Idaho Panhandle National Forests, Intermountain Region USDA Forest Service

## Reconstruction of the Nicholson Adit

A Pictorial Summary of the 2010 Effort on the Pulaski Tunnel Trail





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## Reconstruction of the Nicholson Adit

The reconstruction of the mine portal at the Nicholson Adit where Ed Pulaski, 40 plus men and two horses sought refuge from the 1910 Fire has been completed. The purpose of the reconstruction was to provide the public with a better sense of the adit's post-1910 Fire condition. Since the original portal structure had decayed into nothing, reconstruction of the structure as it looked immediately after the fire was considered an important aspect of the site's interpretive value. The design was checked against historic photos and fitted to the existing portal condition to be as accurate as possible. The project was a cooperative effort by the Pulaski Project, Idaho Panhandle National Forests, and Coeur d'Alene Office of the Bureau of Land Management for the 1910 Centennial commemoration.

The inspiration, funding, design, materials and construction were sponsored by the Pulaski Project, a local Silver Valley group dedicated to the development of the *Pulaski Tunnel Trail*. The Inland Northwest Community Foundation, Recreation Advisory Committee, State of Idaho and Forest Service provided funding for the project. The project proposal and design were put together by a local mining engineer, Alan Gilda, and reviewed by the Idaho State Historic Preservation Office. The logs were carved and charred by Hal Payne, artist and sculptor, according to post burn historic photos of the adit. The size of the sets (i.e., two upright posts and one horizontal cross beam or cap equal one set) were based on measurements of the interior of the adit (i.e., four feet wide by five feet high). Each of the two full sets and one post were placed about four feet apart, which is the same distance as the sets were wide. Prior to placement of the posts and caps the Forest Archaeologist, Steve Matz, troweled the entire outer surface of the portal looking for signs of artifacts from Pulaski's crew. While only a couple of scraps of heavy, flat iron were found, Dwight Clift, the contractor that assembled the posts and caps for the reconstruction, said he found several scraps of horse tack near the entrance of the adit during the construction of the interpretive trail several years ago. This is one more piece of evidence that confirms the Nicholson Adit is the proper location of the "Pulaski Tunnel".

The Pulaski Project, and especially Ron Roizen and Jim See, put a lot of time and effort into seeking grant money for this project so that the public can more fully experience this important 1910 Fire site for the Centennial commemoration. The Pulaski Project and everyone involved in the reconstruction should be congratulated on a job well done.



Figure 1. Post fire photograph of W.W. Morris by R.H. McKay of the Nicholson Adit on right and enlarged view of adit portal from same photo on left (photo courtesy of Northern Region Forest Service Archives).

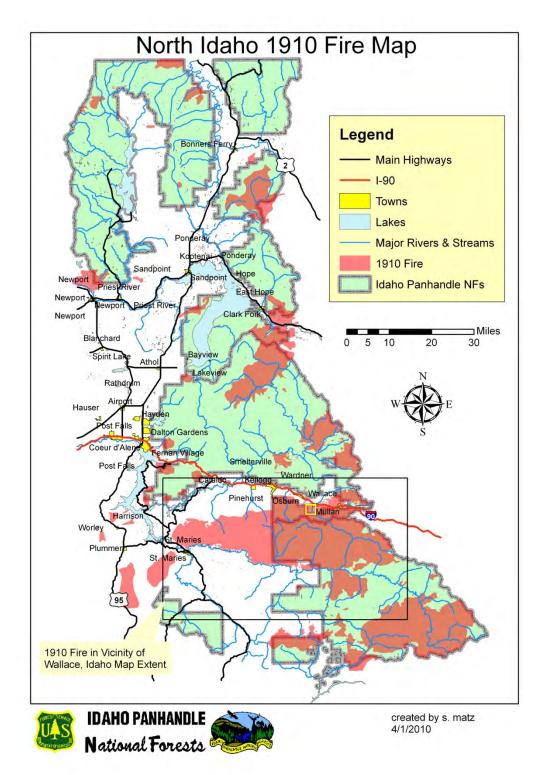


Figure 2. Overview map of the 1910 Fire on the Idaho Panhandle National Forests. The black rectangle indicates the area shown on Figure 3 detailing fire affected areas near Wallace, while the yellow rectangle shows the location of Pulaski Tunnel Trail.

