

“No Sediment Augmentation” Initial Monitoring Report

April 29, 2025

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No-aug Monitoring Report: Purpose

The goal of no-aug monitoring reporting is to:

- identify issues during the no-augmentation period that could impact decision making and influence continuation of the experiment
- May – Initial monitoring report to TAC (**Today**)
- July – Full monitoring report to TAC

Full report on no-aug experiment's impacts to come in 2028, after the 2027 data collections

What we learned and did

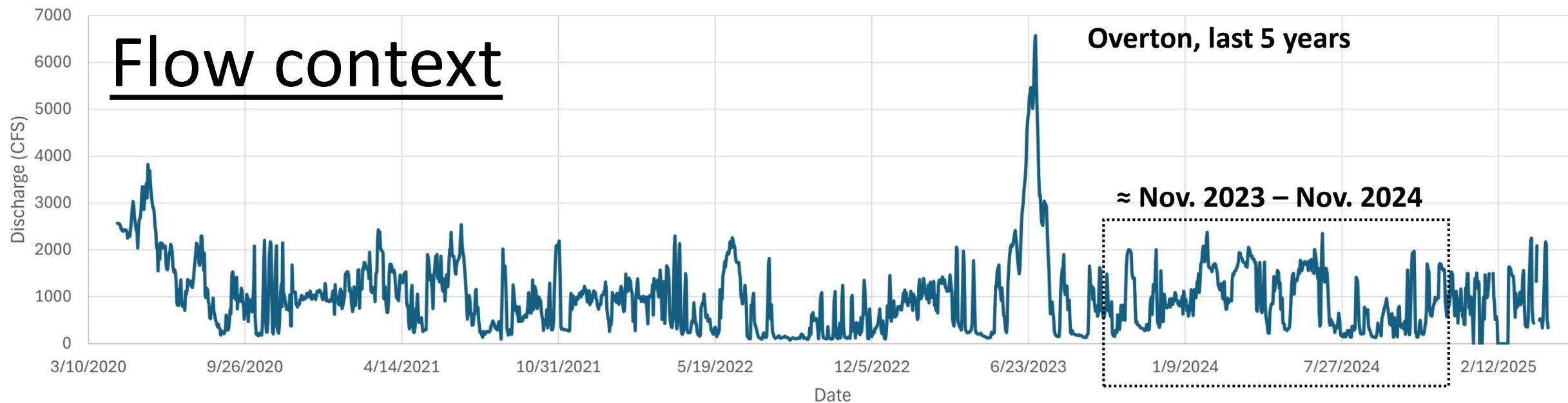
What did we learn from the 2024 lidar and aerial photos?

- Quick assessment of conditions to determine level of concern

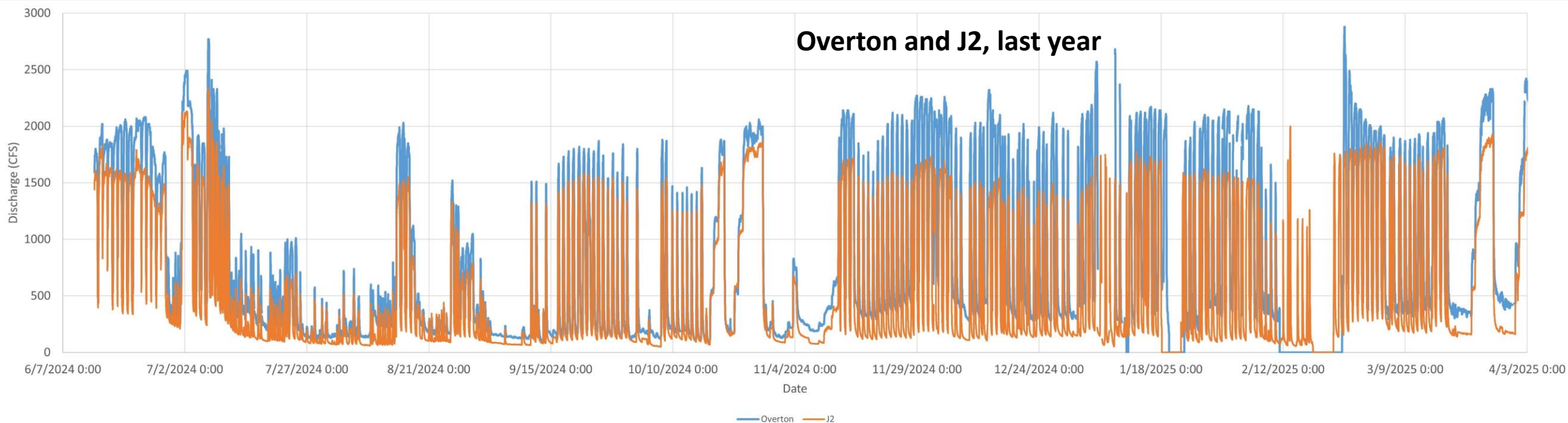
Reminder: Table 2.2 in No Sed Aug Monitoring Plan shows the annual task breakdown.

