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**STAFFORD LAKE PARK MASTER PLAN  
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

**MITIGATION MONITORING AND REPORTING PROGRAM  
November 05, 2019**

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The County of Marin must adopt a MMRP or an equally effective program, if it approves the proposed project with the mitigation measures included in the Initial Study. Public Resources Code, Section 21081.6(a) requires an agency to adopt a program for reporting or monitoring mitigation measures that were adopted or made conditions of project approval.

This Mitigation Monitoring and Reporting Program (MMRP) was formulated based on the findings of the Initial Study prepared for the Stafford Lake Park Master Plan. The purpose of the MMRP is to ensure the implementation of mitigation measures identified as part of the environmental review for the project.

The MMRP consists of the mitigation measures recommended in the Initial Study and identifies mitigation monitoring requirements including monitoring responsibility, implementation timing, verification signature, and verification date. Mitigation Measures were recommended in the following resources areas:

- Biological Resources
- Geophysical Resources
- Water Resources
- Air Quality Resources
- Transportation/Circulation
- Hazards
- Cultural Resources

As recommendations in the Stafford Lake Park Master Plan become "Projects," the applicable mitigation measures will be identified and implemented. Not all mitigation measures will apply to every Project.

## BIOLOGICAL RESOURCES

### Mitigation Measure BIO-1: Protect Special-status Plants

Marin County Parks shall, to the extent feasible, avoid impacts on State and federally listed plant species, locally sensitive plant species, and occupied habitat, meaning the area where rare plants are known to occur. The following measures shall be implemented:

- During the planning and design phase for specific Master Plan projects, Marin County Parks shall conduct a reconnaissance-level survey during the appropriate time for identifying the special-status plants, typically the blooming period, to determine whether the project area supports suitable habitat for special-status plants. For the purpose of the reconnaissance-level survey, the project area shall be defined as the specific area where the project would be located plus a 1,000- foot buffer or smaller if a qualified botanist determines a smaller buffer is adequate to protect special-status plants and after consultation with CDFW. If the area is found not to support suitable habitat for special-status plants, the findings shall be documented in a letter report and no further mitigation would be required. If the area supports suitable habitat, floristic surveys shall be performed.
- Floristic surveys shall be conducted during the appropriate time for identifying the specific plants that could occur in the project area. If found, special-status plants shall be mapped. Marin County Parks, to the maximum extent feasible, shall design site development to avoid special-status plants and minimize development within the 1,000-foot setback from special-status plant populations.

**Typical Blooming Period for Special-status Plants with Potential to Be Affected by Master Plan Projects**

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
bristly leptosiphon ( <i>Leptosiphon acicularis</i> )												
congested-headed hayfield tarplant ( <i>Hemizonia congesta ssp. congesta</i> )												
fragrant fritillary ( <i>Fritillaria liliacea</i> )												
harlequin lotus ( <i>Hosackia gracilis</i> )												
Koch's cord moss ( <i>Entosthodon kochii</i> )	This species is best identified when spore-bearing capsules are present (Flora of North America Editorial Committee, 1993). No information found on seasonality in the limited literature on this species.											
streamside daisy ( <i>Erigeron biolettii</i> )												

- Prior to construction, the 1,000-foot buffer around special-status plants, measured from the edge of the area occupied by special-status plants, shall be clearly delineated with flagging or temporary fencing, by a qualified botanist. To the maximum extent feasible, no disturbance to soil, vegetation, or drainage patterns shall occur within this buffer. All staging, equipment maintenance, refueling, and storage areas shall be located outside the 100-foot buffer.
- Where maintenance activities or placement of site development infrastructure within the 1,000-foot buffer cannot be avoided, but no direct impacts to the population itself will occur, the following actions shall be taken:
  - Conduct a special-status plant worker training for all field personnel involved with project construction. The training shall consist of a brief presentation by a qualified botanist.<sup>1</sup> The training shall include the following: a description of the rare plant and its required habitat including graphic aids such as photographs, a brief

<sup>1</sup> A qualified botanist and/or restoration specialist has a minimum of five years of academic training and professional experience in biological sciences and related resource management activities with a minimum of two years conducting surveys for the target species.

overview of its ecology, an explanation of the measures being taken to avoid or reduce adverse impacts, and the workers' responsibility under applicable environmental regulations.

- For mowing and other above-ground-only disturbance, restrict work to the period when special-status plants have completed that year's seed set as determined by a qualified botanist.
  - Minimize downslope erosion and sedimentation within the buffer, maintain erosion- and sediment-control devices during ground-disturbing activities and until disturbed soils are stabilized. Control devices include rice straw, hydromulch, geofabrics, wattles, sediment traps, check dams, drainage swales, and sand bag dikes. Materials must be certified weed-free to prevent the introduction of wheat, barley, and other nonnative plant seeds.
- If special-status plant species are found, the plant shall be avoided, if possible. If impact avoidance is not feasible and where project activities may result in direct impacts on special-status plants, Marin County Parks would consult with CDFW and/or USFWS, as appropriate depending on species status, to determine the appropriate conservation measures to address direct and indirect impacts that could occur as a result of construction-type measures and would implement the agreed conservation measures to achieve not net loss of occupied habitat or individuals. Conservation measures may include preserving and enhancing existing populations, creation of off-site populations on mitigation sites through seed collection or transplantation, and/or restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat and/or individuals. A conservation plan would be developed describing how unavoidable losses of special-status plants would be compensated.
  - If relocation efforts are part of the conservation plan, the plan would include details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, success criteria, and remedial action responsibilities should the initial effort fail to meet long-term conservation requirements. Success criteria for preserved and compensatory populations would include:
    - The extent of occupied area and plant density (number of plants per unit area) in compensatory populations would be equal to or greater than the affected occupied habitat.
    - Compensatory and preserved populations would be self-producing. Populations would be considered self-producing when:
      - plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and
      - reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity.
  - If off-site conservation includes dedication of conservation easements, purchase of mitigation credits, or other off-site conservation measures, the details of these measures would be included in the conservation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as those listed above and other details, as appropriate to target the preservation of long-term viable populations.

