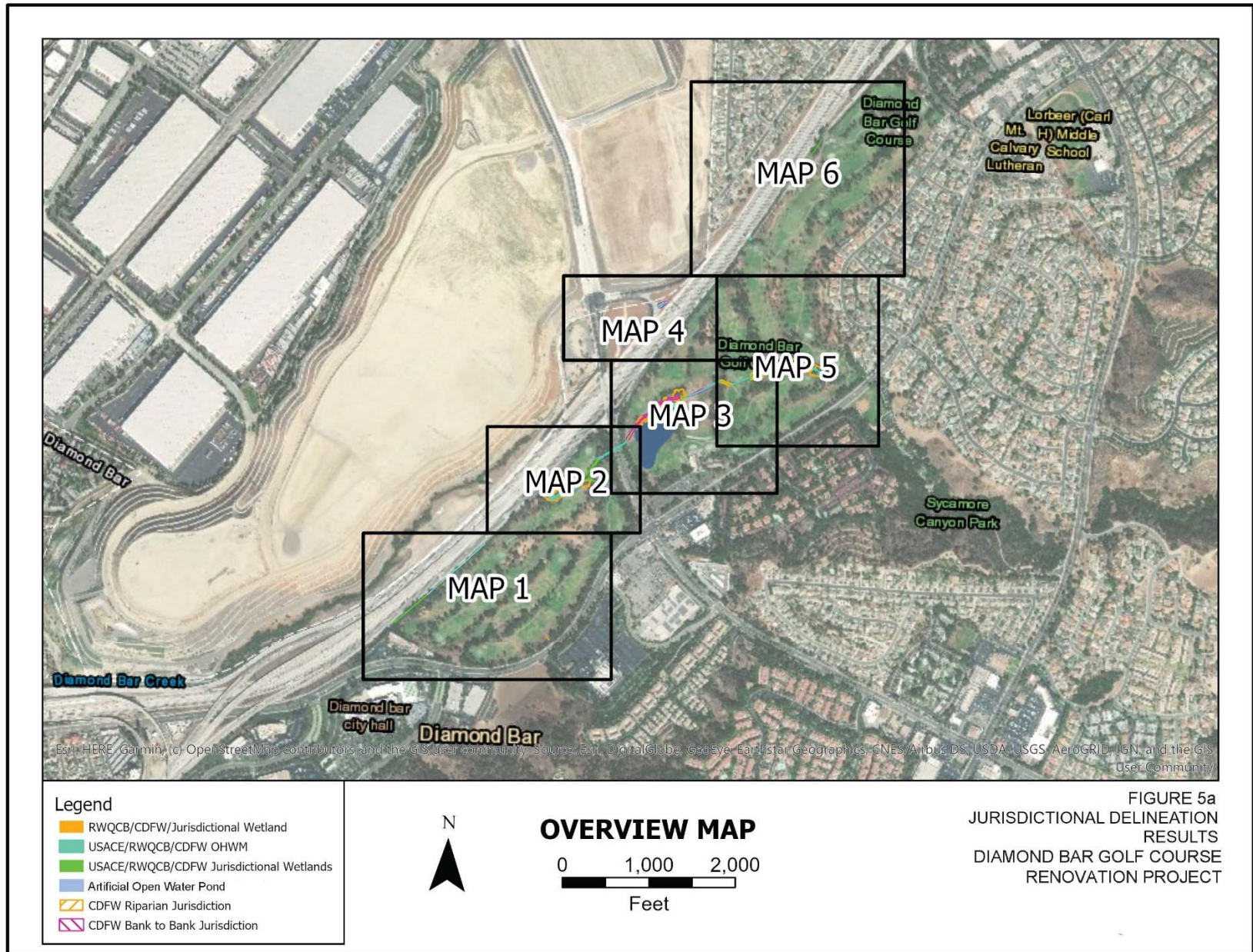
Sensitive wildlife species documented as present within the BSA are limited to raptors and other species protected by the MBTA. Cooper's hawk (*Accipiter cooperii*) and sharp-shinned hawk (*Accipiter striatus*) were observed onsite during the April 2020 and prior surveys. These species appear to utilize the BSA for wintering and foraging only, as no nesting activity has been documented. No federally-designated critical habitat is present within the BSA.

The MBTA and the California Fish and Game Code prohibit impacts to most native species of nesting birds. The trees and shrubs within and adjacent to the BSA may provide suitable nesting sites for a variety of species, including raptors and species protected by the MBTA, which are protected pursuant to these regulations.

