# Meeting Brief

* **GSA Updates:** GSAs and adjacent subbasins provided updates on GSP development.
* **Inter-basin Coordination Update:** M. Rivera-Torres (CBI) presented a brief overview of ongoing inter-basin coordination efforts in the Northern Sacramento Valley [[access here](https://www.buttebasingroundwater.org/s/Inter-basin-Coordination-101_v3.pdf)].
* **Draft Basin Setting Chapters**: C. Buck (Butte County) presented a high-level overview of the Draft Basin Setting chapters, a summary of the comments received during the Draft Basin Setting Chapter public review period, and a description of staff proposed responses to the comments. Butte Subbasin Advisory Board members had the opportunity to ask clarifying questions [Access [slides](https://www.buttebasingroundwater.org/s/Buck_Butte-BAB-Basin-Setting-Overview-and-Public-Comments_Oct-2020.pdf), [staff report](https://www.buttebasingroundwater.org/s/02_BAB-Staff-Report_Basin-Setting-Comments-10152020.pdf), and [comment tracking document](https://www.buttebasingroundwater.org/s/03_BAB_Butte-Comments-Compiled-w-Proposed-Response-10152020.pdf)].
* **Projects & Management Actions (PMA) Process:** T. Carlone (CBI) gave an overview presentation of the PMA requirements and proposed approach to gather and evaluate PMA options [[access slides](https://static1.squarespace.com/static/5d4072188b5bac000164d379/t/5f8db035e69d3c65a2106871/1603121214697/04_Butte_GSP%2BPMA%2BProcess.pdf); [access form](https://static1.squarespace.com/static/5d4072188b5bac000164d379/t/5f8db02f961a4a47bfe3c94f/1603121199987/05_DRAFT%2BPMA%2BSubmittal%2BForm%2Bfor%2BButte%2BSubbasin%2Bconsideration_10-16-20.pdf)].
* **Revised Meeting Framewor**k: CBI developed the GSA Managers meeting framework through 2021, based on Davids Engineering’s timeline for GSP completion (see Appendix A).
* **Next Steps**: The BAB decided to host the next meeting in the evening, as a public workshop, during the first two weeks of December 2020. The facilitation team will follow up to schedule the meeting.

# Action Items

|  |  |  |
| --- | --- | --- |
| **Item** | **Lead Person(s)** | **Completion** |
| Revise the document, compiling public comments for the Draft Basin Setting Chapters, by adding a column for how the comment was addressed. | Butte County/C. Buck | Upon completion |
| Schedule BAB Meeting/Public Workshop in December. | CBI/Mariana | In process |

