

SAGUACHE CREEK DIVERSION INFRASTRUCTURE INVENTORY

Structure Name: QUARTET D

Reported By: Daniel Boyes

Date: April 3, 2019

Headgate	Latitude	Longitude
Location:	38.06614	-106.1046

Headgate Type: Manually operated 3' wide rectangular screw gate

Headgate Condition:	A <input type="checkbox"/>	Diversion and Other Condition:	A <input type="checkbox"/>	Stream Miles from Saguache Creek Terminus (Point of Diversion):	Structure Submerged: Yes <input checked="" type="checkbox"/>
	B <input checked="" type="checkbox"/>		B <input type="checkbox"/>	26.23 mi	No <input type="checkbox"/>
	C <input type="checkbox"/>		C <input checked="" type="checkbox"/>		
	D <input type="checkbox"/>		D <input type="checkbox"/>		
	F <input type="checkbox"/>		F <input type="checkbox"/>		

Structure Description: This structure is located at the apex of a meander. A boulder diversion dam directs water to the headgate, located on the north bank of the stream. The diversion dam effectively diverts the ditch's water users, but debris accumulates on the dam and the structure has led to altered sediment transport, bank erosion, and channel widening downstream of the dam. The dam creates a significant drop in the stream's elevation, forming a fish barrier and leading to a scour pool downstream of the dam. During high flows, it is possible that the stream could intercept a historic channel, causing the stream to bypass the George Ball Ditch headgate. The flume functions but is aging and may fail in the near future.

Repair(s) or Improvement(s) Currently Needed: Given these issues, the SMP Technical Advisory Team (TAT) recommends installing a new diversion, implementing bank stabilization and riparian revegetation, and replacing the flume. A new diversion would reduce maintenance needs, create fish passage, and restore the sediment transport regime. Stabilization and revegetation would help prevent the meander from being cut off and would mitigate erosion. Replacing the flume would improve long-term functionality.

Comments: This ditch is a priority 17A

Notes:

Estimated Range of Cost: Low

Headgate looking downstream



Headgate outlet



Headgate and diversion dam



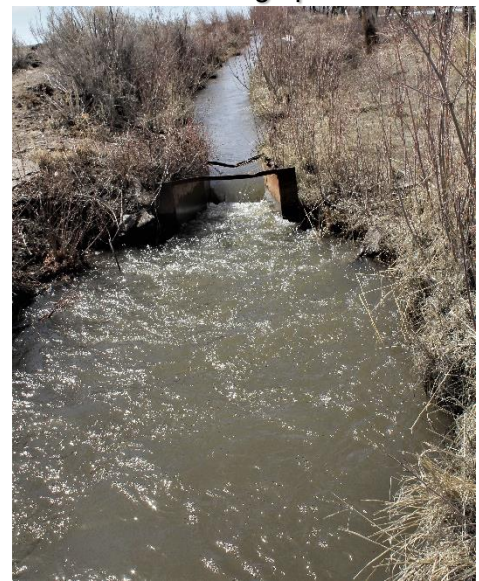
Diversion dam



Flume looking downstream



Flume looking upstream



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QUARTET DITCH

PHOTO LOG

Saguache Creek Stream Management Plan



Image illustrating historic channel downstream of Quartet Ditch