

MAINTAINING SUSTAINABLE
GROUNDWATER IN THE

Bear Valley Basin

Stakeholder Workshop Summary:
**Groundwater
Management Vision**

Held September 23, 2020



Recap: Workshop Goals

- Share what we've learned about the Basin
- Describe the role of the water budget
- Document stakeholder's vision of what a "sustainable Bear Valley Basin" means.

Who attended the workshop



ENVIRONMENTAL /
CONSERVATION
GROUPS



INTEGRATED WATER
MANAGEMENT



BEAR VALLEY MUTUAL WATER COMPANY



LAND USE /
MUNICIPALITIES



PRIVATE WATER
USERS

MOONCAMP
PRIVATE WELL
OWNERS

Workshop attendees helped populate a virtual white board to answer the question “What is our shared vision of what a ‘sustainable Bear Valley Basin’ means?” Stakeholders shared their ideas, values, perceptions, and desired outcomes across the following categories:

1. **AVAILABLE SUPPLY:** What needs/uses does our groundwater supply always need to be able to serve?
2. **AVAILABLE STORAGE:** What needs/uses does our stored groundwater need to serve and/or prepare us for?
3. **GROUNDWATER QUALITY:** What is the quality of groundwater we aim to sustain?
4. **COST TO USERS:** How do we ensure that the cost of securing a ‘sustainable Bear Valley Basin’ is fair and feasible?
5. **GROUNDWATER DEPENDENT ECOSYSTEMS.** If we achieve a “sustainable Bear Valley Basin” how does it look to groundwater-dependent ecosystems?

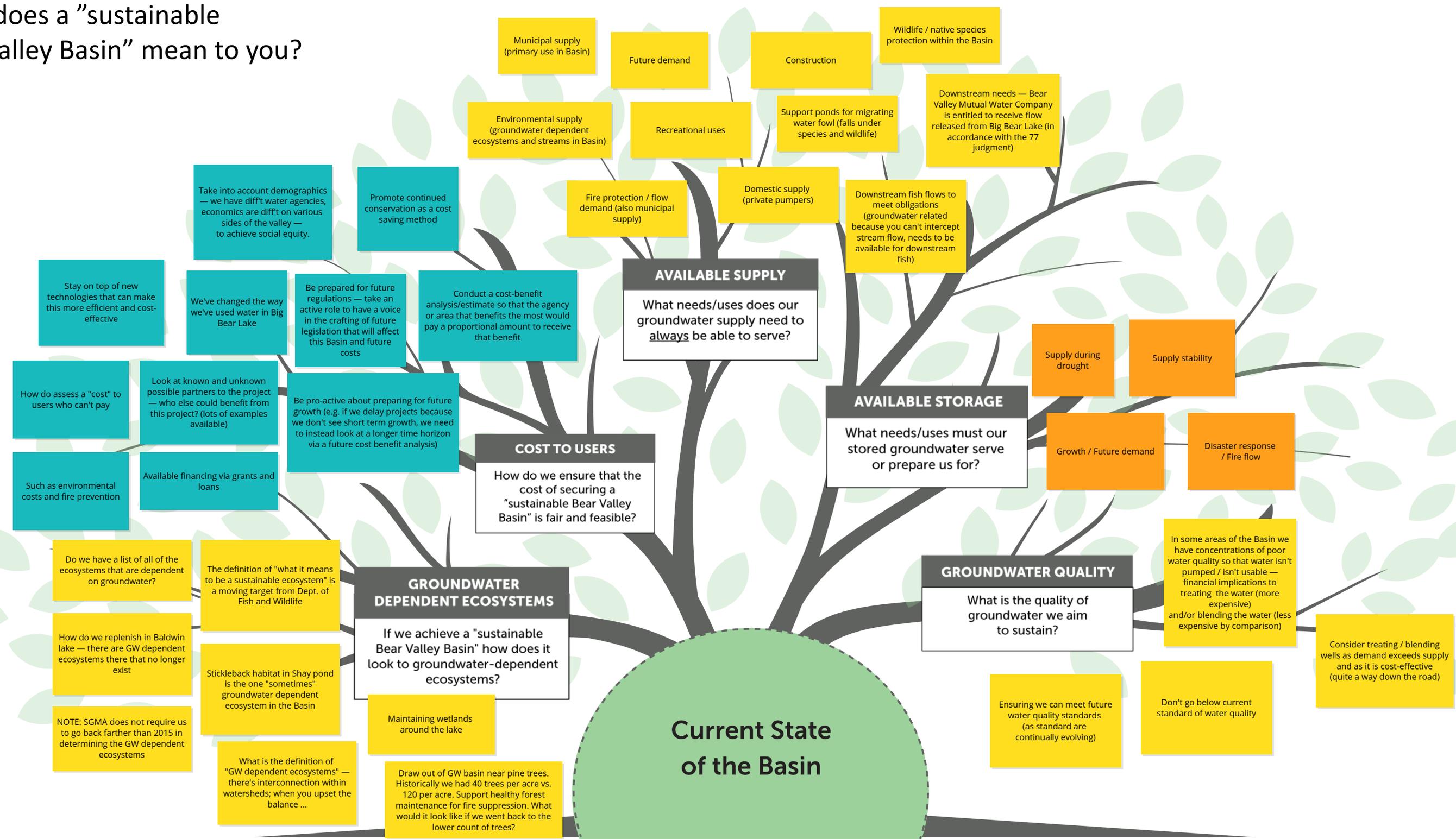
The following is a report out of this workshop exercise.