- Field efforts in Jul and Nov 2024, Apr 2025
- XS surveys and drone imagery each visit, sediment samples July visits

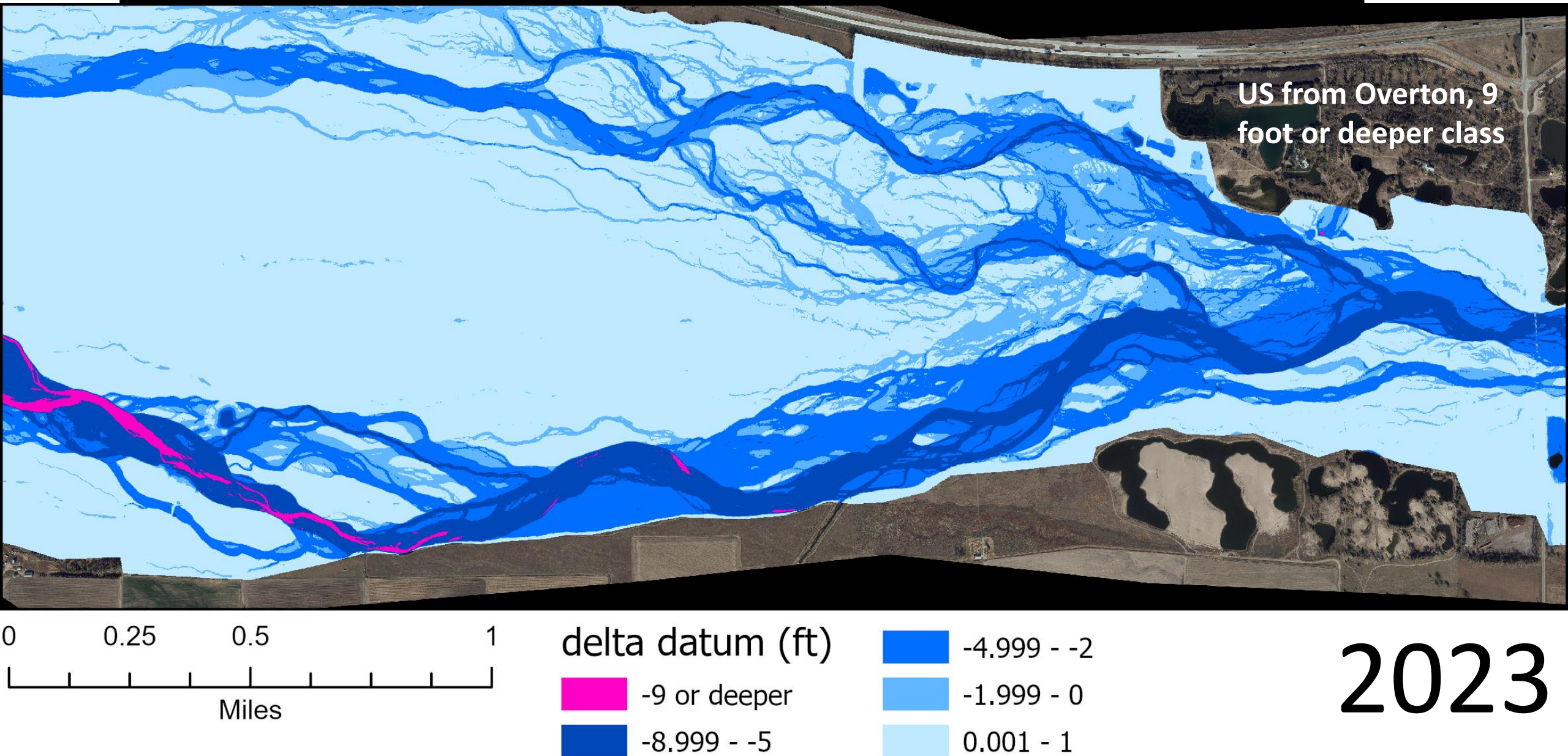
Flow context