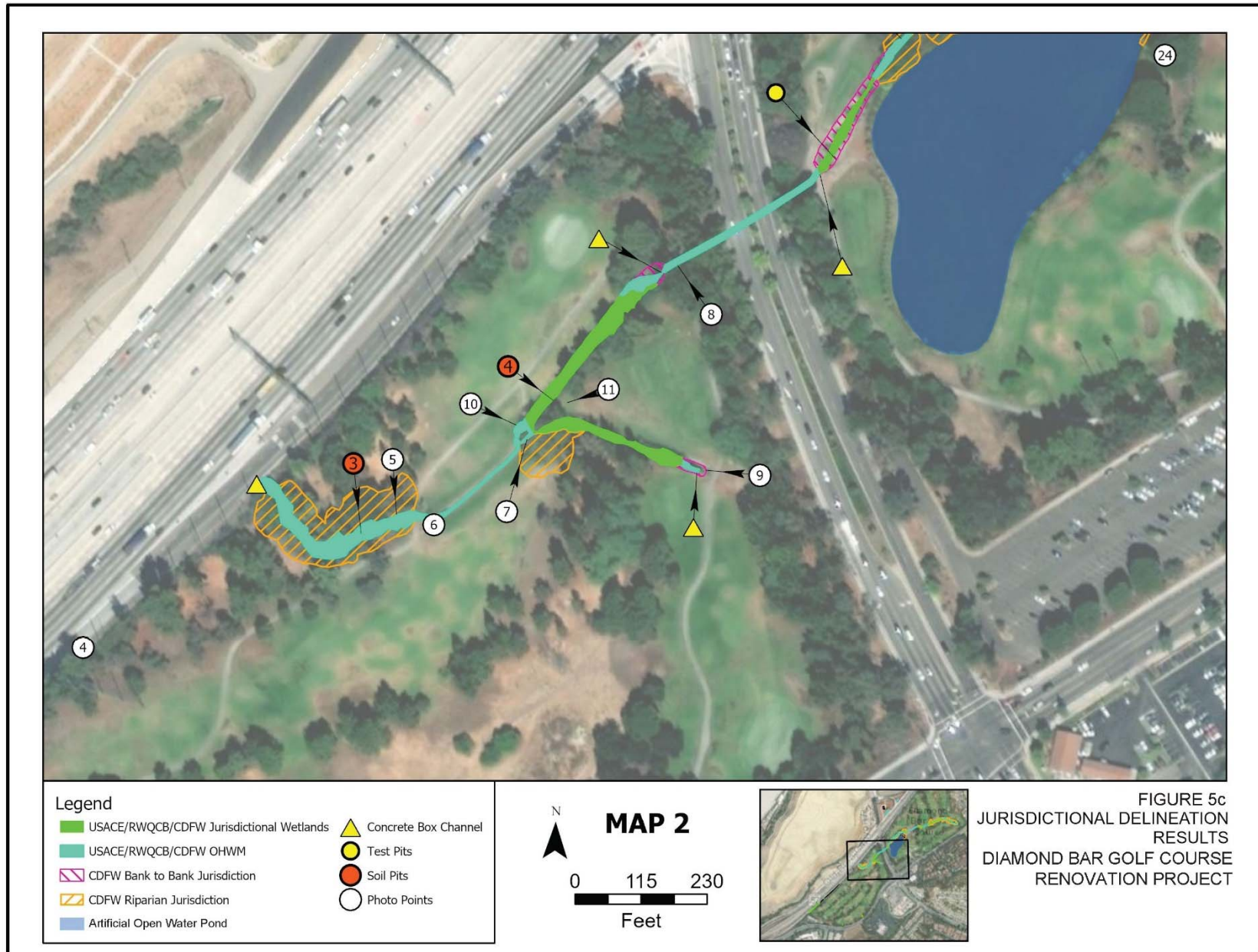
Recent interest in the sustainability of the monarch butterfly (*Danaus plexippus plexippus*) in the western hemisphere leads us to consider what impacts the proposed project might have on this species of butterfly.

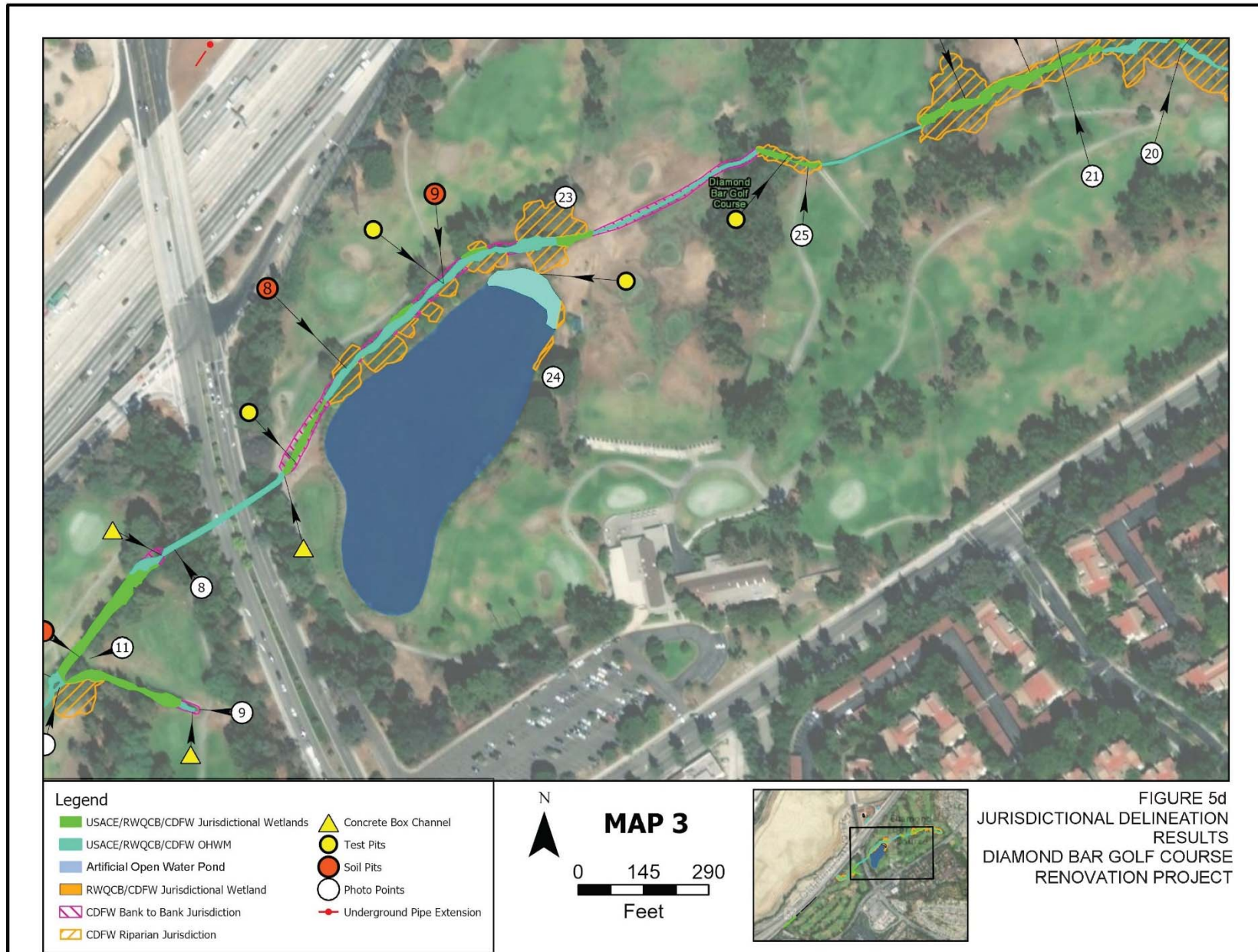
4.4.1. Nesting Birds

The trees and shrubs within the BSA may provide suitable nesting sites for a variety of these species. Suitable raptor nesting habitat within the BSA occurs where large sized trees are located. Tall eucalyptus trees are often used by raptors for nesting.