Stakeholder Visioning Exercise

What does a "sustainable Bear Valley Basin" mean to you?

Future State of the Basin: Groundwater Sustainability

Current State of the Basin





Visioning exercise, stakeholder input detail

CATEGORY	STAKEHOLDER COMMENT
Available Supply	Municipal supply (primary use in Basin)
Available Supply	Future demand
Available Supply	Environmental supply (groundwater dependent ecosystems and streams in Basin)
Available Supply	Recreational uses
Available Supply	Fire protection / flow demand (also municipal supply)
Available Supply	Construction
Available Supply	Support ponds for migrating water fowl (falls under species and wildlife)
Available Supply	Domestic supply (private pumpers)
Available Supply	Wildlife / native species protection within the Basin
Available Supply	Downstream needs — Bear Valley Mutual Water Company is entitled to receive flow released from Big Bear Lake (in accordance with the 77 judgment)
Available Supply	Downstream fish flows to meet obligations (groundwater related because you can't intercept stream flow, needs to be available for downstream fish)
Available Storage	Supply during drought
Available Storage	Supply stability
Available Storage	Growth / Future demand
Available Storage	Disaster response / Fire flow



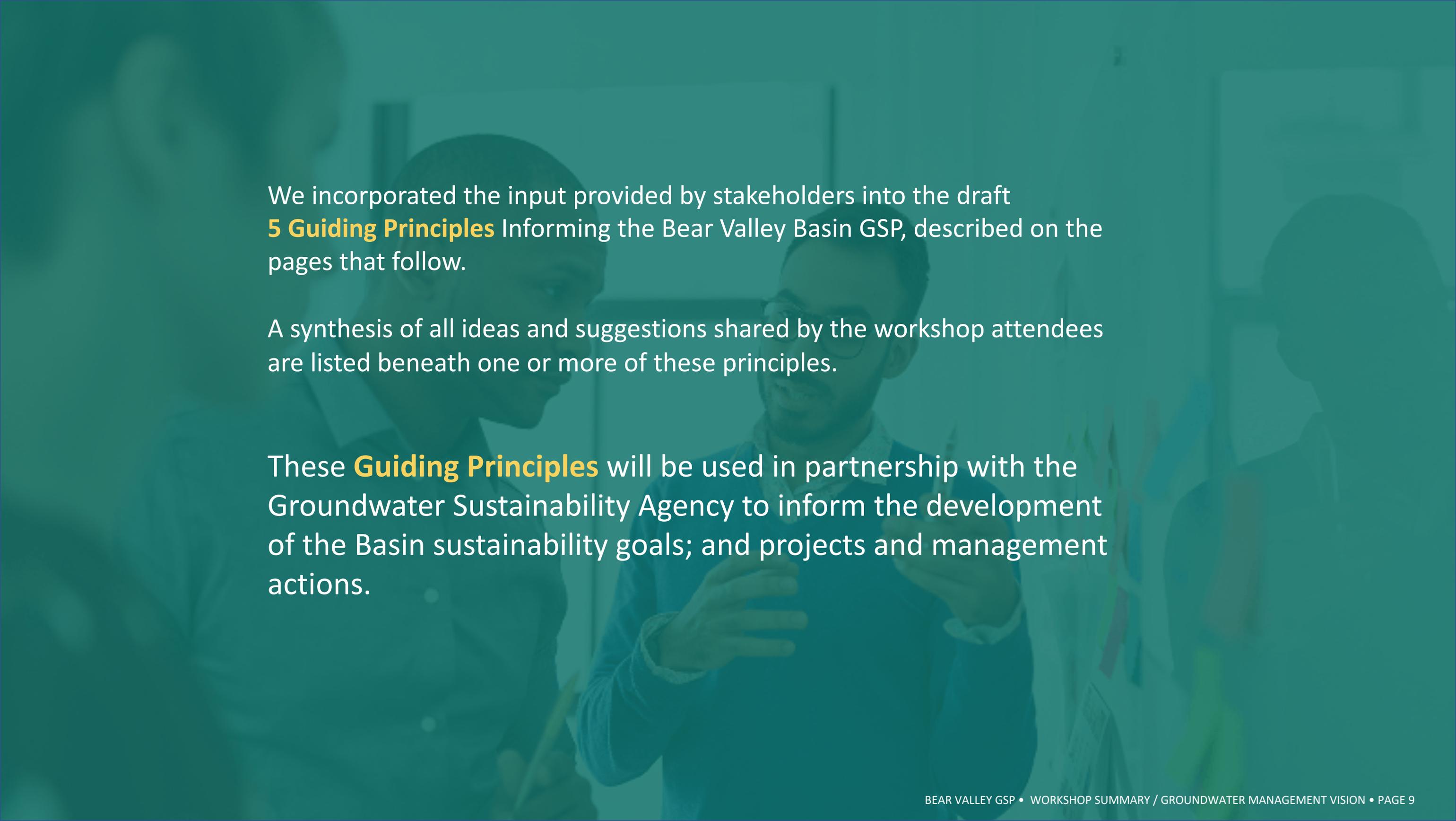
Visioning exercise, stakeholder input detail (continued)

