# Onsite Wetland Enhancement Plan

SR 156 Castroville Boulevard Interchange Project District

5- MON-SR 156-1.4-2.1

EA: 05-31601

June 2021-Revised per RWQCB comments August 2021

Caltrans

CALIFORNIA DEPARTMENT OF TRANSPORTATION

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District 5- MON-SR 156-1.4-2.1
EA: 05-31601

June 2021- Revised August 2021

Prepared By: _____ Date: 8/26/21

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## Project Description

The Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans) and the Transportation Agency of Monterey County (TAMC) are proposing to construct an overpass and a series of three roundabout intersections to replace the existing Castroville Boulevard signalized at-grade intersection with State Route-(SR) 156. This proposed Onsite Wetland Enhancement Plan is proposed to restore and enhance areas with temporary impacts to wetlands from the project. A separate mitigation and monitoring plan describes offsite compensatory mitigation for permanent impacts.

## Wetland Impacts

The project will result in temporary impacts to 0.35 acres of Wetland A. These "impacts" are associated with enhancement of the existing wetland only, not for the purposes of the transportation project. Activities in this area are limited to grading to enhance wetland hydraulic, geomorphic, and vegetative functions. Non-native herbaceous species predominate within the existing wetland, including *Helminotheca echioides*, *Festuca perennis, and Rumex crispus*. The existing slope of the impact area is uniform and gradual, and soils are saturated, but not ponded.

## Restoration/Enhancement Approach

The wetland restoration and enhancement area will be regraded to create shallow ponded areas near the outlets of three culverts in Wetland A. This will significantly increase the hydraulic and geomorphic diversity within Wetland A. It will also help attenuate any high flows from the culverts.

The area will be restored in place with a combination of native willows and native emergent vegetation. The planted area will add a scrub-shrub stratum to Wetland A, and it will increase native vegetation cover and diversity.

A need for irrigation is not anticipated within the restored wetland area. If conditions are abnormally dry, supplemental irrigation could be provided during the first two years after initial planting.

## Monitoring and Reporting

### Schedule

Caltrans will conduct annual monitoring for a three-year period or until performance standards have been achieved. Vegetation monitoring will be performed each year between June 1 and September 1. Baseline data will be collected in the year immediately preceding construction.

Annual post-construction monitoring reports will be submitted to the permitting agencies for a period of three years, in coordination with offsite mitigation monitoring report. The monitoring reports will include information such as planting plans, delineation maps, data forms, and photographs that assess site conditions quantitatively and qualitatively to determine whether the implemented restoration/enhancement has met the established performance standards. A wetland delineation will be completed in the final year of monitoring to verify successful restoration/enhancement of the wetland area.

### Performance Standards

Caltrans Biology staff will monitor the success of the planted jurisdictional areas (Table 1). Monitoring efforts and timeline are proposed to be commensurate with the temporary nature and overall enhancement of onsite restoration. Restoration/enhancement success will be confirmed through achievement of the Year-3 performance standards.

1. The number of native species individually comprising at least 10 percent of the vegetation community will increase by at least 20 percent. (This measure is based on the California Rapid Assessment Method concept of co-dominant species)

2. Total invasive vegetation coverage will decrease by at least 20 percent compared to baseline conditions.

3. Vertical biotic interspersion (described in CRAM Depressional Wetlands Worksheet Table 21, and excerpted below) will increase.

**Table 21:** Rating of Vertical Biotic Structure for Depressional wetlands using Method 1 (entrainment)

| Rating | Alternative States |
|---|---|
| A | Most of the vegetated plain of the AA has a dense canopy of living vegetation or entrained litter or detritus forming a "ceiling" of cover above the wetland surface that shades the surface and can provide abundant cover for wildlife. |
| B | Less than half (25-50%) of the vegetated plain of the AA has a dense canopy of vegetation or entrained litter or detritus as described in "A" above;<br>OR<br>Most of the vegetated plain has a sparse canopy of vegetation or entrained litter or detritus. |
| C | 25-50% of the vegetated plain of the AA has a sparse canopy of vegetation or entrained litter or detritus. |
| D | Most of the AA (>75%) lacks a canopy of living vegetation or entrained litter or detritus. |

**Monitoring Methods**

Percent cover of native and invasive vegetation will be estimated for the restoration area using the CDFW-CNPS releve approach (CDFW-CNPS 2019).

Photo monitoring will be established to track the progress of the site and document vertical biotic interspersion. Photo points will be established at locations around the restoration site and a map prepared showing the photo point locations and viewing orientation. Photos will be included in annual monitoring reports.

If performance standards are not met after the 3-year monitoring period, additional plantings, seeding, or exotic species control may be necessary. Caltrans would be responsible for implementing this work and any other unforeseen challenges within the monitoring period.

The restoration site is designed to be self-sustaining once performance standards have been met to ensure long-term sustainability. If long-term management issues arise, the issue will be addressed through Caltrans standard maintenance and permitting processes.

## References

Bonham, C. D. 1989. Measurements for Terrestrial Vegetation. John Wiley & Sons, New York, NY.

California Department of Fish and Wildlife (CDFW) and California Native Plant Society (CNPS). 2019. Protocol for the Combined Vegetation Rapid Assessment and Relevé Field Form.

Coulloudon, B., K. Eshelman, J. Gianola, N. Habich, L. Hughes, C. Johnson, M. Pellant, P. Podborny. A. Rasmussen, B. Robles, P. Shaver, J. Spehar, J. Willoughby. 1999. Sampling Vegetation Attributes. BLM Technical Reference 1734-4, Denver, CO.

**Attachment A**

Wetland Restoration Conceptual Grading and Planting Plan

# Conceptual Onsite Wetland Enhancement

**Castroville Interchange Project**
**[D05]-[MON]-[156]-[R1.4/1.7M]**
**PN: [05-18000120]/EA: 05-31601]**

## Legend

- Existing wetland

**Extent of Disturbance**

- Pave
- Fill Prism
- Permanently impacted wetland

**Conceptual Enhancement**

- Willow pole planting
- Emergent planting
- Wattle/Fascine
- Existing Contours
- Proposed Contours

0 5 10 20 30 40 Feet

1 inch = 29.05 feet

Coordinate System:
NAD 1983 2011 StatePlane California IV FIPS 0404 Ft US

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