Meeting date/time: May 27th, 2020 I 3:00 p.m. – 5:30 p.m.

Location: Zoom Online Platform

Key contacts:

- -Matt Parker, County Natural Resources Specialist I <u>mparker@co.siskiyou.ca.us</u> I 530.842.8019
- -Rich Wilson, Seatone Consulting Senior Facilitator I r.wilson@csus.edu I 415.515.2317
- -Laura Foglia PhD, U.C. Davis Technical Team Lead I ffglia@ucdavis.edu I 530.219.5692

MEETING RECAP

- Meeting Summary Approval. The facilitator secured consent approval of the April meeting summary.
- **Staff Updates.** Matt Parker provided status updates on the Proposition 68 and Bureau of Reclamation grants, respectively. Brandy Caporaso updated the committee on recent installation of piezometers by the Shasta Valley RCD, and pending work ahead.
- Shasta Valley Water Budget and Potential Modeling Scenarios. The technical team provided a recap of the early May special technical meeting, revisited and discussed the water budget with the committee, then put forward a list of potential model scenarios which could be run over the summer. Committee members and the public provide input and help build out considerations for these initial scenario runs.

SUMMARY OF ACTION ITEMS

Action Item	Responsible Party	Status/Deadline
Prepare/present 30 year graph of	Technical team	Next meeting
evapotranspiration data		
Identify/share referenced study on economics	Susan Fricke	ASAP
related to number of cuttings per season		

Next Meeting: September 15th, 2020. Due to current circumstances surrounding covid-19 the meeting may again be held online with Zoom technology.

View <u>Siskiyou County's groundwater website</u> for posted meeting materials.

MEETING SUMMARY

Agenda Review and Approval of Past Meeting Summary

The facilitator welcomed all participants and thanked attendees for their patience with ongoing use of Zoom as alternative meeting platform during the pandemic. He secured consent from committee members to post the April meeting summary on the county's SGMA webpage. No committee members put forward questions or expressed concerns about the agenda were expressed at the outset of the meeting.

Public Comment Period

At the outset, members of the public may comment on items not on the consent agenda. The public is asked to wait until the appropriate item to comment on issues directly related the current meeting agenda. No comments from the public were offered at the outset.

District Staff and Other Updates

Matt Parker provided a brief update on the nearly completed Proposition 68 grant. The environmental compliance requirements for the Bureau of Reclamation grants will be completed by June 1st. Equipment installation could occur shortly after. Matt let the committee know that he and the technical and facilitation consultants will provide a SGMA implementation status update to the GSA board at its June 23 meeting. Committee members are welcome to attend. Brandy Caporaso from the Shasta Valley RCD provided an update on recently installed piezometers and pending installations for hydro stations.

Recap of Technical Meeting and Shasta Valley Water Budget

Dr. Laura Foglia provided a brief summary of the information presented and feedback received from the special technical meeting held earlier in the month. She reminded the group that it's a lot of material to present and for the advisory committee and interested parties to digest, thus the need for a special meeting a few weeks prior to this meeting.

She and colleague Cab Esposito then put forward the latest available information and analysis of Shasta Valley water budget. Comments from advisory committee members, and occasionally from the public or agency staff in attendance, interspersed the presentation. Main elements of the presentation, and back-an-forth discussion, centered on the following:

- Status update on GSP chapter development
- Revisiting and discussing the water budget
- Exploring how good can Shasta Valley Integrated Hydrologic Model predict reality?
- Illuminating what the Shasta Valley Integrated Hydrologic Model tells us about groundwater/surface water interaction?

A range of questions, comments and suggested considerations followed, with most responses provided by the technical team.

- Question: Are transducers set up to go across the channel (river)?
 - o Response: Yes.
- Question: For precipitation modeled through PRMS, we know it's challenging, are you able to note gage locations that help determine precipitation generated data points?
 - Response: This information can be added/documented in the GSP. Given this is an integrated model, there is not just a single number. We understand this is important and can clearly describe limitations and data gaps.
- Question: In terms of change in the overall available budget in the system, is there an overall number for the last 30 years?

- <u>Response</u>: We don't have a number like this. More water came in than left the system. <u>Additional question</u>: So a net recharge? <u>Response</u>: Difficult question to answer. We need to look at spatial and temporal distribution.
- <u>Comment</u>: I would like to see a 30 year graph relative to evapotranspiration superimposed on itself.
 - o Response: It will show a lot of variability.
- Question: What is the plan to estimate groundwater evapotranspiration?
 - Response: Using GSFLOW with an Ag package, multiple components can be modeled. Right now we have all the estimates provided by Davids Engineering with the satellite approach.
- Question: Can you describe how you separate real from potential evapotranspiration?
 - o Response: Technical team revisits and describes PRMS modeling process.
- <u>Comment</u>: Seems there may be situations where surface input is low but groundwater input is high and thereby you see a delay in the exit to surface. There are a couple of springs I know of that put out water even in dry years, but the path it takes is delayed.
- Question: Do you have ways to estimate storage related to snowmelt from Mt. Shasta?
 - Response: We are with the snow lab at UC Santa Barbara. The model is sensitive to snow and snow melt.