CATEGORY	STAKEHOLDER COMMENT
Groundwater Quality	In some areas of the Basin we have concentrations of poor water quality so that water isn't pumped / isn't usable — financial implications to treating the water (more expensive) and/or blending the water (less expensive by comparison)
Groundwater Quality	Ensuring we can meet future water quality standards (as standard are continually evolving)
Groundwater Quality	Don't go below current standard of water quality
Groundwater Quality	Consider treating / blending wells as demand exceeds supply and as it is cost-effective (quite a way down the road)
Cost to Users	Take into account demographics — we have diff't water agencies, economics are diff't on various sides of the valley — to achieve social equity.
Cost to Users	Promote continued conservation as a cost saving method
Cost to Users	Stay on top of new technologies that can make this more efficient and cost-effective
Cost to Users	We've changed the way we've used water in Big Bear Lake
Cost to Users	Be prepared for future regulations — take an active role to have a voice in the crafting of future legislation that will affect this Basin and future costs
Cost to Users	Conduct a cost-benefit analysis/estimate so that the agency or area that benefits the most would pay a proportional amount to receive that benefit
Cost to Users	How do assess a "cost" to users who can't pay
Cost to Users	Look at known and unknown possible partners to the project — who else could benefit from this project? (lots of examples available)
Cost to Users	Be pro-active about preparing for future growth (e.g. if we delay projects because we don't see short term growth, we need to instead look at a longer time horizon via a future cost benefit analysis)
Cost to Users	Such as environmental costs and fire prevention
Cost to Users	Available financing via grants and loans



Visioning exercise, stakeholder input detail (continued)

CATEGORY	STAKEHOLDER COMMENT
Groundwater Dependent Ecosystems	Do we have a list of all of the ecosystems that are dependent on groundwater?
Groundwater Dependent Ecosystems	The definition of "what it means to be a sustainable ecosystem" is a moving target from Dept. of Fish and
Groundwater Dependent Ecosystems	How do we replenish in Baldwin lake — there are GW dependent ecosystems there that no longer exist
Groundwater Dependent Ecosystems	Stickleback habitat in Shay pond is the one "sometimes" groundwater dependent ecosystem in the Basin
Groundwater Dependent Ecosystems	Maintaining wetlands around the lake
Groundwater Dependent Ecosystems	What is the definition of "GW dependent ecosystems" — there's interconnection within watersheds; when
Groundwater Dependent Ecosystems	you upset the balance ...
Groundwater Dependent Ecosystems	Draw out of GW basin near pine trees. Historically we had 40 trees per acre vs. 120 per acre. Support
Groundwater Dependent Ecosystems	healthy forest maintenance for fire suppression. What would it look like if we went back to the lower count of
Groundwater Dependent Ecosystems	NOTE: SGMA does not require us to go back farther than 2015 in determining the GW dependent



We incorporated the input provided by stakeholders into the draft **5 Guiding Principles** Informing the Bear Valley Basin GSP, described on the pages that follow.

