

MONTHLY BIOLOGICAL MONITORING
REPORT (DRAFT)

FAIRVIEW PARK
Mitigation Project Management and Inspection
Costa Mesa, California

Prepared For:

City of Costa Mesa

Prepared By:

Luma Fowler, Associate Project Manager/Biologist
and
Barry Nerhus, President/Senior Biologist

Endemic Environmental Services, Inc.

596 Victoria St Unit B102

Costa Mesa, CA 92627

P: (714) 393-6249

bnerhus@endemicenvironmental.net



July 2018

Executive Summary

This report has been prepared by Endemic Environmental Service, Inc. (EES) for the City of Costa Mesa located in Costa Mesa, Orange County, California. This report details the Fairview Park riparian mitigation monitoring according to the contract between EES and City of Costa mesa. It also includes an overview of any activities at the park including vandalism, trash, erosion, plants and wildlife surveys, nesting bird survey, vernal pools and other activities described below.

1. Wetlands Quarterly Biological Reports, grassland and oak woodland

Oaks are watered daily at this time. A quarterly report will be submitted in September.

2. On site Project Manager, Implementation of Master Plan and consultation with staff

Part of this task includes participation in meetings with the City of Costa Mesa Staff. Fairview Park inspections are conducted multiple times per week where the following are observed:

Riparian mitigation monitoring

The goal is to detect broad-scale changes in aquatic and riparian ecological conditions by observing selected ecological drivers, stressors, and processes. Specific measurable objectives determine the status and long term trends in selected parameters such as removal of algae, cattail and invasive plants from channels that connect ponds.

Vandalism

Any act involving property damage, such as graffiti and/or property defacement.

Trash

Report illegally dumped trash or garbage at all areas of the park.

Erosion

Report of trail degradation in order to reduce aquatic system disturbance for vernal pools,



excessive muddy trails, widening of trails and creation of undesired trails.

Vernal pools activity

Monitor vernal pools conditions, rare plants, overall biodiversity and any activities that may cause any sort of disturbance to the habitat.

3. Maintenance Services for grassland and tarplant

This section includes the removal of invasive plants in different areas of the park that will be reported on in the daily activities table (see **Table 1**).

4. Cowbird Trapping Program

Currently, there are several brown-headed cowbird (*Molothrus ater*) trapping programs throughout the United States for managing populations of endangered songbirds such as the Kirtland's warbler (*Setophaga kirtlandii*), least Bell's vireo (*Vireo bellii pusillus*), California gnatcatcher (*Poliophtila californica*), Black capped vireo (*Vireo atricapilla*), golden cheeked warbler (*Setophaga chrysoparia*) and southwestern willow flycatcher (*Empidonax traillii extimus*). Studies shows that cowbird trapping is an effective management tool for the recovery of endangered species of birds. In California, the least Bell's vireo and California gnatcatcher are listed as endangered due to loss of riparian and coastal sage scrub habitat and nest parasitism by brown-headed cowbirds.

Brown-headed cowbirds are common residents and summer visitors at Fairview Park and throughout most of the state of California. At the recommendation of the United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and the Army Corps of Engineers (ACOE), a brown-headed cowbird trap was installed at the north side of Pond E and is monitored everyday to release non targeted species and monitor number of cowbirds trapped. Endemic has a daily log datasheet for this activity that will be finalized in an Annual Report. Comments and activity in regards to the cowbird trap are included in this report. The goal of this strategy is to reduce the cowbird population in the park and cowbird parasitism of the least Bell's vireo and California gnatcatcher. As a result, this program should contribute to the increase in reproductive success and ultimately increase to the California gnatcatcher and least Bell's vireo population size, which are currently present at Fairview Park.

5. Quarterly Maintenance Services for wetland ponds and channels

Endemic staff currently remove algae almost daily in the wetlands to reduce mosquito habitat and maintain water flow.



6. Four seasonal tours

No tours were done at this time.

7. As-need Environmental Studies

EES inspects and investigates concerns related to managing and protecting natural resources and public safety, as directed by the City of Costa Mesa Staff. Currently, an invasive plant map has been completed for this Spring of the wetlands (see **Figure 1**). Additionally, EES is surveying and monitoring avian nest activity throughout the park (see **Figure 2**).