The conversation briefly turned to marijuana crops grown in the valley, and concerns about water quality and pumping impacts, as well the need for juniper removal in some areas. A few comments were put forward:

- Comment: There is a need to address nutrient and chemical infiltration to the system.
- <u>Comment</u>: It's important not to overlook these issues. I've seen water come back after removing 30 acres of juniper. Local government may only have a sense of a small percentage of water that is actually being used to support marijuana cultivation.
- <u>Comment</u>: It's important to look at the upland forest when estimating the water budget.

Lightning Round Brainstorm – Generate Optional Model Scenarios

The technical team presented potential model scenarios which could be run over the course of the summer. Additional model runs will occur over time. The initial list brainstormed and presented by the technical team had multiple scenario options under the following topics:

- Crop related scenarios
- Environmental management scenarios
- Water infrastructure

The technical team asked the committee for their initial reaction to the list, possible amendments they might make, and if anything is missing. Responses followed:

- Include wastewater re-use
- No pumping scenario would be an interesting start
- A lot of things could be mixed
- Consider if dry areas could go back to wetlands

- Economic viability is an important bookend for the work, but don't just study Ag
- Understanding recharge is critical
- Some concerns expressed about "no pumping scenario" but others think it's important to look at
- Not sure why we are not going back 50 years
- Need to consider impacts of municipal wastewater Not sure what other water infrastructure to look at in Shasta Valley
- Acknowledgement that some "bookends" in the modeling process can be scary but produce useful, needed information – Model runs can show the opportunities for how we can address things and, ultimately, we know it's going to be a package of solutions
- If the salmon run is the weakest link, consider needed flows and work from there
- Ideas should be considered with no bounds at this stage
- Be sure to consider how good ideas run up against regulations

Matt Parker acknowledged some concerns expressed about the modeling process. He reminded the group that it's still an information generating process at this stage. In time, if the group can build consensus on project and management action ideas, these ideas can get put in the GSP. Laura Foglia followed Matt by reminding the group that potential scenarios are only being explored at this stage of the work, not decided upon, and that an economic analysis of impacts could also be conducted. She reminded the committee that looking at bookend scenarios often helps illuminate what actions make sense.

Additional comments on potential scenarios followed:

- Let's stay focused on Shasta Valley crop types
- Understanding timing and location of fish is key
- Need to understand what we pump and also look at impacts (positive of negative) of what could occur if a different number of cuttings is harvested
- People will need to know the cost of actions they may have to take
- Available studies look at stream flow needs around the state and the Water Board is looking at this issue

Matt Parker thanked everyone for their input and emphasized that committee feedback will be brought to the board at the June 23rd meeting. The technical team acknowledged the importance of how the work around scenarios is communicated, balancing protecting the environment with economic impacts, and the ongoing value of local knowledge and insights put forward in this process.

MEETING ATTENDEES

Advisory Committee Members

Tristan Allen, Montague Water Conservation District Lisa Faris, Big Springs Irrigation District

Susan Fricke (Vice-Chair), Karuk Tribe
Blair Hart, Private Pumper
Justin Holmes, Edson Foulke Ditch Company
Steve Mains, Grenada Irrigation District
Justin Sandahl, Shasta River Water Users Association
John Tannaci (Chair), Residential
Gregg Werner, Environmental/Conservation

Absent Committee Member

Robert Moser, Municipal/City Pete Scala, Private Pumper

District Staff

Matt Parker, County of Siskiyou Natural Resources Specialist

Technical Team

Dr. Laura Foglia, UC Davis/Larry Walker Associates Dr. Thomas Harter, UC Davis Cab Esposito, UC Davis/Larry Walker Associates Brad Gooch, UC Davis/Larry Walker Associates

Facilitator

Rich Wilson, Seatone Consulting

Agency Staff

Bryan McFadin, North Coast Regional Water Quality Control Board Eli Scott, Norther Coast Regional Water Quality Control Boar Janae Scruggs, California Department of Fish and Wildlife Chris Watt, North Coast Regional Water Quality Control Board Pat Vellines, Department of Water Resources

Public

Ethan Brown, Shasta Valley RCD
Brandy Caporaso, Shasta Valley RCD
Amanda Cooper, CalTrout
Bill Hirt
Stan Leake
Danielle Linder
Don Moore
Rhonda Muse, Scott & Shasta Watermaster District
Bonnie Nichols
Michael Riney

Dave Webb Leah Easley