

NWP 27 Summary Notice Report

Project Information

Project Title: Winters Ranch Wetland Enhancement Project

Date: May 26, 2026

1) Prospective Permittee Contact Information

Name: Nicole Goehring

Organization: Bureau of Land Management

Mailing Address: 5665 Morgan Mill Road, Carson City, NV 89701

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Email: ngoehring@blm.gov

2) Location of Proposed Activity

Project Address / Nearest Road: BLM property located both sides of I-580 near Exit 16 Old US 395

City/County/State: Washoe Valley, Washoe County, NV

Latitude/Longitude: 119.8183019°W 39.3044313°N (point located along access road)

Map Reference: See Appendix – **Map 1**.

3) Baseline Ecological Conditions

General Description of the Winters Ranch property:

Winters Ranch is a BLM-managed property that spans 1300 acres in Washoe Valley, NV. Vegetation in the vicinity of the study area transitions from subalpine vegetation of the Sierra Nevada at the upper western edge of the valley, to Great Basin sagebrush shrublands on the eastern side of the valley. The Site itself encompasses the heart of the transition, with much of the range of vegetation occurring on the site, from sub-alpine stream and meadow habitats to sagebrush shrublands, as well as aquatic and alkali habitats associated with Washoe Lake.

Vegetation within the project focus areas consists of a mosaic of upland and wetland plant communities ranging from drought-tolerant shrublands to wetland and riparian habitats. The uplands consist primarily of Great Basin sagebrush, while the wetlands consist of a mixture of seasonal wet meadow and Great Basin alkali habitats as well as perennial marsh and riparian habitats.

In between the sagebrush and wetland habitats are extensive areas where wetlands and uplands intermingle, with a mosaic of upland and facultative wetland plant species. These habitats occur along areas with relatively sandy soils, but which feature slopes moderate enough that water flows as rivulets and/or sheet flow, and where snowmelt is slow enough that, in localized areas, soils remain saturated for extended durations. In addition, presumably where wetlands prevail, the water table is relatively close to the surface, such that the habitats are supported by both overland flow and subsurface groundwater.

Ophir Creek is the largest perennial stream at the Site. Its upper watershed is an area with a history of rockslides and debris flows. A landslide event in May 1983 generated a debris fan that affected the Ophir Creek corridor across the Site. Ophir Creek is currently incised along a significant length through the Site west of I-580, compromising channel-floodplain connectivity. High flows and sediment transport are constrained by an undersized culvert under I-580. NDOT has historically excavated sediment from the channel upstream and downstream of the culvert, impacting the natural channel slope. Upstream diversions may reduce flows on BLM property.

Flows in Davis Creek are typically dependent on snowmelt and may be reduced by upstream diversions. Infrastructure projects (e.g., I-580) have modified natural channel patterns and concentrate stormwater runoff to Davis Creek. Davis Creek appears to have been diverted along the Virginia & Truckee Railroad grade and under the former tracks at a location that concentrates runoff from other ephemeral channels. The concentration of flow in an undersized channel unaccustomed to the new flow regime appears to have resulted in incision and widening. In its current state, the channel contains more frequent floods, with limited floodplain inundation, and vegetation appears to be converting from wetland or wet meadow habitats to drier uplands. The railroad grade extends across the site, deflecting and concentrating flows from various channels into a limited number of crossings, which has led to channel incision and meadow desiccation downstream.

Flows in Winters Creek are typically dependent on snowmelt and may be reduced by upstream diversions. Winters Creek through the Site was modified for ranching activity and more recently ditched. Concentration of flow in a straightened ditch appears to have increased channel slope and flow depths and velocities, resulting in channel scour and erosion. The channel is responding by actively incising, as evidenced by 5 active head cuts; some measured over 5 feet in height. Incision is draining wet meadow soils and accelerating meadow conversion or desiccation. Further downstream, the Virginia & Truckee Railroad grade diverts Winters Creek to a single crossing that accumulates other drainages. Concentration of flow to a single channel east of the railroad grade has also introduced channel incision and meadow desiccation to areas east of the railroad grade.

Farther from the freshwater of the streams, and closer to Washoe Lake, the soils become increasingly alkaline, which in turn influences the plant communities. Densely vegetated wetland meadows dominate areas of near neutral to slightly alkaline soils. Various upland species also occur in varying proportions throughout much of the wetland meadow habitats. However, such upland species are replaced by more facultative and obligate wetland species within areas featuring a higher water input, and/or a higher water table. These more perennial wetland habitats are scattered as localized habitats among the much larger seasonal wetland meadows. With the exceptions of the areas surrounding lower reaches of the larger streams (especially Ophir Creek), soils adjacent to Washoe Lake are highly alkaline, and the associated plants are adapted accordingly.

In the appendix, **Map 2** shows the surveyed vegetation associations. This information was collected via surveys completed in the field by the Stringham Lab at UNR.

4) Sketch of Proposed Project Elements

The project elements are concentrated in three different areas within Winters Ranch. As such, this section is broken into three parts: a) Davis Creek and East Casey Well, b) Ophir Creek and West Casey Well, and c) Winters Ranch.

Certain project elements will rely on the diversion of pumped groundwater. Each of the two existing wells on Winters Ranch is associated with state-issued groundwater permits for recreation/wildlife use. Project implementation will occur as funding and resources allow, aiming for completion within approximately five years. In the scenario where only one well (i.e., the west well) is pumped, features associated with the unused well and the water it would provide would not be implemented unless adequate conditions (e.g., moisture) are present.