<b>Mitigation Measure BIO-1 Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff and/or biological monitor shall verify that the Mitigation Measure has been properly implemented.
<b>Implementation Timing</b>	Prior to applicable construction and maintenance activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

**Mitigation Measure BIO-2: Protect Special-status Wildlife and Habitat – General Measures**

Marin County Parks shall ensure that the following protection measures for wildlife and their habitat are implemented:

- During project planning and design, complete wildlife surveys in and around the project area to delineate and map special-status wildlife habitat and documented occurrences.
- Design projects to minimize disturbance on special-status wildlife while avoiding core habitat areas and providing native habitat buffers.
- Establish buffers to protect wildlife. A qualified biologist<sup>2</sup> shall determine appropriate buffer distances, which shall include the protection of foraging, nesting, migration, and aestivation habitat. The qualified biologist shall determine allowable activities within the buffers.
- Prior to construction, conduct a worker awareness training for all supervisory field staff. The training shall include the following information: a photograph and description of each special-status wildlife species or sensitive resource known from the project area; a description of its ecology and habitat needs; potentially confusing resources such as similar species or habitats; an explanation of the measures being taken to avoid adverse impacts; reporting and necessary actions if sensitive resources are encountered; and workers’ responsibility under the applicable environmental regulation.
- The project limits shall be clearly marked on the final design drawings and work confined within those boundaries.
- Foot and vehicle traffic shall be restricted to the designated work and staging areas.
- Excavated holes, trenches, and other depressions greater than one foot in depth shall be covered with boards or other appropriate materials or backfilled with dirt at the end of each working day. If trenches remain open overnight, earthen escape ramps shall be constructed every 10 feet.
- Food and food-related trash shall be stored in closed containers and removed from the project site daily. Food-related trash can attract wildlife to construction sites, disrupting their normal behavior patterns. Trash must be collected at the end of the day and properly disposed.
- If vehicles and/or equipment will be stored on-site overnight, each vehicle and/or equipment shall be checked prior to use. All vehicles shall be inspected each morning to ensure wildlife are not hiding under them. Vehicles shall not be operated until wildlife have left the area under their own volition.
- Permanent fencing shall not cause the risk of death or injury to wildlife or impede movement. All fencing shall account for wildlife protection.

<b>Mitigation Measure BIO-2 Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff and/or biological monitor shall verify that the Mitigation Measure has been properly implemented.
<b>Implementation Timing</b>	Prior to and during applicable construction and maintenance activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

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<sup>2</sup> A qualified biologist has a minimum of five years of academic training and professional experience in biological sciences and related resource management activities with a minimum of two years conducting surveys for the target species.

### **Mitigation Measure BIO-3: Protect Special-status and Nesting Birds**

Marin County Parks shall implement the following protection measures and seasonal restrictions to protect nesting birds. Work, such as vegetation removal and ground disturbance, that occurs outside of the nesting season may proceed without preconstruction nesting bird surveys. Table 4 provides the recommended buffer and nesting season guidelines for various bird species.

- Prior to construction, complete a nesting bird survey 7 days prior to initiation of any ground disturbing activities, vegetation clearing, tree removal and trimming, or other construction-related activities, including noise disturbance, that is planned to occur during the nesting season. The survey shall be completed for special-status birds and all other native nesting birds by a qualified biologist. The survey shall be completed within the construction area and an appropriate buffer around it summarized in Table 3. If the biologist finds no active nesting or breeding activity, then work can proceed without restrictions. If the work area is left unattended for more than 7 days following the initial surveys, additional surveys shall be completed. This timing is standard protocol based on common knowledge of avian biology. Ongoing construction monitoring of active nests shall occur to ensure no nesting activity is disturbed.
- If active nests are identified within the buffer area guidelines included in Table 4, a qualified biologist shall determine whether or not construction activities may impact the active nest or disrupt reproductive behavior. If it is determined by the biologist that construction would not affect an active nest or disrupt nesting behavior, construction may proceed without restrictions. The determination of disruption shall be based on the species' sensitivity to disturbance, which can vary among species; the expected level of noise or construction disturbance; and the line of sight between the nest and the planned disturbance. If the biologist determines activities would be detrimental, the buffer area guidelines identified in Table 3 shall be avoided until the nest has been vacated, meaning that the chicks have fledged. If nests are present, the qualified biologist shall monitor the behavior of birds, including adults and nestlings, when present at the nest site to ensure they are not disturbed by construction activities. Nest monitoring shall continue until the nestlings have fully fledged, as determined by the qualified biologist.
- If State and/or federally listed birds are found breeding within the construction area, activities shall be halted until the nestlings have fledged or the nesting area plus the site-specific buffer shall be avoided until the nest has been vacated. If construction activities must continue and would incur take of the listed species, Marin County Parks would consult with CDFW and USFWS prior to the initiation of work that would result in take. If construction activities must continue and would not incur take of the listed species, Marin County Parks would establish the buffer area guidelines included in Table 4 until the nest has been vacated.

