

MEMORANDUM

TO: Files 75-14, 75-19D, 75-19H, 75-20, 75-24, 75-113A, 75-113B, 75-113C, 75-14123, 75-14124, 75-14125, 75-14063, 75-11614, 75-14267

FROM: Monica Van Bussum

DATE: November 28, 2008

RE: Discussion of Jesse Creek water system

This memo will address what we have been calling the "Blackadar source issue." The objections in this area relate to a general disagreement regarding the historical path of the Jesse Creek channel below the current City of Salmon water treatment plant. Bob Blackadar filed a number of objections; all stated the point(s) of diversion for the water rights should be where water is diverted from what is commonly known as Farmer's Ditch. However, Mr. Blackadar asserts Farmer's Ditch is actually the historical conveyance of Jesse Creek and the channel running eastward through town is Pollard Canyon Creek.

Most folks in the area disagree with Mr. Blackadar. They believe the natural Jesse Creek channel is that flowing eastward through town and running into the Salmon River. They state that what Mr. Blackadar is calling the Jesse Creek channel is actually the Farmer's Ditch.

While this may seem like an issue of semantics, the final decision will impact water delivery in the area and bears some review. The reader would be helped by having maps of the Jesse Creek watershed available.

I have made extensive review of historical maps of the Jesse Creek watershed. The vast majority of historical maps dating until 1950 show the Pollard Canyon Creek channel joining with the Jesse Creek channel and then running through town to meet the Salmon River in downtown Salmon. Some examples:

- 1892 BLM plat (approved accepted 8/8/1892; attached Map 1)
- A subdivision plat from 1893 shown to me by Bob Blackadar (in Mr. Blackadar's possession)
- A map compiled by H.S. Meekham in 1909, although the label is Jessie Creek (close-up is attached Map 2; full size is in file 75-19H)
- 1913 Salmon National Forest map (in Mr. Blackadar's possession)

Mr. Blackadar showed me a number of maps that show Jesse Creek as diverging from Pollard Canyon Creek and running to the north while Pollard Canyon Creek then runs through downtown Salmon to the Salmon River. Those maps include:

- 1919 BLM plat maps showing Jesse Creek running through the SE corner of Section 36, T22N, R21E, B.M., or along what Mr. Blackadar contends is Jesse

Creek and not Farmer's Ditch. This is only a tiny corner of the 1919 plat (attached Map 3)

- 1951, 1978 and 1989 USGS topographic maps (in Mr. Blackadar's possession).
- 1983 Salmon National Forest status and encumbrance (in Mr. Blackadar's possession).
- Salmon Creek map from *Lewis and Clark Trail Maps: A Cartographic Reconstruction* by Martin Plamondon (attached Map 4).
- 2004 Salmon/Moose Proposed Roads – GIS, base topo not cited (in Mr. Blackadar's possession)
- 2008 Lemhi County school district (in Mr. Blackadar's possession)

There are problems with accepting these maps as evidence for Jesse Creek and Pollard Canyon Creek being separate systems. The 1983, 2004 and 2008 maps probably all used the USGS topographic maps. The 1978 and 1989 topographic maps probably used the 1951 as a base from which to work. The Lewis and Clark cartographic reconstruction also uses a USGS topographic map as its base. Therefore, the 1951 map is potentially the only original among them and the mistake of separating the two systems was compounded with each subsequent map using the same topographic base. The 1919 BLM plat appears to be an anomaly based on other maps of that time period.

Because of the differences in the maps, the best understanding of the system comes from an examination of the topography and a discussion of historic water delivery.

Topography of Jesse Creek system

I met with Betsy Rieffenberger, USFS Hydrologist, on August 29, 2008. She supplied me with a description and analysis of the current state of Jesse Creek in a memo dated September 3, 2008. Ms. Rieffenberger concluded, based on her field examinations, and a review of topography, "The current topographic maps incorrectly depict the location of these streams in this area." (Attached Memorandum 1)

I concur with Ms. Rieffenberger's conclusion. I have been to the site a number of times. The confluence of Pollard Canyon and Jesse Creeks is easy to find. At the confluence, the water can be directed down-gradient to the city of Salmon, or to the left towards the northern properties it serves. Natural streams generally follow the path of least resistance, or flow down-gradient. Down-gradient from the confluence is towards the city of Salmon. Generally natural streams do not make sharp left turns when a down-gradient path is available.

