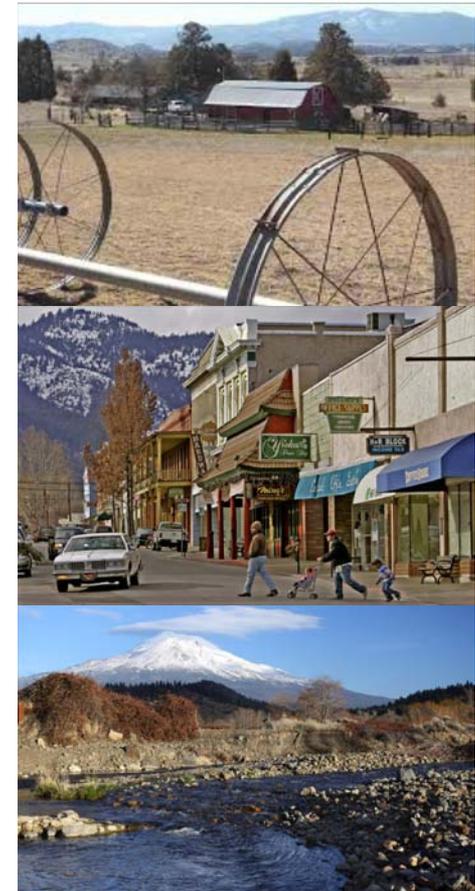


Implementation of the 2014 Sustainable Groundwater Management Act (SGMA) in Siskiyou County, California

Situation Assessment Themes, Findings & Initial Recommendations for Shasta Valley

Shasta Valley Basin Advisory Committee
December 18th, 2018



Presentation Outline

- Assessment Purpose and Process
- List of Interviewees
- Overall Pulse in the Shasta Valley Basin
- Key Themes and Findings in Shasta Valley
- Questions, Clarification and Reactions
- Initial Recommendations: Next Steps
- Longer-term Planning Considerations

Assessment Purpose

- Enable introductions between the facilitation team and different stakeholders, tribes, County Supervisors and District staff, and other interested parties.
- Learn about the range of perspectives, issues and interests surrounding groundwater use/management.
- Present and discuss findings and themes with advisory committees in three basins – Scott, Butte and Shasta.
- Utilize results to devise an optimal governance structure, schedule and workplan for each committee.



Assessment Process

- Phone interviews and some face-to-face meetings.
- All meetings confidential, non-attributable.
- Participants encouraged to be candid.
- CCP staff conducted analysis of findings and prepared report for District staff and committee consideration.
- Report findings and recommendations structured to foster committee discussion of governance/next steps.

List of Interviewees

- Advisory committee members
 - Beth Sandahl – Shasta River Water Users Association
 - Blair Hart – Private pumper
 - Gregg Werner and Amy Campbell – The Nature Conservancy
 - Susan Fricke – Karuk Tribe
 - John Tannaci – Residential water user
 - Justin Holmes – Edson Folke Ditch Company
 - Pete Scala – Private pumper
 - Tristan Allen – Montague Water Conservation District
- Supervisors, tribes, CA Farm Bureau, District staff, DWR, local RCD staff and interested parties

Overall Pulse in the Shasta Valley

- No common perspective on current groundwater conditions
- Broad support for the proposed basin boundary expansion
- Range of ideas about what to discuss in developing a Shasta Valley Groundwater Sustainability Plan (GSP)
- Broad interest to improve understanding of the resource
- A number of related challenges and barriers cited, but also several ideas about how to collaborate and overcome them
- Broad and animated interest to ensure both economically and environmentally sustainable groundwater management

Key Themes and Findings

Perceptions of Current Groundwater Conditions

Key finding – No common perception of groundwater conditions; several noted/demonstrated that perspectives vary across the basin.

- No single view among water users
- Weather, snowpack and drought cited as key factors
- Some noted that in recent years high volume pumping wells in Big Spring led to a drop in the area's groundwater elevation
- A number of others noted that the system is poorly understood – where water is coming from and where it's going

Key Themes and Findings

Perceptions of Current/Future Undesirable Conditions

Key finding – Respondents cited several possible stressors in the present but also potentially in the future.