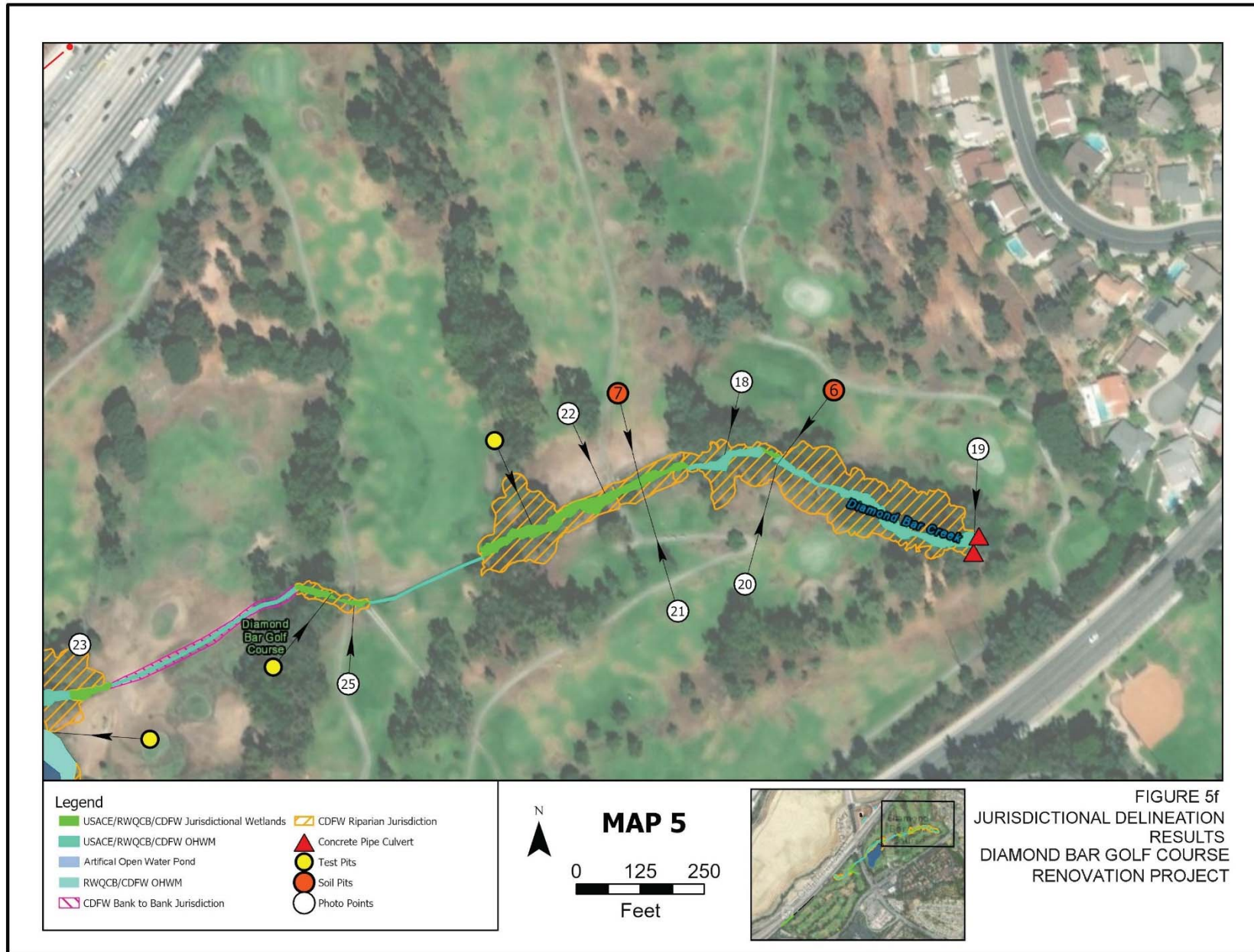














4.4.1.1. SURVEY RESULTS

A nesting bird survey was conducted in April 2020 within the bird nesting season, as defined by USFWS regulations as February 15 through September 15, to identify nesting activity and nest presence with the BSA. All bird species observed were noted with special attention to any raptors observed. Tall trees were examined for the presence of raptor nests. Vegetation density in some trees was very dense making it difficult to see if a nest was present, so it was important to look for signs of breeding/nesting behavior. Tall trees adjacent to the golf course along Golden Springs Drive were also included in the survey. Bird species observed during the survey include:

<u>Scientific Name</u>	<u>Common Name</u>
Podicipedidae	Grebes
<i>Podilymbus podiceps</i>	Pied-billed Grebe
Ardeidae	Herons and Bitterns
<i>Ardea alba</i>	Great Egret
Anatidae	Swans, Geese, and Ducks
<i>Branta canadensis</i>	Canada Goose
<i>Anas platyrhynchos</i>	Mallard
Accipitriidae	Hawks, Old World Vultures, and Harriers
<i>Buteo lineatus</i>	Red-shouldered Hawk
<i>Buteo jamaicensis</i>	Red-tailed Hawk
Rallidae	Rails, Gallinules, and Coots
<i>Fulica americana</i>	American Coot
Columbidae	Pigeons and Doves
<i>Columba fasciata</i>	Band-tailed Pigeon
<i>Streptopelia decaocto</i> *	Eurasian Collared Dove
<i>Zenaida macroura</i>	Mourning Dove
Apodidae	Swifts
<i>Aeronautes saxatalis</i>	White-throated Swift
Trochilidae	Hummingbirds
<i>Calypte anna</i>	Anna's Hummingbird
<i>Selasphorus sasin</i>	Allen's Hummingbird
Picidae	Woodpeckers and Wrynecks
<i>Melanerpes formicivorus</i>	Acorn Woodpecker
<i>Picoides nuttallii</i>	Nuttall's Woodpecker
Tyrannidae	Tyrant Flycatchers
<i>Empidonax difficilis</i>	Pacific-Slope Flycatcher
<i>Sayornis nigricans</i>	Black Phoebe
<i>Myiarchus cinerascens</i>	Ash-throated Flycatcher
<i>Tyrannus vociferans</i>	Cassin's Kingbird
Vireonidae	Typical Vireos
<i>Vireo gilvus</i>	Warbling Vireo
Corvidae	Jays, Magpies, and Crows
<i>Corvus corax</i>	Common Raven
Aegithalidae	Bushtit

