

Salinas Valley Basin GSA

Sustainable Management Criteria Update

Presented to Upper Valley
Aquifer Subbasin Committee
April 5, 2021





Groundwater Levels

Minimum Threshold:

Set to 2015 groundwater levels according to the groundwater elevation representative monitoring network

Measurable Objective:

Set to 2012 groundwater levels according to the groundwater elevation representative monitoring network

Undesirable Result:

15% of representative monitoring wells failing to meet their Minimum Thresholds in a single year



Groundwater Storage

Minimum Threshold:

Extraction minimum threshold is set at the long-term sustainable yield. The current estimate of the future sustainable yield is 119,500 acre-feet per year for the entire Upper Valley Aquifer Subbasin. This number is preliminary and will be revised as additional data and additional projects are implemented.

Measurable Objective:

Same as Minimum Threshold

Undesirable Result:

During average hydrogeologic conditions, and as a long-term average over all hydrogeologic conditions, the total groundwater pumping shall not exceed the minimum threshold.



Interconnected Surface Water

Minimum Threshold:

Minimum threshold is set to the depletion rates observed in 2015, estimated by proxy using shallow groundwater elevations near rivers. These thresholds only apply to river reaches that are hydraulically connected to groundwater when flow in the river is due to either natural runoff, flood releases from a reservoir, or ecological releases from a reservoir. The locations of interconnected surface water should remain the same as 2015 conditions.

Measurable Objective:

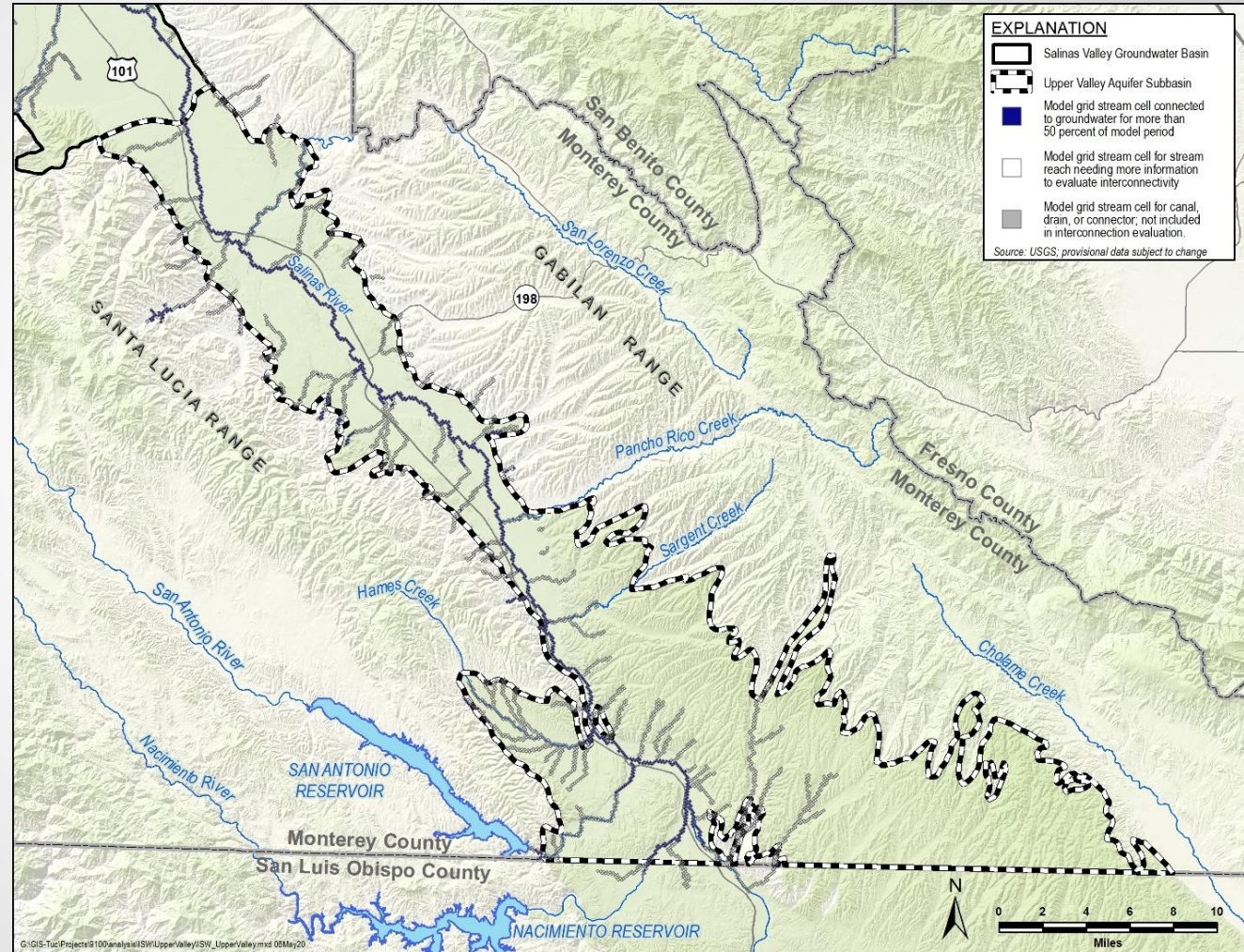
Identical to the Minimum Threshold.

Undesirable Result:

Failing to meet the Minimum Threshold during average hydrogeologic conditions or in the long term



Locations of Interconnected Surface Water



This data (model and/or model results) are preliminary or provisional and are subject to revision. This model and model results are being provided to meet the need for timely best science. The model has not received final approval by the U.S. Geological Survey (USGS). No warranty, expressed or implied, is made by the USGS or the U.S. Government as to the functionality of the model and related material nor shall the fact of release constitute any such warranty. The model is provided on the condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from the authorized or unauthorized use of the model.



Land Subsidence

Minimum Threshold:

Minimum threshold is zero net long-term subsidence, with no more than 0.1 foot per year of estimated land movement to account for InSAR errors.

Measurable Objective:

Same as Minimum Threshold, resulting in zero long-term subsidence.

Undesirable Result:

In any one year, there will be zero exceedances of minimum thresholds for subsidence.



Groundwater Quality

Minimum Threshold:

No new exceedances of regulatory drinking water standards (public water system supply wells) or basin objectives (Irrigated Lands Regulatory Program wells) for groundwater quality constituents of concern

Measurable Objective:

Same as Minimum Threshold

Undesirable Result:

There shall be no additional minimum threshold exceedances beyond existing groundwater quality conditions during any one year as a direct result of projects or management actions taken as part of GSP implementation.

Questions