- Overall lack of snow has us “running out of water” and creeks are drying up
- Science demonstrates groundwater pumping has an impact on surface flows which has led to flow impairments that degrade fish habitat
- Depletion of surface water will be an ongoing issue
- Groundwater consumption outside the boundary area is a big risk
- Potential future stressors: Population, expanded hay farming, fertilizers/pesticides

Key Themes and Findings

Any Concerns about Basin Boundary Expansion

Theme – No concerns put forward, though one person noted some in community may have concern about water restrictions.

Key finding – Many provided rationale/interests behind expansion

- Expansion is critical to better understand resource
- Better understanding of resource may prove sustainability
- Some big water users and municipalities still need to be included
- Some interest to include springs around Weed and bottled water plants
- Expansion may help ensure local governance of groundwater



Key Themes and Findings

Main Issues to Consider in Developing a SGMA GSP

Key Finding – No themes, rather, a wide range of responses.

- Understanding of the resource, including surface water/groundwater interaction and relationship to the Shasta river system
- Understanding of SGMA: Economic impact, how to maintain local agriculture, and right to use water but also share with neighbors
- Best practices – how farmers can be efficient and ensure GSP compliance
- Consideration of in-stream flow needs as part of surface water/groundwater co-management – how to maintain flows that support healthy fish populations
- Proper monitoring and enforcement of the GSP once developed

Key Themes and Findings

Are There Economic and Environmental Issues?

Key Finding – Several issues cited which respondents stressed should be considered during the GSP development process.

- Both economics and environment cited as important
- Water users still need information about SGMA and associated water use, monitoring, reporting and management rules
- Concerns about government overreach, regulations and lawsuits
- Economic impacts and relationship to the time when water is shut off

“Everything comes down to economics. We need to be self-sustaining. We need to know the rules so we can develop appropriate business plans. At the same time, we need to remember the environment is just as important as economics.”



Key Themes and Findings

How to Address Economic and Environmental Issues

Common Theme – Improve our understanding of the resource, with several suggestions offered for how to do so.

- Design science to understand trends and inputs in the system
- Develop real-time monitoring networks
- Improve our understanding of surface water and groundwater interaction, irrigation and pumping impacts on the Shasta river system
- Integrate various science efforts to understand the flow regime in the river and thus how much water people can use and when
- Consider the needs of fisheries when developing the Shasta Valley GSP

Key Themes and Findings

How to Address Economic and Environmental Issues

Common Theme – Improve our understanding of the resource, with several suggestions offered for how to do so.

- Consider both the amount and quality of groundwater when developing monitoring networks
- Collect enough data during monitoring to ensure statistically valid science
- Learn from the Scott Valley modeling process and results (UC Davis team’s past work respected by many)
- Press federal and state agencies to fund flow studies

“As farmers we need to ensure GSP compliance. At meetings I need to ask questions about the greater good that some of my neighbors are afraid to ask.”

Key Themes and Findings

Challenges and Possible Barriers to Success

Key finding – Wide range of responses, many related, when asked about challenges or barriers.

- Lack of trust based on longstanding conflicts over water
- Existence of “us versus them” factions in the community
- Need to agree on a common set of facts as a foundational step to collaboration
- Perception, from different interests, that not all parties will be treated equally
- Limited faith in collaboration by some based on past history

Key Themes and Findings

Challenges and Possible Barriers to Success

Key finding – Wide range of responses, many related, when asked about challenges or barriers.

- Outstanding need to determine the economic value of fish
- Need by all parties to acknowledge Coho salmon as native to the Klamath and threatened with extinction
- How much monitoring is needed and where it will take place (e.g., fear of regulations, data privacy concerns, inability to maintain local control)
- Challenge of reconciling different perspectives regarding water use for agricultural production and water management for fish and the environment

Key Themes and Findings

Ways to Resolve Identified Challenges

Three common themes – Communication and education, research and monitoring, and effective collaboration.