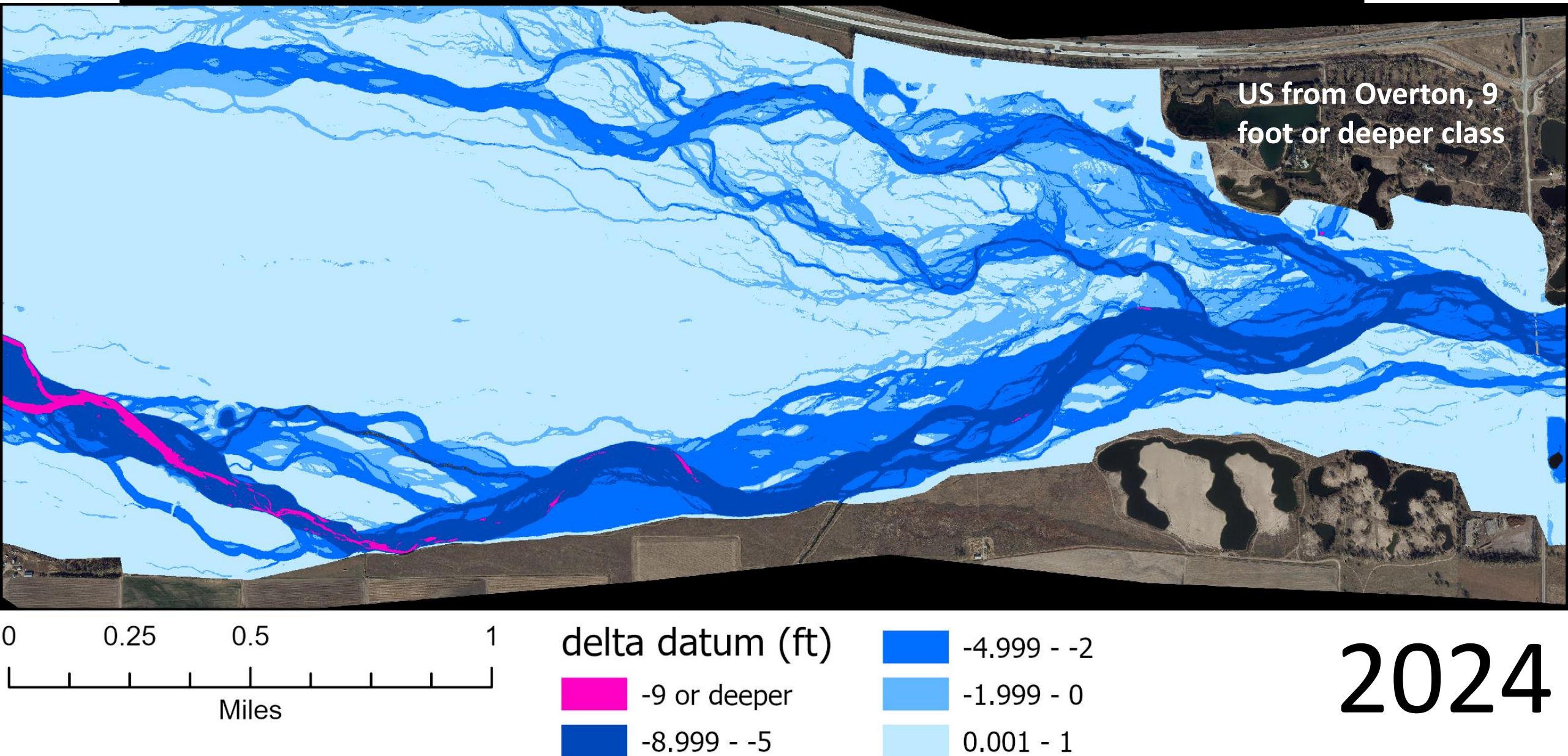
Overton and J2, last year



Lidar and Aerial Photos – Incisional Classes

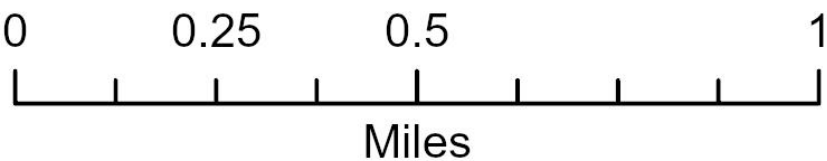
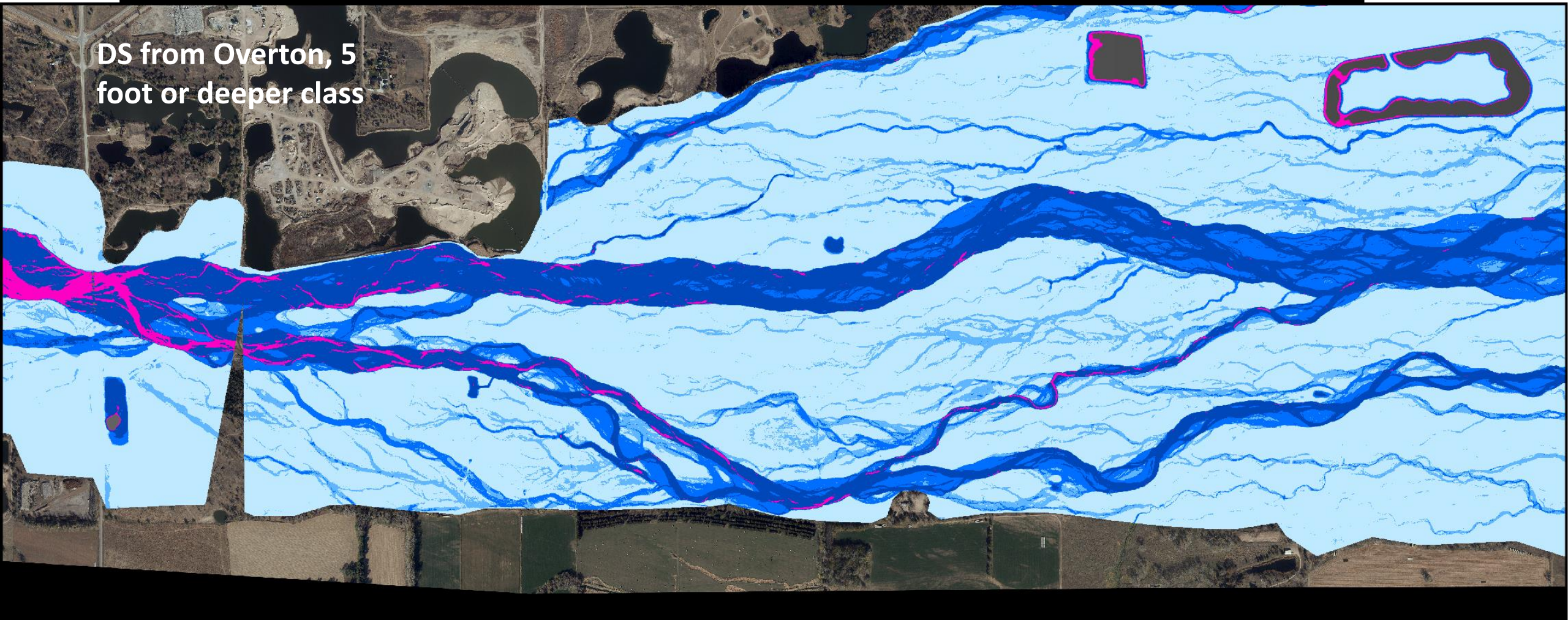