The project elements and associated figures are also described in the BLM's NEPA document for the project, located here: <https://eplanning.blm.gov/Project-Home/?id=16ae61fa-a7f2-f011-8407-001dd80bcf93>

a) Davis Creek and East Casey Well:

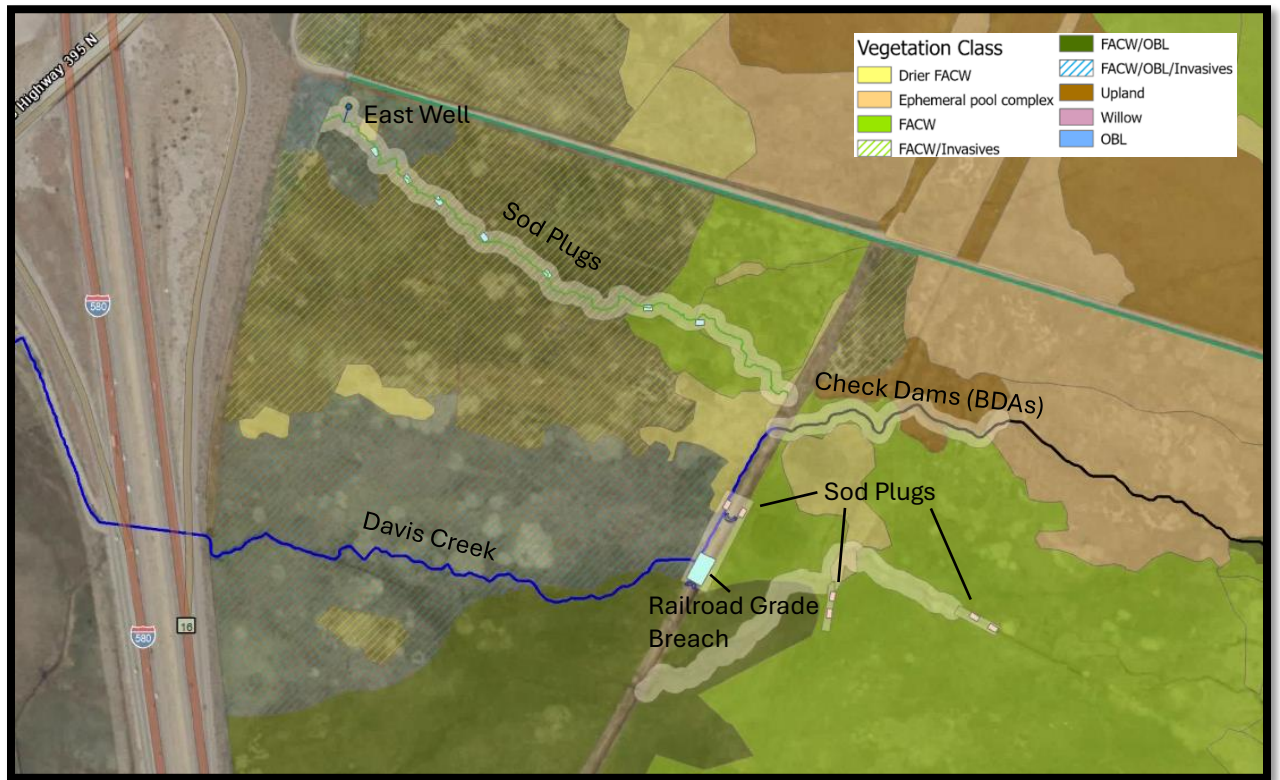


Figure 1. Highlighted project area overview for Davis Creek and East Casey Well, including the railroad grade breach area. Project elements include sod plugs with native plant species, a breach in the railroad berm, and bioengineered check dams (also known as beaver dam analogs (BDAs)).