Summary

## Updates and Announcements

* **GSA & Updates**:
	+ *Biggs West Gridley Water District (BWGWD)*: no updates
	+ *Butte County*: submitted a request to the Department of Water Resources to continue Facilitation Support Services. Butte County staff also met with M&T Ranch and Gray Lodge Wildlife Area (California Department of Fish and Wildlife), two key stakeholders in the subbasin within Butte County’s GSA footprint.
	+ *Butte Water District:* no updates
	+ *City of Biggs:* no updates
	+ *City of Gridley:* no representative
	+ *Colusa Groundwater Authority (CGA):* adjacent updates below
	+ *Glenn County:* no updates
	+ *Richvale Irrigation District:* no updates
	+ *Reclamation District (RD) 1004:* no updates
	+ *RD 2106:* no updates
	+ *Western Canal Water District:* no updates
* **Adjacent Subbasin Updates:**
	+ Vina: Working with Geosyntec on next stages of GSP development. Vina GSA Board sent a letter to Governor Newsom requesting a two-year extension for the GSP submittal deadline. Although Vina is on track for GSP completion, the Vina Stakeholder Advisory Committee asserted that the Covid-19 pandemic limits public engagement opportunities and made a formal recommendation to the Vina GSA Board for an extension.
	+ Wyandotte Creek: Working with Geosyntec on next stages of GSP development.
	+ Colusa:Moving forward with Groundwater Sustainability Plan (GSP) development, expecting the Basin Setting Draft Chapter to be ready by the end of the year (2020). Public outreach meetings will begin the second week of December.
	+ Corning: Recently received Facilitation Support Services (FSS) from DWR for stakeholder outreach and engagement services and will be able to build on existing inter-basin coordination efforts. Corning Subbasin Advisory Board and the Corning Sub-basin GSA Board continue to meet regularly.
* **Inter-basin Coordination** [[access here](https://www.buttebasingroundwater.org/s/Inter-basin-Coordination-101_v3.pdf)]: Representatives from the Antelope, Bowman, Butte, Colusa, Corning, Los Molinos, Red Bluff, Vina, and Wyandotte Creek subbasins have met three times to discuss inter-basin coordination. The first two meetings included County GSA staff only, and the third meeting also included technical consulting teams. The various subbasins have agreed to share technical information and reconvene in early December. Inter-basin coordination efforts have focused on creating tools to foster general and technical information exchange, such as a technical information-sharing template. Each subbasin’s consulting team will fill the template, in order to identify similarities and differences related to modeling approaches, cross-boundary flows, stream-aquifer interactions, and common hydrogeologic understanding. Participants will revisit conversations about Sustainable Management Criteria and Monitoring Networks next year. CBI will provide inter-basin coordination updates on a regular basis moving forward.

### Questions | Discussion

* *Are the subbasins considering inter-basin coordination agreements?* Inter-basin coordination agreements are voluntary, not required as part of GSP development. The facilitation team conducted research to look at examples of inter-basin coordination agreements submitted to the DWR thus far in the critically over- drafted basins and found very few examples. This research was shared with GSA representatives to guide discussions. Although current inter-basin coordination efforts so far are very aligned with the regulations [[Article 8 §357.2 (b](https://groundwaterexchange.org/wp-content/uploads/2018/07/GSP-Regs-Art-8-Interagency-Agreements.pdf))], which describe the requirements for interbasin coordination agreements, the group decided to focus efforts on information-sharing in the near-term and revisit conversations around voluntary inter-basin agreements after compiling and assessing the information.

## Draft Basin Setting and Monitoring Network Chapters

Christina Buck (Butte County) presented an overview of the Draft Basin Setting chapters, a summary of the comments received during the Draft Basin Setting Chapter public review period, and a description of staff proposed responses to the comments [Access [slides](https://www.buttebasingroundwater.org/s/Buck_Butte-BAB-Basin-Setting-Overview-and-Public-Comments_Oct-2020.pdf), [staff report](https://www.buttebasingroundwater.org/s/02_BAB-Staff-Report_Basin-Setting-Comments-10152020.pdf), and [comment tracking document](https://www.buttebasingroundwater.org/s/03_BAB_Butte-Comments-Compiled-w-Proposed-Response-10152020.pdf)].

### Draft Basin Setting Chapters | Technical Foundation

Buck provided an overview of the key components of the draft Basin Setting Chapters, including but not limited to an update on Groundwater Dependent Ecosystems (GDEs) work, groundwater conditions, and water budgets under different scenarios. Generally, groundwater levels are stable in the subbasin, with moderate declines during droughts and curtailment years. Overall, water quality is good, with no high-ranking High Vulnerability Areas. Further, land subsidence has not been observed. Buck highlighted there were some revisions made in the Water Budget calculations from the preliminary findings presentation, related to cross-boundary flows and the Sacramento River’s interaction with the groundwater system at the boundary of the subbasin. Cross-boundary flows, particularly at the western boundary require additional investigation. Continuing current inter-basin cooperation efforts and using regional models will be important moving forward. Lastly, groundwater and surface water are highly interconnected in the Butte Subbasin; historical conditions show significant gains to streamflow from groundwater. Future conditions scenarios indicate an increased reliance on groundwater, primarily due to climate change and impacts to surface water supplies.