Lidar and Aerial Photos – Incisional Classes



Lidar and Aerial Photos – Incisional Classes

DS from Overton, 5
foot or deeper class



delta datum (ft)

-5 or deeper

-4.999 - -3

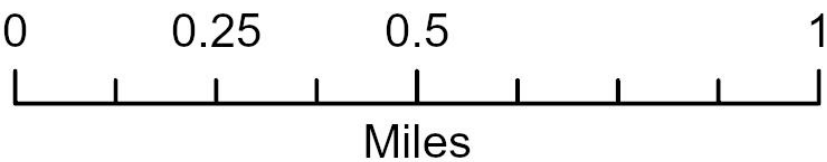
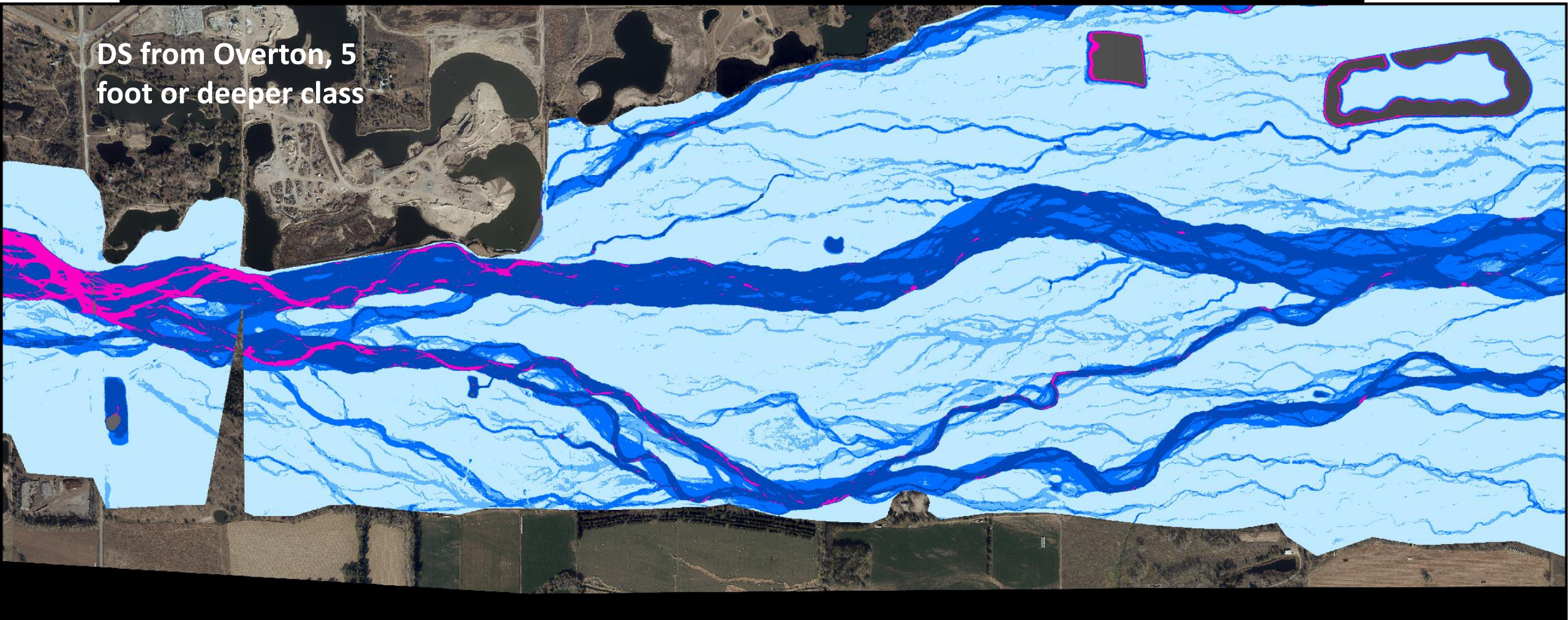
-2.999 - -1

-0.999 - 0

0.001 - 1

2023

Lidar and Aerial Photos – Incisional Classes



delta datum (ft)

