



MEMORANDUM

DATE: October 15, 2020

TO: Butte Advisory Board and Butte Subbasin Groundwater Sustainability Agencies

FROM: Christina Buck, Assistant Director

RE: Public Comments on Basin Setting Drafts

Public Comment Overview

Drafts of the Basin Setting and Monitoring Network Chapters were made available August 7, 2020 for a public comment period. The comment period ended on Tuesday September 8, 2020.

The documents are available online at <https://www.buttebasingroundwater.org/gsp-info>

In addition, an overview of the Basin setting preliminary results was presented to the Butte Advisory Board (BAB) in April 2020. The presentation is also available online for reference:

https://static1.squarespace.com/static/5d4072188b5bac000164d379/t/5ea0ae1437136b7a958f2f4b/1587588639832/DE_FINAL_BAB+Basin+Setting+Results.pdf

Public comments were received from three individuals and are attached to this report. Several themes emerged which are summarized in the bullets below:

- Comments provided suggestions regarding additional monitoring:
 - o shallow groundwater (to monitor impacts to Groundwater Dependent Ecosystems (GDEs) and interconnected surface waters and to refine the Butte Basin Groundwater Model and contour mapping)
 - o stream gages
 - o multi-completion wells near streams to characterize stream-groundwater interaction
 - o wells in circumferential pattern away from the Sutter Buttes to measure water quality and vertical gradients
 - o water quality for potential contamination of City of Colusa and domestic wells water supply on the east side of the Sacramento River related to intrusion of saline water at depth into the overlying freshwater aquifer system
- Comments provided suggested revisions to the Hydrogeologic Conceptual Model (HCM) to include additional description and referenced reports regarding the structure and hydrogeology

of the Sutter Buttes, Willows Fault and Colusa Dome and their relation to water quality in the southern portion of the subbasin

- Comments expressed concern for groundwater pumping or water transfers having the potential to affect vertical gradients and potentially cause water quality contamination of GDEs in the Butte Sink or shallow domestic wells east of the Sacramento River, or wells at Gray Lodge, in the City of Colusa, or in Grimes
- Comments provided a number of suggested revisions regarding
 - o Clarification regarding role of drought
 - o Absence of GDE information in the draft
 - o Description of data gaps in the HCM
 - o Description of flooding in the Butte Sink and portions of the subbasin
 - o Inclusion of evaporation in the groundwater budget
 - o Other points of clarification or correction to the text
- Comments brought attention to a number of report references and data sources

Next Steps with Basin Setting Documents

A column has been added to the spreadsheet of compiled comments with staff's recommendation for proposed action for each comment. Generally, responses falls into one of four broad categories:

1) **Revise document based on comment**– the text will be revised to incorporate the suggested revision

2) **Recommendation noted and will be considered for inclusion in the description of data gaps and possible PMAs for additional monitoring**- these will likely be documented in the Basin Setting section or other portions of the Groundwater Sustainability Plan (GSP) as data gaps and/or addressed through implementation of the GSP (such as expanded monitoring)

3) **Concern noted and can be taken into consideration through development of Sustainable Management Criteria (SMC)**– the concern or issue raised by the comment can be considered with other factors when establishing minimum thresholds and measurable objectives (i.e. SMC development)

4) **Information noted and will be incorporated as appropriate** - references to reports/data will be further evaluated by staff and added to the Basin Setting documents and/or used to inform the SMC development process as applicable

Discussion by the Butte Advisory Board (BAB)

An overview of the draft Basin Setting documents and public comments will be presented to the BAB for information and discussion. It would be helpful to get a sense from BAB members whether they see significant issues raised by the Basin Setting or public comments, and how they would like to see any issues be addressed in the next phase of GSP development. The spreadsheet includes the proposed approach staff recommends for each comment. Feedback on the proposed approach is also appreciated.

Please note that work regarding identification of GDEs is underway and will be added to the documentation when complete. The analysis will be available for and incorporated into the SMC development process.

A couple of issues for potential BAB discussion:

1) Shallow Monitoring Network

The document and public comment identify the limited extent of existing monitoring in the shallowest portions of the aquifer system as an important data gap. Funding will be available after submission of the GSP in 2022 to support implementation of the Plan. Alternatively, the Butte Subbasin could pursue Technical Support Services from the Department of Water Resources for shallow monitoring wells. Either implementation option will require design and development of a shallow monitoring network. The development of the design for a shallow monitoring network and securing the resources for implementation would need to occur after GSP submission. Surrounding subbasins may pursue this as well. The BAB could recommend that development of a shallow monitoring network be prioritized to address the identified data gap.

2) Saline Intrusion vs. Water Quality Sustainability Indicators

Public comment highlighted water quality concerns driven by saline water at depth associated with the Sutter Buttes and its related geologic features and faults serving to introduce water with high levels of Total Dissolved Solids (TDS) into shallower groundwater. The Basin Setting and Monitoring network drafts indicate this water quality issue will be addressed under the water quality Sustainability Indicator (SI) and that seawater intrusion is not considered to be a SI relevant to the Butte Subbasin because of its distance from the Pacific Ocean. This is consistent with the approach taken in the Corning Subbasin and Yuba Subbasins. The BAB may wish to recommend this same approach be used in the Butte Subbasin consistent with the current language in the Basin Setting documents.