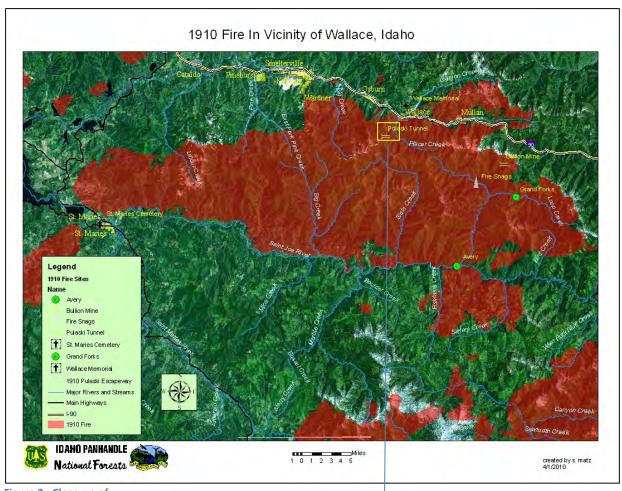


Figure 3. Close-up of 1910 Fire affected areas near Wallace overlain on 2008 orthophoto. Yellow rectangle indicates location of Pulaski Tunnel Trail on inset.

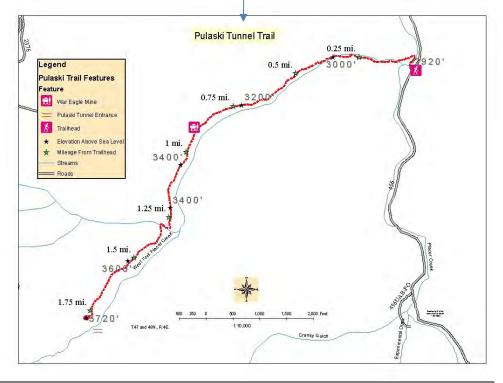








Figure 4. Hal Payne creating posts and caps for Nicholson Adit portal. From left to right: Shaping the log from historic photos, charing the outside of the log to give it the correct color and putting on the finishing touches.





Figure 5. Initial view of the portal area. On the left is the portal from the exterior, while on the right is the portal area from the interior. A large amount of material had caved in since the 1910 Fire, partially closing the tunnel entrance. This material had to be removed in order to place the posts appropriately.





Figure 6. Prior to setting the posts and caps Forest Archaeologist, Steve Matz, systematically removed the material from in front of the portal with a trowel looking for artifacts. Since the material was so wet and rocky it couldn't be screened, but had to be removed very carefully so that any pieces of horse tack or other artifacts associated with the Pulaski crew could be found. All fill material in the area of the posts was removed by trowel down to where clean, undisturbed rock was found. Once troweled the fill was placed back into the mouth of the portal near the metal gate. While only three pieces of heavy sheet metal were found in the fill, contractor Dwight Clift said he had seen decayed pieces of horse tack in the area only several years before.





Figure 4. Intial construction of the adit portal sets. Dwight Clift and grandson Steele cut the posts to length with an electric chainsaw (left photo), while Steele steadied the post for Dwight to nail brace into place (right photo).





Figure 8. Dwight and Steele level posts in order to set cap log in the left photo, while the right photo shows the two sets nearly finished and the uncut final post lying on the ground.



Figure 9. Finished adit reconstruction viewed from Pulaski Tunnel Trail overlook.





Figure 10. Finished portal reconstruction, viewed from both the exterior (left) and the interior (right) of the adit. Note the brace made of treated 2x4" lumber in the left photo. Each post had a horizontal foot nailed to the bottom that was set in a trench excavated perpendicular to the post. A brace was then nailed to the foot and the post to provide additional support. The braces were covered with soil if they were visible from outside. The braces on the left side as you look out of the portal were set toward the back of the adit, while the braces on the right side were faced toward the adjacent post of the same set (see Figure 7 right). The cap logs were placed in a saddle carved in the top of each post and drilled and fastened with rebar to secure them in place. A marine grade water proofing agent was used on the outside and cut ends of each log to reduce natural deterioration. It is expected that the structure will last about 10 years, which is pretty good considering sets in the Coeur d'Alene mines were generally replaced every three to five years.



Figure 11. Enlargement of portal section of 1910 McKay photo on left showing original post fire condition and post reconstruction photo taken upon completion of project in 2010 on right.