<i>Psaltiriparus minimus</i>	Bushtit
Troglodytidae	Wrens
<i>Thryomanes bewickii</i>	Bewick's Wren
Turdidae	Thrushes, Robins, Chats and Wheatears
<i>Sialia mexicana</i>	Western Bluebird
<i>Turdus migratorius</i>	American Robin
Mimidae	Mockingbirds and Thrashers
<i>Mimus polyglottos</i>	Northern Mockingbird
Sturnidae	Starlings & Allies
<i>Sturnus vulgaris</i> *	European Starling
Parulidae	Wood Warblers and relatives
<i>Dendroica petechia</i>	Yellow Warbler
<i>Dendroica coronata</i>	Yellow-rumped Warbler
Thraupidae	Tanagers
<i>Piranga ludoviciana</i>	Western Tanager
Emberizidae	Emberizines
<i>Pipilo maculatus</i>	Spotted Towhee
<i>Spizella passerina</i>	Chipping Sparrow
<i>Melospiza melodia</i>	Song Sparrow
Cardinalidae	Cardinals, Grosbeaks & Allies
<i>Pheucticus melanocephalus</i>	Black-headed Grosbeak
Icteridae	Blackbirds, Orioles & Allies
<i>Molothrus ater</i>	Brown-headed Cowbird
<i>Icterus cucullatus</i>	Hooded Oriole
<i>Icterus bullockii</i>	Bullock's Oriole
Fringillidae	Finches
<i>Haemorhous mexicanus</i>	House Finch
<i>Carduelis psaltria</i>	Lesser Goldfinch
<i>Carduelis tristis</i>	American Goldfinch
Passeridae	Old World Sparrows
<i>Passer domesticus</i> *	House Sparrow

*non-native species

No active raptor nesting was observed on site during the survey. Several Red-tailed Hawks and Red-shouldered Hawks were observed during the survey but for the most part they were seen flying high overhead and typically over the hills off to the east. One adult Red-tailed hawk was briefly observed in a pine tree on the golf course just east of Grand Avenue near the artificial pond and an adult Red-shouldered Hawk was observed in a eucalyptus tree north of the pond near the driving range. No nests or nesting behavior was observed. A pair of Red-shouldered Hawks was observed mobbing a pair of Red-tailed Hawks over the residential development east of Golden Springs Drive suggesting the presence of a nest in the trees in that area.

Given the number of tall mature trees on the golf course it would not have been surprising to find an active raptor nest on site. Raptors are known to nest in golf

course trees at other sites. It is suggested that pre-construction nest surveys be conducted prior to any tree removal scheduled to occur during the nesting season.

4.4.1.2. AVOIDANCE AND MINIMIZATION EFFORTS

Potential direct impacts to protected species are limited to migratory birds protected under the MBTA.

BIO-Avoid 2: To the extent feasible, grubbing of vegetation and tree removal within the construction footprint will occur outside of the bird nesting season, as defined by USFWS regulations as February 15 through September 15, to avoid potential impacts to nesting birds. However, should work commence during the nesting season, a preconstruction nest survey will be conducted by a qualified biologist within three days prior to the start of construction to ensure no impacts to nesting birds occur. The survey will be conducted within the proposed impact area and adjacent suitable habitat up to 500 feet outside the construction footprint. Should nesting birds be present, no work shall be conducted within a minimum of 50 feet of that area until the young have fledged and are no longer affected by the project, as determined by the qualified biologist.

4.4.1.3. PROJECT IMPACTS

Direct impacts to nesting birds could occur if an active nest is removed or if nesting birds are disturbed as a result of construction activities to the extent that they abandon the nest. The MBTA and California Fish and Game Code prohibit impacts that cause nest failure of most species of birds, and the avoidance and minimization measures described in Section 4.4.1.2 are anticipated to ensure that no nest loss occurs.

4.4.1.4. COMPENSATORY MITIGATION

As discussed in Section 4.1.1.4 of this document, impacts to mature native trees will be offset with the same species at a 3:1 for native species. No additional compensatory mitigation is required.

4.4.1.5. CUMULATIVE EFFECTS

Project impacts to nesting birds are limited to the removal of trees and shrubs along the project's active golf course and adjacent roadways. These resources are less suitable for nesting than other resources throughout the region due to their proximity to roadways and the resulting noise and human disturbance. Potential impacts from tree removal will be minimized and avoided through the planting of replacement

trees. Therefore, temporary impacts to these resources are not anticipated to result in a cumulatively considerable contribution to impacts to nesting sites throughout the region.

4.4.2 Monarch Butterfly

The monarch butterfly did not come up in our search of the CNDDDB. However, it does come up in the CNDDDB for quads along the coast from Mendocino to San Diego Counties. These occurrences are for wintering populations as California populations of the monarch butterfly do not fly to Mexico in the winter but migrate to suitable wintering habitat in groves of trees along the coastal border of the state. In late winter/spring, they start to migrate inland feeding on flower nectar and laying their eggs on milkweed plants (*Asclepias* spp.). Monarch caterpillars only feed on milkweed plants and are known to roost in eucalyptus, Monterey pines and Monterey cypresses in California trees. Several generations of monarchs live through the breeding season and the last generation makes its way back west to the coast during the late summer and fall where they wait for the next breeding season.

