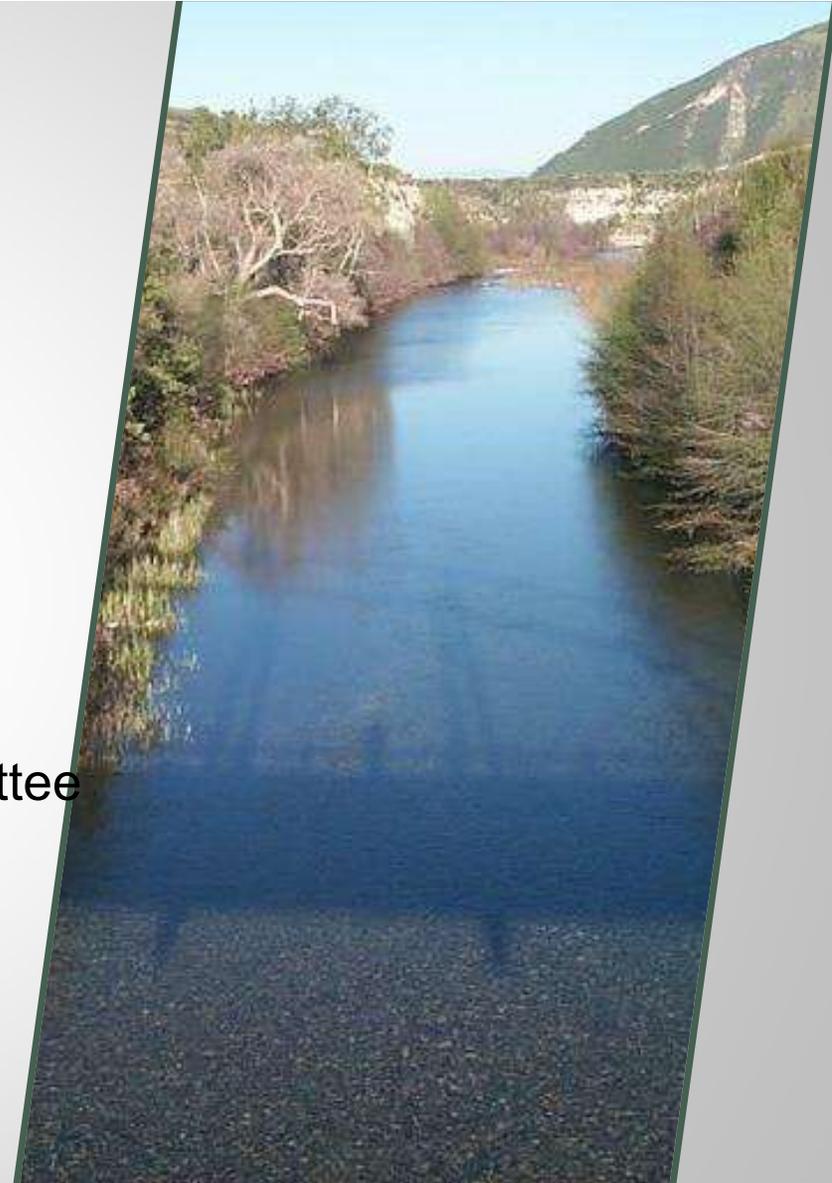


Groundwater Dependent Ecosystems in the Salinas Valley 2022 GSPs

Policy Discussion

Presented to SVBGSA Advisory Committee

May 21, 2021





GSP Regulations

- Defines a groundwater dependent ecosystem (GDE) as: “ecological communities or species that depend on groundwater emerging from aquifers or on groundwater occurring near the ground surface” (§ 351).
- GSPs shall include “identification of groundwater dependent ecosystems within the basin...” (§ 354.16).
- GSPs must consider all the beneficial uses and users of groundwater, of which GDEs are one.
- No regulatory requirement to develop Sustainable Management Criteria (SMC) for GDEs; however, GDEs can be taken into consideration when setting groundwater elevation and interconnected surface water (ISW) minimum thresholds and measurable objectives.