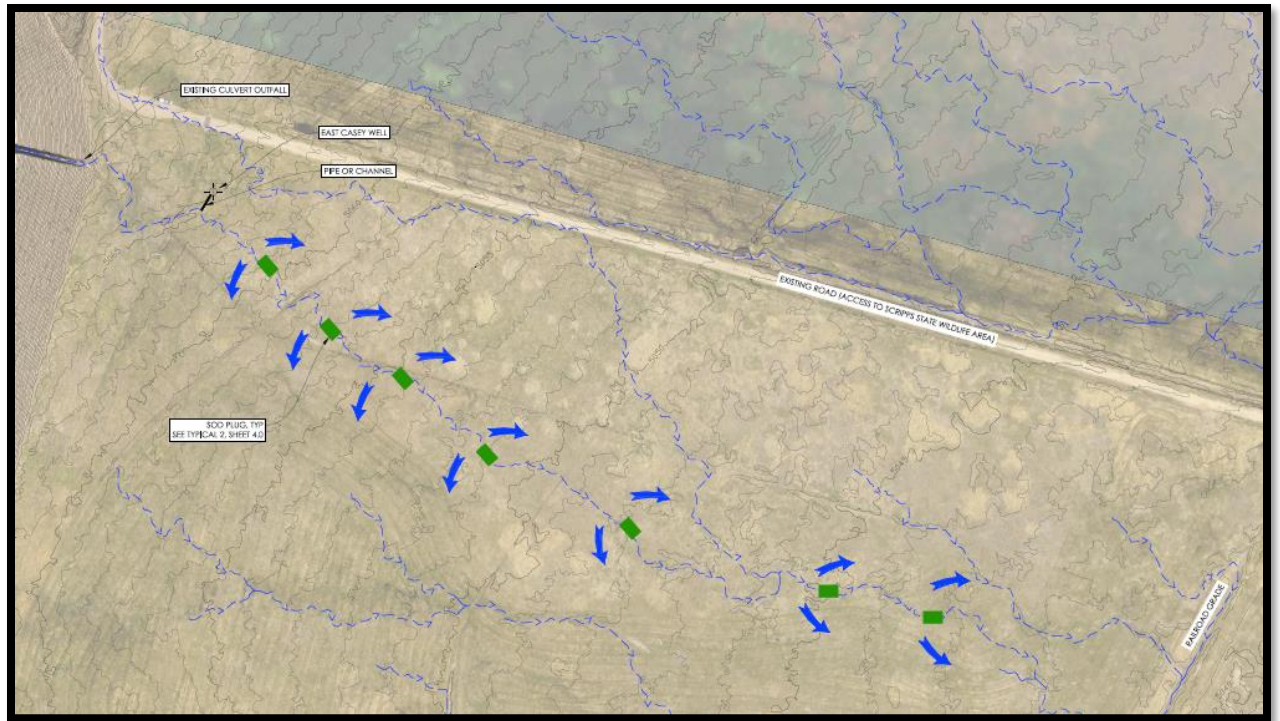


Figure 2. Conceptual design for the East Casey Well. Groundwater would be directed to an adjacent swale/channel and sod plugs in the channel would encourage flow to disperse.

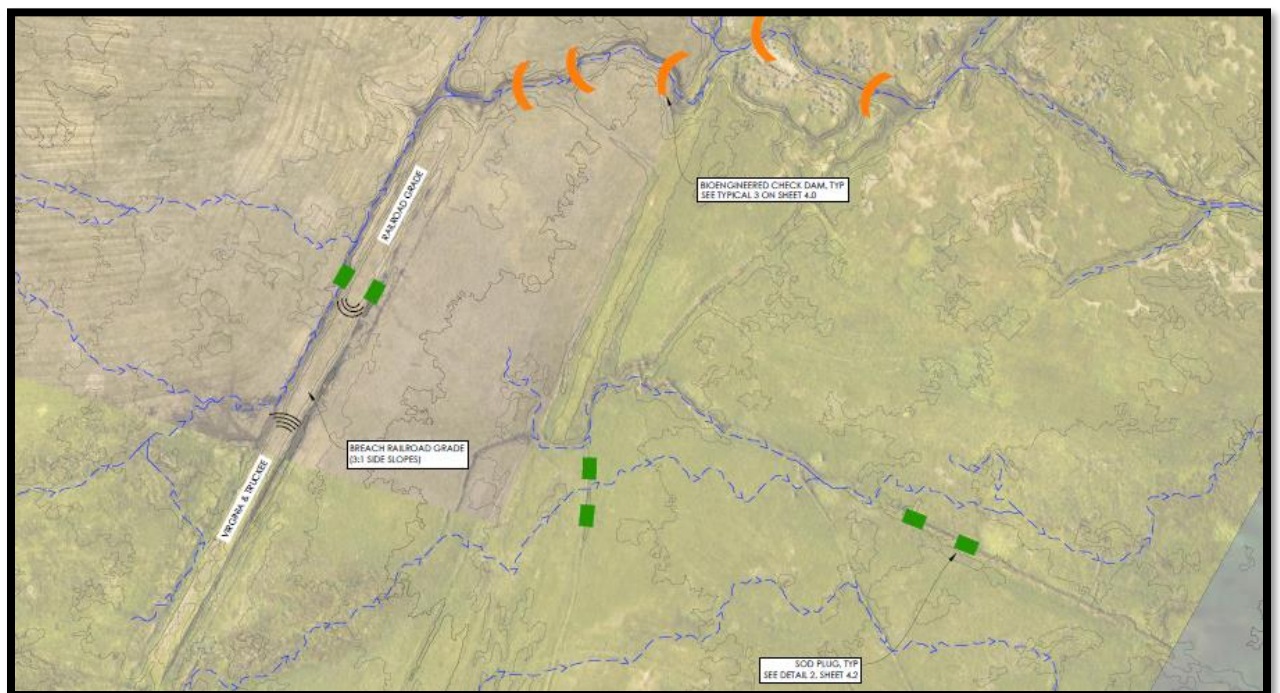


Figure 3. Conceptual design for railroad grade and Davis Creek sod plugs and bioengineered check dams (i.e., BDAs).

