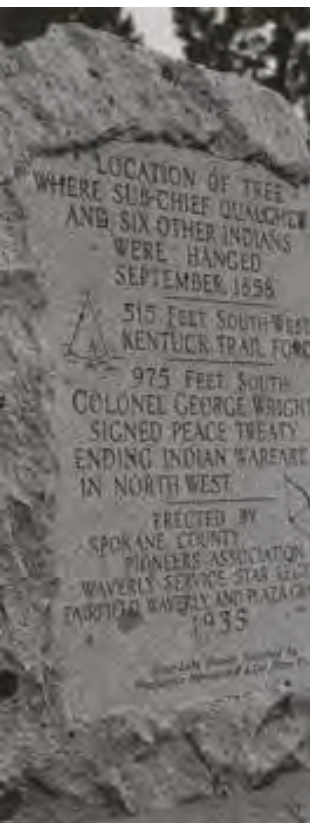






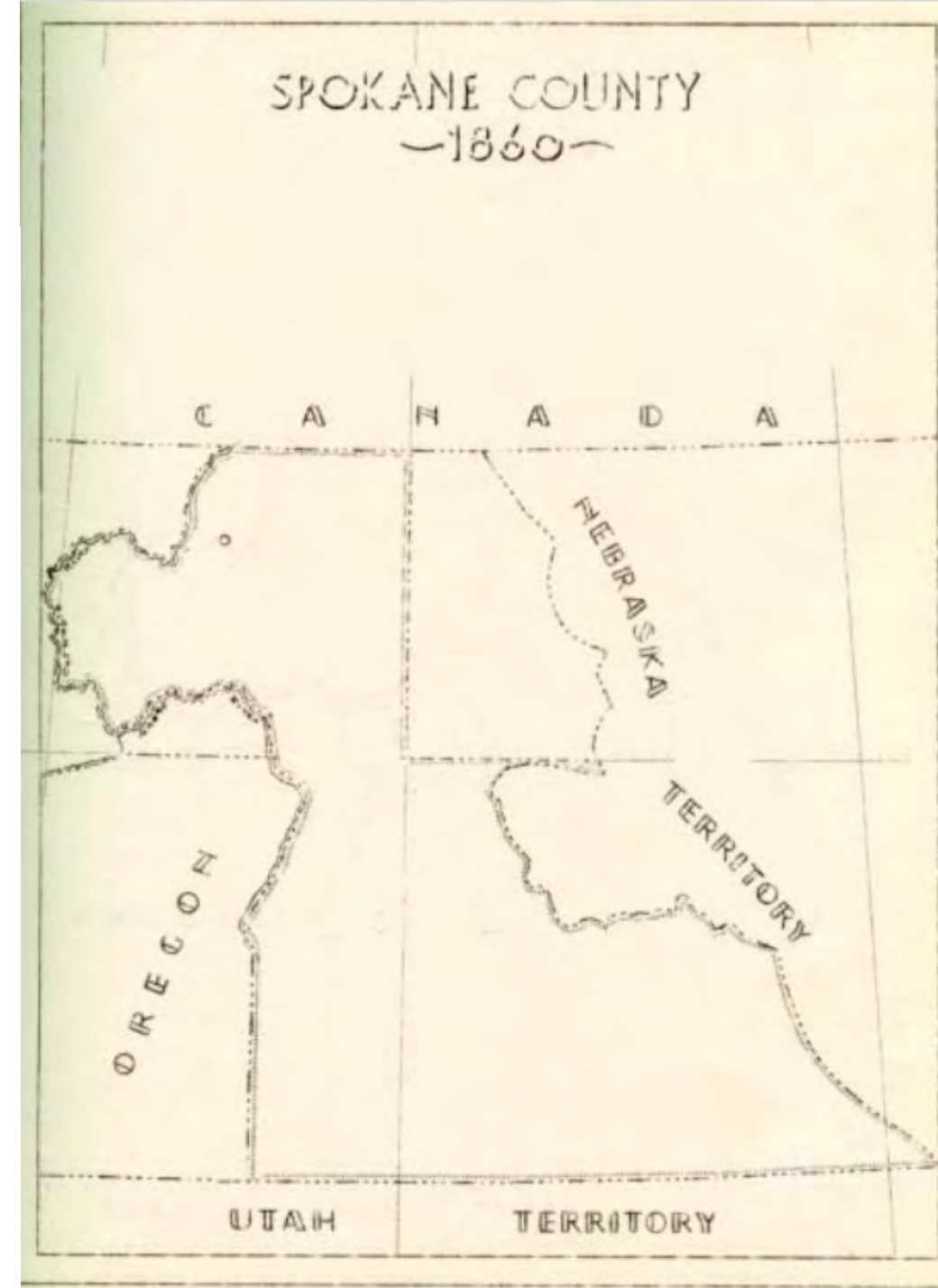
Hangman Creek: a walk through history

Walt Edelen, Water Resources Department Manager



Spokane County

- First formed in 1860 (population 996)
- Wenatchee to Western Montana
- 1880 – population was approximately 4,262
- 1883 – established the current boundaries
- Cattle ranching was first ag activity
- 1890 – population 37,487 (700% increase due to mining, timber)
- Homesteaders and crops began to take over in 1890's with railroad expansion
- Agriculture became prominent in early 1900's



Spokane's Rich History

- Mining, timber, fur trading
- Exploration
- Local Tribes (wars, culture)
- Salmon runs
- Military Road
- Mammoth discovery



1876 Columbian Mammoth discovery

- Benjamin Copen and brothers
- Bog probing
- Complete skeleton
- 13' tall, 10' long tusks weighing 145 lbs
- Found many other bones including 9 tusks and small human skull
- Took it on tour
- In 1914 the Field Museum of Natural History in Chicago bought the bones



