

# Preserving pollinators, protecting our food

Did you know that pollinators like bees, birds, bats and butterflies are responsible for bringing us one out of every three bites of food? By transferring pollen, they enable fertilization and the growth of seeds and fruits. Almonds and many other types of nuts, berries, cherries, avocados, melons and squash are among the popular crops that are highly dependent on the work of pollinators, especially here in California's Central Valley.

Pollinator populations are in serious decline and many are at risk due to sprawling development, habitat loss, climate change and pesticide use. SMUD and other energy utilities manage extensive transmission and distribution rights-of-way and influence land resources at wind and solar farms. We are mobilizing to help support pollinator populations.

SMUD is a member of the Electric Power Research Institute's (EPRI) Power-in-Pollinators initiative, which exists to promote and support pollinator conservation among energy utilities. The partnership shares the latest scientific findings, case studies and tools to assist with the integration of pollinator-friendly practices into utility vegetation, facilities and land management.



## SMUD's pollinator efforts include:

#### **Research Projects:**



Funding and technical support for a pollinator habitat demonstration with educational signage adjacent to the bike trail on the American River Parkway near Cal Expo. This was a joint project with the Pollinator Partnership, the American River Parkway Foundation, Sacramento County Regional Parks and Pacific Gas & Electric Company (PG&E). After three years of study and comparison to conventionally managed sites, the demonstration was found to have twice as many pollinator species, three times the number of bees and 30% higher bee nesting rates.



A collaborative effort with the Utility Arborist Association, the United States Forest Service, PG&E and scientists at the Sonoma State University Center for Environmental Inquiry to evaluate the impact of Integrated Vegetation Management (IVM) on plant communities and wildlife diversity. This study is taking place in an El Dorado County transmission corridor that was burned in the 2014 King Fire. Research on multiple test plots, including vegetation management cost and revegetation success, is ongoing.



A conceptual plan for the integration of pollinator-friendly native grasses and wildflowers, grazing management and soil carbon storage for a utility-scale solar project. We also created a proposal to test the impacts of solar panel shading and soil moisture on milkweed establishment success. We're currently searching for funding partners and evaluating design specifications and methods to enable these practices in future solar projects.

#### **Operational Programs**

- SMUD's Shade Tree Program provides customers with an array of flowering trees which provide nectar and shelter for a variety of pollinators.
- We're using goats and sheep to graze dry grass and brush in our transmission corridors and other land holdings, reducing the need for herbicides.
- SMUD employs local and non-profit extraction services instead of insecticides when bee colonies need to be relocated to safer locations.
- We eliminated the use of herbicides containing glyphosate, known to be harmful to honeybees, in the landscaping at SMUD's Sacramento County buildings.
  SMUD regularly evaluates available weed control alternatives in our Integrated Vegetation Management program and we work to minimize the use of herbicides throughout our system.

### Learn more today!

pollinator.org xerces.org eprijournal.com projectapism.org

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