Mr. Blackadar supplied a document from the 1893 Jesse Creek decree (E.T. Andrews et al. v. John Martin et al.). The document, Findings of Fact and Conclusions of Law, states:

"About the year 1870 J.S. Crane and the said Anthony Hornbach constructed a ditch from the left hand fork of Jesse Creek by means of which they conveyed water to and upon lands then owned by them, lying along Jesse Creek, for the purpose of irrigating agricultural crops growing thereon..."

Mr. Blackadar sees this document as being evidence Jesse Creek and Pollard Canyon Creek were artificially joined by the action of Crane and Hornbach. However, the document does not state the two creeks were joined, only that a ditch was constructed for water delivery. Also, even if the streams were artificially joined, water delivery for nearly 140 years has been in accordance with the streams converging in their current location, which is supported by maps of the time. However, this document was overturned one day after it was filed and a new decree was issued.

During my visit with him on November 7, 2008, Bob Blackadar showed me some of what he considers the natural channel of Jesse Creek, but others know as Farmers Ditch. Pictures are below.



Photo taken near the boundary of the Blackadar/Bills property boundary facing south.



Photo taken near the L. Blackadar-J. Juza/B. Blackadar property boundary facing generally west.

Water delivery

There are three decrees that can as a whole be called the “Jesse Creek decrees.” The decrees places of use (POUs) for these decrees cover quite a bit of area, including area the channel under objection goes through. A 1992 Jesse Creek watermaster delivery record shows Pollard Canyon Creek as tributary to Jesse Creek. Conversations with past and current Jesse Creek watermasters, including Mickey Verbeck, Harry Shanafelt and Paul Stokes, supports a history of delivery of decreed water by maintaining Jesse Creek and Pollard Canyon Creek as a single system.

Conclusion

Jesse Creek has a history, as told by watermasters who have served in the last 25 years, of water delivery as a single system with Pollard Canyon Creek tributary to Jesse Creek and the Jesse Creek channel running eastward through town to join the Salmon River in downtown Salmon. Also, the channel running northward, now marked on topographic maps as Jesse Creek, has historically been administered as the Farmer’s Ditch, not a natural channel.

Topographically, evidence supports Pollard Canyon Creek as a natural tributary to Jesse Creek and the Jesse Creek channel running through town before meeting the Salmon River in downtown Salmon.

There does not appear to be sufficient evidence to support Mr. Blackadar’s assertion the Jesse Creek channel diverges from Pollard Canyon Creek and runs north. If this is a

matter of water delivery, negotiation and settlement might be a better avenue than pursuing naming the Farmer's Ditch Jesse Creek.

Jesse Creek/Pollard Canyon Creek Confluence Area

This memo serves to document two field trips that I have taken to review the area of the Jesse Creek/Pollard Creek confluence and a review of what is currently mapped as Jesse Creek below the City of Salmon water treatment plant.

Since the Salmon-Challis National Forest took the lead on watershed delineation for the Middle Salmon-Panther Subbasin, the Forest Service has an interest in the correct representation of the streams and watershed boundaries in the Jesse and Pollard Canyon drainages.

I have conducted several field reviews of this area one with Bob Blackadar, local citizen and irrigator, on December 7, 2007 and one with Monica Van Bussum, Senior Water Resource Agent from Idaho Department of Water Resources, on August 29, 2008.

Current topographic maps depict Pollard Canyon and Jesse Creek as separate channels that do not intersect but come close in the SWNW of Section 1 just below the water treatment plant. In reality these streams intersect at a diversion structure located below the road that goes to the Forest Service storage area located south of the water treatment plant. At this structure water can be diverted into what is mapped as Jesse Creek or into Pollard Canyon Creek.

A debate is currently underway in the Snake River Adjudication as to whether the stream course that is mapped as Jesse Creek is a natural channel or an irrigation ditch. From the Roosevelt Street stream crossing downstream the channel is located in a topographic low and appears to be a natural channel, though highly modified as it flows through the residential areas on the upper bar. However, from the diversion structure at the Jesse/Pollard confluence to the Roosevelt Street crossing the channel that is mapped as Jesse Creek is a perched channel that has been bermed to keep the water in the channel. If the water breached this channel it would flow south towards what is mapped as Pollard Canyon Creek.

This stream reach from the diversion structure to the road crossing is not a natural channel. However, remnants of a natural channel can be observed below the existing water treatment plant. It is possible that the natural Jesse Creek channel was moved to the south to its current location when the water treatment plant was constructed.

