
Silver Creek 2024

# Several Glacial Events Helped Form Silver Creek

Google Earth

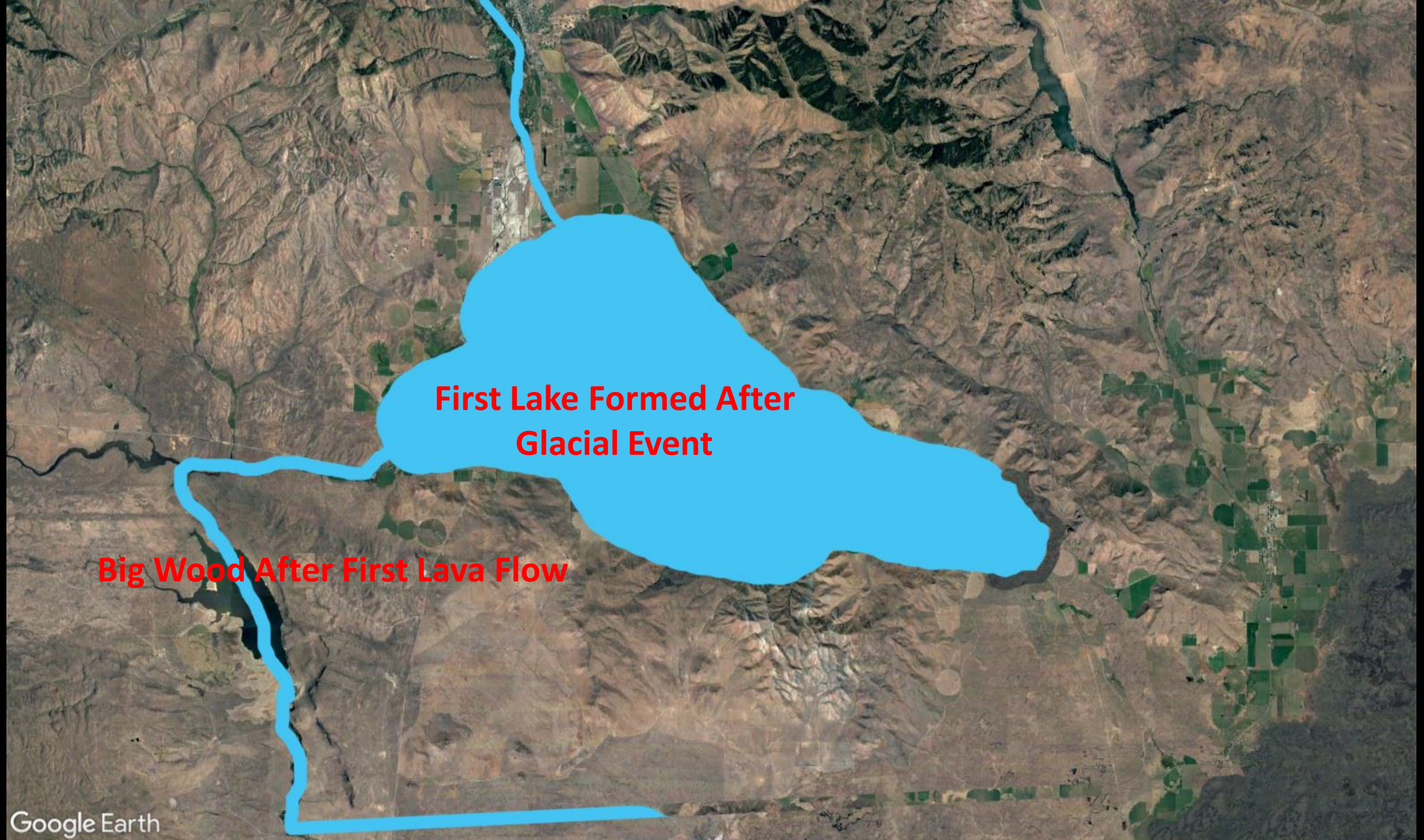

Google Earth


Big Wood River
Timmerman Hills
Silver Creek
Google Earth


Big Wood River First Event
Google Earth

Lava Flow First Event

Google Earth


First Lake Formed After
Glacial Event
Big Wood After First Lava Flow
Google Earth

