

May 2024

Request for Assistance: Butte Sink Waterfowl Association

The KSN Project Management Team on behalf of the Butte Sink Waterfowl Association (BSWA), has requested technical assistance related to the exploration of potential habitat and flow benefits in the Butte Sink as related to Floodplains Reimagined. A project description is provided as attachment A.

1. Applicant Eligibility
 - a. Name: Butte Sink Waterfowl Association
 - b. Contact Information
Holly Dawley, KSN Inc –
hdawley@ksninc.com
 2. Landowner Segment
 - a. Private agricultural farms
 - b. Recreational
 - c. Tribes
 - d. NGO landowners
 - e. Public Agency landowners
 - f. Representatives of landowners
 - g. Other
 3. Geographic Scope
 - a. Property Location
 - i. Address: Field and Tule Duck Club
14556 North Butte Rd
Live Oak, CA 95953
 - ii. Coordinates:
Lat 39.289100° N
Long - 121.892050° W
 - iii. Map: See Attachment
 - iv. Subregional Basin: Butte
 4. Planning Project Type
 - a. Project Concept
 - b. Proof of Concept
 - c. Preliminary Engineering Plans
 - d. Assessments to inform planning/
 - e. Other
- opportunity for increased salmonid rearing habitat and longer duration of floodplain activation.
- a. Task 1, Butte Sink Characterization
 - b. Task 2, Baseline Technical Assessment and Development
 - c. Task 3, Identification and Assessment of Potential Concepts
 - d. Task 4, Planning to Reduce Scientific Uncertainties
6. Proposed Timeline: Summer 2024 – March 2025
 7. Cost Estimate: \$375,000
 8. Reporting : A technical memorandum will be completed by 03/31/2025.

5. Project Description and Tasks

The proposed project will allow for further developing the concept for feasibility and

Project Proponent: Butte Sink Waterfowl Association
Date: May 15, 2024

RE: Project Understanding for BSWA Technical Assistance,
Phase 1

Purpose: Provide a platform for discussion of technical assistance
elements to support BSWA participation in Floodplains
Reimagined

Background

The Butte Sink Waterfowl Association (BSWA) has requested technical assistance through Floodplains Reimagined (FR) to investigate and better understand potential ways landowners and land managers may integrate existing operations with floodplain improvements for multi-benefits including supporting native fishery recoveries and climate change resilience. The Floodplains Reimagined Program just completed Phase 1 of the Program development. This Technical Assistance will leverage work and findings from the Phase 1 effort. In recognition of the hydraulic connectivity of the Butte and Sutter Basins, coordination will occur between subregional efforts which include the Butte Sink, Upper Sutter Bypass, and Sutter Bypass.

Proposed Tasks for Scope of Work

Task 1: Butte Sink Characterization

Task 1 will allow the project team to explore and document the history of restoration in the Butte Sink in order to identify potential options for multi-benefits. This process will help to document a baseline for the region, existing practices, and landowner/manager priorities and concerns.

Deliverables will include the following:

- An external facing primer on the history and successes of restoration in Butte Sink.
- A Butte Sink Interests Assessment documenting priorities and concerns of Butte Sink parties. The assessment will start with the BSWA members and could take into account parties related to potential options in the Butte Sink.

Task 2: Baseline Technical Assessment and Development

Task 2 will allow the technical team to refine baseline conditions for the Butte Sink sub-region. The technical team will consider data needs to explore hydraulic characterization of the region, develop an approach for model and tool refinement, and assess potential for benefits and tradeoffs, all of which will inform Task 3's identification of potential opportunities. This task will build off and refine the existing conditions documented and modeled in Phase 1 of the Floodplains Reimagined effort.

Deliverables will include

- A Butte Sink Baseline Conditions and Opportunities Technical Memorandum documenting operational and ecological baseline conditions and identified areas of technical concern or known areas of potential improvement

Task 3: Identification and Assessment of Potential Concepts

Task 3 will take the information gathered in Task 2 and identify potential sub-regional options to improve habitat, operations, passage, and access in the Butte Sink.