Homesteads and Land Clearing

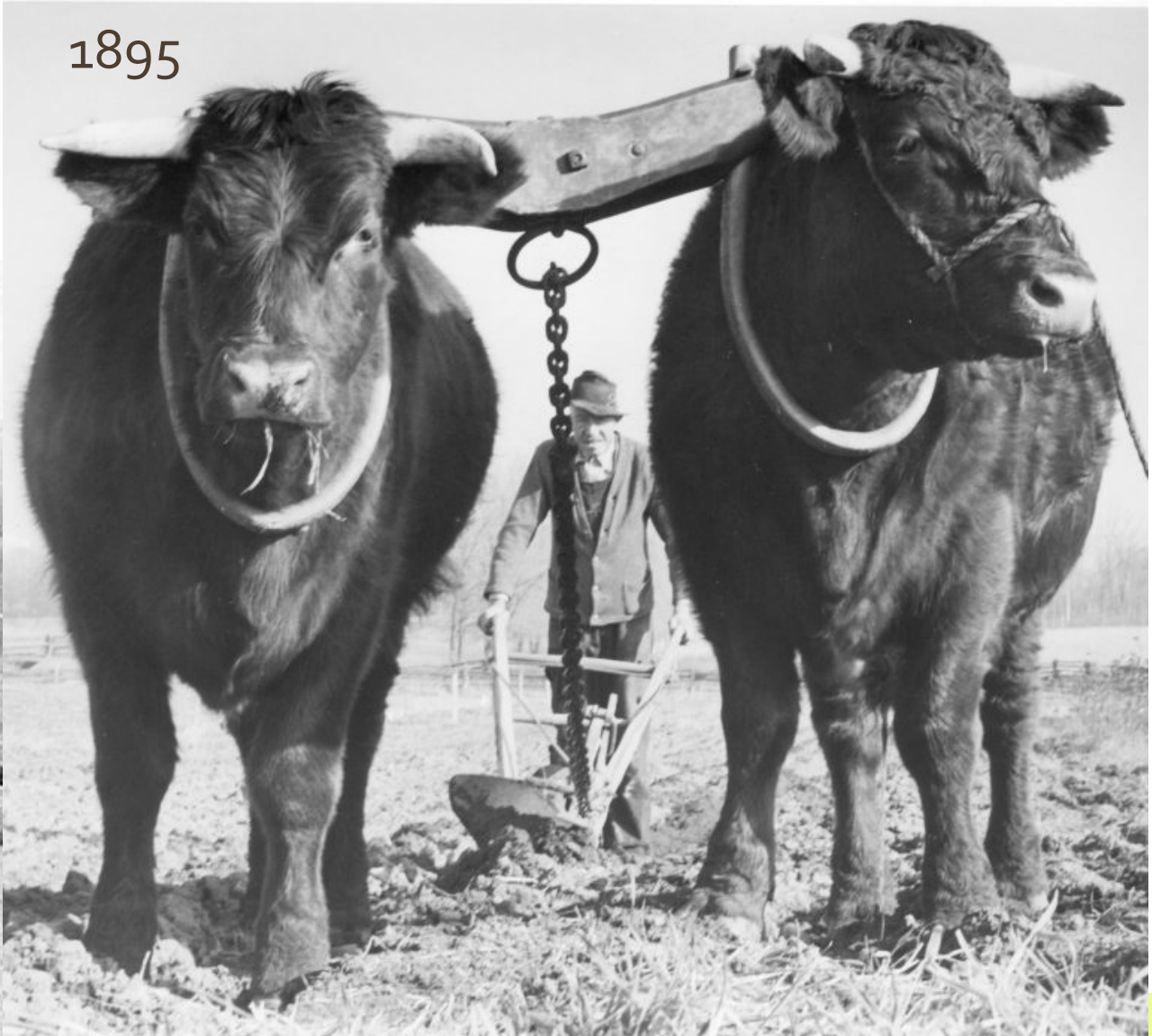


Early Spokane County Agriculture

1892



1895





Early Implements

1903



1909



Agricultural Mechanization – 1930's (Dirty Thirties!)



Hangman Creek Native Vegetation

Table 47: Historic Vegetation Coverage for the Hangman Creek Watershed

Vegetation Types	Vegetation Area by Sub-watershed (acres)					
	Upper Hangman	Lower Hangman	Marshall Creek	Rock Creek	California Creek	Watershed Total
Bunch grass Prairie	110,236	13,650	8,999	33,257	662	166,803
Open Ponderosa Pine with grasses	32,295	24,175	22,798	40,365	8,554	128,186
Open Ponderosa Pine on rocky surface	3,583	4,058	6,546	239	449	14,875
Wetland or Lake	0	645	1,995	0	0	2,640
Evergreen Forest	67,976	2,734	0	39,821	6,276	116,796
Cottonwood, alder, or willow groves	172	570	0	908	0	1,650
Cultivated	135	114	22	0	0	271

Hangman Creek Land Use Changes (1880 – Present)

Sub-Watershed	Land Use	Pre – settle (%)	Current (%)	Net Change (%)
California Cr.	Ag	0	55	+55
	Forest	96	23	-73
Lower Hangman Cr.	Ag	0	30	+30
	Forest	67	18	-49
Marshall Cr.	Ag	0	26	+26
	Forest	71	34	-37
Rock Cr.	Ag	0	81	+81
	Forest	71	10	-61
Upper Hangman Cr.	Ag	0	70	+70
	Forest	48	21	-27

Hangman Creek Alteration and Effects

- Settlement and clearing for agriculture
- Channel modifications by individuals and agencies

Past and some continuing practices have altered the hydrology

- Flooding
- Incision
- Floodplain disconnection
- Riparian area communities (absent)