**Table 4 - Guideline Buffers by Species or Guild**

<b>Species/Guild</b>	<b>Recommended Buffer * meters/feet</b>	<b>Nesting Season</b>
Diurnal Raptors (i.e.: Cooper’s hawk)	100 meters (330 feet)	January 01 – July 31
Owls (except northern spotted owl)	50 meters (160 feet)	January 01 – July 31
Northern Spotted Owl	402 meters (1,320 feet or ¼ mile)	February 01- July 31
White-tailed Kite, double clutch	100 meters (330 feet)	February 01 – October 31
Double-crested Cormorant	50 meters (160 feet)	March 01 – October 31
Herons/Egrets/Bitterns	100 meters (330 feet)	January 01 – September 30
Waterfowl (Ducks/Geese/Swans)	30 meters (100 feet)	March 01 – July 31
Larger Passerines: Corvids (crows, jays), Thrushes	20 meters (65 feet)	March 01 – July 31
Smaller Passerines: Most Songbirds	10 meters (30 feet)	March 01 – July 31
Hummingbirds	10 meters (30 feet)	January 01 – July 31
Woodpeckers	15 meters (50 feet)	March 01 – July 31
Band-tailed Pigeon (BTPI)	30 meters (100 feet)	March 01 – July 31
Pigeons/Doves (except BTPI)	20 meters (65 feet)	March 01 – July 31
Species of Special Concern (olive-sided flycatcher, grasshopper sparrow, San Pablo song sparrow)	22 meters (75 feet)	March 01 – July 31
Blackbirds (tri-colored and red-winged)	30 meters (100 feet)	March 01 – July 31
Turdidae (robins, thrushes)	20 meters (65 feet)	March 01 – July 31
Killdeer	22 meters (75 feet)	March 01 – July 31

**Notes:** These recommended buffers were developed by a Marin County Parks biologist, meeting the definition of a qualified biologist. The recommended buffers were determined to be at an appropriate distance to protect normal bird behavior to prevent nesting failure and/or abandonment. Consistent with implementation of this Mitigation Measure, a qualified biologist would adjust the recommended buffers specific to the project area after conducting field investigations. Not all species/guild included in this table occur within a given project area.

<b>Mitigation Measure BIO-3 Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff and/or biological monitor shall verify that the Mitigation Measure has been properly implemented.
<b>Implementation Timing</b>	Prior to and during applicable construction and maintenance activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

### Mitigation Measure BIO-4: Protect Special-status and Common Bats

Marin County Parks shall implement the following protection measures for special-status and common bats:

- Prior to construction, a qualified biologist shall complete presence/negative finding bat surveys prior to removal or pruning of any trees over 6 inches in diameter at breast height or structure removal/modifications. Because each individual bat species may use different roosts seasonally and from night to day, surveys must be conducted at the appropriate times and according industry standard survey protocols.
- For all trees previously identified during project surveys as active roost sites and subject to pruning or removal, trees shall be removed in a two-step process in consultation with a qualified biologist: limb removal on day one shall be followed by bole removal on day two. This approach will allow any bats that are present an opportunity to move out of the area prior to completing removal of the trees.
- If occupied structures are present and require removal or modification, bat exclusion and one-way exit structures shall be installed to allow bats to leave the structure and not get back in.
- No maternity roosts shall be disturbed until unoccupied for the season. A 50-foot buffer shall be established around maternity roosts until unoccupied.
- If work is postponed or interrupted for more than one week from the date of the initial bat survey, the preconstruction survey shall be repeated.
- Construction shall be limited to daylight hours to avoid interference with the foraging abilities of bats.

<b>Mitigation Measure BIO-4 Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff and/or biological monitor shall verify that the Mitigation Measure has been properly implemented.
<b>Implementation Timing</b>	Prior to and during applicable construction and maintenance activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

### Mitigation Measure BIO-5: Protect American Badger

Marin County Parks shall implement the following protection measures for American badger:

- Prior to construction, a qualified biologist shall complete an American badger survey one week prior to initiation of any vegetation clearing, ground disturbance, or other construction-related activities, including noise disturbance in areas that support suitable badger habitat. The survey shall be completed within the project area and a 250-foot buffer.
- If any badger burrows/dens are documented within the project area or within 250 feet of it, buffer zones shall be established and maintained until the badgers have vacated the area. A qualified biologist shall determine the appropriate setbacks; no work shall occur within the buffer zone until the area is cleared by a qualified biologist and it is determined the project activities will not harm badgers.
- If American badgers are known to be present in the project area or within 250 feet, a qualified biologist shall monitor construction activities to ensure impacts to species will be avoided. Temporary wildlife exclusionary fencing such as silt fence, which is a piece of synthetic filter fabric and is also called geotextile shall also be installed around work areas during construction, as determined by the qualified biologist. Openings in the exclusion fencing shall be restricted to areas of construction site access only. Fencing would preclude badgers from entering the construction area.

<b>Mitigation Measure BIO-5 Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff and/or biological monitor shall verify that the Mitigation Measure has been properly implemented.
<b>Implementation Timing</b>	Prior to and during applicable construction and maintenance activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

### Mitigation Measure BIO-6: Protect California Red-legged Frog

Marin County Parks shall ensure that the following protection measures for California red-legged frog are implemented during project activities:

- Complete a preconstruction California red-legged frog survey one week prior to initiation of any vegetation clearing, ground disturbance, or other construction-related activities for projects within 50 feet of any riparian corridor, Terwilliger Pond, Stafford Lake, or other watercourse. The survey shall be completed within the project area and a 250-foot buffer around it by a qualified biologist. Surveys shall be completed year-round.
- If any California red-legged frogs are documented within the project area or within 250 feet of it, buffer zones shall be established and maintained until the frogs have vacated the area. A qualified biologist shall determine the appropriate setbacks; no work shall occur within the buffer zone until the area is cleared by the qualified biologist and it is determined the project activities will not harm California red-legged frogs. Frogs will only be relocated following consultation with USFWS and CDFW.
- If California red-legged frogs are known to be present in the project area or within 250 feet, a qualified biologist shall monitor construction activities to ensure impacts to species will be avoided. Temporary wildlife exclusionary fencing (e.g., silt fence, which is a piece of synthetic filter fabric [also called geotextile]) shall be installed around work areas during construction, as determined by a qualified biologist. Openings in the exclusion fencing shall be restricted to areas of construction site access only. Fencing would preclude California red-legged frogs from entering the construction area.