Communication and education:

- Ensure we act transparently, educate the wider community, and bring their perspectives into the collaborative process
- Foster communication between landowners and environmental groups
- Build better trust with each other and trust in the process with the community
- Help neighbors understand “we are not giving away the farm” and that developing a monitoring network may help us demonstrate sustainability

Key Themes and Findings

Ways to Resolve Identified Challenges

Three common themes – Communication and education, research and monitoring, and effective collaboration.

Research and monitoring:

- Study the valley as a whole system, including humans, and get a better understanding of what is happening underground with water
- Work with scientists to build a robust monitoring network that informs GSP development and adaptive management into the future
- Explore best practices and new techniques (e.g., flood irrigation, recharge)
- Develop information that shows water rights can be protected by limited pumping – this may also help protect the community from lawsuits

Key Themes and Findings

Ways to Resolve Identified Challenges

Three common themes – Communication and education, research and monitoring, and effective collaboration.

Effective collaboration:

- Identify shared interests so we can find and build agreements
- Be respectful, listen and don't bully others, and be willing to compromise
- Consider water as a common resource for the community, not just “my water”
- Use impartial facilitation to help us resolve differences and build consensus
- Consider and demonstrate the benefits of Safe Harbor Agreements

“Farmers and environmentalists both need to understand that it can't be all or nothing. We have to develop a plan together and there have to be compromises. I still need to talk to people on the other side and they still need to talk to me.”



Key Themes and Findings

Opportunities and Ways to Collaborate

Most common theme – Bring diverse interests together to do the right thing for the community and ensure sustainable management.

- Affected people are involved – this is good as we'll work together more, fight less, and avoid litigation
- Committee gains knowledge through the process, plays an important role advising on GSP development, and helps avoid unnecessary regulation
- Acknowledge we are all in the same boat – work on things together that we haven't previously worked on
- Some still talk of challenges more than opportunities (e.g., past history, lack of trust, skepticism about the state's interests related to SGMA)

Key Themes and Findings

What Advisory Committee Success Looks Like

Most common theme – Wide range of responses spoke to “we” much more than “I” when talking about the committee.

- We bring our local knowledge to the table and support the technical team
- Committee members effectively represent all interests in the community
- Achieving consensus may be challenging but it’s not impossible for us
- Community outreach generates support for plan development/implementation
- A plan we can all live with that helps our children/grandchildren avoid lawsuits
- A plan that enables both commodity production and environmental protection

Outstanding questions, issues
needing clarification or reactions?

Initial Recommendations: Next Steps

- Finish recruiting and building out full advisory committee membership composition.
- Facilitate Brown Act education and training.
- Discuss and agree to a committee governance structure.
- Develop a workplan and regular meeting schedule.
- Begin integrating science with support from the technical team.
- Collaboratively develop and implement a communication and engagement strategy as SGMA work unfolds.

Initial Charter Discussion

- What is a charter and why have one?
- Sources of information for the draft charter:
 - Groundwater Sustainability Agency documents
 - Situation assessment results
 - CCP collaboration experience
- Membership composition
- Advisory committee goals
- Member roles and responsibilities

Longer-term Planning Considerations

Groundwater Sustainability Agencies must:

Consider “all interests of all beneficial uses and users of groundwater” including:

- Agriculture
- Domestic users
- Public & private water systems
- Tribes
- Environmental users
- Disadvantaged communities
- Others



Longer-term Planning Considerations

Groundwater Sustainability Plans must:

- Describe the basin conditions, using a hydrologic conceptual model
- Describe the basin-specific monitoring network
- Establish minimum thresholds and measurable objectives to avoid SGMA undesirable results:
 - Groundwater-level declines
 - Reduction in groundwater storage
 - Seawater intrusion
 - Water quality degradation
 - Land subsidence
 - Surface water depletion
- Identify projects and management actions needed to achieve or maintain sustainable conditions within 20 years
- GSP must be completed by January 31, 2022 or triggers state intervention