



March 9, 2023

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Re: Follow up to Plan for Water (PFW) Questions and NID Responses

Dear NID Board and Ms. Hanson,

Thank you for providing written responses to the questions and recommendations outlined in our letter dated January 25, 2025. We would like to take the opportunity to follow up on several of the questions asked and respective responses outlined in NID's February 7, 2023 letter.

- Referring to Question 2 regarding PFW glossary of terms Our proposal would be that NID adopt a statewide glossary that includes mutually accepted definitions, which is essential for consistency and public acceptance. We provided a link to the state's basicwater glossary, which we encourage NID to adapt, in its entirety, to its PFW glossary. If there are particular definitions that NID does not agree with, or specific reasons why NID does not want to follow the statewide agreed upon definitions, we would request to understand why and how existing glossaries do not meet NID's needs. We would be happy to work with you on adjusting definitions as needed.
- 2. Referring to Question 3 regarding limitations of NID's historical water use data We do not disagree that there will always be uncertainties when capturing and modeling water loss and demand data. Our question is aimed at ensuring that NID is accounting for overestimating and underreporting. Understanding the uncertainty in the data being used by the model is crucial to knowing how to calibrate the model. The development of an

upper and lower bound when running the suite of modeling options to develop the range of possible scenarios relies on assuming the historical water usage data is accurate within some margin of error. Without knowing what that margin of error is, setting the upper and lower bounds for modeling becomes an unknown level of guesswork. We appreciate that the plan will be updated every 5 years, however, ensuring that the data relied on at the outset of the PFW is sound is also critical.

- **3.** Referring to Question 4 regarding OpenET dataset We understand how OpenET operates and how it can potentially be problematic to rely on due to its limited spatial resolution. The nature of remote sensing data, like that relied upon by OpenET, is that each pixel (30m x 30m for Landsat) is assigned a value. The end user, OpenET, NID, and the Consultant team, then have to decide what that number means as it relates to water demand. We would like to understand what rules will be followed to decide how a given pixel is classified as related to its assumed raw water demand. This is especially important in places where a single pixel is comprised of multiple land uses, not all of which are being irrigated.
- 4. **Referring to Question 5 regarding "groundtruthing"** It was our understanding that there was a conversation around the need for "groundtruthing" on real raw water use due to the uncertainty of relying on historical data, crop reports etc. Raw water audits would provide a critical on-the-ground accounting, or "groundtruthing" with respect to water deliveries and demand that would greatly benefit and enhance the PFW model.
- **5.** Referring to Question 6 regarding model weighting We appreciate the clarification that model inputs are not weighted differently in the model, and that instead, upper and lower boundaries will be established based on model inputs. However, the upper and lower boundaries which will be established as part of the model will rely on a suite of data sources you name. These data will not always agree because they all estimate water demand using different metrics and different spatial and temporal scales. In the event where the four data sources all suggest a different demand at a location, how are the differences reconciled to come up with the single demand value at that location and point in time?

We would be happy to schedule an in-person meeting to discuss some of our thoughts and questions in more detail. Thank you again for your responses to our questions and comments, and for the opportunity to provide feedback.

Sincerely,

Traci Sheehan Van Thull Coordinator Foothills Water Network

In IM

Aaron Zettler-Mann Interim Executive Director Watershed Science Director South Yuba River Citizens League

cc: Katherine Klug, Davids Engineering, Inc. Brandon Ertis, Davids Engineering, Inc. Brian Wahlin, West Consultants David Curtis, West Consultants Marco Bell, West Consultants Jeff Meyer, Western Hydrologics Megan Lionberger, HDR Inc.