Second Lava Flow

Second Glacial Event Forms New Lake

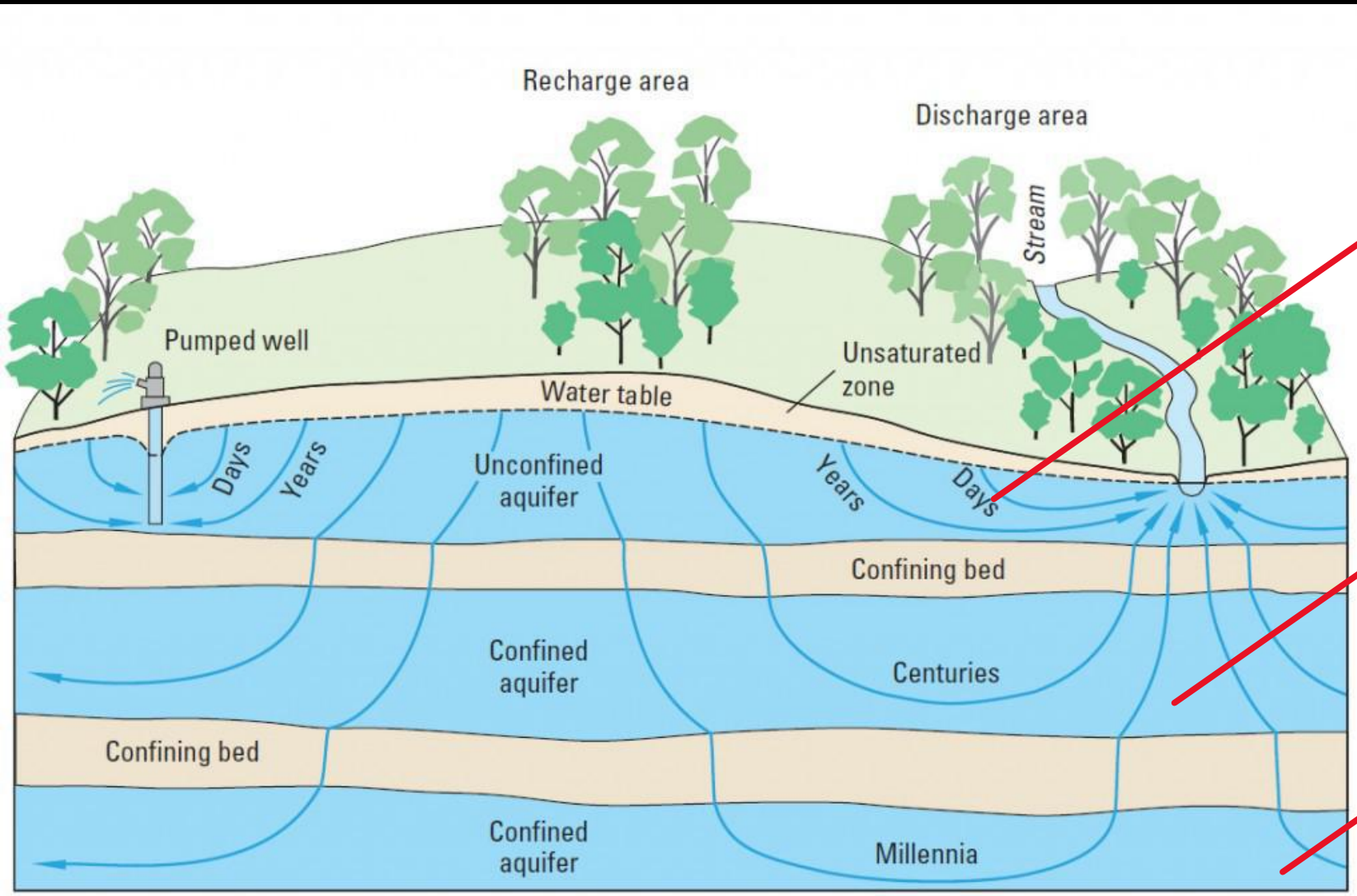
Silver Creek is Formed

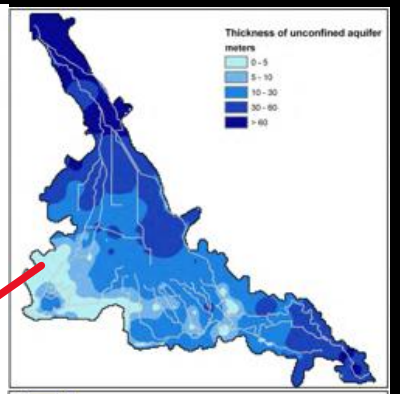
Google Earth


Current Big Wood River and Silver Creek are Formed
Google Earth

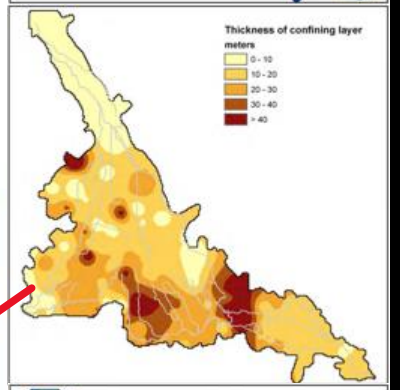
# Wood River Valley Aquifer-Silver Creek.