The wintering populations are ranked as S2S3 by the CDFW. This indicates that the state wildlife agency views the status of the wintering monarch as between S2 and S3. S2 being Imperiled and S3 being Vulnerable. Monarch wintering sites are considered sensitive. The species has been under Special Status Assessment and Status Review by the USFWS since 2014 with a decision expected in December 2020.

4.4.2.1 SURVEY RESULTS

While wintering populations are considered an Imperiled/Vulnerable species by the CDFW and the species is undergoing Status Review by the USFWS, the monarch butterfly is not a listed species. Its wintering habitat along the coast is considered sensitive by the CDFW but no wintering sites exist within or near the Project area. Breeding season areas are characterized by the presence of various species of milkweed (*Asclepias* spp.), none of which has been observed in the Project area. If present, it would likely be found in ruderal areas or on flowering ornamental or landscape plants. It is likely that individual monarch butterflies fly through and in the vicinity of the Project area during the breeding season feeding on any flowers blooming at the time. Breeding is unlikely except where milkweed is found. There are no records of milkweed occurring within the BSA and therefore the monarch butterfly is not expected to breed within the BSA.

Chapter 5. Results: Permits and Technical Studies for Special Laws or Conditions

5.1. Federal Endangered Species Act Consultation Summary

No consultation is required for Federal Endangered Species Act as these resources have been determined to be absent from the BSA.

5.2. Federal Fisheries and Essential Fish Habitat Consultation Summary

No consultation is required for Federal Fisheries and Essential Fish Habitat, as these resources have been determined to be absent from the BSA.

5.3. California Endangered Species Act Consultation Summary

No consultation is required pursuant to CESA, as resources subject to CESA have been determined to be absent from the BSA.

5.4. Wetlands and Other Waters Coordination Summary

It is anticipated that resource agency permits will be required from the ACOE, RWQCB, and the CDFW under Sections 404 and 401 of the federal CWA and Section 1600 of the State Fish and Game Code, respectively, for the impacts to jurisdictional waters and wetlands associated with the Golf Course Renovation Project.

5.5. Invasive Species

Post-project restoration monitoring within the downstream Diamond Bar Creek migration area is required to include invasive vegetation control as required by the ACOE, RWQCB, and the CDFW through the Section 404 and 401 of the federal CWA and Section 1600 of the State Fish and Game Code compliance process.

5.6. Other

No consultation is required for other topics. Section 3.1.3 of this Biological Survey Report includes relevant information pertaining to the MBTA and wildlife corridors. No additional information is required.

Chapter 6. References

California Department of Fish and Wildlife (CDFW)

- 1994. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607. Environmental Services Division.
- 2005. *State and Federally Listed Endangered and Threatened Animals of California*. State of California Resources Agency. Sacramento, California. July.
- 2006. *Special Animals*. State of California Resources Agency. Sacramento, California. July.
- 2007. National Wetland Inventory 2007 <http://wetlandsfws.er.usgs.gov>. Accessed November 2007.

California Native Plant Society, Rare Plant Program (CNPS).

- 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.45). Azusa, Glendora, Mt. Baldy, Ontario, San Dimas, Baldwin Park, La Habra, Yorba Linda, and Prado Dam, California USGS 7.5-minute quadrangles. Website <http://www.rareplants.cnps.org> (accessed 27 May 2020).

California Natural Diversity Database (CNDDDB).

- 2020. Azusa, Glendora, Mt. Baldy, Ontario, San Dimas, Baldwin Park, La Habra, Yorba Linda, and Prado Dam, California USGS 7.5-minute quadrangles. (accessed 27 May 2020).

GPA Consulting.

- 2019. Amendment to the Natural Environment Study for the State Route 57/State Route 60 Confluence at Grand Avenue Project, Cities of Industry and of Diamond Bar, CA.

Hickman, J. C., editor.

- 1993. *The Jepson manual: higher plants of California*. University of California Press, Berkeley and Los Angeles. 1400 pp.

Holland, R. F.

- 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Unpublished report available from California Department of Fish and Game, Sacramento, California.

Munz, P. A.

- 1974. *A Flora of Southern California*. University of California Press, Berkeley, California.

Jones and Stokes.

- 2003. Draft Biological Resources Impact Analysis for the Proposed Industry Business Center Project. City of Industry, Los Angeles County, California.

Reed, Jr., P. B.

- 1988. National List of Plant Species That Occur in Wetlands: Intermountain (Region 8). U.S. Fish and Wildlife Service Biological Report 88 (26.8).

Sage Environmental Group

- 2007. Draft - Jurisdictional Determination and Wetland Delineation SR-57/SR-60 Confluence Grand Avenue Interchange Improvement Project City of Diamond Bar, Los Angeles County, California. Electronic mapping. September, 2007.
- 2007. Results of Focused Least Bell's Vireo and Southwestern Willow Flycatcher Surveys SR-57/SR-60 Confluence Grand Avenue Interchange Improvement Project City of Diamond Bar, Los Angeles County, California. Letter Report. October 30, 2007.
- 2008. Results of Biological Constraints Evaluation SR-57/SR-60 Confluence Grand Avenue Interchange Improvement Project City of Diamond Bar, Los Angeles County, California. Letter Report. April 15, 2008.
- 2008. Results of Focused Least Bell's Vireo and Southwestern Willow Flycatcher Surveys SR-57/SR-60 Confluence Grand Avenue Interchange Improvement Project City of Diamond Bar, Los Angeles County, California. Letter Report. November 9, 2008.
- 2008. Results of Plant Survey for the Federally-listed Endangered Branton's Milk-vetch Project: Expanded Alignment - SR-57/SR-60 Confluence Grand Avenue Interchange Improvement Project, City of Industry, Los Angeles County, California. Letter Report. November 9, 2008.

Sawyer and Keeler-Wolf

- 1995. Sawyer, J. O., and T. Keeler-Wolf. 1995. A Manual of California Vegetation. Sacramento, California.
- 2009. Sawyer, J. O., T. Keeler-Wolf, J. M. Evans. 2009. A Manual of California Vegetation. Second Edition., California Native Plant Society Press. Sacramento, California.

