

Quarterly Report: Prepared for the California Department of Pesticide Regulation (DPR)

California Marine Sanctuary Foundation (CMSF)

Agriculture Water Quality Coordinator

May 1, 2022 – June 30, 2022

**Submitted by: Pamela Krone and Jennifer Pensky,
California Marine Sanctuary Foundation,
99 Pacific Street, Bldg. 455, Monterey, CA 93940.**

In fulfillment of duties under the funding allocation administered through DPR (Agreement No. 21-C0092), the Contractor performed the following work tasks.

Phase I: Beta Testing and Evaluation Phase with Experts (UC Davis Granite Canyon, UCCE, RCD, Select PCA or Consultants – at least 5 people to participate)

CMSF has been working with the 3rd party Cooperative Monitoring Program, DPR staff, and the model developers to evaluate the CalBMP model. On June 21, 2022, CMSF hosted an expert panel webinar to give an overview of the model and recommend model modifications. This meeting was attended by 11 people, including representatives from CMSF and the 3rd party Cooperative Monitoring Program, staff and researchers from DPR, researchers from UC Davis and the USDA, and a representative from the California Water Boards. The 2-hour meeting included discussion about the model usability, BMP feasibility, suggestions for model improvements, and ideas for framework development to contextualize use of the model, including incorporating regenerative agriculture, integrated pest management, and other BMPs not currently included in the model. The agenda was sent out in advance of the meeting, and minutes were sent out to all participants following the meeting.

Suggestions to the model development team included: incorporating additional data for predictive conditions in the future; running the model in the “inverse” direction (i.e., recommending BMPs to help growers meet specific benchmarks or toxicity values); incorporating structural BMPs (i.e., vegetated buffer strips); linking to a website that helps growers ID their soil type since growers may not know it; adding the ability for growers to input multiple pesticide applications; and incorporating the ability to change the type and amount of irrigation applied over time.

The model developers stated during the expert panel that there were still some glitches with the backend of the model to be worked through that should be resolved during the month of July. After resolving the model glitches, the modeling team will also begin incorporating suggestions from the expert panel. CMSF is planning to host another meeting with the model development team, DPR, and at least 3 experts in August or September in order to assess the model improvements and discuss ideas for the larger framework to contextualize use of the model.

Phase II: Model Testing and Evaluation with growers or the consultants they would normally hire or have on staff to test Model usability and effectiveness.

To be completed during Third and Fourth Quarter 2022.

Phase III: BMP Effectiveness Verification

To be completed during Summer of 2023.

Phase IV: Broader Outreach Effort for CalBMP Tool

To be completed by Fourth Quarter of 2023.