Main Comments Received Regarding GDEs in the 180/400-Foot Aquifer GSP

- ▶ The main concerns regarding GDEs centered around 3 main themes:
 - ▶ **GDE Description:** Whether the GSP should further delineate and describe potential GDEs present in the subbasin.
 - ▶ **Balancing Beneficial Uses and Users:** Whether the GSP should consider modifying sustainable management criteria, such as groundwater elevations, to address key environmental beneficial uses and users.
 - ▶ **Greater GDE Analysis:** Whether the GSP should include greater analysis of ISW and GDEs during seasonal and interannual groundwater fluctuations.

Previous Advisory Committee Decisions

- July and August 2020 Advisory Committee meetings – considered GDEs
- Advisory Committee voted to
 - **Add greater descriptions of GDEs** in the GSPs, and
 - **Maintain the current level of protection for GDEs through maintaining shallow groundwater levels near GDEs at 2015 levels (or some alternative year).**
 - In the discussion, members noted the objective will likely be an average water level and minimum threshold will likely be a drought level, but left it to each subbasin to decide a reasonable historical level.
- In October 2020, the Advisory Committee voted to
 - Use existing data for GDEs, mark 2015 as the starting point for the ISW measurable objective, and not consider the shallow sediments a primary aquifer.



Approach to GDEs in 2022 GSPs

- 1) Adding description of GDEs – drawing on existing data from multiple agencies and organizations.
- 2) Balancing beneficial uses and users
- 3) Greater GDE analysis

1) Adding GDE Description

- Notes main types of ecosystems commonly associated with groundwater
- Names threatened and endangered species present in Salinas Valley that depend or may depend on groundwater
- Identifies locations where potential GDEs are present

Groundwater Dependence	Common Name	Federal Status	State Status
Direct	California black rail	-	Threatened
	California red-legged frog	Threatened	-
	California Ridgway's rail	Endangered	Endangered
	longfin smelt	-	Threatened
	Santa Cruz long-toed salamander	Endangered	Endangered
	steelhead - central California coast DPS	Threatened	-
	steelhead - south-central California coast DPS	Threatened	-
	Tidewater Goby	Endangered	-
	tricolored blackbird	-	Threatened
	Direct and Indirect	arroyo toad	Endangered
Indirect	bald eagle	-	Endangered
	bank swallow	-	Threatened
	Belding's savannah sparrow	-	Endangered
	California condor	Endangered	Endangered
	California least tern	Endangered	Endangered
	least Bell's vireo	Endangered	Endangered
	southwestern willow flycatcher	Endangered	Endangered
	Swainson's hawk	-	Threatened
	willow flycatcher	-	Endangered

2) Balancing beneficial uses and users

- Needs balanced through
 - Regular stakeholder meetings and discussions
 - Developing relationships with partner agencies and stakeholders
 - Additional reviews of data by consultants
 - Regular reviews of comments and subsequent investigation into suggestions
 - Reviewing supplementary reports and information provided by ecologically-focused organizations
 - Providing information to the SVBGSA leadership to solicit feedback and address concerns raised
- Subbasin Planning Committees defined subbasin-specific SMC
 - Groundwater elevations – 2015 or recent low selected for Minimum Thresholds
 - Interconnected Surface Water – 2015 or recent low selected for Minimum Thresholds
- ISW monitoring network defined



3) Greater GDE analysis

- AC voted to use existing data to define and located GDEs
- One source of new data will be Central Coast Wetlands Group's Watershed Coordinator work to conduct watershed monitoring and assessment.
 - Assessment of surface and groundwater dependent ecosystems in the 180/400, Langley, and Eastside using rapid assessment methods
- Seasonal and interannual groundwater fluctuations are accounted for by monitoring during the low groundwater elevation season and comparing measurements to recent low, yet acceptable years

Questions