(b) Ophir Creek and West Casey Well:

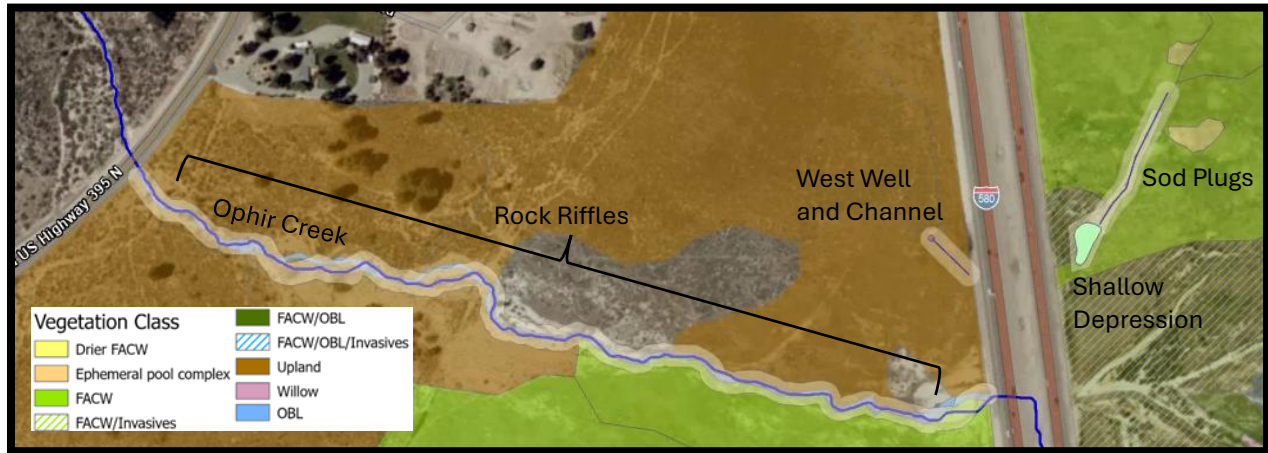


Figure 4. Highlighted overview of Ophir Creek project area and East Casey Well. Water pumped from the well would flow east through a culvert and feed a wetland area with potential for expansion. Expansion of wetland vegetation would be facilitated by targeted grading that forms a shallow depression.

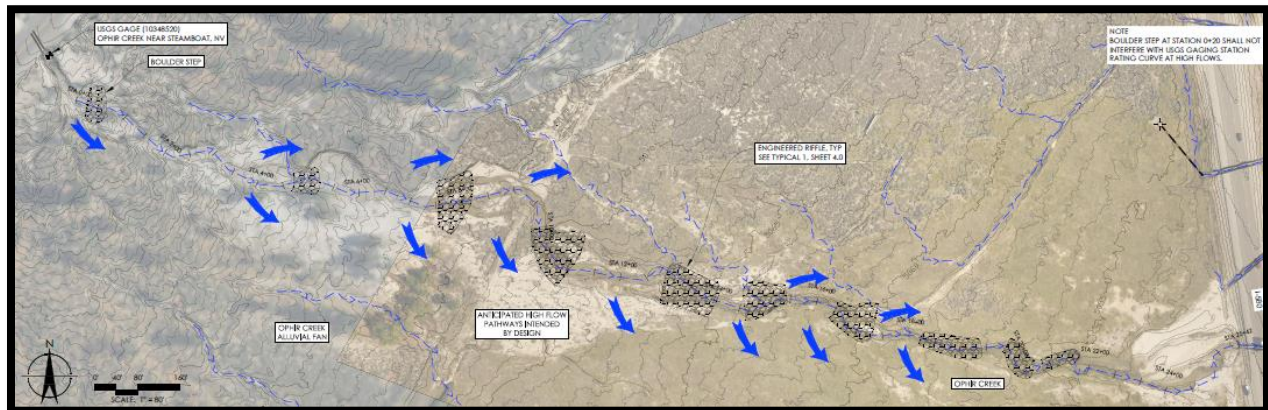


Figure 5. Ophir Creek rock structure conceptual design. Riffles would promote the dispersal of high flows onto the floodplain. The riffles and overbank flow may also reduce the volume of sediment reaching the culvert.

