



Waters of the US Tour, Summit County, UT

July 18, 2017
 8:30 – 10:45 am
 Itinerary

8:30 am Depart Utah State Capitol Parking Lot

9:20 am Arrive Bitner Ranch (Site 1)

Property history and current ranching operations

Bitner Ranch is one of the oldest ranches in Summit County, founded by Milton O. Bitner in the late 1800s. The original ranch included 22,000 acres and the Kimball Hotel, which served as the first stop east of Salt Lake City on the Lincoln Highway. Brian K. Bitner currently runs a ranching operation on the property that includes 7,000 sheep, 25 horses. The family also works the land for alfalfa. The family has deep roots to the land and has used the property to teach generations of kids how to work.

East Canyon Creek

East Canyon Creek, part of the Weber River system, is a jurisdictional water impaired for low dissolved oxygen. Downstream of Bitner Ranch, the East Canyon Water Reclamation Facility treats municipal wastewater to some of the highest levels in Utah. Its discharge to East Canyon Creek represents the majority of the flow in the creek during the summer and was instrumental in the recovery of East Canyon Reservoir.

Riparian restoration project on East Canyon Creek

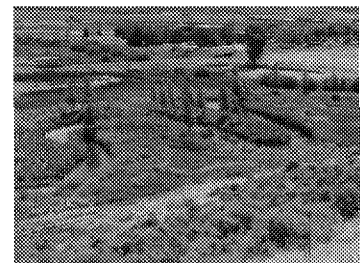
In 2010, a stream restoration project was installed on Bitner Ranch and adjoining property to reduce stream bank erosion and improve riparian habitat and water quality in East Canyon Creek. The project included fencing, plantings, stream bank stabilization, hardened crossings and watering areas for livestock. The project was funded with a combination of federal and state funds and permitted under a Nationwide 404 permit.



2009 – Banks before project



2010 - During construction



2017 – After project

Open pond and meadow wetland tributary to East Canyon Creek (Site 2)

A jurisdictional wetland connected through a small tributary to East Canyon Creek.

9:40 am Depart Bitner Ranch

Travel past Swaner Nature Preserve (Site 3)

The Swaner Preserve is a 1,200 acre nature preserve that was created through private donations of

land from the Swaner family and other land owners in the area. In 2001, a Federal Wetland Reserve Program easement was established to protect 533 acres of critical wetland habitat on the east side of the preserve.

Silver Creek tributary to Weber River (Site 4)

Silver Creek originates with water flowing out of old mine tunnels in Park City. The Silver Creek Water Reclamation Facility is permitted to discharge treated municipal wastewater to a small tributary to Silver Creek, tributary to Weber River. The facility is currently being upgraded to address issues of growth and to address water quality concerns downstream. Weber River is impounded in several reservoirs that provide irrigation water, drinking water, and recreational and fishing opportunities before flowing into the Great Salt Lake.

Silver Creek Village Development (Site 5)

Aquatic resources on this property were assessed by the USACE to determine whether a 404 permit would be needed as part of a planned subdivision.

Wetland A: USACE determined that Wetland A was not jurisdictional under the Rapanos Guidelines due to a lack of significant nexus with the downstream Traditional Navigable Water. Under the 2015 Clean Water Rule, this wetland would again require a significant nexus analysis because it is within 4,000 feet of the ordinary high water mark of Silver Creek and would likely remain a non-jurisdictional wetland.

Wetland B: The USACE determined that Wetland B was jurisdictional through a significant nexus analysis due to a surface hydrologic connection. Under the 2015 Clean Water Rule, this wetland would again require a significant nexus analysis because it is within 4,000 feet of the ordinary high water mark of Silver Creek and would remain a jurisdictional wetland.

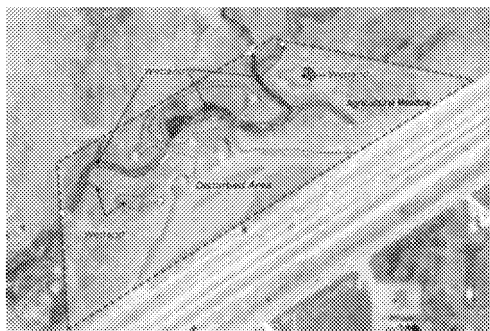
Drainage C: This ephemeral stream was previously determined to be jurisdictional through a significant nexus analysis due to a surface hydrologic connection. It is unclear how this drainage would be evaluated under the 2015 Clean Water Rule because its surface hydrologic connection with Silver Creek lacks a continuous ordinary high water mark and bed and bank.

10:00 am Arrive at Ditch on Bitner Ranch property (Site 6)

This ditch intercepts water that otherwise flowed to a tributary to East Canyon Creek. Because the ditch delivers perennial flow to East Canyon Creek, it would likely be considered jurisdictional under current rules and the 2015 Clean Water Rule. However, the USACE has not made a formal determination on the status of this ditch.

10:10 am Arrive at Wetland Mitigation Site (Site 7)

Wetland and stream restoration at this site provided mitigation for the removal of wetlands in Echo Canyon as part of an expansion of I-80. The project included the removal of two stream crossings and associated fill as well as the restoration of wetland acreage and creation of expanded meanders in the stream.



Pre-restoration site plan



Post-mitigation photo

10:15 am Depart for Utah State Capitol Building