

## January 9, 2020 Technical Peer Review Meeting Handout #2 Example Matrix of Stakeholder Input



Sustainability Indicator <sup>2</sup>	I. STORAGE	II. GROUNDWATER ELEVATION	III. WATER QUALITY	IV. LAND SUBSIDENCE	V. SURFACE WATER CONNECTIVITY
Undesirable Results Consideration <sup>3</sup>	Unreasonable reduction of groundwater storage, which results in:  a. Adverse impacts to the viability of agriculture, and the agricultural economy.  b. Adverse impacts to the viability of urban and rural communities and their future plans.  c. Adverse impacts to the current operations of Beale AFB and its long-term viability  d. Future beneficial uses cannot be supported.	Chronic lowering of groundwater levels indicating unreasonable depletion of supply, which results in: a. Increase in pumping costs. b. Unusable and stranded groundwater extraction infrastructure. c. Need to deepen, or construct new wells. d. Adverse impacts to domestic wells users e. Adverse impacts on neighboring basins. f. Adverse impacts on connected ecosystems. g. Adverse impacts on adjacent water bodies.	Significant and unreasonable degraded water quality that adversely impacts drinking, irrigation, industrial, and environmental uses, resulting from:  a. Intrusion of saline water into the fresh water aquifer.  b. Contamination from urban and industrial sources.  c. Contamination from agricultural sources (e.g., pesticide/nutrients)  d. Migration of existing contamination from Nearby AFB into water aquifers.	Significant and unreasonable land subsidence that substantially interferes with surface land uses causing:  a. Damage to public and private infrastructure (e.g., roads and highways, flood control, canals, pipelines, utilities, public buildings, residential and commercial structures).  b. Permanent loss of groundwater storage capacity.	Significant and unreasonable depletions of interconnected surface water that results in: a. Adverse impacts to downstream water users. b. Adverse impacts to fishery health and sustainability. c. Adverse impacts to riparian habitat. d. Adverse impacts to recreational use.
Minimum Threshold Consideration	Withdrawal volumes exceeds the sustainable yield <sup>7</sup> limits.	Elevations below historic 1991 groundwater elevation levels at representative sites.     Elevations outside the recently experienced (2000-2017) range of maximum and minimum groundwater elevations levels at representative sites.	Exceedance of defined containment limits relating to AFB contaminants     Trend of exceedance of historic baseline of water quality indicators at representative sites (Arsenic, Nitrate, Na, TDS)	Land subsidence rate and magnitude indicating in-elastic land subsidence at established monuments.	Rate of surface water depletion along adjacent water bodies exceeds historic baseline levels.
Measurable Objective Consideration 5	Maintain groundwater storage (within the limits of basin sustainable yield) that provide for sustainable use of the groundwater basin.	<ul> <li>Example</li> <li>Maintain groundwater elevations (within xx at locations y, z) that provide for sustainable use of the groundwater basin.</li> </ul>	Maintain and improve groundwater quality in the Yuba basin for the benefit of groundwater users.	<ul> <li>Example</li> <li>Protect against potential inelastic land surface subsidence.</li> </ul>	<ul> <li>Example</li> <li>Manage groundwater to protect against adverse impacts to surface water flows in the Yuba River, Feather River, Honcut Creek, and Bear River within Yuba County.</li> </ul>
Interim Milestones Consideration	• TBD	• TBD	• TBD	• TBD	• TBD
Projects & Management Actions Consideration	<ul> <li>Increase groundwater recharge opportunities.</li> <li>Create database for free and mutual exchange of surface and groundwater information (levels, usage, transfers) for both municipal and agricultural uses.</li> <li>Explore re-use, detention basins/stormwater capture, and other water conservation practices.</li> <li>TBD</li> </ul>	<ul> <li>Increase groundwater recharge opportunities.</li> <li>TBD</li> </ul>	• TBD	• TBD	• TBD
Planning Principles <sup>8</sup>	The planning process will be inclusive and trans	e management of the North and South Yuba Basins	good environmental stewardship practices.		

## Notes:

- 1. Sustainability Goal refers to the existence and implementation of one or more groundwater sustainability plans that achieve sustainable groundwater management by identifying and causing the implementation of measures targeted to ensure that the applicable basin is operated within its sustainable vield
- 2. Sustainability Indicator refers to any of the effects caused by groundwater conditions occurring throughout the basin that, when significant and unreasonable, cause undesirable results
- 3. **Undesirable Result** means one or more of the following effects caused by groundwater conditions occurring throughout the basin: (1) Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon. (2) Significant and unreasonable reduction of groundwater storage. (3) Significant and unreasonable land subsidence that substantially interferes with surface land uses. (6) Depletion of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.
- 4. Minimum Threshold refers to a numeric value for each sustainability indicator used to define undesirable results
- 5. **Measurable Objective** refers to specific, quantifiable goals for the maintenance or improvement of specified groundwater conditions that have been included in an adopted Plan to achieve the sustainability goal for the basin within 20 years. Uses the same metric as defined by the minimum threshold for the same sustainability indicator.
- 6. Interim Milestones refers to a target value representing measurable groundwater conditions, in increments of five years using the same metric as the measurable objective.
- 7. Sustainable Yield means the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, which can be withdrawn annually from a groundwater supply without causing an undesirable result.
- 8. Planning Principles describes "how" the planning process will be conducted and provide overall guidance.