A synthesis of all ideas and suggestions shared by the workshop attendees are listed beneath one or more of these principles.

These **Guiding Principles** will be used in partnership with the Groundwater Sustainability Agency to inform the development of the Basin sustainability goals; and projects and management actions.



(DRAFT)

5 Guiding Principles informing the Bear Valley Basin GSP

1

Available groundwater supply **reliably supports diverse and evolving water needs.**

2

Stored groundwater supports supply **stability and reliability to future conditions.**

3

Groundwater quality is **either maintained or further improved to support future demand.**

4

Cost of maintaining a sustainable basin is **fair, fiscally responsible. Proactive, and forward-thinking with creative financing options.**

5

Groundwater levels support the **sustained and (where possible) restorative health** of groundwater dependent ecosystems.

1. Available groundwater supply **reliably supports diverse and evolving water needs.**

SUMMARY OF STAKEHOLDER PERCEPTIONS:

- Municipal supply (primary use in Basin)
- Future demand
- Environmental supply (groundwater dependent ecosystems and streams in Basin)
- Recreational uses
- Fire protection / flow demand (also municipal supply)
- Construction
- Support ponds for migrating water fowl (falls under species and wildlife)
- Domestic supply (private pumpers)
- Wildlife / native species protection within the Basin
- Downstream needs — Bear Valley Mutual Water Company is entitled to receive flow released from Big Bear Lake (in accordance with the 77 judgment)
- Downstream fish flows to meet obligations (groundwater related because you can't intercept stream flow, needs to be available for downstream fish)

2. Stored groundwater supports **supply stability and reliability to future conditions.**

SUMMARY OF STAKEHOLDER PERCEPTIONS:

- Supply during drought
- Supply stability
- Growth / Future demand
- Disaster response / Fire flow

3. Groundwater quality is **either maintained or further improved to support future demand.**

SUMMARY OF STAKEHOLDER PERCEPTIONS:

- In some areas of the Basin we have concentrations of poor water quality so that water isn't pumped / isn't usable — financial implications to treating the water (more expensive) and/or blending the water (less expensive by comparison)
- Ensuring we can meet future water quality standards (as standard are continually evolving)
- Don't go below current standard of water quality
- Consider treating / blending wells as demand exceeds supply and as it is cost-effective (quite a way down the road)

4. Cost of maintaining a sustainable basin is **fair, fiscally responsible. Proactive, and forward-thinking with creative financing options.**

SUMMARY OF STAKEHOLDER PERCEPTIONS:

- Take into account demographics — we have different water agencies, economics are different on various sides of the valley — to achieve social equity.
- Promote continued conservation as a cost saving method
- Stay on top of new technologies that can make this more efficient and cost-effective
- We've changed the way we've used water in Big Bear Lake
- Be prepared for future regulations — take an active role to have a voice in the crafting of future legislation that will affect this Basin and future costs
- Conduct a cost-benefit analysis/estimate so that the agency or area that benefits the most would pay a proportional amount to receive that benefit
- How do assess a "cost" to users who can't pay
- Look at known and unknown possible partners to the project — who else could benefit from this project? (lots of examples available)
- Be pro-active about preparing for future growth (e.g. if we delay projects because we don't see short term growth, we need to instead look at a longer time horizon via a future cost benefit analysis)
- Such as environmental costs and fire prevention
- Available financing via grants and loans

5. Groundwater levels support the **sustained and (where possible) restorative health** of groundwater dependent ecosystems.

SUMMARY OF STAKEHOLDER PERCEPTIONS:

- Do we have a list of all of the ecosystems that are dependent on groundwater?
- The definition of "what it means to be a sustainable ecosystem" is a moving target from Dept. of Fish and Wildlife
- How do we replenish in Baldwin lake — there are GW dependent ecosystems there that no longer exist
- Stickleback habitat in Shay pond is the one "sometimes" groundwater dependent ecosystem in the Basin
- Maintaining wetlands around the lake
- What is the definition of "GW dependent ecosystems" — there's interconnection within watersheds; when you upset the balance ...
- Draw out of GW basin near pine trees. Historically we had 40 trees per acre vs. 120 per acre. Support healthy forest maintenance for fire suppression. What would it look like if we went back to the lower count of trees?
- NOTE: SGMA does not require us to go back farther than 2015 in determining the GW dependent ecosystems