<b>Mitigation Measure BIO-6 Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff and/or biological monitor shall verify that the Mitigation Measure has been properly implemented.
<b>Implementation Timing</b>	Prior to and during applicable construction and maintenance activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

**Mitigation Measure BIO-7: Protect Northwestern Pond Turtle**

Marin County Parks shall ensure that the following protection measures for northwestern pond turtle are implemented during project activities:

- Construction that involves digging within 250 feet from any waterway at Stafford Lake Park, including Novato Creek, Terwilliger Pond, and Stafford Lake, should be delayed until outside of northwestern pond turtle nesting season: April 1 through August 31. Work that would occur September 1 through March 31 within 250 feet of a waterway shall require fencing and a daily biological survey to ensure no northwestern pond turtles are within the project area. Northwestern pond turtles found within the project area shall be relocated. A biological monitor shall be present during digging to ensure no northwestern pond turtles have burrowed.
- Any adults found within the project area shall be relocated to suitable off-site habitat within Stafford Lake Park by a qualified biologist. Marin County Parks would then notify CDFW of the relocation.
- Nest sites discovered during the preconstruction survey or anytime during construction shall be avoided until the nest is vacated, as determined by a qualified biologist. Buffer zones shall be established and maintained until nesting is complete. A qualified biologist shall determine the appropriate setbacks; no work shall occur within the buffer zone until the area is cleared by the biologist and it is determined the project activities will not harm turtle nests.
- If turtles are known to be present in the project area or within 250 feet, a qualified biologist shall monitor construction activities to ensure impacts to species are avoided. Temporary wildlife exclusionary fencing will also be installed around work areas during construction as determined by a qualified biologist.
- Establish a baseline northwestern pond turtle inventory for the area surrounding Novato Creek, Terwilliger Pond and areas along the shoreline of Stafford Lake prior to implementing park improvements in those areas. Monitor Northwestern pond turtle population changes as a result of infrastructure development and public use. Monitoring shall be conducted by a qualified biologist at regular intervals for the target species to inform on going public uses and development of an adaptive management strategy if negative impacts are detected such as education program and seasonal exclusion of park users.

<b>Mitigation Measure BIO-7 Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff and/or biological monitor shall verify that the Mitigation Measure has been properly implemented.
<b>Implementation Timing</b>	Prior to and during applicable construction and maintenance activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

## Mitigation Measure BIO-8: Protect Sensitive Natural Communities – General Protection Measures

Marin County Parks shall protect sensitive natural communities during construction activities using the following protection measures.

- Prohibit equipment refueling, fluid storage, equipment maintenance, and road surfacing activities within sensitive natural communities. Inspect equipment and vehicles regularly for hydraulic and oil leaks, and do not allow leaking vehicles in the park. Drip pans will be placed underneath equipment stored on site. Vehicles and construction equipment will be maintained in good working condition.
- To minimize downslope erosion and sedimentation near sensitive natural communities maintain erosion- and sediment-control devices during ground-disturbing activities and until all disturbed soils have been stabilized. Materials shall be certified weed-free to prevent the introduction of wheat, barley, and other nonnative plant seeds. Erosion-control materials shall be constructed of natural fibers including coconut fiber mats, burlap and rice straw wattles.
- Limit or avoid using heavy equipment in areas with soils that are undisturbed, saturated, or subject to extensive compaction. Where staging of heavy equipment, vehicles, or stockpiles is unavoidable, the allowable disturbance footprint shall be limited and marked with flagging or fencing. Following the end of work, surface soils, if they no longer support native vegetation, shall be scarified and seeded with appropriate native species as directed by a qualified botanist or restoration specialist to retard runoff and promote rapid revegetation.
- Immediately rehabilitate areas where project actions have disturbed soil. Areas disturbed by equipment or vehicles shall be rehabilitated as quickly as possible to prevent erosion and discourage the colonization of invasive plants. For disturbed areas greater than 0.1 acre, prepare a project-specific revegetation or restoration plan.
- To the extent feasible, use locally collected native plant materials from the project footprint or from within the park or adjacent preserves for revegetation. Marin County Parks shall allow collection of no more than 5 percent of any native plant population to prevent over-collection of wild plant material sources, as per Marin County Parks and Open Space District's Vegetation and Biodiversity Management Plan, BMP – Special Status Plants 5 (2015). If sufficient local plant materials are not available for collection prior to project activities, geographically appropriate native plant materials will be purchased from a local nursery or seed supplier.
- Incorporate the removal of invasive species into site development. Remove, by hand or mechanical means, all non-natives within the project site and within 25 feet of the construction area. Dispose of any material with potential to germinate or re-sprout in a landfill. If substantial bare ground is left after removal, seed and/or plant with site-appropriate native species.
- Prevent the introduction and spread of invasive plant species.
  - Ensure that any seed, straw, mulch, gravel, or other imported materials are weed-free.
  - Clean construction vehicles and other landscaping or maintenance equipment of seed and soil from weed-infested locations before entering new areas.
  - Revegetate disturbed soil promptly after disturbance.
  - Use only native species from the Novato Creek watershed or Marin County for all site restoration and erosion control seeding when available and to the greatest extent feasible.
  - Monitor areas of ground disturbance for invasive species infestation after construction and revegetation efforts.
- Do not plant invasive, weedy species, or non-native species.
- Limit the introduction and spread of plant pathogens by:
  - Cleaning equipment, boots, truck tires, and any other exposed material with a 10 percent bleach solution or other disinfectant after working in infected areas and bringing materials into the park.
  - Avoiding pruning oaks or other affected trees in wet weather.
  - Avoiding work in wooded areas during the wet season when spores are being produced and infections are starting.

