Allen Canal Bajada Hanging
Canal Preliminary Field Notes

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The centrist Allen Prehistoric Hanging Bajada Canal is one of the longer and more interesting and has several unique features that include possible historic reservoir use and a spectacularly huge Culebra Cut. The length of the presently verified and surveyed Allen portion is 9.6 kilometers. But the total managed length may end up approaching a 15.3 kilometers if a Frye Creek watershed diversion, their managed use of the otherwise natural Spring Canyon channel, and extensions to yet unverified fields are included.

Access is primarily by way of primitive 4WD tracks routing off the Frye Mesa road. Elevations of the verified and surveyed portions start at 3480 feet with an average slope of 4.8 percent. Much of this unusually high value involves the off-mesa drop just south of the Allen Reservoir. Ownership is primarily AZ State Lands...
The canal complex apparently begins at 32.74533 -109.84059 by use of an accumulation from the spring itself, from Spring Canyon runoff, or from a still unproven Frye Creek watershed diversion canal. An superb example of watershed crossing appears elsewhere at 32.79155 -109.85377.

Water is then either brilliantly dumped back into Spring Canyon for Allen Canal use, or is routed all the way down Upper Frye Mesa where it appears to be selectively switched between the HS Canal and the Robinson Canal. The Spring Canyon diversion is apparently still used by CNF, delivering to a down mesa storage tank.

The "real" Allen Canal begins with a Spring Canyon takein found at 32.78239 -109.83552. It then continues "up" to the north where it was apparently rebuilt into a historic Hawk Hollow cattle tank. Construction at the tank spillway and elsewhere locally suggests CCC involvement and quality stonework. The often easily traced canal continues northward along the entire length of the mesa to the east of Central Wash. Progressively crossing a fairly deep cut section, a crossing of the back 4WD route to Mud Springs, and several barrel cacti mid stream.

The exact off-mesa route to the failed Allen Reservoir remains presently unknown. As does whether the canal itself was used historically to source the reservoir. No other significant reservoir water sources are known and the total watershed appears restricted. There seems to be no accomodation by the dam to either source or sink canal water.

The terrain driven nature of the canal architecture dramatically changes below and north of the dam. A short run features an unusual white caliche-like fill. This is followed by the spectacular Culebra Cut, a construct well over two meters wide and two meters deep. Despite its huge size, the associated canal appears to retain its prehistoric architecture and construction and is believed genuine. Two other constructs of comparable yardage in the system would be the aqueduct in the Marijilda Canal and the dramatic HS Canal believed to route off mesa to the Golf Course, Blue Ponds, and Freeman Canals.

The present known end of the Allen Canal is a very shallow saddle just east of Central Wash at 32.83318 -109.80488. The route is then presumed to head northward to potential unverified fields in the Central Dam area. While the Allen and the Mud Springs canals are quite close to each other, the intermediate terrain does not appear favorable for any sort of linking.

Here are some noteworthy Allen Canal features and locations...

- **32.74339 -109.83972** Projected but unproven location of Frye Creek watershed diversion.
- **32.74519 -109.84080** The spring in Spring Canyon is believed to have been quite large in prehistoric times.

— Allen Canal Log 2 —
The takein point for the actual Allen Canal is quite far down Spring Canyon.

Historically rebuilt Hawk Hollow Tank includes some impressive overflow stonework.

Allen Canal continues northward by way of elaborate CCC water spreaders.

Fairly deep and long cut in this area. elaborate CCC water spreaders. Difficult access.

Canal crosses obscure 4WD track to Mud Springs.

Several barrel cacti midstream. ATV route nearby.

Canal begins unresolved drop off north mesa edge.

Overrun by failed historic Allen Dam without any apparent accommodation whatsoever. The dam use of canal water remains underresolved.

Modest hanging portion has white Caliche-like fill.

Spectacular Culebra cut is one of the three most significant excavations in the entire system.

Presently explored portion ends in a shallow saddle just east of Central Wash.

Possible unproven destination fields.
Further Allen Canal work might include...

1 — Prove or disprove the Frye Creek watershed crossing canal.
2 — Determine the canal route between north mesa and dam.
3 — Explore potential end use fields, especially behind Central Dam.
4 — Resolve whether Allen Canal was a historic dam feeder.
5 — Seek additional evidence that the Culebra Cut was in fact prehistoric.
6 — Attempt to determine prehistoric climatic and rainfall conditions.
7 — Do fly over drone and videotape survey.
8 — Continue historic dam failure research.

New Hanging Canal Discoveries: http://www.tinaja.com/whtnu17.shtml, etc…
ALLEN0 – Just after its rather elaborate takein structure, the Allen Canal changes direction and begins a "climb" to the historic Hawk Hollow tank. The view is to the north at 32.78252 -109.83453.

ALLEN1 – Below the dam, the Allen Canal has a white somewhat caliche-like fill somewhat similar to portions of the Mud Springs Canal. A modest hanging portion can be viewed here. The view is to the south at 32.83477 -109.79619.
CULEBRA2 – There appears to be some flood damage just before the start of the major Culebra Cut. Three included canal constructs are the Culebra, the aqueduct, and the HS canal. The view is to the west at 32.83569 -109.79794

CULEBRA1 – Dr. Neely in the Culebra Cut. The size and reach of this canal is quite impressive. The evidence of prehistoric origins seems convincing. The view is to the west at 32.84792 -109.81102.
Here is a topographic map of the Allen Canal...

You can click through on the above images to directly reach Acme Mapper at a higher resolution.

A hanging canal directory can be found here and its sourcecode here.

This field note is associated with directory #38 ALC1 Allen Canal. Also related are #39 ALD1 Allen Dam Failure and #40 CUC1 Culebra Cut.

This document can be found here and its sourcecode here..