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CC: Dean Ackerly, Dean, Berkeley College of Natural Resources and Peter Gorman, Housing Project Manager, Capital Strategies

SUBJECT: Recommendation to postpone CEQA for the Albany Village Graduate Student Housing project until a biological survey for monarch butterflies (*Danaus plexippus*) is conducted.

The Xerces Society for Invertebrate Conservation opposes moving forward with the Albany Village Graduate Student Housing project which is part of the University Village & Albany/Northwest Berkeley Properties Master Plan Amendments until new biological surveys can be conducted. The Environmental Impact Review (EIR) for this development project was completed in 2004 and does not adequately address the effects of a six story housing development project on the monarch overwintering site (winter colony) present at the site. Two major changes have taken place since the original biological surveys and EIR were completed in 2004:

 Surveys conducted as part of the <u>Western Monarch Thanksgiving Count</u> have documented monarch butterflies using the proposed development site as overwintering habitat for the last two winters (winters of 2018/19 and 2020/21), and therefore the original EIR is no longer adequate in addressing habitat protection for monarch butterflies. The overwintering site adjacent to the proposed housing development (Site Name: Gill Tract, Site ID:3255) supported one of the largest clusters of monarch butterflies in the Bay Area during the winter of 2020 and 2021. This is now a crucial overwintering site for monarch butterflies in the Bay Area. Please see the map included at the end of this letter to see where monarchs have been observed in the proposed project area in the winter of 2018/ 2019, and 2020/21. In 2004, monarch butterflies were not actively using the proposed development area as overwintering habitat, but historical records indicate that monarchs did use this general location in the 1990s, therefore the site should be managed as monarch overwintering habitat.

2. In 2020, the U.S. Fish and Wildlife Service announced that monarch butterflies are warranted but precluded from federal listing under the Endangered Species Act (ESA). The monarch butterfly is now a Candidate Species for listing under the ESA.

As stated on page 79 of the EIR for this project "California law recognizes monarch butterfly winter colonies as "special resources." The CDFG is required to identify winter colony sites and establish management plans to protect them.". Now that monarch butterflies have been documented using the proposed development site as a winter colony, the EIR should be revised, and the development of a monarch butterfly overwintering site management plan is strongly recommended.

The western monarch butterfly population has declined 99.9 percent since the 1980s, and the decline has accelerated significantly over the past three years. The western monarch migratory population that overwinters at groves of trees in California is nearing extinction. The population has declined so much that a petition was filed in 2014 to list the monarch butterfly in North America as Endangered under the ESA. In December, 2020, the U.S. Fish and Wildlife Service announced that the monarch butterfly warrants protection under the ESA, but that other species currently take priority. This means that the monarch still lacks the federal protection that it so desperately needs to recover, but it does mean that the monarch butterfly is now a Candidate Species and a new ruling will be made in the year 2024 with annual assessments of the population scheduled.

Research suggests that the damage and loss of overwintering habitat is one of the primary drivers of the decline of western monarchs. Currently, overwintering habitat continues to be lost or greatly altered by development. Monarch overwintering sites have very specific microclimatic conditions that allow the butterflies to survive the winter. These specific conditions include dappled sunlight, fresh water (such as that provided by Codornices Creek in the project area), protection from high winds, high humidity and fall- or winterblooming nectar plants. Overwintering microclimates can easily be altered by tree removal, tree trimming, and development. Sometimes, just the simple loss of a wind buffer that may consist of a single tree or tree limb may be enough to alter the microclimatic conditions to make as site no longer suitable as overwintering habitat for monarch butterflies.

Since the habitat of overwintering sites is so sensitive, this proposed housing development near the Gill Tract overwintering site needs a full biological review to ensure that overwintering habitat is not altered to be unsuitable in the future. The development project could change the microclimate by altering sun exposure of the trees used by monarchs, altering wind patterns, cause indirect effects to vegetation through soil compaction or increased erosion from impervious surfaces. This list is not inclusive, but just serves as examples of why a new biological survey and environmental review is needed for the project.



The monarch population has reached a critically low level and the protection and restoration of overwintering habitat is more important than ever to help recover the population.

Recommended actions to ensure monarch butterflies are adequately considered in the University Village & Albany/Northwest Berkeley Properties Master Plan Amendments:

- 1. Conduct a thorough biological survey of the site for monarch butterflies. This assessment should be conducted by an experienced monarch butterfly biologist (see recommendation at the end of the letter). The survey should include surveys to adequately document when butterflies are present at the site (monthly with more frequent weekly surveys during the overwintering season), and what habitat they use. Since it is already known that monarchs overwinter at the site, a thorough overwintering habitat assessment is needed.
- 2. Develop an Overwintering Site Management Plan for Monarch Butterflies using the new biological surveys and data from the Western Monarch Thanksgiving Count.

The Xerces Society for Invertebrate Conservation is an international nonprofit organization that protects the natural world through the conservation of invertebrates and their habitats. In particular, the Xerces Society focuses on conservation and recovery of the western monarch population in California. This includes habitat where the monarch butterflies overwinter on the California coast, such as the habitat found at the Gill Tract overwintering site in Berkeley. The Xerces Society works closely with land managers in California to protect and restore overwintering habitat by developing overwintering site management plans to help recover the population. The Xerces Society recommends that this project is postponed until new biological surveys for monarch butterflies can be conducted. The Xerces Society looks forward to providing additional guidance to ensure that the planned development project has minimal impacts to monarch butterfly habitat.



Figure 1. Map of confirmed locations of clusters (red dots) of monarch butterflies (*Danaus plexippus*) overwintering at the Gill Tract (Site ID: 3255) in winter of 2018/19 and 2020/21. The historical site where monarch butterflies were documented in the 1990s is also shows on the map (Site ID: 2835). Data from the Western Monarch Count (www.westernmonarchcount.org/data).

Sincerely,

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## Additional Monarch Butterfly Overwintering Habitat and Population Status Information:

• The Xerces publication, "Protecting California's Butterfly Groves: Management Guidelines for Monarch Butterfly Overwintering Habitat". These guidelines provide an



overview of the biology and conservation of western monarchs; step-by-step guidance for developing a site-specific management plan, and overall guidance on topics including tree management, shrub and forb management, and visitor and public access issues. The document also includes a list of monarch-attractive native nectar plants suitable for coastal areas. These guidelines will help site managers become familiar with overwintering monarch habitat needs and provides a roadmap to develop site-specific management plans to benefit monarchs in both the short- and long-term. https://xerces.org/publications/guidelines/protecting-californias-butterfly-groves

- Monarch Overwintering Grove Management Plan Template.
  <u>https://www.westernmonarchcount.org/wp-content/uploads/2020/02/OW-Grove-Mgmt-Plan-Template-10.2019.docx</u>
- U.S. Fish and Wildlife Service: Assessing the Status of the Monarch Butterfly. 2020 Endangered Species Act Listing Decision. <u>https://www.fws.gov/savethemonarch/SSA.html</u>
- Western Monarch Count. <u>www.westernmonarchcount.org</u>
- Save Western Monarchs. <u>www.savewesternmonarchs.org</u>

## **Biological Survey Consultant with Monarch Butterfly Overwintering Habitat** Experience

The Xerces Society for Invertebrate Conservation is not affiliated with nor benefits from this recommendation. Creekside Sciences: Creekside Center for Earth Observation has extensive experience surveying for monarch butterflies, researching their habitat needs, and developing site management plans.

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