The Timmerman Hills are the reason Silver Creek exists.

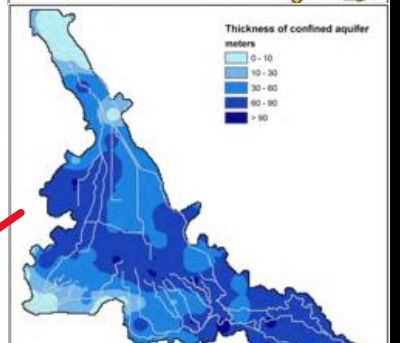



Unconfined
Layer 0->60 feet thick




Confined Layer #1
1->40 feet thick




Confined Layer #2
0->90 feet thick

# The Native Fish of Silver Creek


Large Scale Sucker

Bridgelip Sucker

Longnose Dace

Whitefish (Last whitefish noted in SC-1991)

Wood River Sculpin

Redband Rainbow

# The Invasive Fish of Silver Creek

Brown Trout ( First 30k fry introduced in Little Wood in 1970)

Brook Trout ( Virtually gone except in upper tribs.)

Western slope Cutthroat (Introduced on South side of Galena)

Costal Rainbow Trout (and several other rainbow species)

# Hayspur hatchery has been in operation since 1907 (oldest in Idaho)

Projected Eyed Egg Need

Ten (10) million. Needed throughout the year, but the majority of the eggs are requested between September and February.

Founding Population

The Hayspur rainbow trout was derived from various strains of rainbow stocked into the large earthen brood pond at the Hayspur Fish Hatchery since 1906. Some strains used include native Silver Creek and Big Wood River fish (probably derived from Redband and McCloud strain rainbow), brood fish from American Falls Hatchery (fish trapped in Rock Creek, a tributary to American Falls Reservoir), fish from the Rogue River, and "escapees" from various domestic strains raised at Hayspur (Shasta, Ennis, Mt. Lassen, and Arlee). Typically over 1,000 trout per year have been stocked into the pond as broodstock replacements.

Fishery Performance

Hayspur rainbow trout have typically returned to the angler's creels at rates at least equal to other strains tested (Maiolie and Partridge 1985). With good management, return rates of

# Hayspur Fish Hatchery 1946

# 2023 IDF&G Fish Survey

Method used: mark-recapture
Time frame: Every 3 years
Total trout 2023: 1913
No. of transects: 3
Density of fish: 1913 fish per km.
Percentage: Brown 59%  Rainbow 41%
Increase in density in Stalker Creek. Decrease in density's in TNC and Willows.
Annual mortality rates:  Rainbow- 66%  Brown- 38%
Avian populations possible cause for increase in mortality.
Long term trends show stability in system.