- Leaving potentially infected downed trees in the park instead of transporting the material to an uninfected area.
- Purchasing nursery stock for restoration plantings at nurseries that follows current Best Management Practices (BMPs) for preventing the spread of SOD. Consult the California Oak Mortality Task Force, [www.suddenoakdeath.org](http://www.suddenoakdeath.org), for current standards.
- Inspecting all plant materials for symptoms of SOD before bringing any plants into the park.

<b>Mitigation Measure BIO-8 Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff and/or biological monitor shall verify that the Mitigation Measure has been properly implemented.
<b>Implementation Timing</b>	Prior to and during applicable construction and maintenance activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

**Mitigation Measure BIO-9: Protect or Replace Riparian Trees**

Park improvements shall avoid impacts to native trees to the greatest extent feasible. However, if impacts cannot be avoided, Marin County Parks shall replace native riparian trees at the following ratios:

- Native Riparian Trees .....3 – 6 inches DBH ..... 3:1
- Native Riparian trees .....6-inches + DBH ..... 6:1
- Non-native trees.....any DBH..... 1:1

Revegetation should include only local plant materials native to the project area, unless local trees are not available. Should plants need to be obtained from a non-local source, information regarding the lack of local supplies and the non-local source shall be provided to CDFW as part of a permit application when a CDFW permit is required for the specific Master Plan project. If a CDFW permit is not required, this information shall be included in the project file.

<b>Mitigation Measure BIO-9 Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff and/or biological monitor shall verify that the Mitigation Measure has been properly implemented.
<b>Implementation Timing</b>	After applicable construction activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

**Mitigation Measure BIO-10: Stream Conservation Areas**

Park improvements shall avoid encroachment into riparian habitat to the greatest extent feasible. However, if the riparian habitat cannot be avoided, and the removal of riparian vegetation is required, Marin County Parks shall implement the following measures:

- Mitigation shall occur at a minimum 1:1 ratio, based on area of impact. Exact mitigation ratios shall be determined after analyzing the total percent of habitat removed from the project; local sensitivity and diversity of the habitat type; significance of likely temporal losses while the restored area is establishing; and proximity of the mitigation area to the impact site. On-site mitigation shall be prioritized. CDFW may require greater than 1:1 mitigation ratio for off-site mitigation.
- Mitigation in riparian areas shall include planting suitable native species (determined by a qualified botanist or biologist) along an unaffected edge of the affected area. If there is insufficient area within the riparian habitat at Stafford Lake Park to complete the mitigation, then SCAs on other suitable Marin County open space or park parcels can be planted in order to complete the mitigation requirement. In addition, unforested portions of the riparian area shall be planted with native willow trees if the area is suitable, or native tree species including coast live oak, valley oak, California bay, California buckeye, and/or big-leaf maple between park improvements and the edge of the riparian canopy to increase the effectiveness of the riparian buffer.
- A planting plan shall be developed for installing trees within the riparian area between the existing riparian canopy and the proposed park improvements. The planting plan shall show the locations of the tree planting and shall provide techniques for tree planting. The planting plan shall indicate performance standards and the contents of an as-built report. Monitoring the success of the plantings shall occur for at least 5 years. Annual reports shall be submitted to CDFW when a CDFW permit is required for the specific Master Plan project. Otherwise, annual reports shall be included in the project file.

<b>Mitigation Measure BIO-10 Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff and/or biological monitor shall verify that the Mitigation Measure has been properly implemented.
<b>Implementation Timing</b>	After applicable construction activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

### Mitigation Measure BIO-11: Protect Native Grassland

Marin County Parks shall avoid permanent impacts on native grasslands to the greatest extent feasible, meaning that specific Master Plan projects shall be designed and constructed outside of native grassland and the boundaries of sensitive natural communities. Sensitive habitats such as the brome/fescue native grassland shall be identified during the design process for the specific Master Plan project so that these sensitive areas can be avoided to the greatest extent possible. Prior to the initiation of construction activities, an exclusion zone shall be established. Construction equipment, personnel, material storage, and staging activities shall be prohibited within the exclusion zone. If impacts to native grassland cannot be avoided, Marin County Parks shall implement the following measures:

- Impacts on native brome/fescue grassland shall be mitigated by establishing native brome/fescue grassland species within non-native grassland; impacts on purple needlegrass grassland shall be mitigated by establishing purple needlegrass grassland species within non-native grassland.
- Mitigation shall occur at a minimum 1:1 ratio, to be determined by a qualified biologist after analyzing the total percent of habitat removed from the project; local sensitivity and diversity of the habitat type; significance of likely temporal losses while the restored area is establishing; and proximity of the mitigation area to the impact site. On-site mitigation shall be prioritized. CDFW may require greater than 1:1 mitigation ration for off-site mitigation.
- A revegetation plan shall be developed that will identify areas for re-establishing the native grassland, techniques used to reestablish the grassland, performance standards, and monitoring techniques. The performance standards shall include replacing the grassland lost with native grassland of similar species composition and cover of grassland lost to park improvements. Annual reports shall be submitted to CDFW when a CDFW permit is required for the specific Master Plan project. Otherwise, annual reports shall be included in the project file.

<b>Mitigation Measure BIO-11 Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff and/or biological monitor shall verify that the Mitigation Measure has been properly implemented.
<b>Implementation Timing</b>	After applicable construction activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

**Mitigation Measure BIO-12: Protect Oak Woodland and Individual Oak Trees**

Marin County Parks shall ensure that park improvements are designed and implemented to avoid encroachment on oak woodlands to the greatest extent feasible.