Erosion and Nutrient Sources



WA State # 1 Pollution Priority

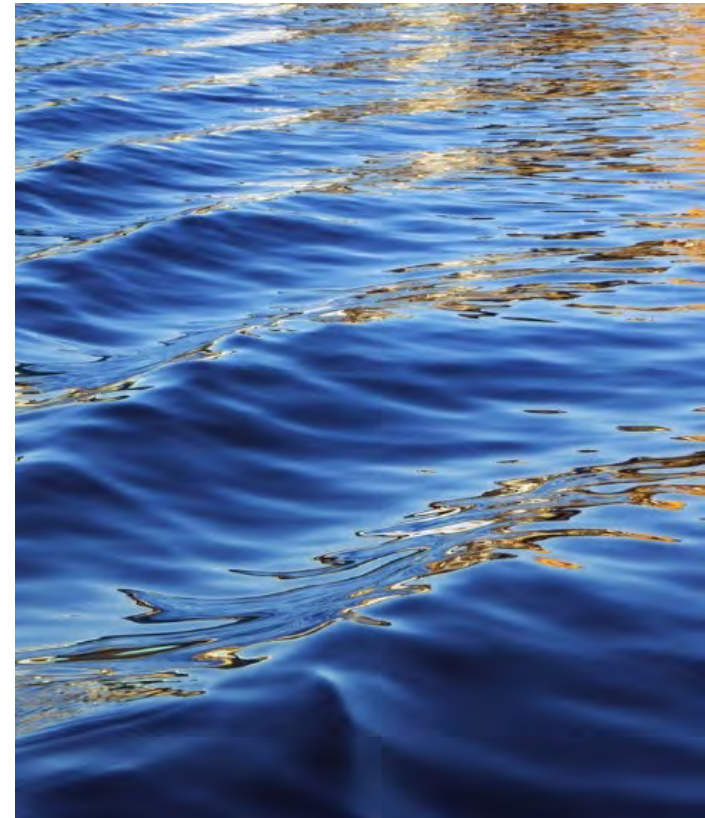






Change in Hangman Creek Watershed

Technology and Stewardship Practices/Programs



SCD Implementation Approach

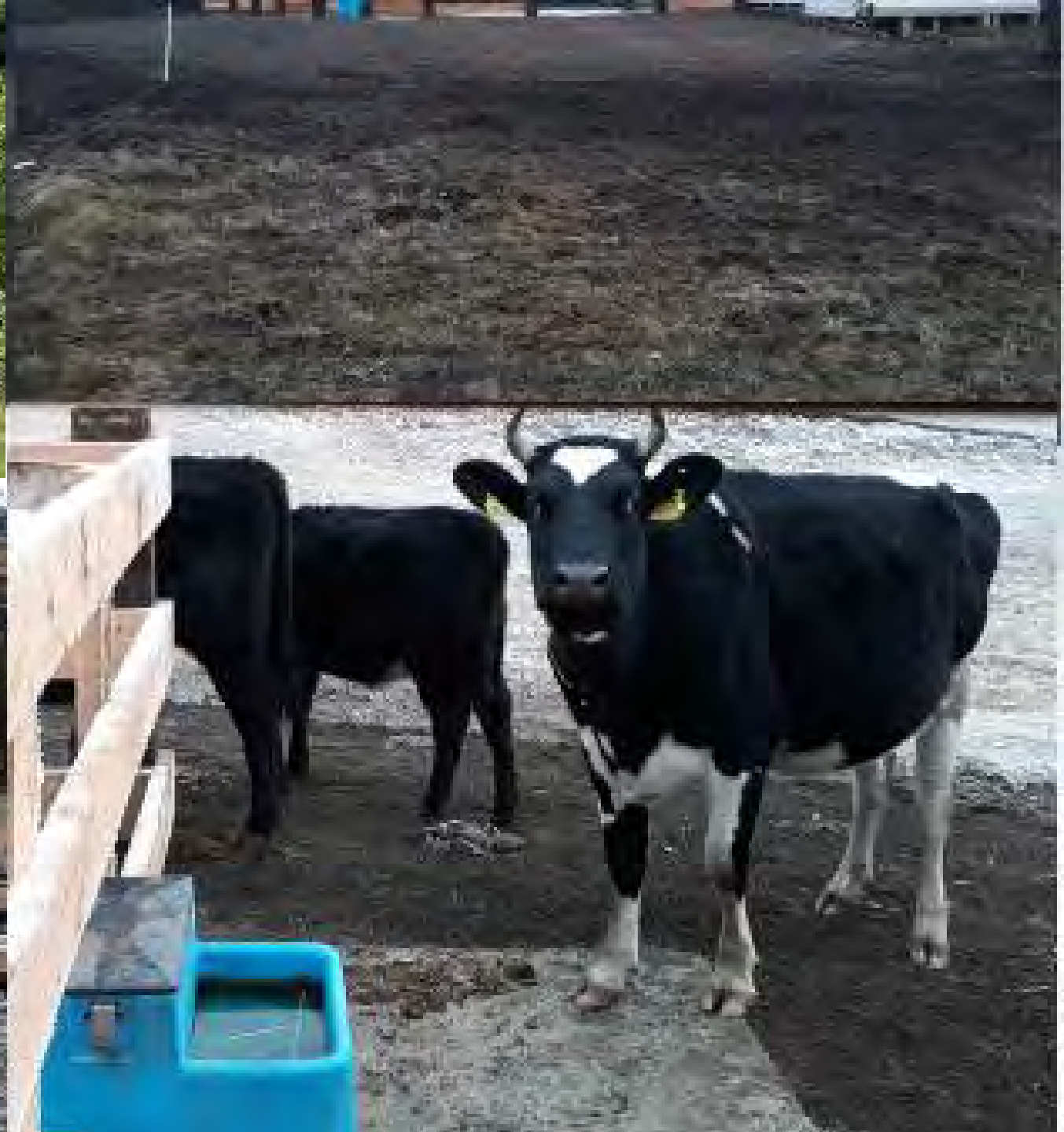
- **Stream Bank Stabilization**
 - Currently working on nearly a mile of Little Hangman Creek
 - Inventory of stream bank erosion
- **Livestock Operations**
 - Currently working on several TA's
 - Cove Creek – over 16,000' of fencing
- **Agricultural Operations**
 - Equipment loans for no-till
 - Cost-share program for no-till
 - Research on no-till benefits
 - Inventory of tillage in watershed
 - Riparian programs