-5 or deeper

-4.999 - -3

-2.999 - -1

-0.999 - 0

0.001 - 1

2024

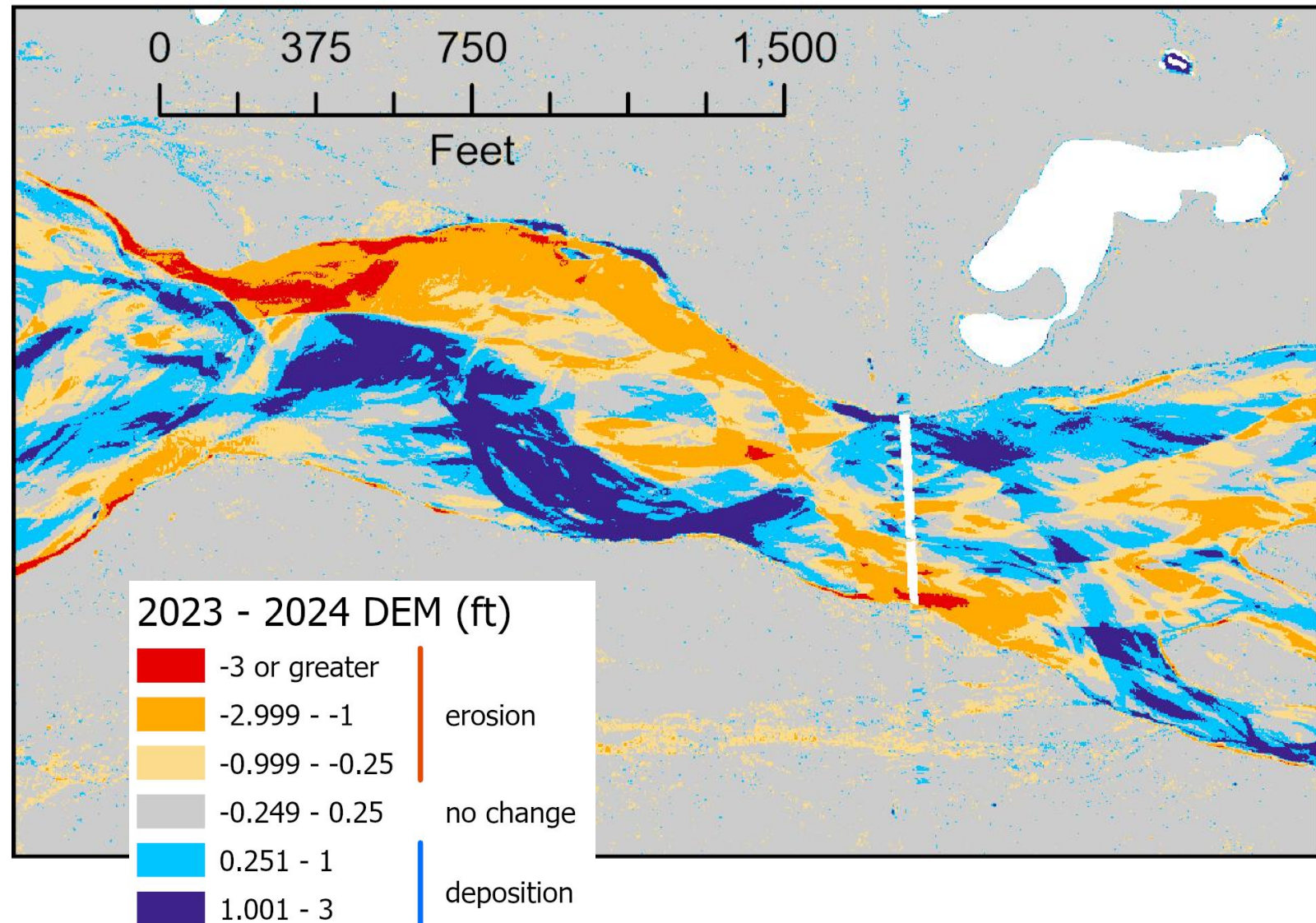
Lidar and Aerial Photos – Incisional Classes

What did we learn?

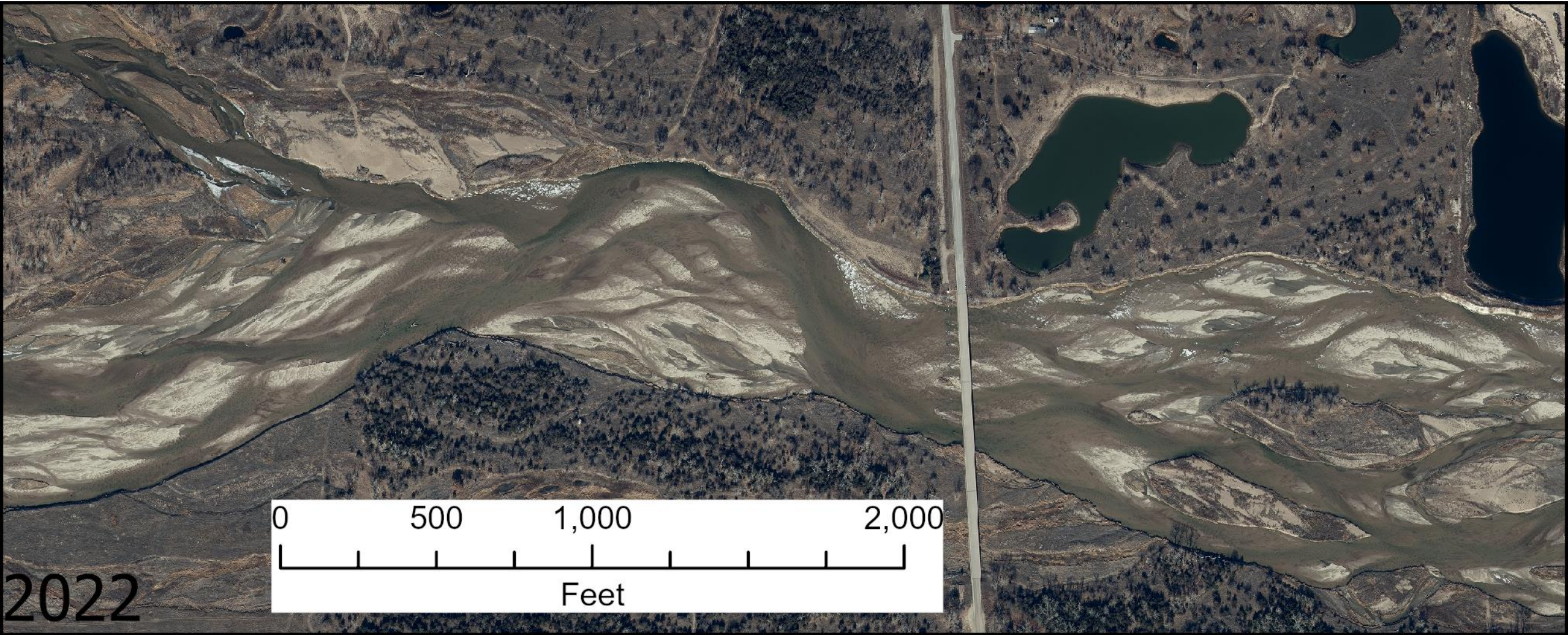
- No significant downstream progression in these depth classes (very little change at all)
- Some DS translation of deeper pools, mostly lateral erosion and shifting of thalweg (e.g. at the Overton Bridge)