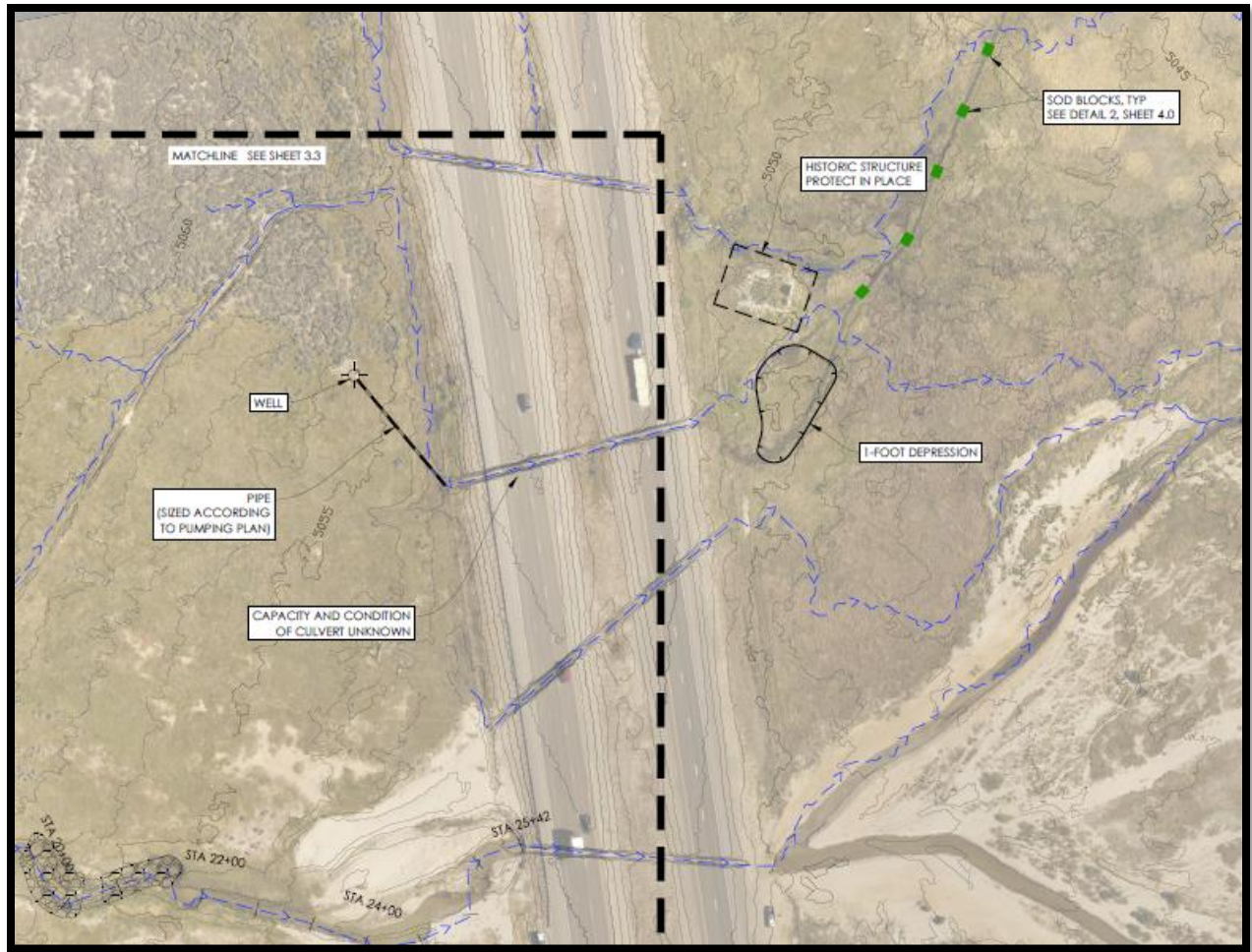


Figure 6. Conceptual design for West Casey Well and downslope wetland depression and sod blocks.

(b) Winters Creek:

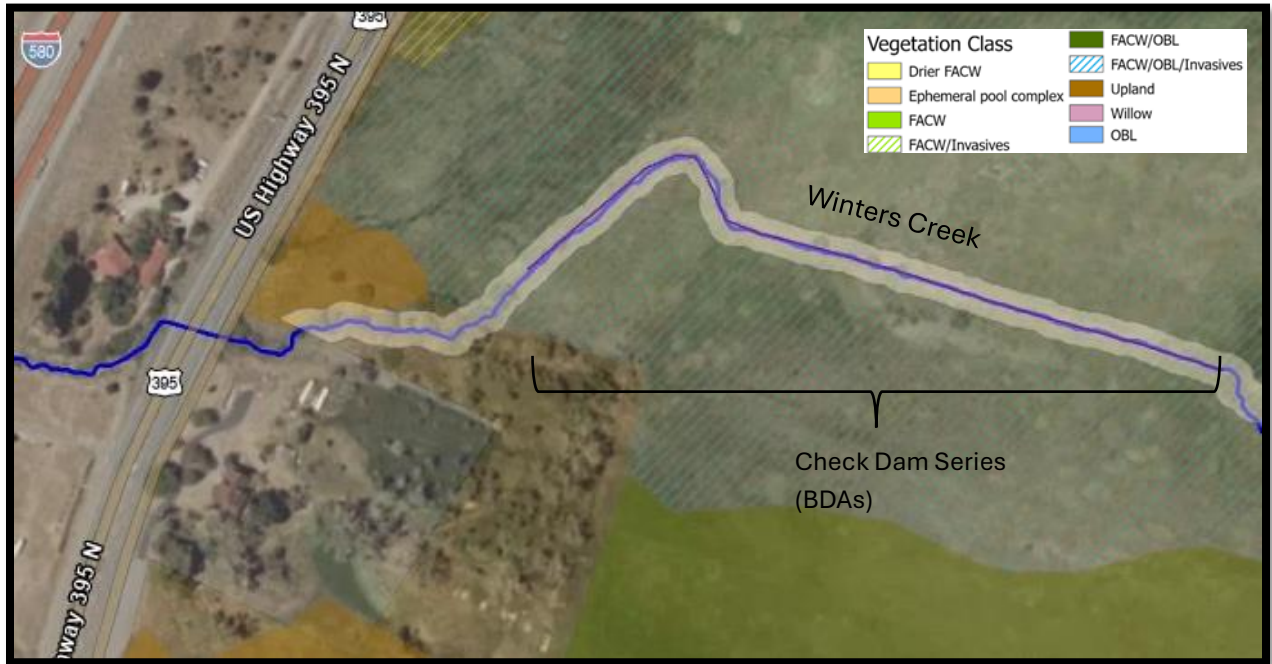


Figure 7. Highlighted overview of Winters Creek project area. BDAs would be installed along the single-thread segment of Winters Creek, much of which has been ditched, limiting natural stream functionality.

