Some Allen Canal 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...



- Allen Canal Log 1-

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 brillantly 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 unlimited. There appears 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 aquaduct 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-

32.78239 -109.83552	The takein point for the actual Allen Canal is quite far down Spring Canyon.
32.78549 -109.83249	Historically rebuilt Hawk Hollow Tank includes some impressive overflow stonework.
32.78716 -109.83203	Allen Canal continues northward by way of elaborate CCC water spreaders.
32.79765 -109.82149	Fairly deep and long cut in this area. elaborate CCC water spreaders. Difficult access.
32.80079 -109.819699	Canal crosses obscure 4WD track to Mud Springs.
32.80547 -109.81664	Several barrel cacti midstream. ATV route nearby.
32.82077 -109.80490	Canal begins unresolved drop off north mesa edge.
32.83352 -109.79348	Overrun by failed historic Allen Dam without any apparent accomodation whatsoever. The dam use of canal water remains underresolved.
32.83538 -109.79685	Modest hanging portion has white Caliche-like fill.
32.83568 -109.79797	Spectacular Culebra cut is one of the three most significant excavations in the entire system.
32.83305 -109.80523	Presently explored portion ends in a shallow saddle just east of Central Wash.

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.
- 7 Continue **historic dam failure** research.

More Hanging Canal Resources: http://www.tinaja.com/tinsamp1.shtml New Hanging Canal Discoveries: http://www.tinaja.com/whtnu17.shtml , etc...



ALLENO – Just after its rather elablorate 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 aquaduct, 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 comvincing. The view is to the west at **32.84792** -109.81102.

— Allen Canal Log 6—