

Condition 58**Monarch Butterfly Surveys**

The proposed project shall avoid Monarch butterfly winter roost habitats where feasible. If the proposed project will impact potential winter roost habitat, a qualified biologist with expertise in positively identifying the Monarch butterfly and winter roosting behavior shall conduct preconstruction surveys within all suitable habitat that occurs within the proposed impact area during the months of October through February. All potential roost sites that have a potential to be impacted as a result of construction activities shall be fenced and avoided. No construction activities shall be permitted in the vicinity (within 500 feet) of potential roost sites during the winter roosting months.

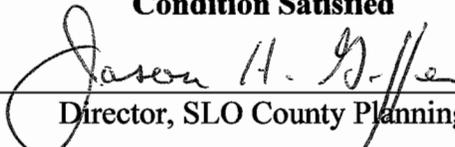
Evidence of compliance:

Please refer to the attached Monarch Butterfly Survey Report (1/11/12). Monarch butterflies were not observed roosting in any trees that are slated for removal on the Broderson site. Further monitoring during construction will occur by Public Works biologists to ensure construction does not occur within 500 feet of a significant monarch roost. In the event roost sites are identified in subsequent surveys within 500 feet of construction, the subject activities will be fenced and avoided as prescribed in the condition. Many former Los Osos roost sites have had dwindling numbers over recent years (see below), so actual roosting activity will be verified before restricting construction activities. The only known roosting site that will potentially have construction within 500 feet of the roost would be at Pecho and Rosina.

	1997	2003	2010
Camp KEEP	50,000	300	0
Monarch Lane (modified site)	3,000	1160	63
Pecho & Rosina	15,000	3,000	3,689
Sweet Springs	925	500	4

*From the Monarch Program's Annual Thanksgiving Monarch Butterfly Count
(<http://www.monarchprogram.org/>)*

Condition Satisfied



Director, SLO County Planning

February 10, 2012

Date



SAN LUIS OBISPO COUNTY DEPARTMENT OF PUBLIC WORKS

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Monarch Butterfly Surveys at the Broderson Leach Field, Los Osos Wastewater Project (300448)

*Prepared by Eric Wier, Department of Public Works, Environmental Programs Division
–January 11, 2012*

Previous Surveys

In March 2004, a report was prepared by Dennis Frey and Shawna Stevens for the Los Osos Wastewater Facilities Project. That report's objective was to provide survey results for monarch butterflies (*Danaus plexipus* L.) and potential wintering habitat on the Broderson and Midtown (formerly "Tri-W") in Los Osos, California. During 6.5 hours of surveys throughout the month of February, 2004, no roosting monarch butterflies were observed.

Frey and Stevens cited their search of four sources to review the historical use of habitat by monarch butterflies in the general Los Osos vicinity and specifically the Broderson property. These sources included: (1) the California Department of Fish and Game Natural Diversity Data Base record for monarch habitat, (2) a California Department of Parks and Recreation monarch habitat survey by Sakai and Calvert (1991), (3) the seven year record of the Monarch Program's Annual Thanksgiving Counts (1997 through 2010) and (4) public comments relating to biological resources on the DEIR and the FEIR for the Los Osos Wastewater Facilities Project (2001).

No record was found in the CNDDDB, Sakai and Calvert (1991), or the Monarch Program Thanksgiving Counts database for this site. Public comments from the DEIR and FEIR indicate no historical evidence of monarch butterflies roosting on the property. In addition, public comments from the 2009 EIR for the current project indicate no evidence of monarch butterfly roosting on the property.

Methods

On the dates and times listed in Table 1 below, field surveys of the Broderson Leach Field site were made by Eric Wier, biologist with the Department of Public Works Environmental Programs Division. The surveys focused on detection of monarch butterflies (*Danaus plexippus*), and specifically whether trees within the area to be disturbed by construction of the leach field were being used by monarch butterflies for roosting. All trees were carefully inspected on each visit, and field notes were made of any butterfly sightings.

Results

No roosting clusters of monarch butterflies were found on the Broderson property during the three site visits. However, monarch butterflies engaged in other non-roosting activities were observed on the property during the same time. These findings are summarized in Table 1.

Specific non-roosting activities included butterflies flying or soaring through the site, basking on vegetation, or actively nectaring on flowers. Many eucalyptus trees were in bloom. The absence of rain and preponderance of mild temperatures created optimal conditions for monarch activity.

Table 1 Survey Dates and Findings

Survey Date	Survey Time	Conditions	Roosting	Flying, Basking or Nectaring
11-15-11	0800-0915	Clear, calm, 57-59° F	0	4
12-8-11	0940-1053	Clear; wind variable, 0-10 mph; 50-57° F	0	4
1-11-12	0905-0955	Thin, high overcast, wind variable, 0-10 mph, 47-54° F	0	1

Conclusions

Monarch butterflies were not overwintering at the Broderson property during the survey period and historical records from five different sources also support this finding. The few non-roosting butterflies observed on the property were most likely roosting off-site.