Tiger Trout

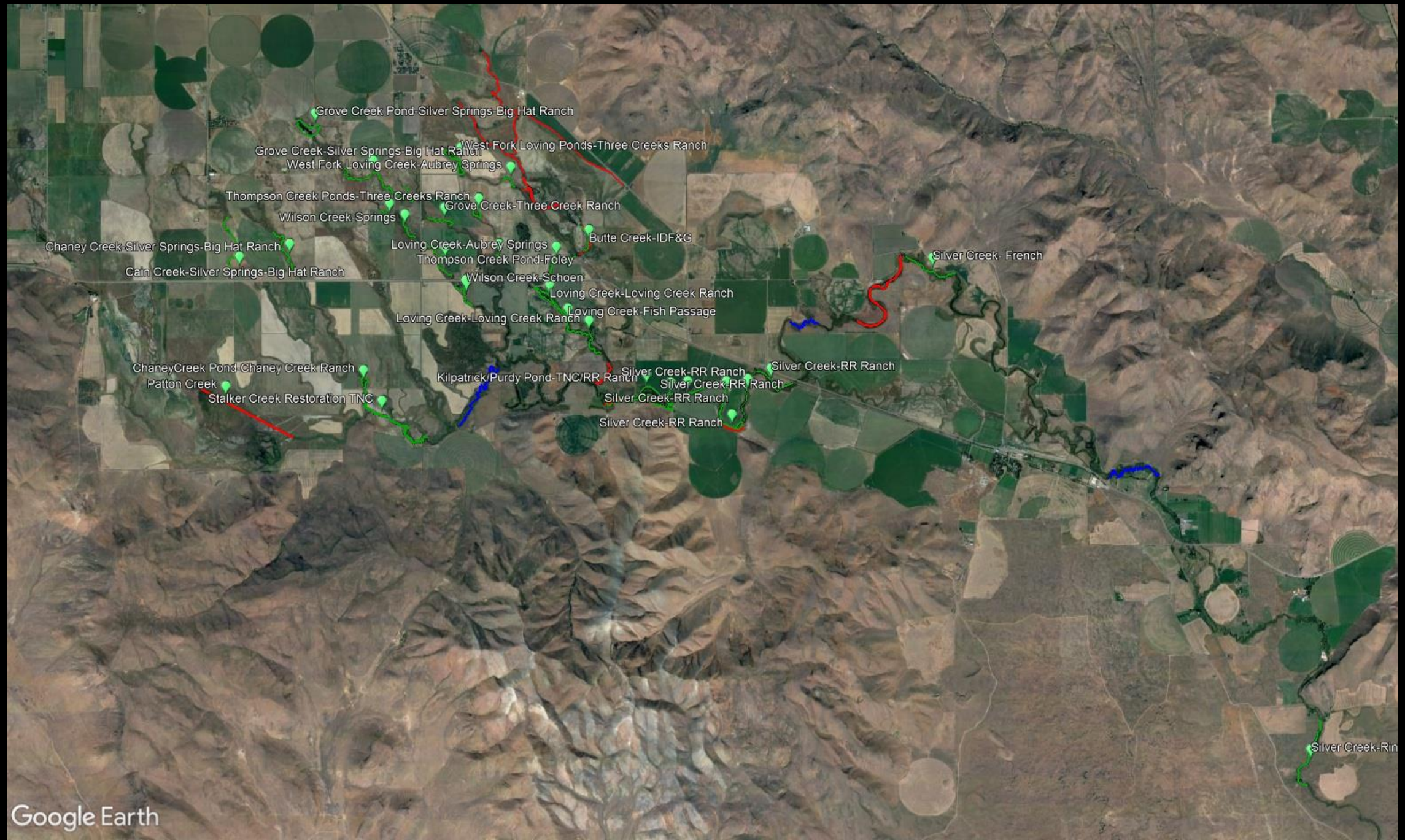
# Pelicans

- Pelicans have been around a long time.
- The populations are increasing
- Silver Creek is easy pickings
- US Fish and Wildlife has been hazing for several years and will continue.
- Last 2 years have seen less birds on the Creek