Lidar and Aerial Photos – 2023 vs. 2024

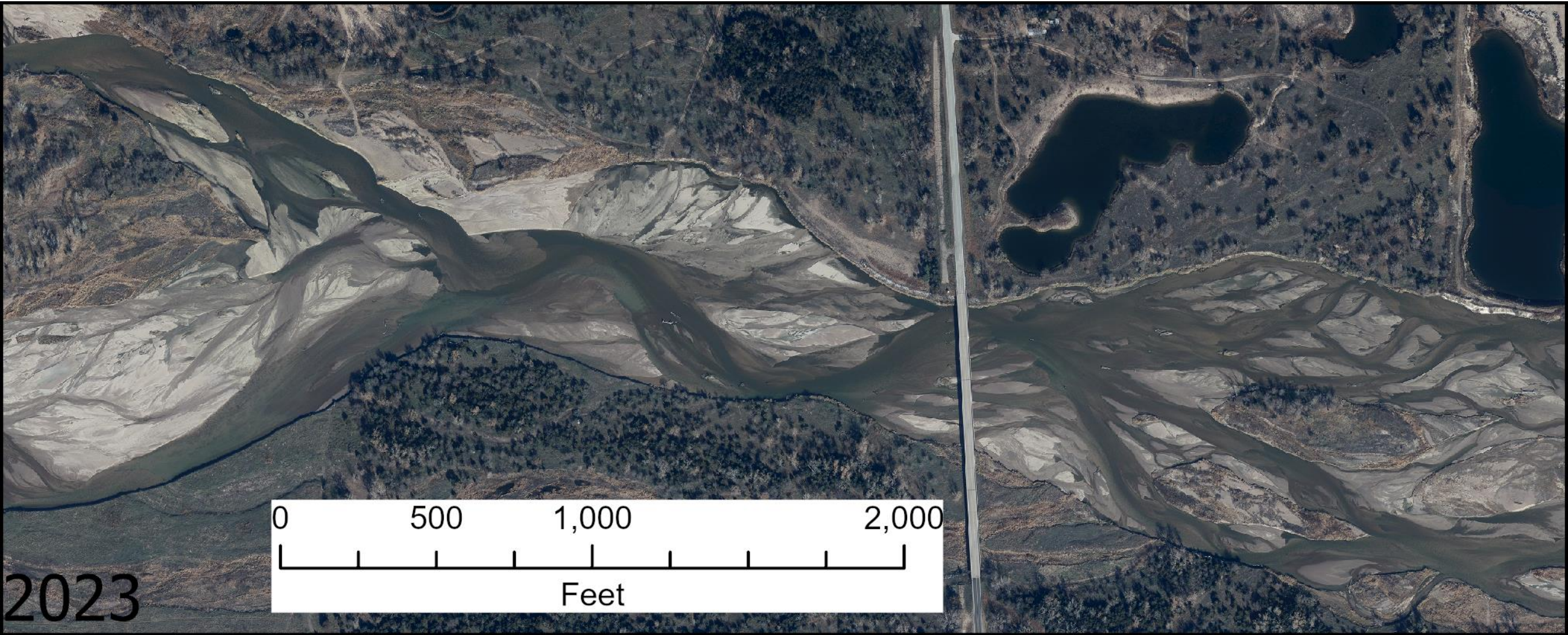
- Lots of typical channel shifting through both AOIs
- Lateral erosion continues, mainly in & US of AOI 1
- Strange looking section @ Overton Bridge – 2024 shows bar deposited the previous year was removed