I have lived and worked as a hydrologist in the Salmon, Idaho area since 1977. Until recent maps were produced the stream channel flowing down the bar hill into the Salmon River adjacent to the Idaho Adventures office has been known as Jesse Creek. Locals still call this channel Jesse Creek. Old maps have variously called both Pollard Canyon and Jesse Creek as forks of Jesse Creek, or called the southern stream Pollard Canyon down to the confluence with Jesse Creek then Jesse Creek below that point. Recent maps

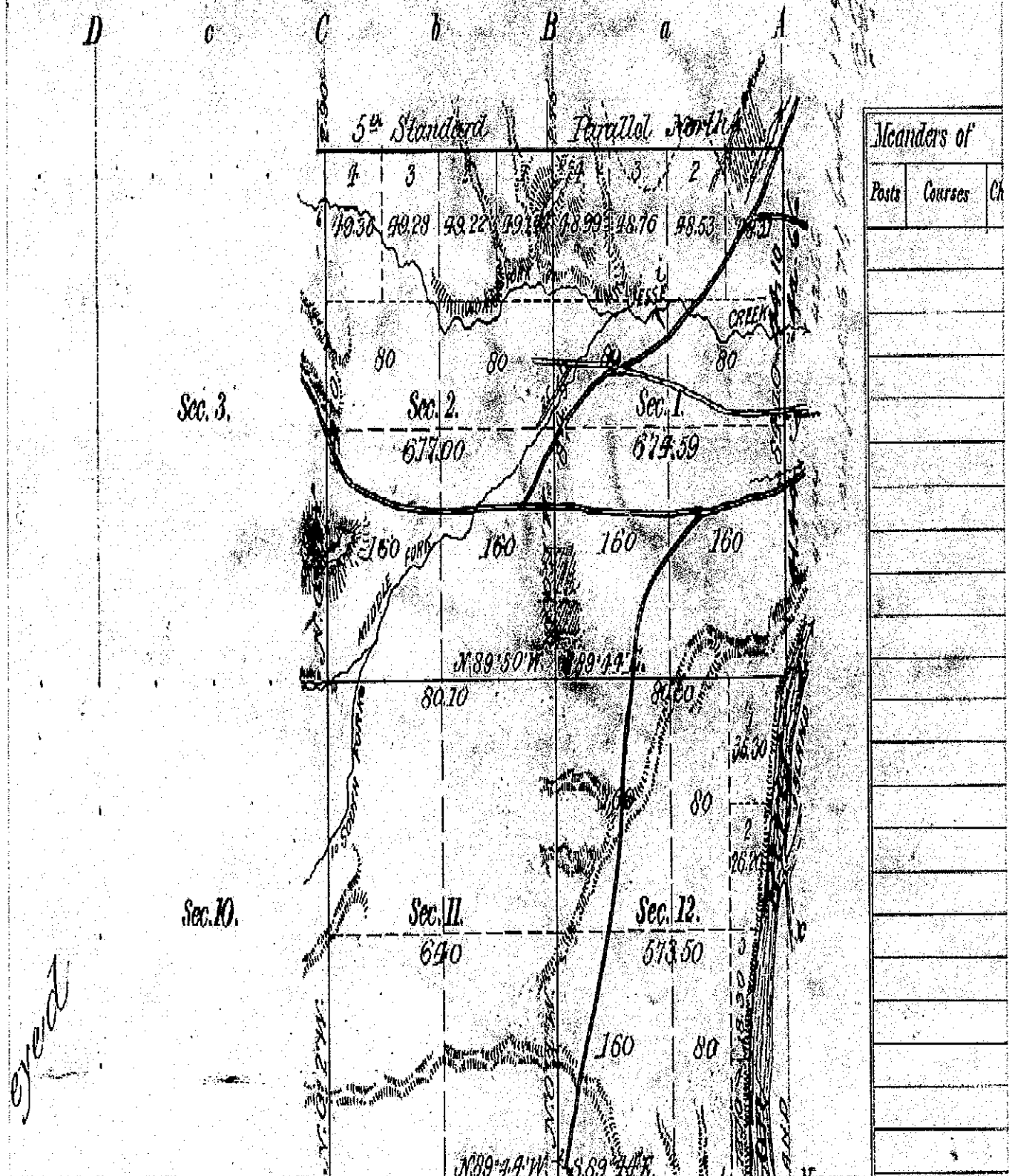
have shown the northern channel as Jesse Creek and the southern channel as Pollard Canyon Creek all the way to the Salmon River.