### Summary of Comments from Staff Memo: Key Themes from Public Comments [[Access memo](https://static1.squarespace.com/static/5d4072188b5bac000164d379/t/5f8db01b9fd00b1abf7ff3d4/1603121181816/02_BAB%2BStaff%2BReport_Basin%2BSetting%2BComments%2B10152020.pdf); [comment tracker](https://static1.squarespace.com/static/5d4072188b5bac000164d379/t/5f8db0269fd00b1abf7ff8a3/1603121190556/03_BAB_Butte%2BComments%2BCompiled%2Bw%2BProposed%2BResponse%2B10152020.pdf)]

Buck summarized key themes from public comments on the Basin Setting Chapters. These themes include suggestions for additional monitoring to better understand shallow groundwater, GDEs, stream-aquifer interactions, and water quality concerns. Some suggested revisions to the Hydrogeologic Conceptual Model (HCM)regarding the structure and influence of the Sutter Buttes, Willows Fault and Colusa Dome and to include a number of references to reports and data sources. Other concerns and clarifications include unease around groundwater pumping or water transfers that could affect vertical gradients and potentially cause water quality contamination of GDEs and shallow domestic wells west of the Sutter Buttes.Buck shared a compilation of the comments with a series of proposed actions in response to the comments: (1) Revise document based on comment; (2) Note recommendation and consider during the description of data gaps and possible Projects and Management Actions (PMAs); (3) Note concern and take into consideration through the Sustainable Management Criteria (SMC) development process, and (4) information noted and will be incorporated as appropriate.

### Discussion | Draft Basin Setting Chapters

* **Slurry Wall:** A GSA manager inquired about the effects of the slurry wall on Feather River on groundwater levels. Buck explained that analysis has not been incorporated so far, but the GSAs could take a closer look through monitoring wells and potentially address it through increased monitoring of shallow wells. The GSA manager suggested perhaps using the existing monitoring wells to accurately evaluate a before and after comparison. A BAB member stated that farmers in Sutter and Butte had inquired about the slurry wall. He suggested contacting Michael Bessette from the Sutter Butte Flood Control Agency because they have gathered data. Better understanding the impacts of the slurry wall could be identified as a data gap.
* **Groundwater Dependent Ecosystems (GDEs):** Another BAB member asked where GDEs will be included in the GSP. Buck explained that a map and description of GDEs will be included in the next Basin Setting Draft, and GDEs will be considered when establishing Sustainable Management Criteria.
* **Sutter Buttes**: A BAB member appreciated the proposed actions regarding the comments related to water quality concerns around the Sutter Buttes.
* **Shallow Monitoring Network:** BAB members were interested in the development of a shallow monitoring network in the Butte Subbasin, and potentially including medium-depth wells as well. Funding for implementation will be available after 2022. The network can be tailored to the specific aspect the GSAs would like to address. The plan would specify whether the goal is to better understand water levels, for example, to comprehend GDEs, or whether it is looking at water quality and salinity concerns. For water quality, the GSAs could use existing wells. Additional monitoring could also increase understanding regarding basin boundary interactions.
* **Water Quality vs. Seawater Intrusion Sustainability Indicator:** BAB members agreed that existing saline water concerns should be considered within the Water Quality Sustainability Indicator, rather than as Seawater Intrusion, consistent with DWR recommendations.

### Outcomes & Next Steps | Draft Basin Setting Chapters

* Revise the document compiling public comments, add a column for how the comment was addressed, and pivot focus towards SMC discussion.
* Butte Subbasin GSAs will follow a similar review process for upcoming draft chapters: 1) receive comments, (2) compile comments and write memo, (3) categorize comments, 4) revise the draft chapter, and (5) document how comments have been addressed.
* Although not a formal recommendation at this time, the BAB supported continuing to explore shallow monitoring networks, to address the potential data gap.