- The Root Protection Zone (RPZ), defined as 1.5 times the dripline radius and 3 feet below the soil surface, of all native trees, shall be identified on design plans for specific Master Plan projects. Temporary protective fencing shall be installed around RPZs or, at a minimum, the dripline perimeter of trees near work areas in the field prior to the initiation of construction-related activities.
- Changes in drainage and soil compaction within protected tree perimeters shall be avoided to the extent feasible.
- Heavy equipment, vehicles, and/or construction materials shall not be parked or stored beneath trees or operated within the delineated protected perimeter.

If placement of facilities in oak woodlands cannot be avoided, Marin County Parks shall implement the following measures:

- Proposed facilities, such as the Zipline, trails, and paths, shall be sited to minimize damage to the trees of the oak woodland and other native trees. Zipline facilities shall be located above the tree canopy to minimize impacts to trees when feasible. If needed, individual trees shall be pruned prior to installation of the Zipline facility to avoid injury. Tree pruning shall be directed by a certified arborist. Zipline components shall not be in contact with tree trunks.
- Any native tree in which at least 1/3 of its canopy or root system is damaged from construction or operation of proposed facilities shall be mitigated through replacement of the same species at the following ratios:
  - oaks .....5 - 10 inches DBH ..... 4:1
  - oaks .....10 – 15-inches DBH ..... 5:1
  - oaks .....15-inch + DBH..... 15:1
- Trees shall be planted at a suitable location identified by a qualified biologist, preferably at the interface of oak woodland and non-native grassland at the park edge near the Indian Valley Golf Club. Associated native understory species from the impact area shall also be replaced, to the extent feasible, along with the trees in the restoration area. A restoration plan shall be developed that will identify areas for re-establishing the oak woodland, techniques used to reestablish the oak woodland, performance standards, and monitoring techniques. The performance standards shall include replacing the oak woodland lost with native oak woodland of the same species composition and cover of oak woodland lost to park improvements. Annual reports shall be submitted to CDFW when a CDFW permit is required for the specific Master Plan project. Otherwise, annual reports shall be included in the project file.

<b>Mitigation Measure BIO-12 Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff and/or biological monitor shall verify that the Mitigation Measure has been properly implemented.
<b>Implementation Timing</b>	Prior to, during, and after applicable construction activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

**Mitigation Measure BIO-13: Protect Wetlands and Watercourses**

- Prior to construction, a formal wetland delineation shall be prepared for all areas of the park subject to the specific Master Plan project. The wetland delineation shall be used to determine the extent of fill to waters of the United States including wetlands, and waters of the State. Marin County Parks shall review the wetland delineation and associated upland features with the regulatory agencies including CDFW, REQCB, and USACOE as needed to confirm jurisdiction. Jurisdictional areas to be filled or avoided shall be clearly shown on construction plans for specific improvements.
- Prior to construction of improvements resulting in fill of jurisdictional areas, appropriate permits from the Corps, RWQCB, and CDFW shall be obtained.
- An application for a Lake or Streambed Alteration Agreement pursuant to Fish and Game Code §1600 shall be submitted to the CDFW for any modification of the bed and/or bank of Stafford Lake, Terwilliger Pond, and Novato Creek resulting from construction of proposed improvements, including the Fishing Deck and Creek Boardwalk and potentially the Bird Blind and Bird Viewing Vista Area. Any loss of riparian vegetation shall be replaced on-site at a ratio agreed upon with regulatory agencies.
- Temporary impacts in wetlands and waters shall be restored and may include removal of sediments and foreign materials deposited during construction activities, restoration of disturbed areas to their original contour and hydrologic condition, stabilization of disturbance areas prior to the onset of winter, reestablishment of riparian woodland and stands of sensitive wetland plant cover using native seed stock, container plants, and/or cuttings collected from as close to the impact vicinity as possible, and protection and conservation of topsoil within riparian woodland and stands of sensitive wetland plant cover.
- If wetland areas cannot be avoided, Marin County Parks shall mitigate for the loss. Compensatory mitigation may include onsite, in-kind replacement, or purchase of wetland credits. Onsite wetland mitigation shall consist of creating wetland acreage at a ratio determined by regulatory agencies, preferably at the edge of existing wetlands onsite. A wetland mitigation plan shall be developed for any required mitigation, except for purchase of wetland credits. The wetland mitigation plan shall include monitoring and reporting methods and performance standards for the mitigation wetlands. The site shall be monitored for 5 years; additional monitoring may be required if performance standards are not met during that time. If required, the results of the monitoring shall be reported in annual reports submitted to the applicable regulatory agencies.

<b>Mitigation Measure BIO-13 Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff and/or biological monitor shall verify that the Mitigation Measure has been properly implemented.
<b>Implementation Timing</b>	Prior to, during, and after applicable construction activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

## **GEOPHYSICAL RESOURCES**

### **Mitigation Measure 3.A**

Prior to grading, excavation, and construction of improvements under the Master Plan that coincide with areas with potentially adverse geological conditions, a design-level geotechnical report shall be prepared by a licensed professional and submitted to Marin County Parks staff for review and approval. Projects requiring a geotechnical report include reconfiguring vehicle circulation, the new gatehouse, event center and parking lot, destination playground, maintenance facility and offices, roadway extension and parking lot, swim lagoon and changing facility, bouldering course, strider trail, tot lot and temporary roadway extension, zipline, alpine slide, and creek boardwalk. The geotechnical review shall specifically address potential adverse geological conditions at the site, including but not limited to expansive soils, slope instability, liquefaction, and seismic shaking. All structures will be designed by a licensed engineer and will adhere to the current California Building Code requirements, and other applicable design standards. All design measures, recommendations, design criteria, and specifications set forth in the design-level geotechnical review shall be incorporated into the design and construction plans.