United States Army Corps of Engineers. (ACOE)

- 1987. Corps of Engineers Wetlands Determination Manual. U.S. Army Corps of Engineers. Washington, D.C.

U.S. Department of Agriculture Soil Conservation Service.

2019. Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at the following link: <https://websoilsurvey.sc.egov.usda.gov/>. Accessed (October 25, 2019).
- United States Fish and Wildlife Service (FWS)
1986. Endangered and threatened wildlife and plants; Final rule determining endangered status for the least Bell's vireo. Federal Register 51: 16474-16482.
1993. Endangered and threatened wildlife and plants; determination of threatened status for the coastal California gnatcatcher. Final rule. Federal Register 58: 16742-16757.
1994. Endangered and threatened wildlife and plants; Final determination of critical habitat for the least Bell's vireo. Federal Register 59: 4845-4867.
1995. Endangered and threatened wildlife and plants; Final rule determining endangered status for the southwestern willow flycatcher. Federal Register 60: 10694-10715.
1997. Endangered and threatened wildlife and plants; Final determination of critical habitat for the southwestern willow flycatcher. Federal Register 62: 39129-39147.
2020. United States Fish and Wildlife Service (USFWS) Information for Planning and Conservation Database. (Accessed May 27, 2020).

Appendix A

Site Photographs



Photo 1: Typical of golf course field of play areas.



Photo 2: Diamond Bar Creek near Hole #8 depicts ornamental landscape found present throughout the golf course site.



Photo 3: Ornamental pond and surrounding golf course turf and landscaped area.



Photo 4: Driving range area proposed for re-contouring.

Appendix B
California Natural Diversity Data Base
and IPaC Lists



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Azusa (3411728) OR Glendora (3411727) OR Mt. Baldy (3411726) OR Ontario (3411716) OR San Dimas (3411717) OR Baldwin Park (3411718) OR La Habra (3311788) OR Yorba Linda (3311787) OR Prado Dam (3311786))

Diamond Bar Golf Course Renovation Project

Table with 7 columns: Species, Element Code, Federal Status, State Status, Global Rank, State Rank, Rare Plant Rank/CDFW SSC or FP. Rows include species like Abronia villosa var. aurita, Accipiter cooperii, Agelaius tricolor, Aimophila ruficeps canescens, Ammodramus savannarum, Anaxyrus californicus, Anniella stebbinsi, Antrozous pallidus, Aquila chrysaetos, Arctostaphylos glandulosa ssp. gabrielensis, Arizona elegans occidentalis, Asio otus, Aspidoscelis hyperythra, Aspidoscelis tigris stejnegeri, Astragalus brauntonii, Athene cunicularia, Atractelmis wawona, Atriplex coulteri, and Atriplex parishii.



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Batrachoseps gabrieli</i> San Gabriel slender salamander	AAAAD02110	None	None	G2G3	S2S3	
<i>Berberis nevinii</i> Nevin's barberry	PDBER060A0	Endangered	Endangered	G1	S1	1B.1
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
<i>Brodiaea filifolia</i> thread-leaved brodiaea	PMLIL0C050	Threatened	Endangered	G2	S2	1B.1
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
California Walnut Woodland California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
<i>Callophrys mossii hidakupa</i> San Gabriel Mountains elfin butterfly	IILEPE2206	None	None	G4T1T2	S1S2	
<i>Calochortus clavatus var. gracilis</i> slender mariposa-lily	PMLIL0D096	None	None	G4T2T3	S2S3	1B.2
<i>Calochortus plummerae</i> Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
<i>Calochortus weedii var. intermedius</i> intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T2	S2	1B.2
<i>Calystegia felix</i> lucky morning-glory	PDCON040P0	None	None	G1Q	S1	1B.1
<i>Campylorhynchus brunneicapillus sandiegensis</i> coastal cactus wren	ABPBG02095	None	None	G5T3Q	S3	SSC
Canyon Live Oak Ravine Forest Canyon Live Oak Ravine Forest	CTT61350CA	None	None	G3	S3.3	
<i>Castilleja gleasoni</i> Mt. Gleason paintbrush	PDSCR0D140	None	Rare	G2	S2	1B.2
<i>Catostomus santaanae</i> Santa Ana sucker	AFCJC02190	Threatened	None	G1	S1	
<i>Centromadia parryi ssp. australis</i> southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
<i>Centromadia pungens ssp. laevis</i> smooth tarplant	PDAST4R0R4	None	None	G3G4T2	S2	1B.1
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	AMAFD05031	None	None	G5T3T4	S3S4	SSC
<i>Chorizanthe parryi var. parryi</i> Parry's spineflower	PDPGN040J2	None	None	G3T2	S2	1B.1
<i>Cladium californicum</i> California saw-grass	PMCYP04010	None	None	G4	S2	2B.2
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Coturnicops noveboracensis</i> yellow rail	ABNME01010	None	None	G4	S1S2	SSC
<i>Crotalus ruber</i> red-diamond rattlesnake	ARADE02090	None	None	G4	S3	SSC
<i>Cypseloides niger</i> black swift	ABNUA01010	None	None	G4	S2	SSC
<i>Diplectrona californica</i> California diplectronan caddisfly	IITRI23010	None	None	G1G2	S1S2	
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	AMAFD03143	Endangered	Candidate Endangered	G5T1	S1	SSC
<i>Dodecahema leptoceras</i> slender-horned spineflower	PDPGN0V010	Endangered	Endangered	G1	S1	1B.1
<i>Dudleya cymosa ssp. crebrifolia</i> San Gabriel River dudleya	PDCRA040A8	None	None	G5T2	S2	1B.2
<i>Dudleya densiflora</i> San Gabriel Mountains dudleya	PDCRA040B0	None	None	G2	S2	1B.1
<i>Dudleya multicaulis</i> many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S1	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Ensatina eschscholtzii klauberi</i> large-blotched salamander	AAAAD04013	None	None	G5T2?	S3	WL
<i>Eremophila alpestris actia</i> California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
<i>Eriastrum densifolium ssp. sanctorum</i> Santa Ana River woollystar	PDPLM03035	Endangered	Endangered	G4T1	S1	1B.1
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
<i>Falco columbarius</i> merlin	ABNKD06030	None	None	G5	S3S4	WL
<i>Fimbristylis thermalis</i> hot springs fimbristylis	PMCYP0B0N0	None	None	G4	S1S2	2B.2
<i>Galium grande</i> San Gabriel bedstraw	PDRUB0N0V0	None	None	G1	S1	1B.2
<i>Gila orcuttii</i> arroyo chub	AFCJB13120	None	None	G2	S2	SSC
<i>Horkelia cuneata var. puberula</i> mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Icteria virens</i> yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
<i>Imperata brevifolia</i> California satintail	PMPOA3D020	None	None	G4	S3	2B.1
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4	
<i>Lasiurus xanthinus</i> western yellow bat	AMACC05070	None	None	G5	S3	SSC
<i>Lasthenia glabrata ssp. coulteri</i> Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
<i>Laterallus jamaicensis coturniculus</i> California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
<i>Lepidium virginicum var. robinsonii</i> Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	AMAEB03051	None	None	G5T3T4	S3S4	SSC
<i>Lilium parryi</i> lemon lily	PMLIL1A0J0	None	None	G3	S3	1B.2
<i>Linanthus concinnus</i> San Gabriel linanthus	PDPLM090D0	None	None	G2	S2	1B.2
<i>Monardella australis ssp. jakerstii</i> Jakerst's monardella	PDLAM18112	None	None	G4T1?	S1?	1B.1
<i>Monardella macrantha ssp. hallii</i> Hall's monardella	PDLAM180E1	None	None	G5T3	S3	1B.3
<i>Muhlenbergia californica</i> California muhly	PMPOA480A0	None	None	G4	S4	4.3
<i>Muhlenbergia utilis</i> aparejo grass	PMPOA481X0	None	None	G4	S2S3	2B.2
<i>Myotis yumanensis</i> Yuma myotis	AMACC01020	None	None	G5	S4	
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.2
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	AMAFF08041	None	None	G5T3T4	S3S4	SSC
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	AMACD04010	None	None	G4	S3	SSC
<i>Nyctinomops macrotis</i> big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
<i>Oncorhynchus mykiss irideus pop. 10</i> steelhead - southern California DPS	AFCHA0209J	Endangered	None	G5T1Q	S1	
<i>Oreonana vestita</i> woolly mountain-parsley	PDAPI1G030	None	None	G3	S3	1B.3