## Project & Management Actions

The BAB received an overview presentation of proposed PMA requirements, timeline, and proposed process [access [PMA Process Presentation](https://www.buttebasingroundwater.org/s/04_Butte_GSP-PMA-Process.pdf); [Draft Submittal Form](https://www.buttebasingroundwater.org/s/05_DRAFT-PMA-Submittal-Form-for-Butte-Subbasin-consideration_10-16-20.pdf)]. PMAs will be mainly identified in existing Ag. Water Management Plans and other relevant plans in the various GSAs. The BAB also received a draft PMA project form (adapted from Colusa Subbasin) to gather other PMA ideas from the public.

### Discussion

* A BAB member asked how the GSAs will delve into the Sustainable Management Criteria (SMC) process and decide which Undesirable Result (UR) to address. Byron Clark (Davids Engineering), the technical consultant, stated that each subbasin establishes a Sustainability Goal, describing what constitutes as significant and unreasonable, then established quantitative criteria tied to monitoring networks, known as Minimum Thresholds (MT) and Measurable Objectives (MO). The BAB will revisit SMC conversations in future meetings.
* The BAB, as an advisory board, will provide recommendations for the GSA boards to consider.

### Outcomes & Next Steps | PMAs

* Immediate next steps include:
	+ October-December 2020: Initial PMA Identification and Assessment
	+ January-February 2021: Screening Analysis
	+ March-May 2021: Alternatives Analysis
	+ June-August 2021: Identify PMA mix and analyze uncertainty
	+ September-October 2021: Public review draft GSP

## Revised Meeting Framework

* T. Carlone quickly shared the revised Butte Subbasin BAB & GSA Managers Meeting Framework, which was extended through 2021 based on Davids Engineering’s timeline for GSP completion (see Appendix A). B. Clark (Davids Engineering) stated Butte Subbasin is now transitioning from Basin Setting towards Sustainable Management Criteria and Projects and Management Actions. The BAB decided to hold a meeting/public workshop in December to continue the conversation. The meeting will be held during the evening to make public participation more accessible.

### Discussion

* A BAB member asked whether this meeting would be in person, since soliciting public input is difficult in an online setting. GSA managers will discuss this matter further at their meeting in November.

### Outcomes & Next Steps | Meeting Framework

* The BAB decided to hold an evening meeting/public workshop in December.
* CBI will follow up to schedule this meeting.

Next Meeting

The next Butte Subbasin Advisory Board meeting will take place in December. Date TBD.

# Meeting Participants

# Butte Subbasin Advisory Board, Staff & Consultant Meeting Attendance

| **Participant** | **Representation/Affiliation** | **Present**  |
| --- | --- | --- |
| **Butte Subbasin Advisory Board (BAB) Members** |  |
| Mike Farr | Biggs-West Gridley Water District | Y |
| Eugene Massa, Jr. (alternate) | Biggs-West Gridley Water District | Y |
| Steve Lambert | Butte County | Y |
| Debra Lucero (alternate) | Butte County | Y |
| Pete Righero | Butte Water District | Y |
| Shelly Davis (alternate) | Butte Water District | N |
| James (Bo) Sheppard | City of Biggs | Y |
| Mark Sorensen (alternate) | City of Biggs | Y |
| Chris Williams | City of Gridley | N |
| Paul Eckert (alternate) | City of Gridley | N |
| Denise Carter | Colusa Groundwater Authority | Y |
| Jeff Moresco (alternate) | Colusa Groundwater Authority | Y |
| John Viegas | Glenn County | Y |
| Leigh McDaniel (alternate) | Glenn County | N |
| Hans Heckert | Reclamation District 1004 | Y |
| Terry Bressler (alternate) | Reclamation District 1004 | N |
| Charlie Edgar | Reclamation District 2106 | Y |
| Richard Thieriot (alternate) | Reclamation District 2106 | N |
| Gary Stone | Richvale Irrigation District | Y |
| Sean Earley (alternate) | Richvale Irrigation District | Y |
| Greg Johnson  | Western Canal Water District | N |
| Anjanette Shadley (alternate) | Western Canal Water District | N |
| **Groundwater Sustainability Agency (GSA) Staff** (not included above) |  |
| Christina Buck | Butte County | Y |
| Paul Gosselin | Butte County  | Y |
| Mary Fahey | Colusa Groundwater Authority | Y |
| Lisa Hunter | Glenn County | Y |
| Ted Trimble  | Western Canal Water District | Y |
| **Facilitator** |  |
| Tania Carlone | Consensus Building Institute | Y |
| Mariana Rivera-Torres | Consensus Building Institute | Y |
| **Technical Consultant** |  |
| Byron Clark | Davids Engineering | Y |