Hangman Creek RM-17 Stream Bank Stabilization Project (2019)

**16,000 Tons
lost**



Agriculture

- \$59 Million/year business






RCPP

Project lead: Charlie Peterson (2016 – 2021)

206 Contracts (Acres treated – 162,590)

- 140,414 Acres of Conservation Tillage/no-till
- 51,900 acres of Precision Ag
- 4,239 Acres of Forest Management
- Approx. 436,028 tons of soil erosion prevented



Commodity Buffer Program

- Project Lead: Seth Flanders
- 431 Acres of implemented and preserved buffer
- 121 miles of buffer enrolled

Edge of Field Monitoring

- Project lead: Seth Flanders
- 2 stations installed
- Collects field runoff/nutrient sampling
- Evaluates BMP effectiveness



3-Yr Monitoring Results



No till management

- reduced topsoil erosion by 200 lbs. per ac./year.
- reduced nitrogen loss by 4 lbs. per ac./year.
- Water infiltration was 28% greater.

Are farmers doing their part?



- Getting involved in local organizations
- Being proactive with tillage and stewardship practices
- Public needs to hear their story!

SCD Program Opportunities



- Hangman BMP Assistance Programs
- Riparian Conservation & Restoration Program
- Commodity Buffer Program



Hangman Creek BMP Assistance Program

(Hangman landowners only)

- Ecology grant (\$1.5 million dollars)
- Livestock operation BMP cost-share
- Equipment loans (2.5 to 4.5%)
- Conservation tillage cost-share program (250 acres - \$28/ac.)
- Riparian restoration project (LHC)
- Watershed tillage inventory (100K ac.)
- Stream bank inventory (spring 2022)
- Watershed Committee – sign up!

Stream Bank Inventory Results

- 58.5 miles of stream banks (WA side only)
- 2022 work found 37,129 feet of erosion (124 actively eroding banks)
 - avg was 300' in length
- 2003 work documented 41,326 feet of erosion (133 eroding banks)
 - avg was 310' in length
- 10% overall reduction





Riparian Conservation & Restoration Program

(Hangman landowners only)

- \$1 million dollar pilot program (Ecology)
- Must have received an Ecology letter
- Tillage operations only
- Competitive rental rate
- Objective – 20 to 70 acres of buffers



Riparian Conservation & Restoration Program

(Hangman landowners only)

Eligibility

- Tillage operations only
 - Program - \$300/ac
 - Perennial waterways



Riparian Conservation & Restoration Program

(Hangman landowners only)

Required Buffer Size

- Minimum 50% SPTH
- Maximum of 100% SPTH
- SPTH Map
- SCD administered program
- Timeline – ends 6/30/23



- **Currently 9 Participants**
- **Over 185 acres of restoration**
- **\$3 million dollar budget**
- **15-year contracts**