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Orobanche valida ssp. valida</i> Rock Creek broomrape	PDORO040G2	None	None	G4T2	S2	1B.2
<i>Ovis canadensis nelsoni</i> desert bighorn sheep	AMALE04013	None	None	G4T4	S3	FP
<i>Phacelia stellaris</i> Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
<i>Phrynosoma blainvillii</i> coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
<i>Poliophtila californica californica</i> coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T2Q	S2	SSC
<i>Pseudognaphalium leucocephalum</i> white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
<i>Rana boylei</i> foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	G3	S3	SSC
<i>Rana muscosa</i> southern mountain yellow-legged frog	AAABH01330	Endangered	Endangered	G1	S1	WL
<i>Rhinichthys osculus ssp. 3</i> Santa Ana speckled dace	AFCJB3705K	None	None	G5T1	S1	SSC
<i>Riparia riparia</i> bank swallow	ABPAU08010	None	Threatened	G5	S2	
<i>Riversidian Alluvial Fan Sage Scrub</i> Riversidian Alluvial Fan Sage Scrub	CTT32720CA	None	None	G1	S1.1	
<i>Salvadora hexalepis virgultea</i> coast patch-nosed snake	ARADB30033	None	None	G5T4	S2S3	SSC
<i>Senecio aphanactis</i> chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
<i>Setophaga petechia</i> yellow warbler	ABPBX03010	None	None	G5	S3S4	SSC
<i>Sidalcea neomexicana</i> salt spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2
<i>Southern California Arroyo Chub/Santa Ana Sucker Stream</i> Southern California Arroyo Chub/Santa Ana Sucker Stream	CARE2330CA	None	None	GNR	SNR	
<i>Southern Coast Live Oak Riparian Forest</i> Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
<i>Southern Cottonwood Willow Riparian Forest</i> Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
<i>Southern Sycamore Alder Riparian Woodland</i> Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
<i>Southern Willow Scrub</i> Southern Willow Scrub	CTT63320CA	None	None	G3	S2.1	
<i>Spea hammondi</i> western spadefoot	AAABF02020	None	None	G3	S3	SSC



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Symphotrichum defoliatum</i> San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
<i>Symphotrichum greatae</i> Greata's aster	PDASTE80U0	None	None	G2	S2	1B.3
<i>Taricha torosa</i> Coast Range newt	AAAAF02032	None	None	G4	S4	SSC
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Thamnophis hammondi</i> two-striped gartersnake	ARADB36160	None	None	G4	S3S4	SSC
<i>Thelypteris puberula var. sonorensis</i> Sonoran maiden fern	PPTHE05192	None	None	G5T3	S2	2B.2
<i>Thysanocarpus rigidus</i> rigid fringepod	PDBRA2Q070	None	None	G1G2	S1	1B.2
<i>Vireo bellii pusillus</i> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
Walnut Forest Walnut Forest	CTT81600CA	None	None	G1	S1.1	

Record Count: 112

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.

