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Some Henry's Canal Preliminary Field Notes

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Only a six kilometer fraction of Henry's **prehistoric Canal** is presently verified, ranging from a wash crossing or takein at **32.71810 -109.76715** to a well defined end use field area and possible ponding channel found at **32.74558 -109.72845**.

The canal is characterized by being of "flatland" architecture without any major hanging portions. At a meter width, it is wider and shallower than is typical. The elevations of this portion range from 3340 to 3220 feet with a typical slope in the two percent range. Much of this canal portion is readily traced on **Acme Mapper**.

The water source remains unknown, but it is likely a branch of the **Marijilda Canal** at **32.71810 -109.76715** or a natural stream channel near **32.71244 -109.76455**. A full combined length in the ten kilometer range might be anticipated.

Here is a map of the known portion of Henry's Canal...



Although the canal was ultimately obviously sourced from Marijilda Creek, just how the water got to **32.73711 -109.74237** from **32.70633 -109.77709** is not yet at all clear. Possible would be a branching of the **Marijilda Canal**, perhaps around **32.71810 -109.76715**. Braided natural channels of Marijilda Creek might also have delivered water further downstream during wetter times.

Limited field and satellite checking has revealed nothing obvious. There are some smaller and isolated canal branches in the **32.73701 -109.74344** area, but these presently seem to be unreleased shorter delivery channels and appear to be rather small. Terms like "primitive" or "awkward" come to mind.

The Henry Canal seems to split into two parallel channels, with its western or main one continuing northward in its usual deep vee construct. The second channel is much more shallow and seems to be acting as a ponding channel for selective delivery to a fairly major destination area to the east. A wide variety of rock alignments are found in this area. A similar ponding area can be found where the TB East and TB West canals merge into a single destination.

Thunderbird Canal is nearby canal to the north, otherwise known as CC:5:51. Associated with it is a historic concrete headgate whose water source seems enigmatic and possibly Henry Canal derived.

Another mystery is that **Henry's Canal would seem to duplicate the routing of the high Lebanon Canal**, placing a wide, flat, and easily engineered canal largely "in parallel" with a difficult to design and construct lower flow hanging one. There appears to be no obvious historic reuse of the Henry's route, while a "bypassed for storage" high Lebanon route remains in use today as the **Roper Canal**.

But there is fairly strong evidence that the Roper Canal is late modern without prehistoric precedence. First, because it orthogonally crosses the route of Henry's Canal. Second, because Roper Lake did not exist until the 1960's. Third, because orientations are largely cardinal. Fourth because the concrete aggregate appears modern. And, finally, because portions seem too steep for a mud original.

Ownership of the Henry Canal appears to be predominately **Arizona State lands**.

This prehistoric **bajada canal** is located in Arizona's **Safford Basin** in the **Upper Gila Valley** and is believed to date through the 1350's. Access involves mostly reasonable hiking, either from the Lower Marijilda and Lower Lebanon Road junction or via rough 4WD tracks from the Thunderbird Estates area.

Here are some noteworthy **Henry's Canal** features and locations...

- 32.70629 -109.77724** Usual perennial limit of Marijilda Creek.
- 32.71542 -109.76326** Possible braided channel of Marijilda Creek.
- 32.73589 -109.74455** Hints of an unexplored possible canal route.
- 32.73684 -109.74340** Secondary and largely unexplored smaller canal.
- 32.73711 -109.74233** Limit and possible takein of Henry's study area.
- 32.73802 -109.73988** Canal route well defined on **Acme Mapper**.
- 32.73911 -109.73896** Channel wider and shallower than others.
- 32.73911 -109.73896** Power line crossing.
- 32.74317 -109.72835** Henry's Canal swings northerly.
- 32.74319 -109.72832** Ponding channel and destination fields.
- 32.74515 -109.72854** Possible destination field underlying modern tank.
- 32.74629 -109.72837** Orthogonal crossing of modern **Roper Canal**.

Further Henry's Canal work might include...