<b>Mitigation Measure 3.A Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff
<b>Implementation Timing</b>	Prior to applicable construction activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

## WATER RESOURCES

### Mitigation Measure 4.A

Proposed improvements within the flood zone (e.g., vehicular bridge and boardwalk) shall be designed by a qualified professional engineer to minimize changes to stormwater flow and flood waters. The design shall ensure that proposed improvements are located above the base flood elevation and that encroachment into the flood hazard zone does not exacerbate flooding or restrict the movement of floodwater and the design ensures that people and/or property are not subject to flood-related hazards, thereby reducing this impact to less than significant. In addition, any projects located in or near the creek would require compliance with the Clean Water Act and would obtain all required permits from the RWQCB, USACE, and CDFW.

<b>Mitigation Measure 4.A Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff
<b>Implementation Timing</b>	Prior to applicable construction activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

## AIR QUALITY RESOURCES

### Mitigation Measure 5.A

Marin County and the project contractor shall follow Basic Construction Mitigation Measures as recommended by the BAAQMD, including:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes. Clear signage on this measure shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- Post a publicly visible sign with the telephone number and person to contact at Marin County Parks regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

<b>Mitigation Measure 5.A Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff
<b>Implementation Timing</b>	During applicable construction and maintenance activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

## TRANSPORTATION / CIRCULATION

### Mitigation Measure 7.A

For any construction phase anticipated to require 17 or more construction workers per day, work shall be scheduled so that worker and vendor trips occur outside of the AM peak period (7:00 a.m. to 9:00 a.m.) and PM peak period (4:00 p.m. to 6:00 p.m.).

<b>Mitigation Measure 7.A Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff
<b>Implementation Timing</b>	During applicable construction activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

### Mitigation Measure 7.B

At the time of construction of the proposed Stafford Lake Park entrance driveway, Marin County shall improve Novato Boulevard to provide a westbound left-turn pocket with at least 75 feet of storage for vehicles waiting to enter Stafford Lake Park. Vegetation at the proposed entrance shall be maintained to preserve at least 625 feet of sight distance from the park exit.

<b>Mitigation Measure 7.B Implementation</b>	
<b>Monitoring Responsibility</b>	Marin County Parks staff
<b>Implementation Timing</b>	During applicable construction activities
<b>Verification Signature</b>	
<b>Verification Date</b>	

## HAZARDS

### Mitigation Measure 10.A

The following measures shall be implemented throughout the construction period to reduce the potential risk associated with fire hazards:

1. Parks staff shall comply with the County fire prevention practices.
2. Upon notification from the County Fire Department that a “Red Flag Warning - High Fire Danger Alert” exists for Marin County, Parks shall suspend any construction activities involving powered mechanical equipment and shall limit vehicle access to construction staging areas.
3. Parks staff shall hold fire prevention training session(s) for construction staff, contractors, and volunteers. The training shall describe the County’s Fire Prevention Procedures and regulations for smoking and open fires on Parks land, including:
  - o The prohibitions on smoking and open fire or flames while on Parks land;
  - o The use of fire suppression equipment; and
  - o The use of avoidance measures such as not allowing heated tools to contact ignitable fuels or not driving off road or in any area with tall grass.
4. Parks shall maintain fire suppression equipment, including water pumpers and fire extinguishers, on site and on trucks and tractors.
5. Parks shall maintain communication equipment, including cell phones and radios, on site during construction to allow for rapid contact of emergency responders.
6. Parks shall implement the following measures to reduce the risk of fire resulting from the use and storage of fuel:
  - o Refuel power equipment or tools in a cleared space;
  - o Store fuel in a cleared space and, where possible, in the shade;
  - o Turn off equipment while fueling;
  - o Use a gas spout/funnel to avoid spills; and
  - o Remove or dry any spilled fuel prior to starting equipment.
7. Parks shall implement the following measures if welding is necessary during construction:
  - o Suspend welding on hot dry days and when winds exceed five miles per hour;
  - o Perform welding in the morning prior to 10:00 a.m.;
  - o Remove grass within a 12-foot radius of the welding site;
  - o Wet the ground and surrounding vegetation prior to welding and every 15 minutes thereafter;
  - o Maintain a portable welding screen around the welder;
  - o Keep a truck-mounted pumper at the welding site, with the pump engaged during welding; and
  - o Staff an extra person on site with no other duty except to watch for fire and operate the pumper.

<b>Mitigation Measure 10.A Implementation</b>	
<b>Monitoring Responsibility.</b>	Marin County Parks staff. After receiving red-flag warnings, Parks staff shall verify that the park supervisor has suspended the use of heavy equipment. Prior to the start of construction, Parks staff shall verify that construction staff held fire prevention training session. Parks shall verify the implementation of the various fire safety mitigation measures.
<b>Implementation Timing.</b>	During applicable construction activities
<b>Verification Signature.</b>	
<b>Verification Date.</b>	

## CULTURAL RESOURCES

### Mitigation Measure 15.A.1

Should project construction encounter paleontological resources, all ground-disturbing activities within 25 feet shall be redirected to prevent disturbance of the resource(s), and a qualified paleontologist shall be contacted to assess the situation, consult with the County, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any paleontological materials.

Paleontological resources are considered significant if they may provide new information regarding past life forms, paleoecology, stratigraphy, or geological formation processes. If found to be significant, and project activities cannot avoid disturbing such finds, the mitigation recommended by the consulting paleontologist shall be implemented prior to the resumption of project activities within the 25-foot protective buffer described previously. Mitigation may include monitoring, recording the fossil locality, data recovery and analysis, a final report, and accessioning the fossil material and technical report to a paleontological repository. Public educational outreach may also be appropriate.

Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the County, and, if paleontological materials are recovered, to a paleontological repository, such as the University of California Museum of Paleontology.