An overview of the confluence area shows evidence of debris berms and various active and inactive channels, particularly along Pollard Canyon Creek above the confluence. It is probable that over geologic time these streams have connected and disconnected with flood events and the deposition of bedload associated with the flood events. Currently these streams are connected at the diversion structure though it is probable that Jesse Creek was moved to its current location south of the water treatment plant during plant construction. The current topographic maps incorrectly depict the location of these streams in this area.

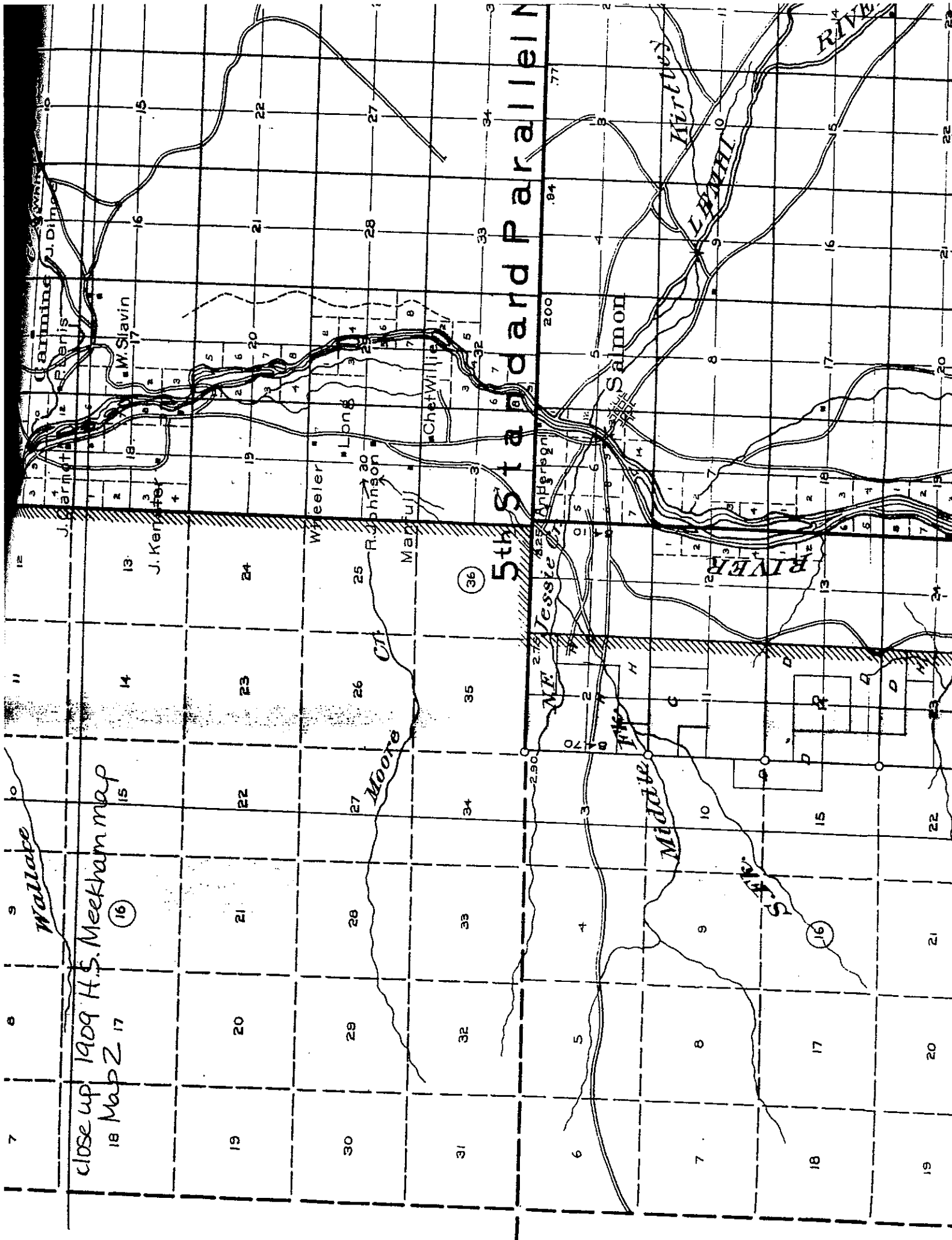
Betsy Rieffenberger
Forest Hydrologist
Salmon-Challis National Forest