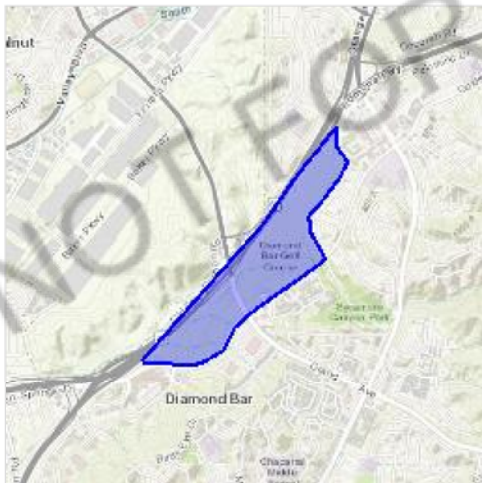
Project information

NAME

Diamond Bar Golf Course Renovation Project

LOCATION

Los Angeles County, California



Local office

Carlsbad Fish And Wildlife Office

☎ (760) 431-9440

📅 (760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

<http://www.fws.gov/carlsbad/>

NOT FOR CONSULTATION

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. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) 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 [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), 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
------	--------

Coastal California Gnatcatcher *Polioptila californica californica* Threatened
 There is **final** critical habitat for this species. Your location is outside the critical habitat.
<https://ecos.fws.gov/ecp/species/8178>

Least Bell's Vireo *Vireo bellii pusillus* Endangered
 There is **final** critical habitat for this species. Your location is outside the critical habitat.
<https://ecos.fws.gov/ecp/species/5945>

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.

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 [below](#).

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 <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.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 (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
<p>Allen's Hummingbird <i>Selasphorus sasin</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637</p>	Breeds Feb 1 to Jul 15
<p>Black Swift <i>Cypseloides niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8878</p>	Breeds Jun 15 to Sep 10
<p>Common Yellowthroat <i>Geothlypis trichas sinuosa</i> 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</p>	Breeds May 20 to Jul 31
<p>Nuttall's Woodpecker <i>Picoides nuttallii</i> 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</p>	Breeds Apr 1 to Jul 20
<p>Oak Titmouse <i>Baeolophus inornatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656</p>	Breeds Mar 15 to Jul 15

Song Sparrow *Melospiza melodia*

Breeds Feb 20 to Sep 5

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

Spotted Towhee *Pipilo maculatus clementae*

Breeds Apr 15 to Jul 20

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/4243>

Wrentit *Chamaea fasciata*

Breeds Mar 15 to Aug 10

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

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.

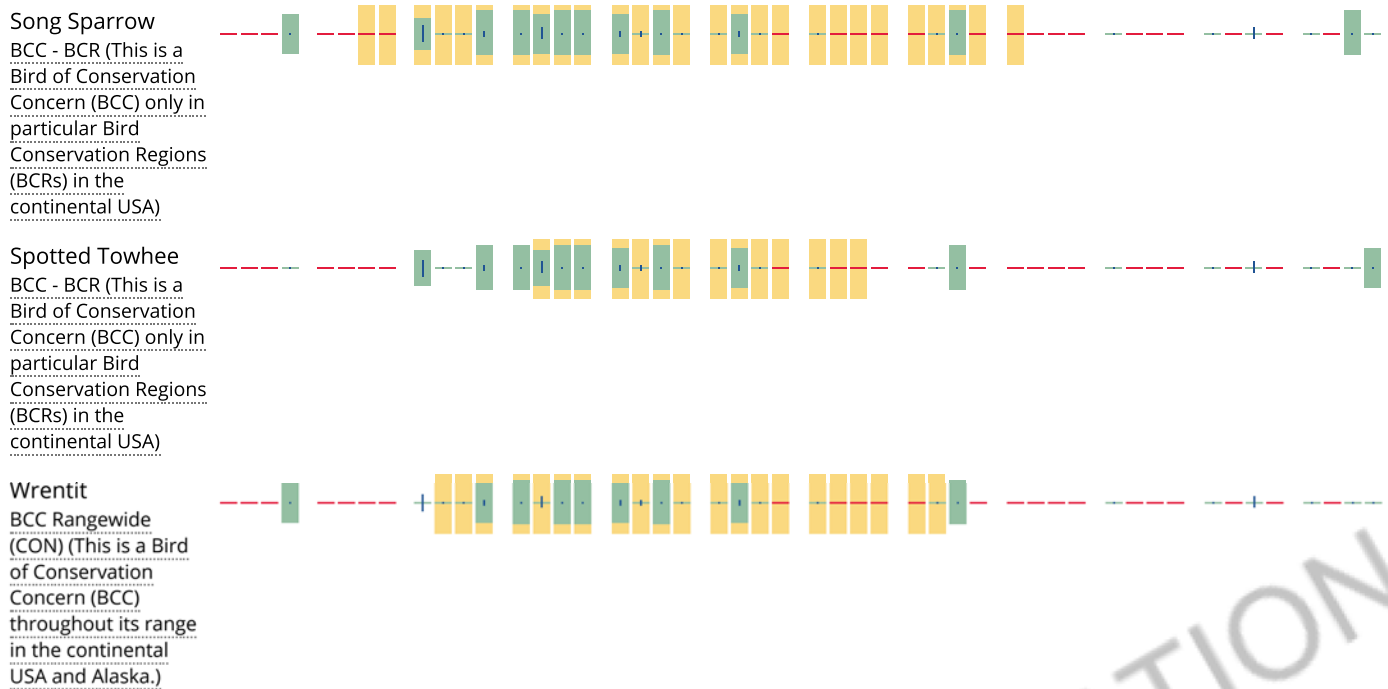
How is the probability of presence score calculated? The calculation is done in three steps:

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.



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](#) and/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 migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) 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 [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) 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 ([Eagle Act](#) 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 [AKN Phenology Tool](#).

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 [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

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 to 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, migrating or present year-round in my project 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 refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). 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 [Birds of Conservation Concern](#) (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 [Eagle Act](#) 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 [Northeast Ocean Data Portal](#). 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 [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

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 [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

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 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 [National Wildlife Refuge](#) 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

Impacts to [NWI wetlands](#) 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.S. Army Corps of Engineers District](#).

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 EMERGENT WETLAND

[PEM1Cx](#)

FRESHWATER FORESTED/SHRUB WETLAND

[PFOC](#)

FRESHWATER POND

[PUBHx](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

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 tubercid 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.