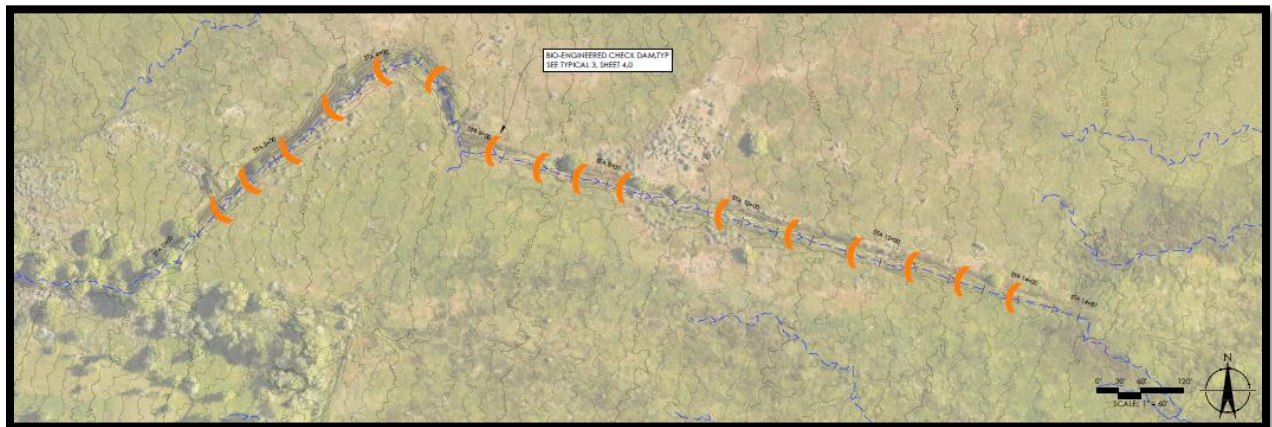


Figure 8. Conceptual design for check dam (BDA) locations on Winters Creek.

5) Objectives and Techniques/Mechanisms

Goals and objectives

Based on the Winters Ranch Management Plan (BLM, 2011) and the Winters Ranch Wetland Management, Monitoring, and Maintenance Plan (Balance Hydrologics and Vollmar, 2020), the goals and objectives are as follows:

Goal 1. Stream Habitats: Restore aquatic and riparian habitats along Ophir, Davis, and Winters creeks, and maintain them in a healthy, functioning condition.

Objective A. Re-establish a more natural flow regime for the streams crossing the Site. Frequent small floods that are associated with channel-forming processes, healthy riparian plant communities, and functioning aquatic habitats would be allowed to occur, and occasional large floods would be accommodated.

Objective B. Restore and maintain the streams to provide healthy, functioning nursery habitat for juvenile fish and aquatic habitat for herptiles, as indicated by appropriate: physical characteristics (e.g., width, depth, sinuosity, bed materials); water quality (e.g., temperature, pH, dissolved solids, dissolved oxygen); and biota (e.g., abundance and diversity of fish, herptiles, and macroinvertebrates).

Objective C. Restore and maintain the riparian communities to their full capability, as indicated by their: physical characteristics (e.g., channel width, depth, sinuosity, vertical stability, ability to store and release water); plant communities (e.g., the presence of native and late-seral species, diverse age classes and species composition, ground cover, ability to dissipate energy during high stream flows); and wildlife habitat (e.g., habitat characteristics, use by birds, herptiles, and mammals).

Goal 2. Wetlands: Restore wetland habitats on the Winters Ranch Site, and maintain them in a healthy, functioning condition.

Objective A. Re-establish a hydrologic regime that mimics nature as much as possible, given the constraints that the highway and railroad grade place on water movement.

Objective B. Restore and maintain the marshes and wet meadows to provide healthy, functioning forage habitat for birds and herptiles, and reproduction habitat for amphibians, and indicated by their: plant communities (e.g., the presence of native and late-seral species, or mid-seral species where desirable, and diverse age

classes and species composition); and wildlife habitat (e.g. habitat characteristics, use by birds and herptiles).

Techniques or Mechanisms:

- **Beaver Dam Analogs:** BDAs encourage overbank flows and dissipate high flows across the alluvial fan, restoring the original geomorphic processes that occurred pre-disturbance. By slowing flow and trapping sediment, BDAs help incised channel bottoms aggrade.
- **Rock structures:** Restoration of channel-floodplain connectivity could include construction of riffles composed of natural gravels and cobbles. On Ophir Creek upstream of I-580, restoration of channel-floodplain connectivity upstream of the I-580 culvert is anticipated to provide: (a) re-wetting or more frequent wetting of the adjacent meadow, and (b) opportunities to deposit sediment on the floodplain-meadow surface instead of at the culvert inlet. If resources and an access route are available, a boulder step could be installed on the west end of Ophir Creek where the gradient of the channel is higher.
- **Berm Cut:** Railroad grades deflect and concentrate flows into a limited number of crossings, which has led to channel incision and meadow desiccation downstream. Restoring the natural flow pathways by removing a section of the railroad grade (up to approximately 80 feet) would improve surface flows and meadow wetting patterns. Sides of the berm would be graded to a 3:1 slope.
- **Sod plugs and seasonal depressions:** Targeted areas could be graded into small seasonal depressions that support wetland habitat. Materials excavated for these depressions could be used to create channel plugs to encourage overbank flow or fill other adjacent man-made channels that do not provide wetland functions. A swale or shallow pond may also be used to help manage groundwater pumped from the East Casey well.
- **Monitoring and adaptive management:** Photo monitoring and adaptive management will help ensure that project goals and objectives are progressing toward being met. Adaptive management may include additional plantings, adjustments to pumping regimes, placement of additional sod plugs, and modification of rock riffles and beaver dam analogs.