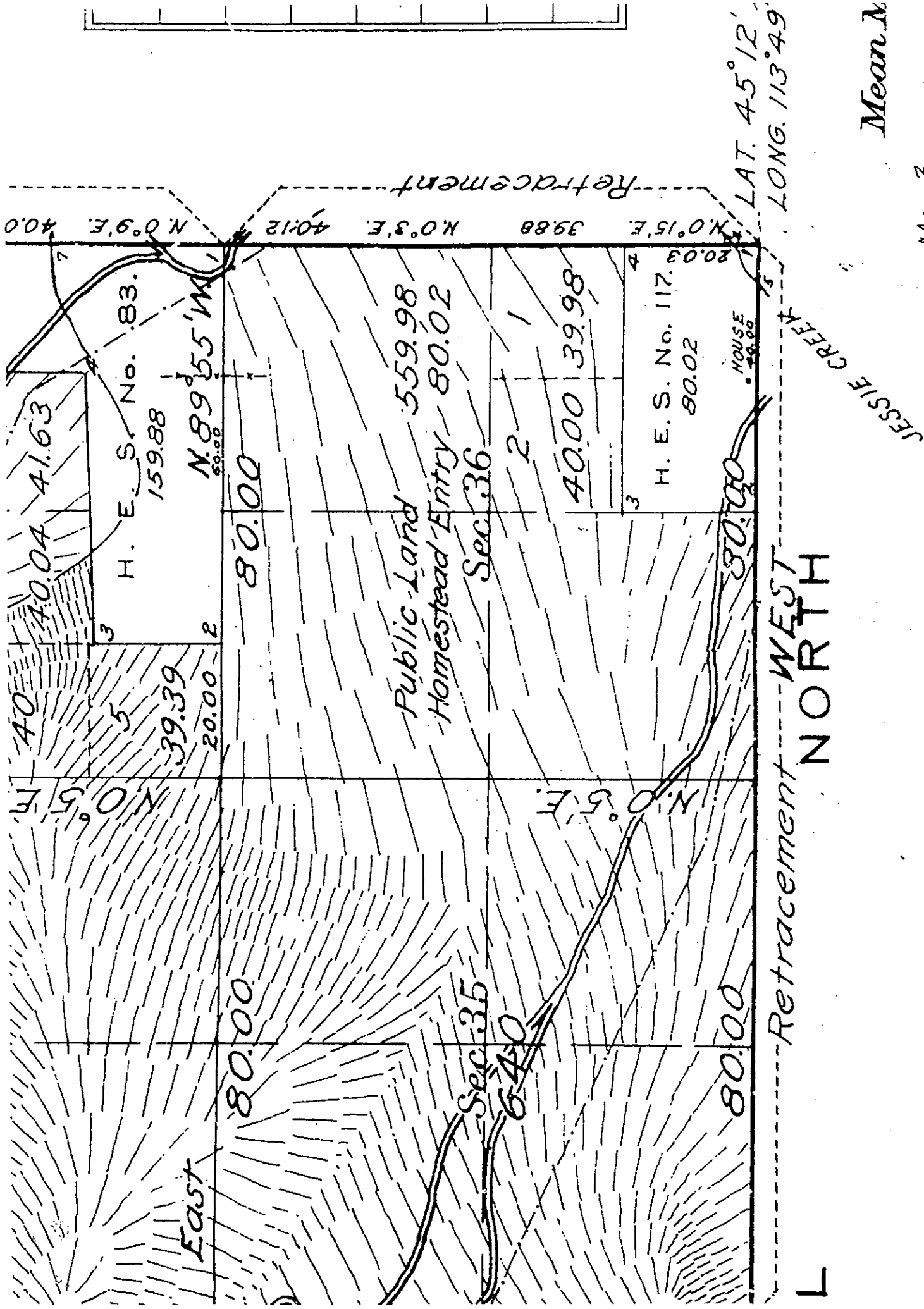
September 3, 2008

21 East of the Boise Meridian