<b>Mitigation Measure 15.A.1 Implementation</b>	
<b>Monitoring Responsibility.</b>	Marin County Parks staff
<b>Implementation Timing.</b>	During applicable construction activities
<b>Verification Signature.</b>	
<b>Verification Date.</b>	

### Mitigation Measure 15.A.2

Prior to construction of proposed improvements, the County shall require an archaeological presence/absence investigation to determine if subsurface components of the site exist and extend into areas proposed for improvements. The investigation shall include the use of canine's trained in the detection of human remains and shall be overseen by a Registered Professional Archaeologist. FIGR shall provide input during the selection of the archaeologist. The final selection of the archaeologist will be made by the County. Prior to construction of proposed improvements, the County shall notify FIGR. If FIGR determines it is necessary to have a tribal representative on-site during ground disturbing activity, FIGR will be responsible for providing a tribal representative at no additional expense to the County and in a manner that does not unreasonably delay the County's effort.

Should the investigation indicate that subsurface archaeological deposits associated with CA-MRN-528 exist, proposed improvements shall be redesigned to avoid disturbing said deposits. If such avoidance is not possible, the deposits shall be evaluated to determine if they meet the definition of a historical or unique archaeological resource under California Public Resources Code (PRC) Section 21084.1 and PRC Section 21083.2, respectively. If they do so qualify, the disturbance of such deposits would constitute a substantial adverse change in their significance, which would result in a significant impact under *CEQA Guidelines* Section 15064.5(b).

Prior to the impact described above occurring, the County shall require that the disturbance of the deposits associated with CA-MRN-528 be mitigated through data recovery. Such mitigation could consist of archaeological data recovery through excavation and analysis of recovered materials, and public outreach and interpretation.

<b>Mitigation Measure 15.A.2 Implementation</b>	
<b>Monitoring Responsibility.</b>	Marin County Parks staff
<b>Implementation Timing.</b>	During applicable construction activities
<b>Verification Signature.</b>	
<b>Verification Date.</b>	

### Mitigation Measure 15.A.3

To identify and avoid or mitigate impacts to archaeological deposits associated with CA-MRN-342 (i.e., the archaeological site adjacent to the Park area), a qualified archaeologist shall monitor construction-related ground disturbance of CA-MRN-342 in the Park area east of the dam along the south side of Novato Boulevard. Prior to construction of proposed improvements, the County shall notify FIGR. FIGR may choose to provide input during the selection of the archaeologist. The final selection of the archaeologist will be made by the County. If FIGR determines it is necessary to have a tribal representative on-site during ground disturbing activity, FIGR will be responsible for providing a tribal representative at no additional expense to the County and in a manner that does not unreasonably delay the County's effort.

Should subsurface archaeological deposits associated with CA-MRN-342 exist, proposed improvements shall be redesigned to avoid disturbing said deposits. If such avoidance is not possible, the deposits shall be evaluated to determine if they meet the definition of a historical or unique archaeological resource under PRC Section 21084.1 and PRC Section 21083.2, respectively. If they do so qualify, the disturbance of such deposits would constitute a substantial adverse change in their significance, which would result in a significant impact under *CEQA Guidelines* Section 15064.5(b).

Prior to the impact described above occurring, the County shall require that the disturbance of the deposits associated with CA-MRN-342 be mitigated through data recovery. Such mitigation could consist of archaeological data recovery through excavation and analysis of recovered materials, and public outreach and interpretation.

<b>Mitigation Measure 15.A.3 Implementation</b>	
<b>Monitoring Responsibility.</b>	Marin County Parks staff
<b>Implementation Timing.</b>	During applicable construction activities
<b>Verification Signature.</b>	
<b>Verification Date.</b>	

### Mitigation Measure 15.A.4

Should an archaeological deposit be encountered during project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a Registered Professional Archaeologist be contacted to assess the situation (if one is not already on-site), consult with agencies as appropriate, and make recommendations for the treatment of the discovery. If found to be significant (i.e., meets the definition of a historical or unique archaeological resource under CEQA), the County shall require appropriate mitigation measures. Mitigation measures may include recording the archaeological deposit, data recovery and analysis, and public outreach. Upon completion of the selected mitigations, a report documenting methods, findings, and recommendations shall be prepared and submitted to the County for review.

<b>Mitigation Measure 15.A.4 Implementation</b>	
<b>Monitoring Responsibility.</b>	Marin County Parks staff
<b>Implementation Timing.</b>	During applicable construction activities
<b>Verification Signature.</b>	
<b>Verification Date.</b>	

**Mitigation Measure 15.A.5**

Any human remains encountered during project ground-disturbing activities shall be treated in accordance with California Health and Safety Code Section 7050.5 and CEQA Guidelines section 15064.5(d). The County shall inform its contractor(s) of the sensitivity of the park area for human remains by including the following directive in contract documents:

“If human remains are uncovered, work within 25 feet of the discovery shall be redirected and the County Coroner notified immediately. At the same time, an archaeologist shall be contacted (if one is not already on site) to assess the situation and consult with agencies as appropriate. Project personnel shall not collect or move any human remains or associated materials. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. Work within 25 feet of the discovery can resume only after the MLD has inspected the site, provided recommendations, and the remains and associated grave goods removed from the site by a qualified archaeologist in consultation with the MLD.”

<b>Mitigation Measure 10.A Implementation</b>	
<b>Monitoring Responsibility.</b>	Marin County Parks staff
<b>Implementation Timing.</b>	During applicable construction activities
<b>Verification Signature.</b>	
<b>Verification Date.</b>	

All County publications are available in alternative formats (Braille, Large Print, or CD), upon request. Requests for accommodations may be made by calling (415) 473-4381, TTY (415) 473-2495, CRS dial 711, e-mail at [disabilityaccess@marincounty.org](mailto:disabilityaccess@marincounty.org).