

Appendix R – Proper Functioning Condition and Water Resources Narrative and Photos

Because there are numerous water resources and riparian areas within the Devils Gate Allotment it is impractical to include a description of each resource within this appendix. A sample of data including a narrative description, photos, and analysis are presented below. Sites are organized by Lentic PFC ID, Lotic PFC Station ID, and Water Resource Inventory (WRI) ID. Data for each area are available electronically and may be requested from the BLM.

Devils Gate Lentic Stations

Devils Gate 4; N39 E58 15AB complex

The riparian area is about 0.6 acres in size and is supported by several spring sources which have a combined flow of about 30 gallons per minute (GPM). The springs are within a 2.5 acre liberty pipe enclosure which has been in place since around 2006. The lentic assessment in 2004 rated the riparian area as functional at risk with downward trend (FARD) citing livestock use as a causal factor. Assessment teams observed that in the past this spring complex had supported a much larger riparian area as evidenced by adjacent soils and vegetation along with the dependable high rate of flow from the spring. Long term grazing at this site has resulted in narrowing of the riparian area due to erosion of riparian soils and channelization of the spring outflow. The presence of riparian soils and vegetation is well below potential due to these hydrologic impacts along with long term effects of persistent grazing and hoof action. Since the livestock enclosure was installed the condition of the wetted area has improved but it will take some time for the riparian vegetation to expand laterally. The lentic area was rated as functional at risk with upward trend (FARU) in 2013.

Photo 1 – Riparian area assessed for the 2004 Devils Gate 4 assessment. Stressed riparian vegetation and hoof action have destabilized and eroded riparian soils resulting in exposed rock at the surface. Instead of flowing laterally and watering a wide riparian area, water flows down the channel and may infiltrate into the ground more rapidly. Soils adjacent to the channel are dry and less stable than riparian soils.



Photo 2 – Repeat of photo 1 taken as part of the 2013 Stag Mountain 4 assessment. Riparian vegetation is dense within the stream channel and with time the channel will aggrade and the riparian area will expand laterally.



Photo 3 – Riparian area assessed for the 2004 Devils Gate 4 assessment. Similar description to photo 1.



Photo 4 – Repeat of photo 3 taken as part of the 2013 Stag Mountain 4 assessment. Similar description to photo 1.



Devils Gate 30 (2012); Devils Gate UNSP 1,2,3 (2003); N40 E58 29BCC

Riparian area is about 0.23 acres in size and is supported by several spring sources. Flow is too low to measure in many of the springs but the total measurable flow from these sources is about one gpm. The lentic assessments in 2003 divided the site into three separate areas and rated them all PFC. This assessment occurred during a period of two to three years when cattle were not present in the pasture due to a grazing closure following the 2001 stag fire. A reassessment in 2012 was done following grazing and indicated the area is FARD with livestock grazing as a causal factor.

Photo 5 – One of the areas assessed during the 2003 Stag Mountain UNSP 3,4,5 assessment. Vigorous vegetation production is observed, however, it does appear that many of these grasses are upland varieties suggesting that recovery of the riparian area has just started.



Photo 6 - Repeat of same site showing areas of bare ground and lack of vigorous riparian vegetation in 2012.



Devils Gate 15; N40 E58 20DBC

The Riparian area consists of a small herbaceous and woody riparian area about 0.18 acres in size which is supported by a spring. Flow has never been measured at this spring source. The area was rated as PFC. The assessment team noted that woody vegetation had burned in a recent fire and as a result their older age classes were missing, however this did not reduce functionality enough to warrant an at risk rating.

Photo 7 – Area assessed as part of the 2004 Devils Gate 15 assessment.



Photo 8 – Area assessed as part of the 2004 Devils Gate 15 assessment.



Devils Gate 19; N40 E58 21BDA

Riparian area is about 0.6 acres in size and is supported by a spring source that flows an average of 0.6 gpm. The lentic area was rated FARU in 2004. In 2013 the assessment team rated it FARD recording that the site is a fraction of its potential size, appears to be shrinking, and is impacted by hoof action.

Photo 9 - Area assessed as part of the 2004 Devils Gate 19 assessment.



Photo 10 – Repeat of photo 9 taken as part of the 2013 Stag Mountain 19 assessment.



Devils Gate 16; N40 E58 16CCD

Riparian area is about one acre and is supported by a spring which flows about one gpm. Flow from the spring was originally impounded in a small pond but this pond has filled with sediment and has become part of a riparian meadow. The 2004 lentic assessment rated this area as FARD citing a shrinking riparian area caused by livestock. The 2013 assessment team also rated the site FARD, but BLM personnel changed the rating to FARNA because it was not clear whether the functionality was actually in decline, or just appeared to be in decline due to the ongoing drought.

Photo 11 - Area assessed as part of the 2004 Devil's Gate 16 assessment.



Photo 12 - Repeat of photo 11 taken as part of the 2013 Stag Mountain 16 assessment.



Devils Gate Lotic Stations

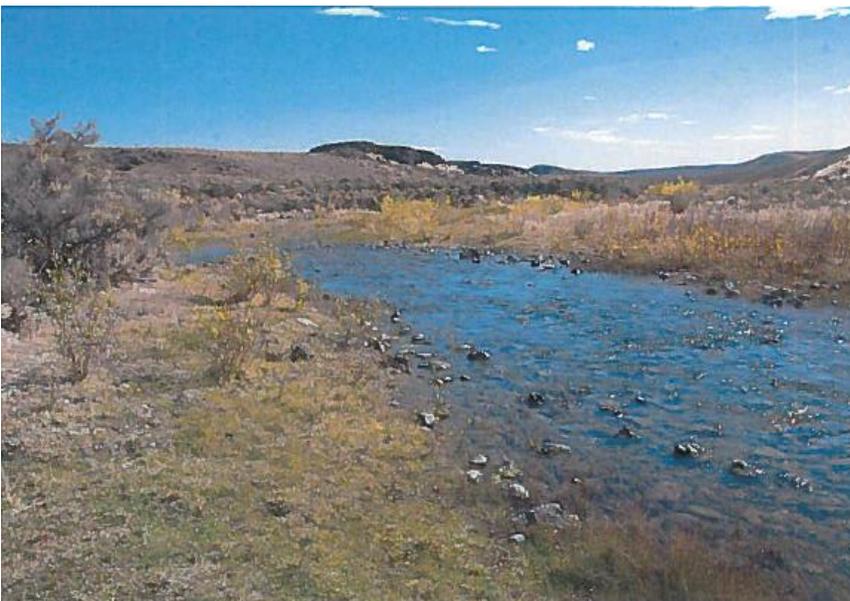
Devils Gate, North Fork of Humboldt River, Station 4

North Fork of Humboldt River is a perennial system. The Riparian Condition Indices for station 4 was 42 % (fair) for 1978 and 65% (good) in 2010. The 2010 lotic assessment rated this area as FARU citing past livestock practices. Since 2006, this station has been in Devil's Gate riparian pasture.

Photo 13 – Downstream view from Station 4. Area assessed in 1978.



Photo 14 – Repeat of photo 13 taken in 2014.



Devils Gate, North Fork of Humboldt River, Station 8

The North Fork of the Humboldt River is a perennial system. The Riparian Condition Indices for station 8 was 42 % (fair) for 1978 and 75% (good) in 2010. The 2010 lotic assessment rated this area as PFC. Since 2006, this station has been in Devil's Gate riparian pasture.

Photo 15 – North Fork of the Humboldt River, downstream view of Station 8. Area assessed in 1978.



Photo 16 – Repeat of photo 15 taken in 2014.