12 members of the public attended the on-line meeting.

# Appendix A – GSA Managers Meeting Framework

Butte Subbasin GSP Completion
January 2020-January 2022
DRAFT Meeting Framework

The Butte Subbasin GSAs and Advisory Board meetings will occur on an alternating schedule. All Butte Subbasin meetings will occur on the fourth Thursday of the month from 1-3 PM. This meeting framework illustrates the anticipated schedule and the key discussion topics for each Butte Subbasin Advisory Board meeting, GSA Managers meetings, and other outreach events. GSA Managers meet to prepare for Butte Subbasin Advisory Board meetings and to coordinate on administrative and public outreach and engagement activities. The framework will be updated, as warranted, to reflect the most current information.

| **Date** | **Meeting Type** | **Key Meeting Topics/Outcomes** |
| --- | --- | --- |
| January 23, 20201-3 PM | GSA Managers  |  |
| February 27, 20201-3 PM | Butte Subbasin Advisory Board | * SGMA overview
* GSP Planning timeline and milestones overview
* Cooperation Agreement review
* Butte Subbasin Stakeholder Communications & Engagement Plan
* Introduction to the Basin Setting (Hydrogeology, land and water use etc.)
* Introduction and status of the Butte Basin Groundwater Model
 |
| March 26, 20201-3 PM | GSA Managers | * Preliminary basin setting results
 |
| April 23, 20201-3 PM  | Butte Subbasin Advisory Board | * Presentation and Discussion on preliminary:

 *Current and Historical Groundwater Conditions (354.16) and Water Budget Information (354.18)* |
| May 28, 20201-3 PM | GSA Managers | * Management Areas considerations/recommendations
 |
| June 25, 20201-3 PM | Butte Subbasin Advisory Board | * Update on Management Area Discussions
* Basin Setting Chapter Review Process
* Review Meeting Framework and Schedule
 |
| July 23, 20201-3 PM | GSA Managers | *Tentative: Hold Date- Possible Check-in with Technical Consultants*  |
| Summer 2020  | Public Comment Period on GSP Draft Chapters | * Draft Basin Setting Chapters
 |
| September 24, 20201-3 PM | GSA Managers | * Discuss comments received during public comment period on Basin Setting GSP Chapters
* Discuss presentation of Basin Setting chapters and comments for Butte Subbasin Advisory Board (BAB) meeting
* Receive overview presentation of proposed PMA Process for consideration
* Review draft PMA project form and options for PMA options identification
 |
| October 22, 20201-3 PM | Butte Subbasin Advisory Board | * Discuss comments received during public comment period on Basin Setting GSP Chapters
* Discuss presentation of Basin Setting chapters and comments for Butte Subbasin Advisory Board (BAB) meeting
* Receive overview presentation of proposed PMA Process for consideration
* Review draft PMA project form and options for PMA options identification
* Ask BAB: for preferences about doubling BAB meeting with a public workshop or keeping them separate?
 |
| October- December 2020 | Outreach: Online PMA Form | * PMA project form available on the website for public input.
 |
| November 4, 20209-11 AM | GSA Managers | * Preliminary Discussions on Draft Sustainability Goal (SG) and Significant and Unreasonable Conditions (SUCs)
* Initial PMA Identification and Assessment
* Updated Basin Setting Chapters
 |
| December 20205:30 pm (planned) | Butte Subbasin Advisory Board and/or Public Workshop? | * Discuss and make possible recommendations on Draft Sustainability Goal (SG)
* Discuss and make possible recommendations on Significant and Unreasonable Conditions
* Brainstorm initial concepts for Project Management and Actions (PMAs)