- 1 — Determine the water source.
- 2 — Resolve "missing" four kilometer segment near **32.72507 -109.75218**.
- 3 — Seek proof of **Marijilda Canal** involvement.
- 4 — Determine why dual parallel high hanging and low flat routings.
- 5 — Map short southerly canal hints near **32.73705 -109.74356**.
- 6 — Find more destination fields and/or **Roper Canal** involvement.
- 7 — Significantly improve photography and annotation of canal complex.
- 8 — Do fly over drone and videotape survey.
- 9 — Carefully map main destination area.
- 10 — Seek relation with Thunderbird Canal and its historic reuse.
- 11 — Resolve use of ponding channel.
- 12 — Mentor students and create field camps.

Many thanks to Henry Schneiker for his field work assistance.



HENRY1 - Henry's canal is atypically wider, flatter, and shallower than most and has no yet known hanging portions. Half of the canal remains unexplored, but is believed to source from the historically adapted and still flowing [Marijilda Canal](#). The view is to the east at [32.73889 -109.73768](#).



HENRY9 - Portions of the canal routing are quite apparent from [Acme Mapper](#). Curiously, there seem to be a pair of "high hanging" and "low flat" canals largely along the same parallel route. View is to the southeast at [32.73711 -109.74237](#).



HENRY34 - A parallel channel may serve as a ponding area for destination fields along the canal route. This seems similar to one that combines the TB East and TB West Canals. View is to the south at [32.74297 -109.72824](#).



HENRY35 - Even while adjacent to its ponding channel, the main Henry Canal retains its usual deep vee shape. View is southwest at [32.74305 -109.72847](#).



HENRY30 - A wide variety of options can be seen in the fields area. Long linear alignments are shown here. View is southeast at [t32.737109 -109.7423708](#).



HENRY33 - The end use area appears to be a hybrid of dry farmed grids and irrigated distribution channels. View is southeast at [32.73711 -109.74237](#).

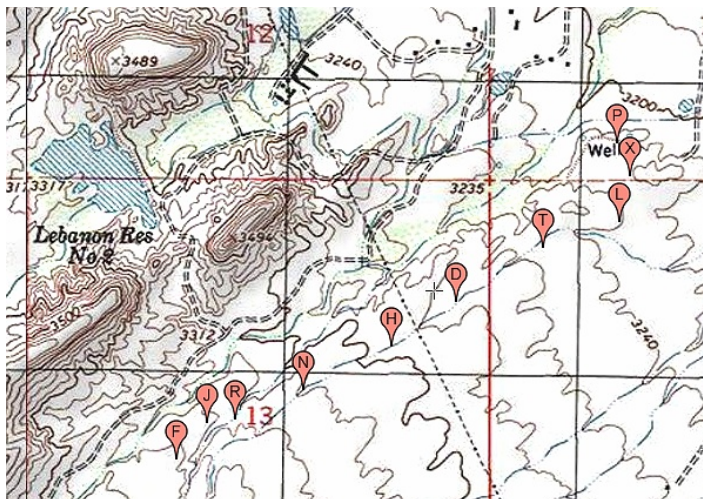


HENRY10 - The Henry Canal appears to continue northward well beyond its serviced fields and ponding area, possibly terminating in a modern tank. View here is to the north at [32.74406 -109.72830](#).



HENRY11 - Looking towards the fields and ponding area from a kilometer or so west of US 191. View is to the South near [32.74406 -109.72830](#).

And here is a topographic map of the partial Henry's 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 **11. HNC1 - Henry Canal** and **84. HFD1 - Henry Fields** and **8. MAQ1 - Marijilda Aqueduct** and **6. MAR1 - Main Marijilda Canal** and **81. TBD1 - Thunderbird Canal**.

This document can be found [here](#) and its sourcecode [here](#).

More Hanging Canal Resources: <http://www.tinaja.com/tinsamp1.shtml>

New Hanging Canal Developments: <http://www.tinaja.com/whtnu17.shtml>