Deliverables will include

- A Butte Sink Options Technical Memorandum

Task 4: Planning to Reduce Scientific Uncertainties

Task 4 will prioritize reducing scientific uncertainties to inform development of multi-benefit options for Butte Sink. The FR Phase I Report identifies certain scientific uncertainties as critical to evaluating multiple benefits to juvenile Chinook salmon. Biologic and physical science activities will build on the FR Phase I Chinook Scientific Uncertainties Technical Memo. The Technical Team will consider and prioritize efforts such as productivity monitoring, growth of migration, spatial distribution of rearing juvenile salmon, etc. Physical process science activities will likely focus on water level and flow monitoring at key locations along with necessary topographic and bathymetric (in-river) surveys.

Deliverables will include

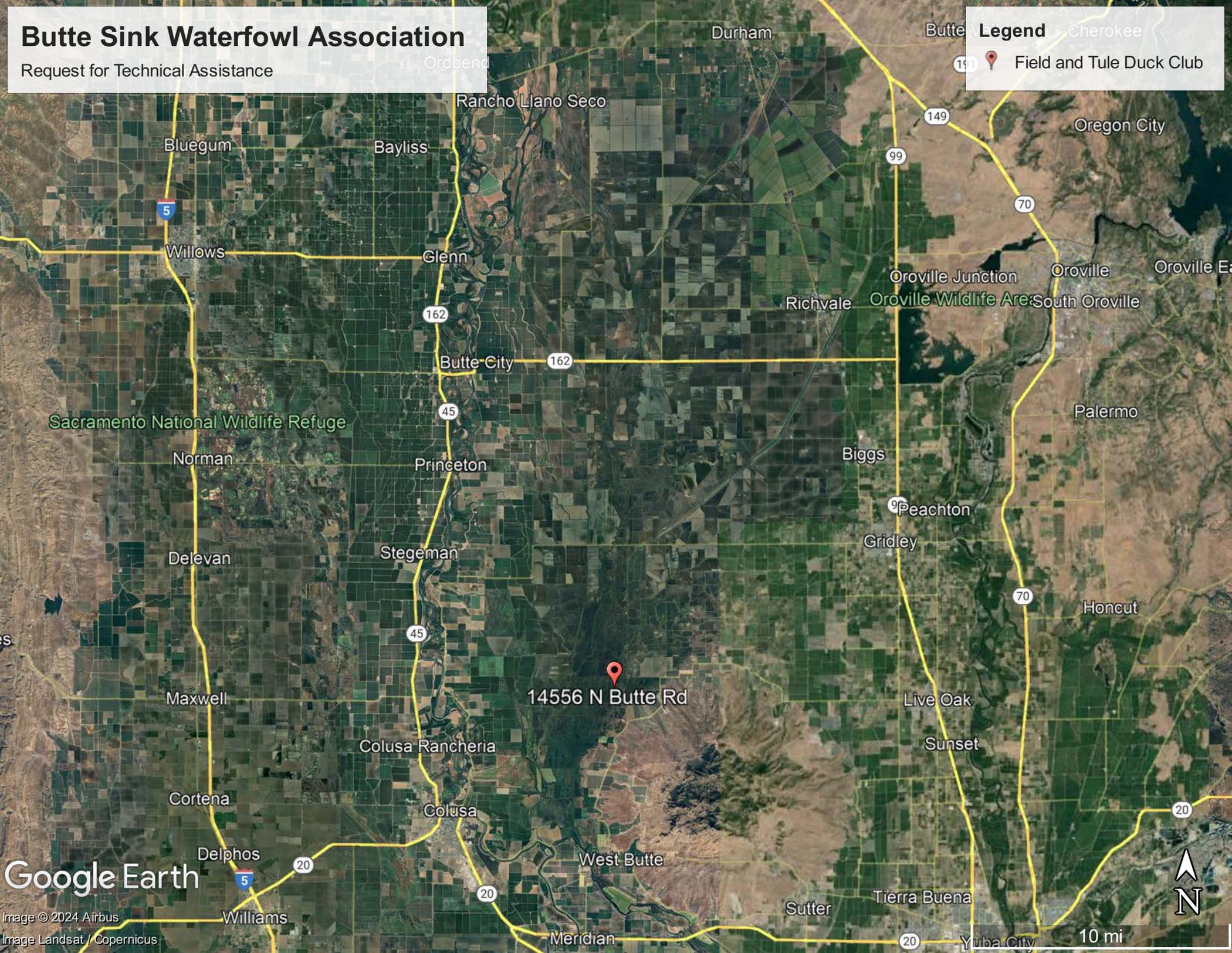
A Butte Sink Subregion Science Activity Plan Technical Memorandum including recommendations for science activity plans and potential costs.