Cary Janson
Generational Farming Family
Latah, WA



Janson – Bippes Cook Shack



Janson Threshing Crew



Threshing Bippes Homestead



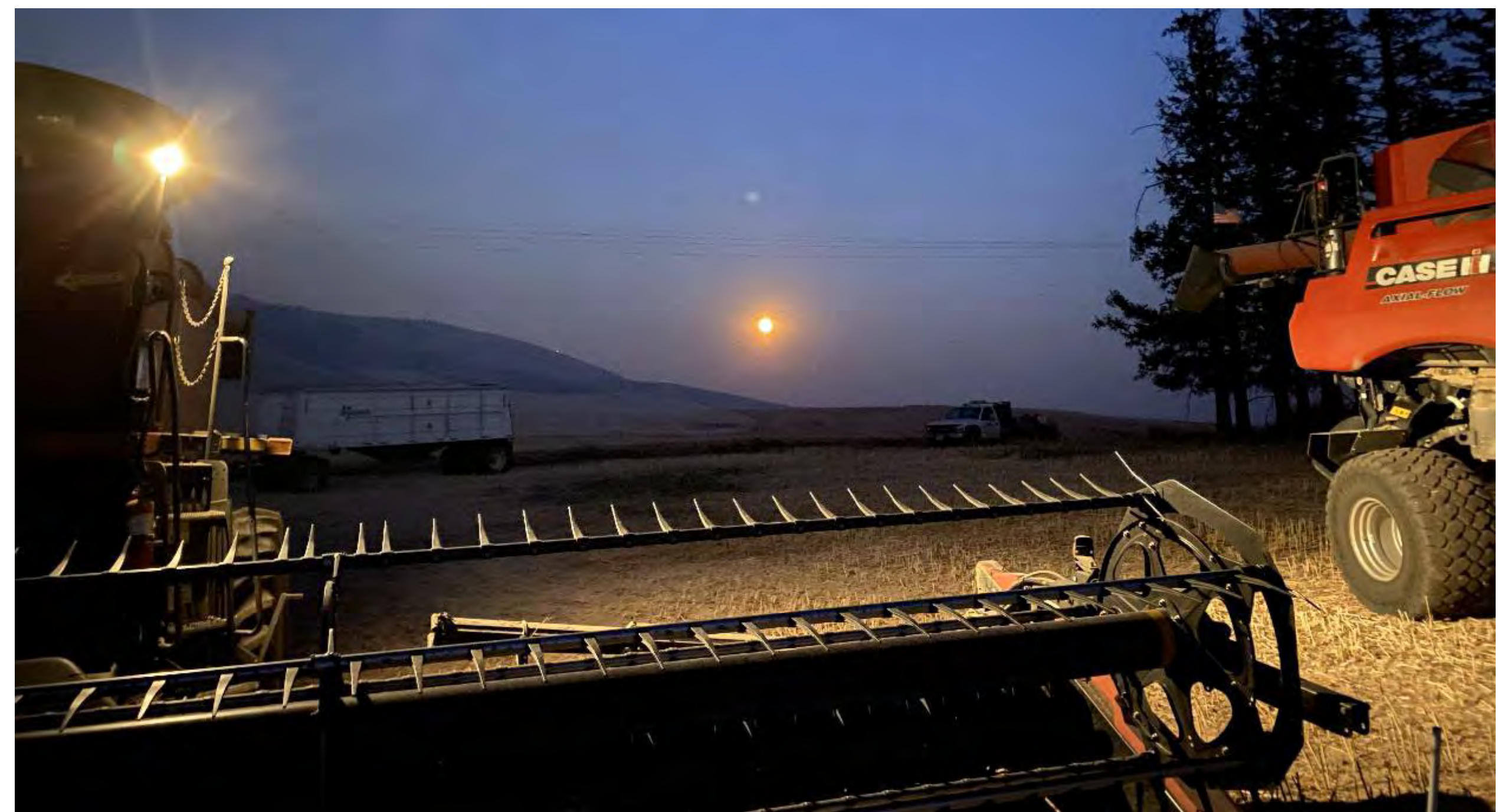


Harvest Combine 1950's













JANSON

SPOKANE

COUNTY

CONSERVATION FARMER

1913











Air Drill



Sediment Basin





Janson Homestead