General & Regional Conditions – Confirmation Checklist

General Condition Topic	Status	Notes
General Condition 18 Endangered Species Act	No consultation required	The iPaC tool was reviewed to consider potential impacted species. Based on the scope and timing of the project activities, BLM determined that there would be no effect to listed, or proposed to be listed, threatened or endangered species or their critical habitat. The ESA does not require consultation on "no effect" determinations.
General Condition 20 Historic Properties	Project is under threshold by Section 106 regulations.	No adverse effects. CRINA sent to SHPO 12/13/2024; no response received. See Attachment 1.
Water Quality Certification (WQC):	A 401 Certification is being pursued	Pre-meeting for 401 Certification was completed on 3/10/2026
Wild and Scenic Rivers:	Not present	

Regional Conditions Summary: No regional conditions apply within this Project Area.

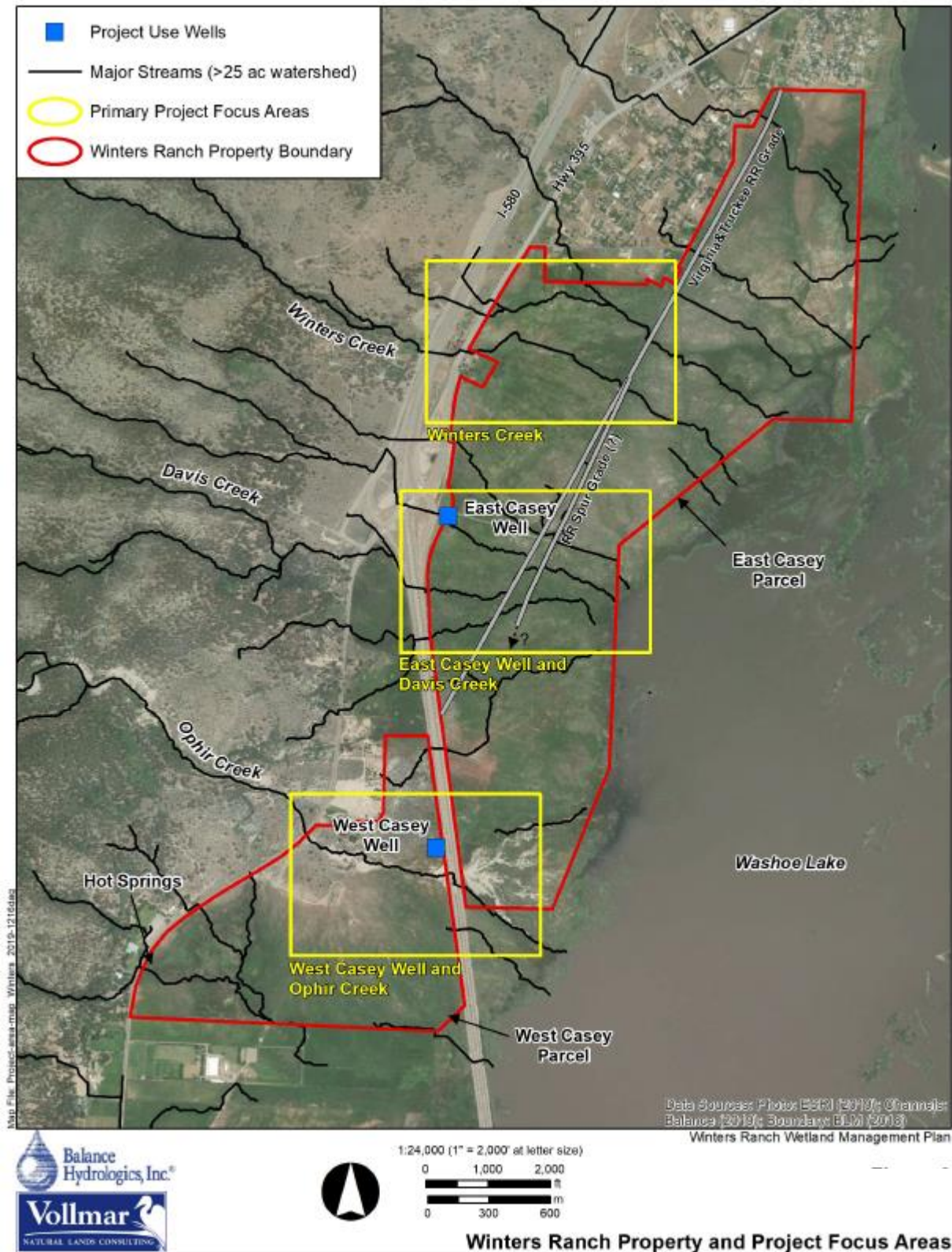
References

Balance Hydrologics and Vollmar Natural Lands Consulting (2020). *Winters Ranch Wetland Management, Monitoring, and Maintenance Plan*.