Butte Sink Waterfowl Association

Request for Technical Assistance

Legend

-  Field and Tule Duck Club



Google Earth

Image © 2024 Airbus
Image Landsat / Copernicus



10 mi

May 2024

Evaluation Criteria: Butte Sink Waterfowl Association

The purpose of this document is to provide evaluation criteria for the Floodplains Reimagined Steering Committee to evaluate the proposed projects for Floodplains Reimagined Technical Assistance.

The Steering Committee will evaluate the proposed project based on subjective evaluation of the criteria and give it one of the following grades:

1. Pass
2. Fail
3. Need more information

Highlighted in yellow below are the criteria met by BSWA's request.

Steering Committee Meeting: May 15, 2024

Steering Committee Grade: Pass, Fail, Need Info

Funded planning projects must meet the following criteria:

a. Eligibility

Landowners of lands within the Floodplains Reimagined geographic scope are eligible to request technical assistance.

Landowners are defined as those who own or manage land and water in the geographic scope and may include:

- a. Owners of private farms or ranches
- b. Recreational hunting clubs and preserves
- c. Tribes
- d. NGO landowners
- e. Public Agency landowners
- f. Authorized representatives of landowners

b. Planning projects only – such as:

- a. Development of project concepts
- b. Proof of concept plans
- c. Preliminary engineering plans
- d. Research studies and pilot studies to inform planning
- e. Development of agreements between landowners and sponsoring agencies

c. Project Type (Potentially)

There will be no implementation projects such as construction or restoration.

- a. Floodplain reactivation projects
- b. Fish food production
- c. Removal of invasive plants
- d. Coordinated operations plan

- e. Modifying diversion infrastructure and/or operations
 - f. Modifying river connection infrastructure and/or operations
 - g. Creating new river connections
- d. Geographic scope – the land on which the project is proposed must be within the geographic scope of Floodplains Reimagined.
- e. Objectives – The purpose of the proposed project must meet one or more of the Floodplains Reimagined objectives as follows:
- a. Improve floodplain connectivity during the winter and shoulder seasons including October – May.
 - b. Planning to:
 - i. Convey water from the Sacramento River to the floodplain or surrogate agricultural floodplain.
 - ii. Drain water back into the Sacramento River.
 - iii. Hold water on the floodplain or surrogate agricultural floodplain.
 - iv. Protect neighboring properties from risk of inundation.
 - v. Permanent restoration of floodplain habitat and connectivity in marginal or underutilized lands
- f. Replicability
- a. Plans must be either replicable or the outcomes and lessons learned applicable to the rest of one of the following subregions within the geographic scope:
 - i. Butte Basin
 - ii. Sutter Bypass
 - iii. Colusa Basin
- g. Outcomes
- a. The funding must cover:
 - i. planning project deliverables.
 - b. The funding could cover:
 - i. development of prototype agreement between the landowner and sponsoring agency for restoration and inundation activities
 - c. The funding is not required to cover:
 - i. further analysis of the project as it relates to replicability.