close up 1909 H.S. Meekham map
18 Mar 2 17 16 15

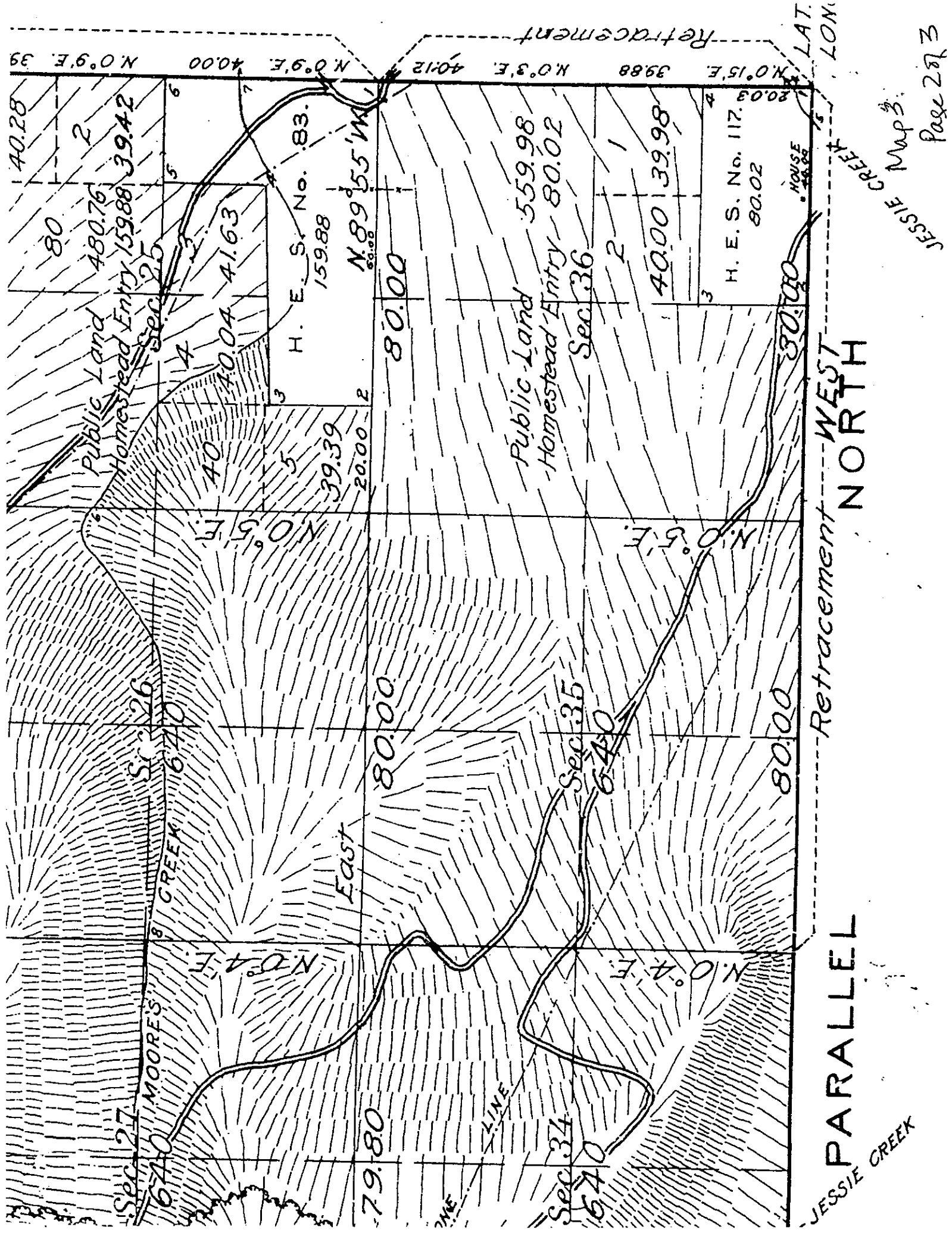




Mean N

Map 3.

