

July 12, 2021

Re: Water Management on APN 220-331-001

To Whom It May Concern:

Stillwater Sciences has been developing a multi-benefit approach for use of the pre-existing onstream ponds on Humboldt County APN 220-331-001. Stillwater has been coordinating with the landowner and California Department of Fish and Wildlife to develop a Lake and Streambed Alteration Agreement for the property that meets the irrigation water use needs of the landowner, provides fire suppression water storage for the community, and substantially benefits instream aquatic habitat in Miller Creek.

Our work began in the summer and fall of 2020 with a topographic and bathymetric survey of the ponds to determine water storage volume. Since then, additional analyses, planning, design and coordination has been conducted to develop pond management and flow augmentation plans agreeable to both CDFW and the landowner. The plan includes invasive species control and flow releases to Miller Creek equivalent to 1/3 of the total water volume stored in the ponds each year. Approximately 1/3 of the water volume will be maintained for irrigation/fire suppression and 1/3 is expected to be lost to evaporation and seepage. Flow releases are expected to be 1.3 million gallons during normal precipitation years, although they may be less during drought years if pond volumes in the late spring are significantly lower than capacity.

These types of flow releases from agricultural ponds have successfully improved instream aquatic habitat conditions in Russian River tributaries in Sonoma County. It is anticipated that the flow releases from these ponds will have a substantial positive impact on dry season conditions in the downstream reaches of Miller Creek. Although this project alone will not eliminate the severe low-flow conditions in Miller Creek, it is a meaningful step in the right direction.

Stillwater Sciences will maintain future involvement in the project through monitoring and adaptive management activities. It is also anticipated that lessons learned from this project will provide guidance for future flow enhancement efforts in the Redwood Creek.

Please feel free to contact me with questions related to the flow augmentation component of this project.

Sincerely,



Joel Monschke PE

jmonschke@stillwatersci.com

2855 Telegraph Avenue
Suite 400
Berkeley, CA 94705
510.848.8098

279 Cousteau Place
Suite 400
Davis, CA 95618
530.756.7550

850 G Street
Suite K
Arcata, CA 95521
707.822.9607

895 Napa Avenue
Suite B-4
Morro Bay, CA 93442
805.570.7499

555 W. 5th Street
35th Floor
Los Angeles, CA 90013
424.302.3910

108 NW Ninth Avenue
Suite 202
Portland, OR 97209
503.267.9006