

# Joint Authority Board and Reservoir Committee Meeting

Agenda Item 3.2: Update on the Project's  
Biological Assessment

March 18, 2022



# ESA Quick Reminder and Status

## Biological Assessment

- Authority & Reclamation prepare
- Covers both construction and operations (terrestrial and aquatics)

Today

## Reclamation Submits BA to USFWS and NMFS

- Reclamation has final review and approval
- Submitted under Reclamation Letterhead

May Mtg:  
Delegate Authority  
For Ex Director to  
Submit to  
Reclamation

Late May/  
Early June

## Biological Opinions

- One from USFWS
  - Terrestrial and Delta Smelt
- One from NMFS
  - Anadromous Fish

End of 2022/  
Early 2023

# Terrestrial Species Covered

- Take likely necessary for:
  - Conservancy fairy shrimp
  - Vernal pool fairy shrimp
  - Vernal pool tadpole shrimp
  - Valley elderberry longhorn beetle
  - California red-legged frog
  - Giant garter snake (state listed also)
- Not requesting take for:
  - Palmate-bracted bird's beak
  - Keck's checkermallow,
  - Western yellow-billed cuckoo
  - Must avoid if found OR reconsult



Vernal Pool Tadpole Shrimp



Palmate

Calscape –  
2008 Chris  
Winchell

Giant Garter Snake



© Richard Porter

# Preliminary Habitat Estimate for Terrestrial Species

USFWS-Managed Species	Conservatively Estimated Modeled Habitat
Conservancy fairy shrimp	Up to 240 acres <sup>1</sup>
Vernal pool fairy shrimp	Up to 240 acres <sup>1</sup>
Vernal pool tadpole shrimp	Up to 240 acres <sup>1</sup>
Valley elderberry longhorn beetle	Up to 250 shrubs
California red-legged frog	Up to 287 acres of modeled aquatic habitat and 6,765 acres of modeled upland habitat
Giant garter snake	Up to 2 acres of aquatic habitat and 27 acres of upland habitat

Note: Estimated effects based on aerial imagery and CNDDDB occurrences and expected to be a conservative estimate. Actual amounts of permanent and temporary impacts will be determined during surveys prior to Project construction.

1. This is the same 240 acres as it could be potential habitat for any or all of these three vernal pool species

# Take Minimization Measures

- Measures to reduce amount of take include:
  - Construction windows and buffer areas
  - Construction best management practices
  - Restoration on temporarily affected habitat
  - Preconstruction surveys
  - Habitat mapping and flagging
  - Avoidance of habitat
  - Biological monitoring



# Proposed Mitigation Approach

- Compensatory mitigation for take is required
- Diverse approach
  - Sites-lead off-site habitat acquisition or restoration
  - Conservation easements
  - Conservation banks / mitigation banks
  - On-site opportunistic habitat preservation / restoration
- Each has different risks
- Prepare detailed mitigation strategy in 2022/2023

# Next Steps

- April meeting
  - Financial assurances discussion
  - Operations / aquatics effects (may move to May depending on modeling)
- May meeting
  - Approval for Executive Director to submit the Biological Assessment and Operations ITP Application
- June
  - Submit to Reclamation Biological Assessment to USFWS and NMFS