Bird Nest Surveys, Monitoring, and Mitigation Inspections

All avian nests at Fairview Park have been monitored and mapped within the wetlands area. The intention is to avoid interference on their reproduction and also maintain compliance with environmental laws and regulations.

Plant and Wildlife Species Surveys

Rare plants and animals are documented during park inspections, which are included in this report. This information will provide insight on the locations and general behavior of special status species that will aid in the management of the species and overall planning of Fairview Park in context of the Fairview Park Master Plan.

Daily Tasks at Fairview Park

EES daily tasks include monitoring and reporting on the function of the water pumps, flow of the channels from pond to pond, invasive plant removal, watering plants, inspecting the cowbird trap (see **Figure 3**), clearing algae and report any unusual activities at Fairview Park. Additionally to the regular schedule, EES inspect and report unusual activities that may occur at Fairview Park. Activities described in **Table 1**, below, will be updated weekly and reported to the City of Costa Mesa.

Table 1. Daily activities at Fairview Park

Date	Activities/Notes
7/2/2018	<ul style="list-style-type: none">• Water flowing Weir Pond D to E• Water Oaks and Mesa Plants



	<ul style="list-style-type: none"> ● Cleared algae Channel 1 ● Homeless at Channel 3 (called Dispatch)
7/3/2018	<ul style="list-style-type: none"> ● Swallows Bird house broken (fixed) (see Appendix 1 - Photo 2) ● Clearing Algae weir Pond B to C (see Appendix 1 - Photo 3)
7/4/2018	OFF
7/5/2018	<ul style="list-style-type: none"> ● Cleared algae ● Water Oaks and Mesa ● Watered plants on channel 2 ● Cleared weir Pond B to C and C to D (see Appendix 1 - Photo 4)
7/6/2018	<ul style="list-style-type: none"> ● Cowbird trap vandalised (see Appendix 1 - Photo 5) All birds released ● Cleared algae channel 3 (see Appendix 1 - Photo 6) ● Homeless person at channel 3 (called Dispatch)
7/9/2018	<ul style="list-style-type: none"> ● Dead Rattlesnake at Pond D (see Appendix 1 - Photo 7)- Erosion Net strangelled ● Juvenile Western Grebe trapped on the Erosion Net (see Appendix 1 - Photo 8) ● Watered oaks ● Cleared algae Channel 3
7/10/2018	<ul style="list-style-type: none"> ● Watered Oaks ● Cleared algae at weir A to B ● Cleared algae at Channel 3
7/11/2018	<ul style="list-style-type: none"> ● Watered Oaks ● Watered plants of channel 2 (see Appendix 1 - Photo 9) ● Watered plant at Mesa (Matt and Maddy)
7/12/2018	<ul style="list-style-type: none"> ● Cleared Algae at weir Pond C to D ● Watered Oaks
7/13/2018	<ul style="list-style-type: none"> ● Watered Oaks ● Red-eared slider turtle (<i>Trachemys scripta elegans</i>) removed from path next to Pond C (see Appendix 1 - Photo 10) ● Watered plants at Mesa (see Appendix 1 - photos 11 and 12)
7/16/2018	<ul style="list-style-type: none"> ● Men and his son playing in the water, where Pond E flows. Also the location where Vireos are using. ● watered oaks
7/17/2018	<ul style="list-style-type: none"> ●



7/18/2018	•
7/19/2018	•
7/20/2018	•
7/23/2018	•
7/24/2018	•
7/25/2018	•
7/26/2018	•
7/27/2018	•
7/30/2018	•



APPENDIX 1 – Photos



Photo 1. Cowbird Trap



Photo 2. Swallow's house broken



Photo 3. Algae and grasses clogging weir from Pond B to C





Photo 4. Cleared algae and grasses weir Pond C to D **Photo 5.** Vandalism at Cowbird trap