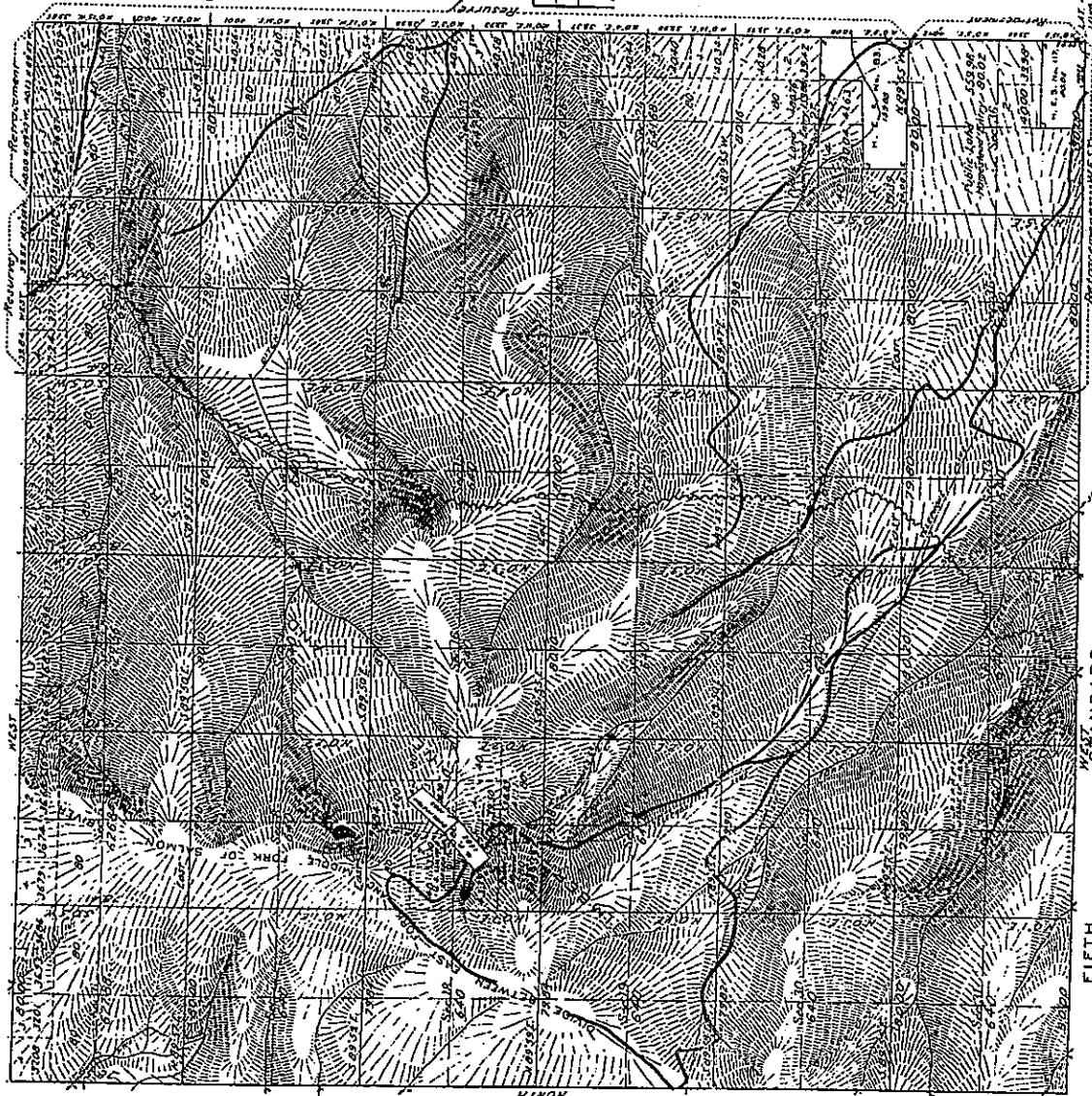
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Township No. 22 North, Range No. 21 East of the Boise Meridian, Idaho.

Sec. 35

Sec. 36



Sec. 6

PATENTED MINERAL CLAIMS			
No.	Name	Area acres	Location
1602	Burlington Lake	20.433	In sec. 17
	U. P.	20.667	

Sec. 7

Mineral indications were specially noted in sections 14 and 17; stamp mills are located in each of these sections.

