

Some Robinson Canal Field Notes

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The largely well preserved Robinson Ditch **Prehistoric Hanging Bajada Canal** is one of the longer and more difficult for foot-only access. Significant hanging portions are included. It also offers exceptionally strong and deceptive "water flows uphill" illusions caused by subtle differences in canal slope compared to the actual topography slope. Somewhat centered in the entire canal system, Robinson also seems quite sophisticated in that there is a distinct "predelivery routing" phase and an "actual canal" phase. The canal was renamed by a pioneer clan.

The length of the presently **verified and surveyed** Robinson portion is 5.6 kilometers. But the **total managed length** may end up approaching an 8.3 kilometers if a Frye Creek watershed diversion, major predelivery routings on upper Frye Mesa and and final extensions to unverified fields are included...



- Robinson Canal Log 1-

Predelivery apparently consisted of gathering water from three distinct sources, a projected but not yet proven Frye Creek watershed crossing diversion starting at 32.74387 -109.83947 and similar to a proven watershed crossing elsewhere at 32.79151 -109.85386; an apparently major spring at 2.74530 -109.84049; and the Spring Canyon streamflow itself also found at 2.74530 -109.84049.

These gathered resources were then either routed down the natural Spring Canyon channel to eventually become Allen Canal, or were else casrefully routed down the entire length of Upper Frye Mesa to a holding pond at 32.76008 -109.81132.

From this pond, the water could be apparently switched between the beginning of the main Robinson Canal also at **32.76008** -**109.81132**. Or alternately routed down the spectacular **HS Canal** at **32.75869** -**109.81423**, presumably but still unproven to become the **Golf Course Canal**, the **Freeman Canal**, and possibly several others.

The somewhat tortuious predelivery routing down upper Frye Mesa includes knife edging at **32.75840 -109.82049**, braided channels, and even some **CCC** water spreader rework. Portions near the falls parking lot remain unverified. A similar **CNF** routing remains in use today as a forest service pipeline. This is one of many examples of "steal the plans" or "borrow the blueprints" adaptation.

Elevation of the predelivery phase begins at 5600 feet and the actual canal at 4360, potentially delivering to presumed fields around 3340 and a projected total slope of 5.8 percent. This figure is rather high owing to the descent of two or more mesas. Ownership of the predelivery phase is primarily **Coronado National Forest**, while the rest of the actual canal routing is mostly **Arizona State lands**.

Difficult access is mostly foot only, variously reachable by way of 4WD tracks out of Dailey Estates, the lower Frye Mesa road and the upper Frye Mesa road. The condition and preservation is generally good along much of the actual route.

The actual canal begins a steep hanging descent at **32.76008** -**109.81132** routing down to a Sheep Tank Canyon crossing at **32.76348** -**109.80056**. This portion remains unvisited, but is mostly obvious on **Acme Mapper**, besides being a clearly named object on topo maps.

The canal then begins a rather impressive "climb" up Robinson Mesa at **32.77461 -109.79667** with a significant hanging portion and a very strong "water flows uphill" illusion. Typical size in this region is around a meter wide by 80 cm deep. Remnants of dead mesquite trees suggest remnant flows during historic times.

Once reaching the mesa top at **32.77787** -**109.79580**, the canal assumes a "normal" rather than a "hanging" status. A major washout along this reach near **32.78761** -**109.79162** renders its status presently unfunctional.

The Robinson canal next steeply drops off its mesa near **32.79712** -**109.79131**, possibly assisted by French Drain structures. Both the Thorpe Tank that is found at **32.80128** -**109.78870** and the Stowe Tank near **32.80647** -**109.78561** but off the direct route suggest historic reuse, as does the conspicuously obvious and well marked topo renaming.

No obvious end tie in to the **Golf Course canal** has yet been observed, and the intermediate terrain would appear somewhat unfavorable. At present, mid reach of the Golf Course Canal remains largely unresolved. A more direct route directly south up through Riggs Canyon would appear more probable.

No specific destination for the Robinson Canal has yet been verified. While it may in fact terminate at Stowe tank, the three ponds at **32.81107** -**109.77215** might also have served as end use fields. Any extension further north would seem limited by the Spring Canyon drainage.

Here are some noteworthy Robinson 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.
32.74530 -109.84049	Water switched here between Allen and Robinson.
32.74730 -109.83892	A "pinch point" here would appear to set routing.
32.74881 -109.83883	Presumed yet unproven "climb" up Frye Mesa.
32.75102 -109.83770	Mesa route suggested by Acme Mapper CCC cross dam rework appears present.
32.75363 -109.83698	CCC water diversion appears to overlay the canal.
32.75514 -109.83553	Believed crossing of the Frye Creek Road
32.75686 -109.83479	Present destination of CNF pipeline rework.
32.75775 -109.82745	Braided channels include CCC rework.
32.75790 -109.82319	Exceedingly narrow "Pinch Point" on mesa edge seems to set the only feasable graded route.
32.75955 -109.81628	More braided channels include CCC rework.
32.76010 -109.81128	End of Predelivery. Start of actual Robinson Canal. Water switched between Robinson and HS canals.
32.75907 -109.81345	Superbly engineered HS canal returns creek water.
32.75997 -109.81108	Start of actual Robinson canal.
32.75979 -109.80755	Steep descent off Frye Mesa.
32.76385 -109.80060	Sheep tank canyon crossing.
32.77421 -109.79653	Significant "water flows uphill" illusion
32.77684 -109.79653	Dead Mesquite Trees suggest historical reuse.
32.78597 -109.79232	Historically renamed route well topo marked.
32.78788 -109.79159	Significant washout compromized canal
32.79091 -109.79138	Steep descent off Robinson mesa
32.80123 -109.78889	Thorpe Tank may have seen historic canal use



32.80653 -109.78545	Stowe Tank may have seen historic canal use.
32.81082 -109.77211	End use fields may underly these three tanks.
32.81587 -109.77202	Spring Canyon would appear to limit extension

Further Robinson Canal work might include...

- 1 Prove or disprove the Frye Creek watershed crossing canal.
- If watershed crossing does not exist, determine alternate explanation for the extreme HS Canal energy commitment.
- 3 Determine exact switching point between Allen and Robinson.
- **4** Resolve initial climb to mesa top. Map the top route itself.
- 5 Improve mapping west of road.
- **6** Map the exact CNF water pipe route and record its history.
- 7 Map the braidings and the knife edge pinch point.
- **8** Improve photography of entire canal, especially mesa dropoffs.
- 9 Further study Sheep Tank Canyon crossing area.
- **10** Determine significance of dead mesquite trees adjacent to canal.
- 11 Study relationship between Thorp Tank, Stowe tank and the canal.
- 12 Evaluate whether Robinson Canal ever reached the triple ponds.
- **13** Do fly over drone and videotape survey.
- 14 Mentor students and create field camps.

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









ROB1 – The Robinson Canal begins its "climb" up Robinson Mesa with Deadman Peak in the background. The view is to the south from **32.77604** -**109.79688**.



ROB2 – There is a strong illusion of "water flows uphill" where the downward slope of the canal exceeds the rate of fall of the local terrain. The view is to the north near **32.77604** -**109.79688**.





ROB3 – The Robinson Canal assumes a more level stance once it reaches the mesa top. Numerous adjacent and dead mesquite trees appear to suggest water flow during historic times. The view is to the north near **32.77730** -**109.79597**