---discuss which Sustainability Indicators they are interested in |
| December 2020 | Inter-basin Coordination | * Technical Information-Sharing
 |
| January 22, 20211-3 PM | GSA Managers | * Discuss Draft Admin Information, Plan Area, Notice, and Communication
* PMAs Screening Analysis & Define Criteria
* Draft Minimum Thresholds and Measurable Objectives
* Draft Representative Monitoring Networks
* Update Inter-basin Coordination
 |
| February 26, 20211-3 PM | Butte Subbasin Advisory Board | * Discuss and make possible recommendations on PMAs Screening Analysis & Criteria
* Discuss and make possible recommendations on Draft Representative Monitoring Networks
* Update on Inter-basin Coordination
 |
| March 26, 20211-3 PM | GSA Managers | * Draft Admin Information, Plan Area, Notice, and Communication
* Updated Admin Information, Plan Area, Notice, and Communication
* Updated Minimum Thresholds (MTs), Measurable Objectives (MOs), and Monitoring Networks
* PMAs Alternatives Analysis
 |
| March 2021 | Inter-basin Coordination | Technical Review  |
| April 23, 20211-3 PM | Butte Subbasin Advisory Board  | * Discuss and make possible recommendations on Minimum Thresholds (MTs), Measurable Objectives (MOs)
* Discuss, provide feedback, and make possible recommendations on PMA Alternatives Analysis
* Inter-basin Coordination Update
 |
| April (evening) | Public Meeting/ Workshop | * Discuss and make possible recommendations on Minimum Thresholds (MTs), Measurable Objectives (MOs),
* Discuss, provide feedback, and make possible recommendations on PMA Alternatives Analysis.
* Inter-basin Coordination Update
 |
| May 1-31, 2021 | Public Comment Period on Sustainable Management Criteria (SMC) | GSP Draft Chapters |
| May 28, 20211-3 PM | GSA Managers | * Compiled public comments from Sustainable Management Criteria (SMC)
* Updated Admin Information, Plan Area, Notice, and Communication
* PMAs Alternatives Analysis
* Inter-basin Coordination Update
 |
| June 1-31 2021 | Public Comment Period on GSP Information and Monitoring Networks | GSP Draft Chapters  |
| June 25, 20211-3 PM | Butte Subbasin Advisory Board | * Compiled public comments from Sustainable Management Criteria (SMC)
* Discuss and make possible recommendations on PMA mix and uncertainty analysis
 |
| July 2021 | Inter-basin Coordination | Technical Review  |
| July 23, 20211-3 PM | GSA Managers | * Updated Sustainable Yield
* Identify PMA mix and analyze uncertainty
* Executive Summary, SMC, PMAs and Plan Implementation
* Compiled public comments from GSP Information and Monitoring Networks
* Inter-basin Coordination Update
 |
| July-August 2021 (evening) | Public Meeting/ Workshop | * Discuss and make possible recommendations on PMAs
* Preview Draft GSP
 |
| August 27, 20211-3 PM | Butte Subbasin Advisory Board | * Discuss and make possible recommendations on Updated Sustainable Yield
* Discuss and make possible recommendations on PMAs and Draft GSP
* Inter-basin Coordination Update
 |
| September-October 2021 | Public Comment Period of Draft GSP  |  |
| September 24, 2021; 1-3 PM | GSA Managers | * Discuss compiled public comments on Draft GSP
 |
| October 22, 20211-3 PM | Butte Subbasin Advisory Board | * Discuss and make final recommendations on compiled public comments on Draft GSP
 |
| November 2021-Jan 2022 |  | FINAL GSP |