# Yellow Flag Iris

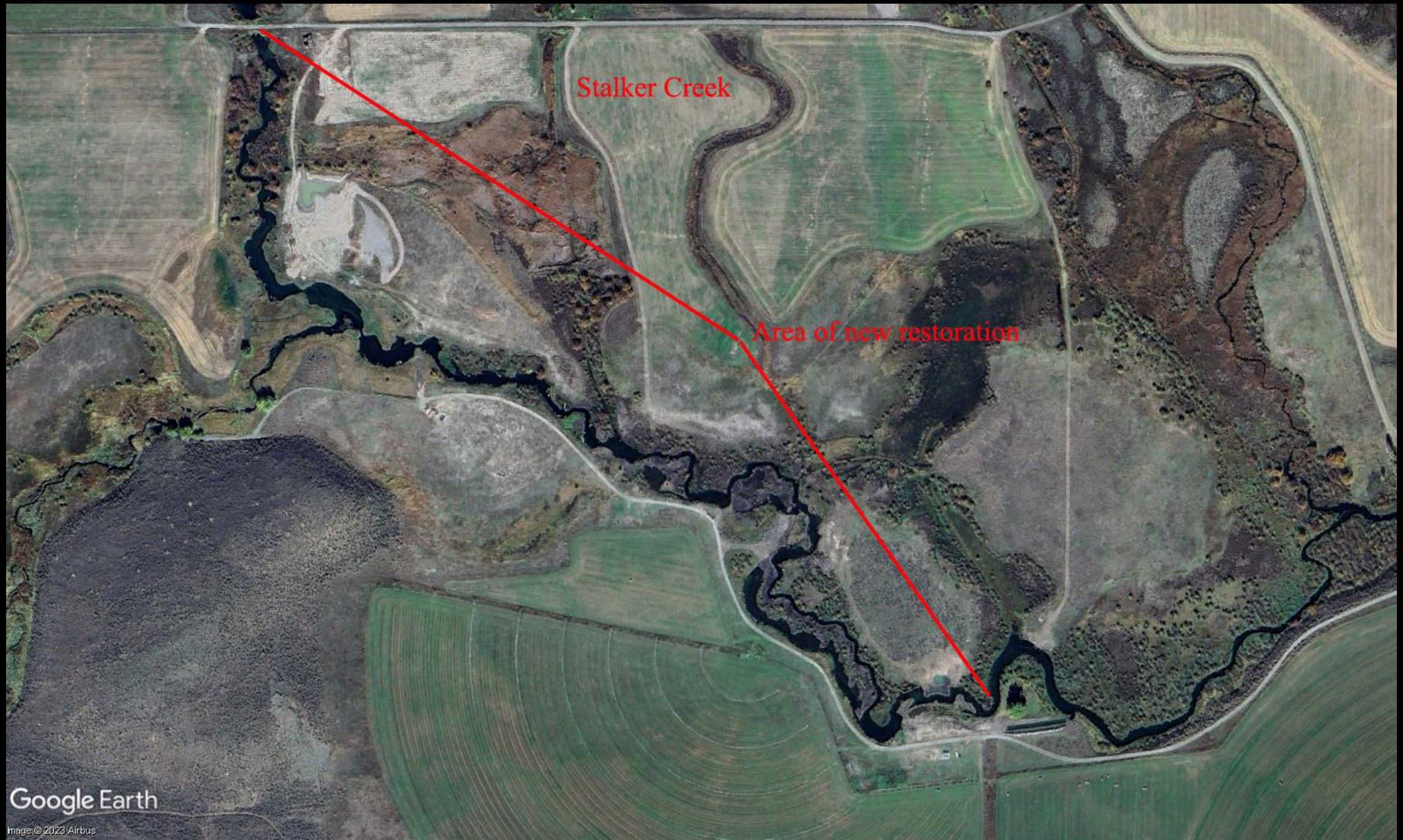
Highly invasive
From Asia
2019-Over 2500 plants treated in first year. 2023- Roughly 100 plants treated
Continued monitoring

# Silver Creek Restoration- 1960's to Present



# Restoration of Stalker Creek 2022

# Stalker Creek 2023



# A 1.9 Million Dollar Grant!

That’s right! With the dedicated efforts of Erika Phillips of the Nature Conservancy, a 1.9 million dollar grant from BOR was secured for restoration of Loving Creek.

The grant was matched for funding from:

- Silver Creek Alliance
- Nature Conservancy
- Idaho Department of Fish and Game
- Landowners on Loving Creek

# Upper Loving Creek Restoration

Fish barrier

Ditch to Hatchery

Google Earth

# Loving Creek Restoration Butte Creek (IDF&G)

# Lower Loving TNC

# Future Projects in Planning

Upper Loving Creek

Access for All

Protection of Silver Creek Spring System

Silver Creek Spring

Buffer Zones

Point of Rocks

# The Fishery, why so up and down?

- Fisheries are cyclic
- Climate is a wild card
- In Silver Creek-flows are everything


January 15 2024

# Water, Water, Water!

We can control water for Silver Creek

- Awareness and understanding
- Planning
- Conservation
- Cooperation

Dry spring head

# The Future for Silver Creek

- The future of Silver Creek depends on us.
- Understanding the Creeks needs.
- Education
- Cooperation
- Funding the work
- Restoration Planning for the future
- Stability is possible in drought
- New tools for water use:
  Ground Water-Flow Model
  Silver Creek and Big Wood  Water Quantity and Quality Forecasting Tools

Silver Creek Assessment Report

for The Nature Conservancy and Silver Creek Alliance

May 2020

Applied Science & Engineering

Prepared by Rio ASE and Ecosystem Sciences

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# A Success Story on Loving Creek

SaveSilverCreek.com
SilverCreekAlliance.org
Nature.org
EcosystemSciences.com

# Questions?