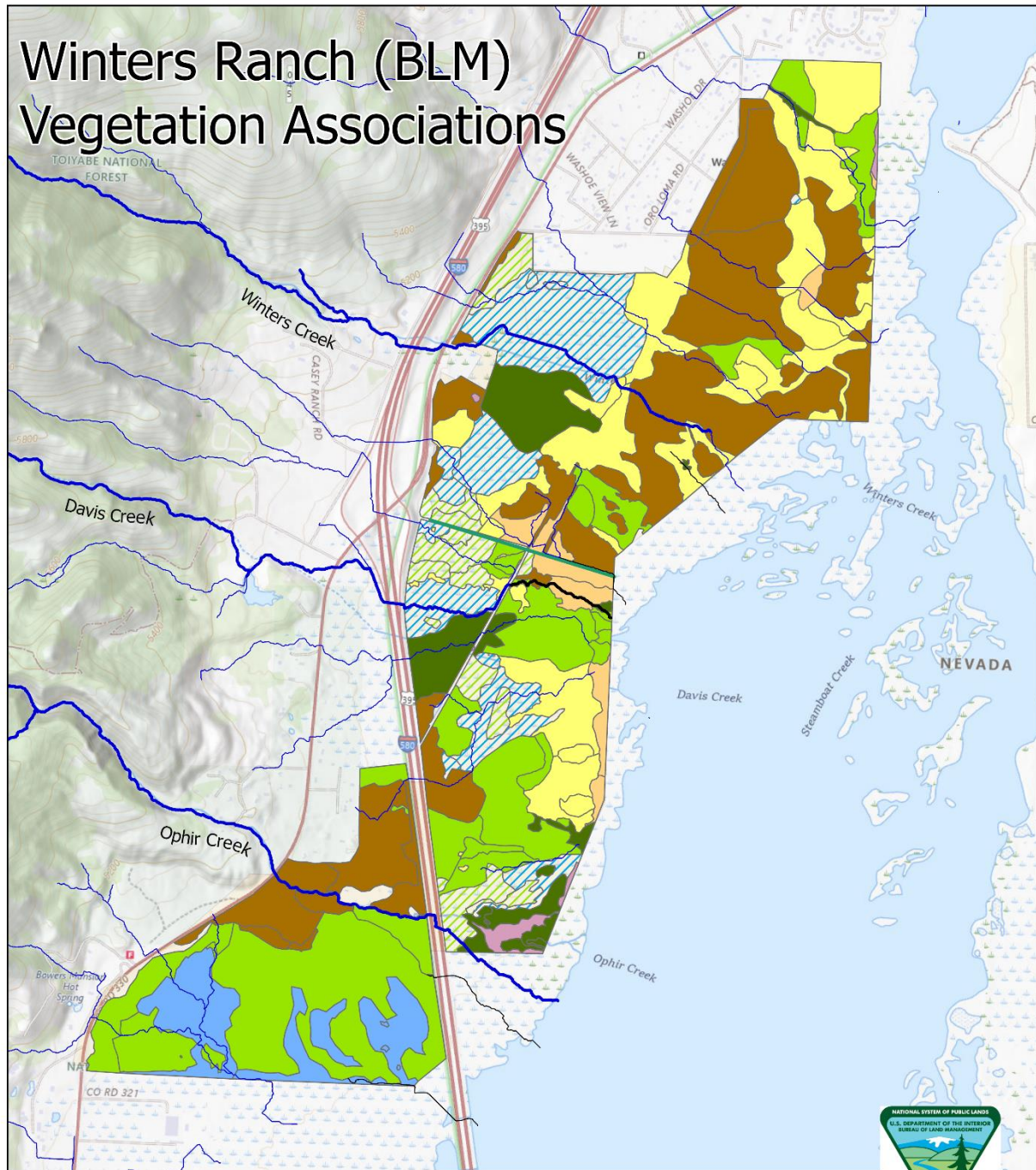
U.S. Bureau of Land Management (BLM) (2011). *Final Environmental Assessment: Winters Ranch Management Plan*.

Appendix

Map 1. Overview of the Winters Ranch property in Washoe Valley, NV and project focus areas.



Map 2. Vegetation associations on the Winters Ranch property. The associations indicate the variety of habitats present.



Vegetation Class

 Drier FACW	 FACW/OBL
 Ephemeral pool complex	 FACW/OBL/Invasives
 FACW	 Upland
 FACW/Invasives	 Willow
	 OBL
	 NDOW Easement Rd



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No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.



Section 106 Compliance Winters Ranch Project

From Miller, Winston H <whmiller@blm.gov>
Date Mon 12/22/2025 3:47 PM
To Goehring, Nicole A <ngoehring@blm.gov>

On December 13, 2024, I sent the CRINA for the Winters Ranch Wetland Project to SHPO to get concurrence for no adverse effect to the V&T Railroad grade. In pursuant of Section 1.d of the Nevada State Protocol, SHPO made no comments on the CRINA in the five(5) working days of when it was submitted. Thus, BLM determined this project is under-threshold and no adverse effects would occur to the historical property.

The BLM is utilizing 36 CFR 800.5.a.1 and Section V.E.3 and V.E.4 of the Nevada State Protocol in its assessment of adverse effect to site 26WA5815. "An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association" (36 CFR 800.5.a.1). The proposed undertaking of an 80ft breach of the Virginia Truckee Railroad Grade is associated within the context of Criteria C. Due to site 26WA5815 being eligible only under Criteria A and B this breach will not have an adverse effect to its inclusion in the National Register.

Cheers!

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Certification & Signature

Name/Title: Matthew E. Magaletti, Sierra Front Field Manager and Acting District Manager

Organization: BLM Sierra Front Field Office

Date: 05/26/2026