Photo 6. Cleared algae on channel 3



Photo 7. Dead Rattlesnake in netting at Pond D





Photo 8. Plants at Channel 2

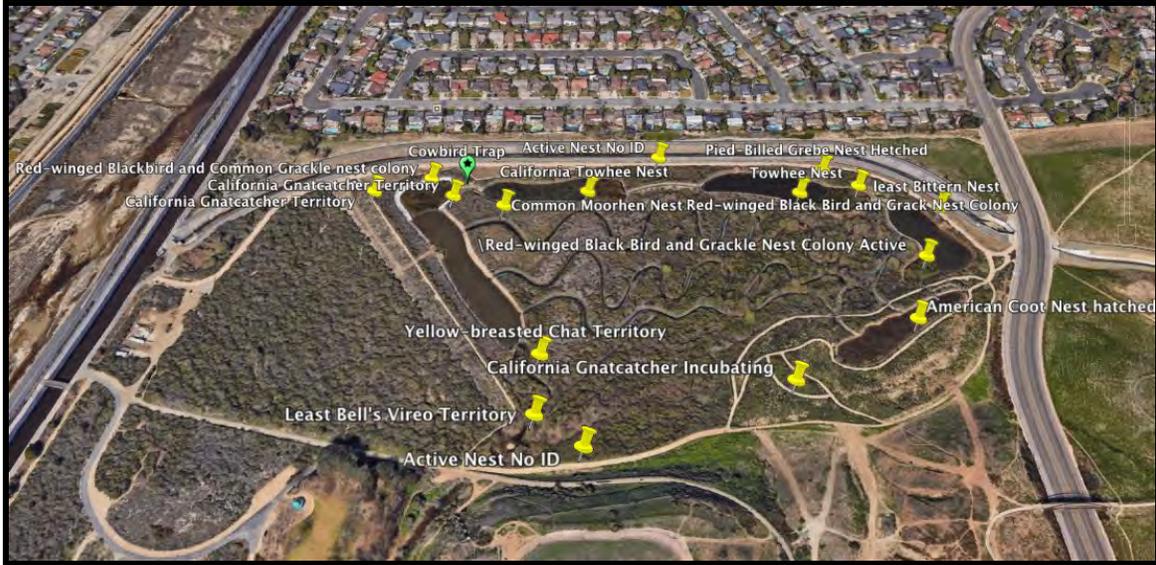


Photo 9. Red-eared slider turtle

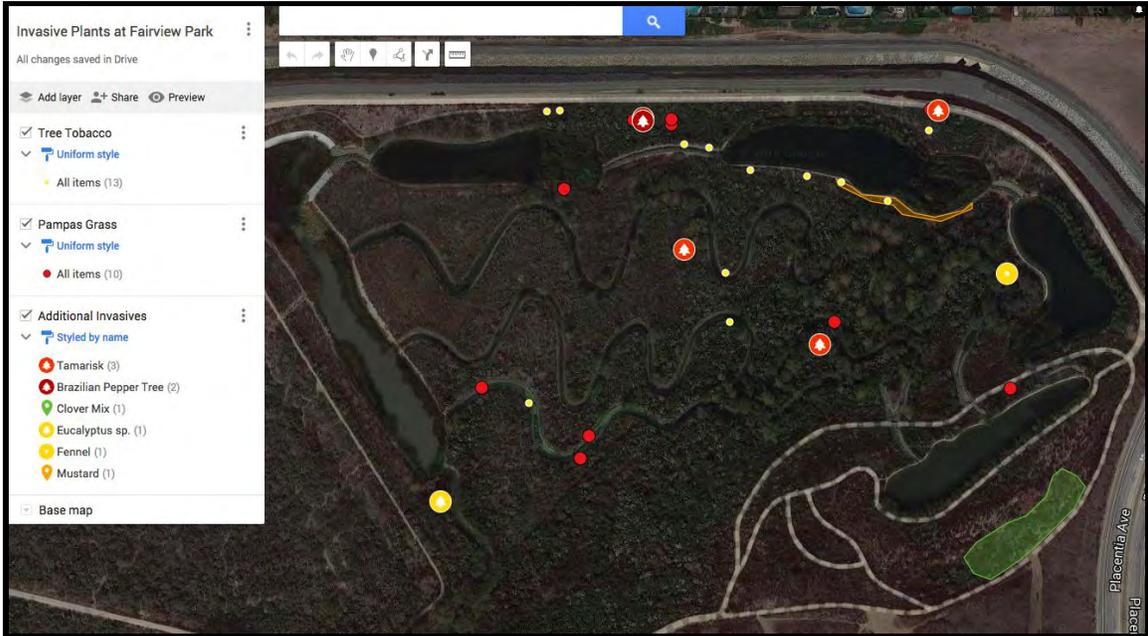


Photos 11 and 12. Plants at mesa watered





Map 1. Birds' nests locations at Fairview Park.



Map 2. Invasive Plants at Fairview Park