Sec. 18

PATENTED HOMESTEAD ENTRY SURVEYS			
No.	Area in acres	Location	
63	159.88	In sec. 25	
117	600.2	In sec. 25	

Sec. 19

Sec. 30

Areas in Acres	
Public Land	22695.11
Indian Reservation	
Indian Allotments	41.11
Mineral Claims	
Water Surface	239.90
Homestead Entries	22976.12
Total Area	22976.12

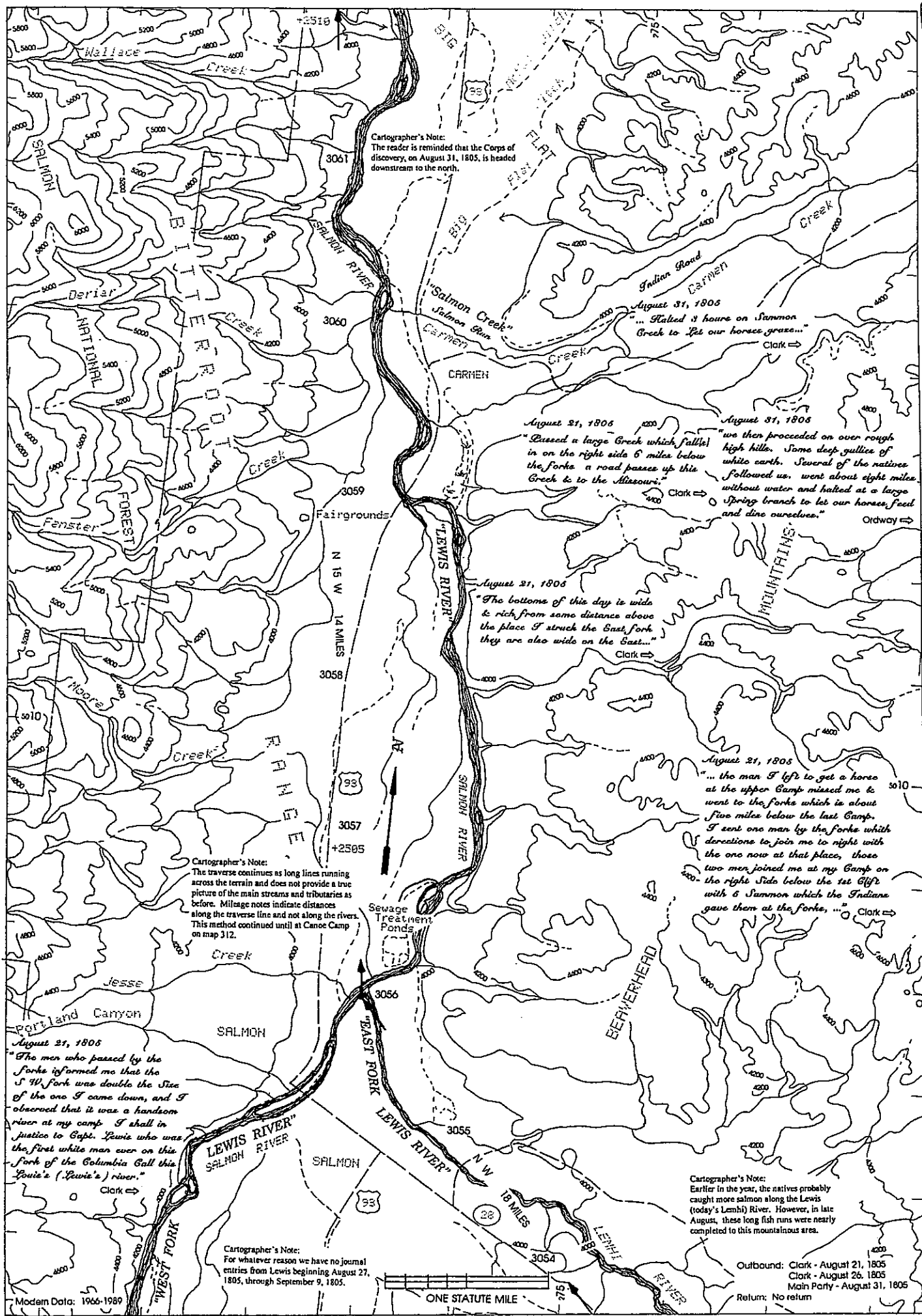
Scale 40 Chains to an inch
Mean Magnetic Inclination, not recorded.

The above map of Township No. 22 North, Range No. 21 East of the Boise Meridian, Idaho, is strictly conformable to the field notes of the survey thereof on file in this office, which have been examined and approved.

U. S. Surveyor General's Office,
Boise, Idaho, November 17, 1920

Edward Hadden
Surveyor General.

Surveys Investigated	By Whom Surveyed	Group	Area	When Surveyed
Ward & Boundary Act	B. M. Pullum	103	June 11, 1919	July 14, 1919
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Map 4

UTM Zone 12

Map number 277

Salmon Creek

Explorations of Lewis & Clark 1804-1806

map file cut off