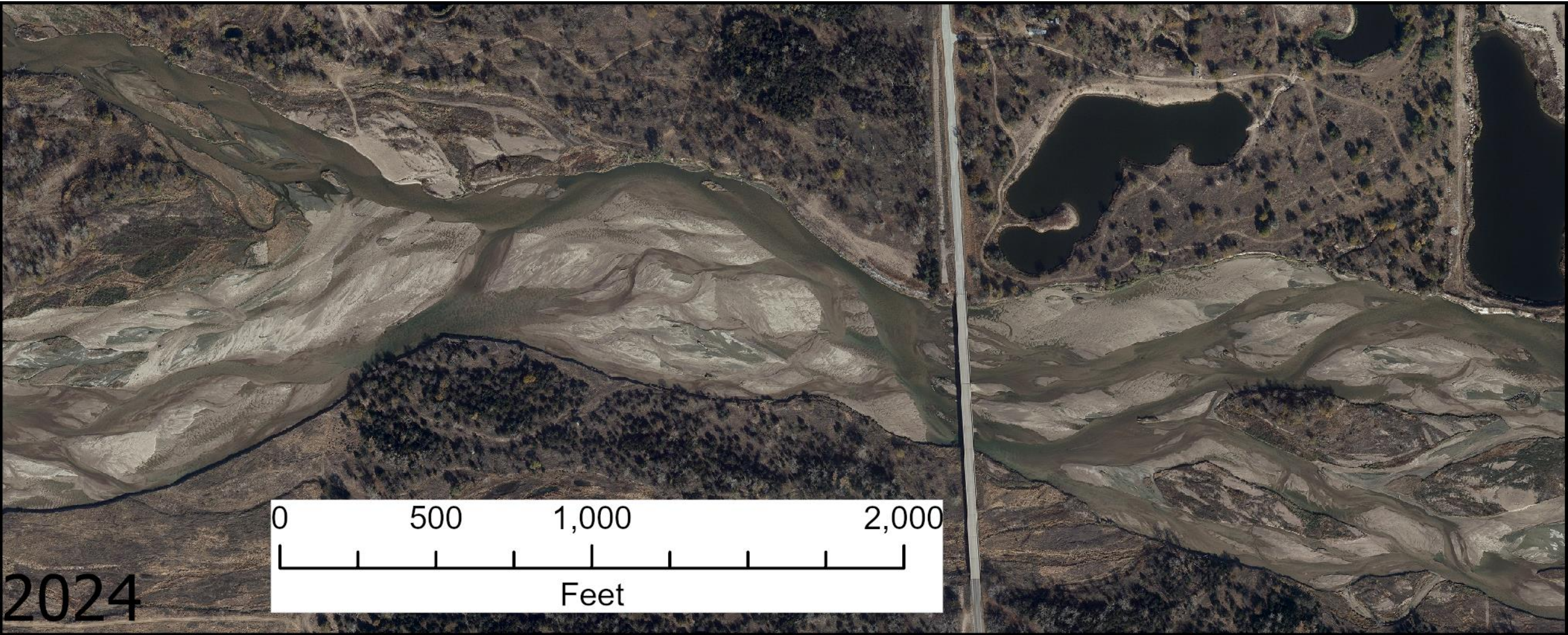
Lidar and Aerial Photos – 2022 - 2024



Lidar and Aerial Photos – 2022 - 2024



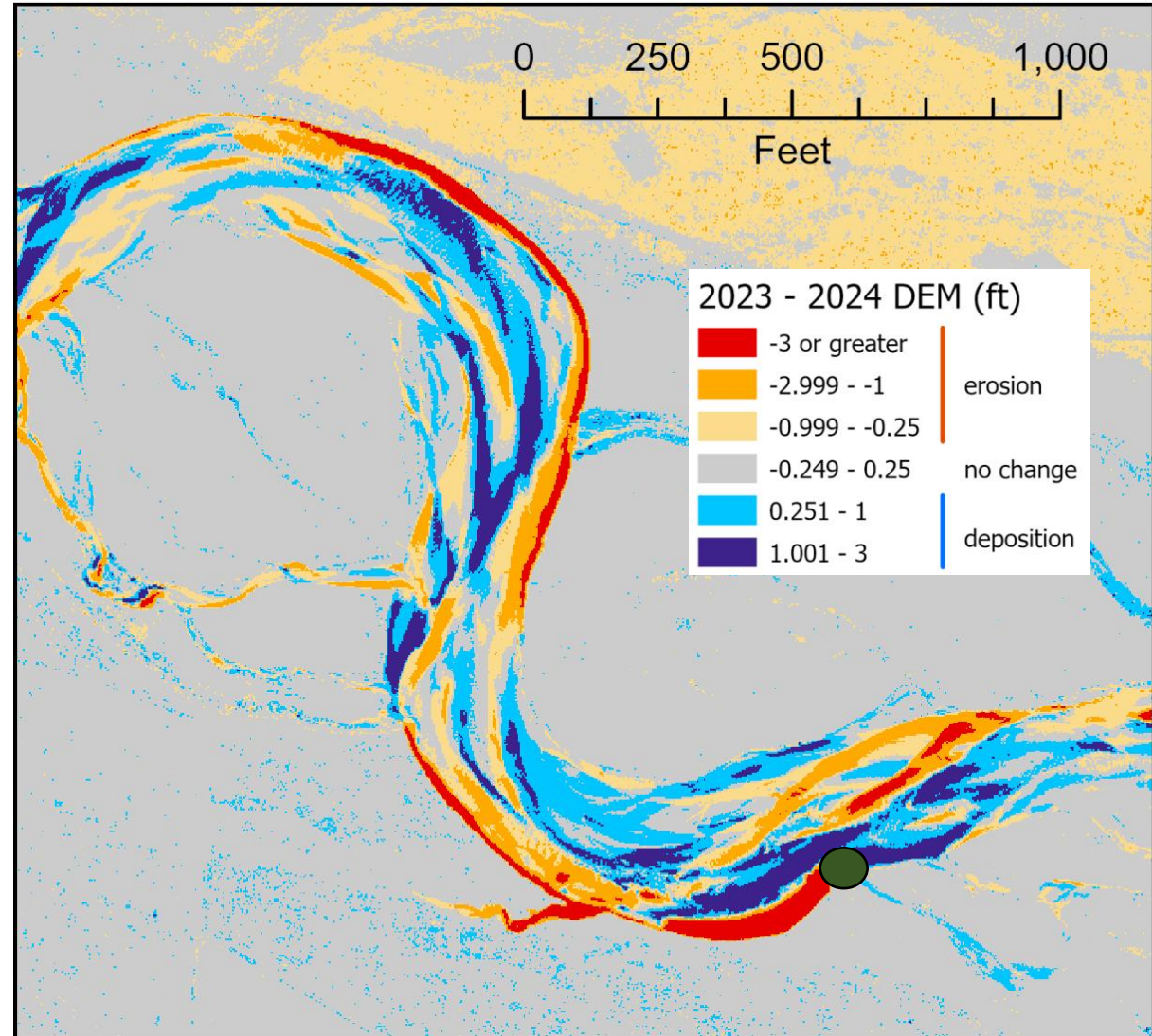
Lidar and Aerial Photos – 2022 - 2024



Lidar and Aerial Photos – 2023 vs. 2024

Station 70K and US

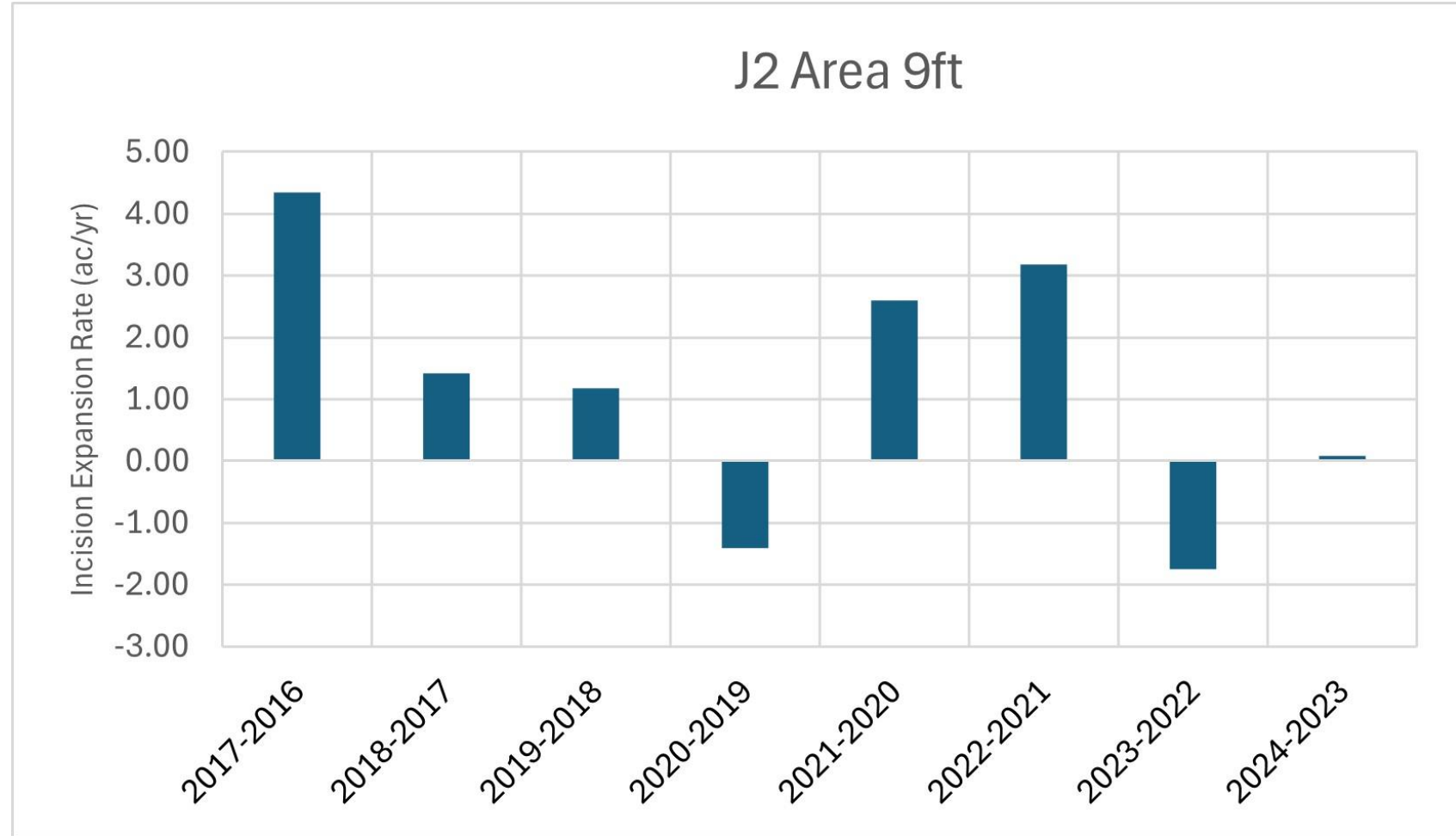
- Continued meander migration US of 70K, not much change DS of 70K
- Max \approx 50 ft laterally, typically 10-40 ft
- South bend highly impacted by tree-lined bank and in-channel wood (“**pinch point**”)



Lidar Area Calculations

Summed **area** of 9 foot or deeper class upstream of Overton Bridge = almost no change

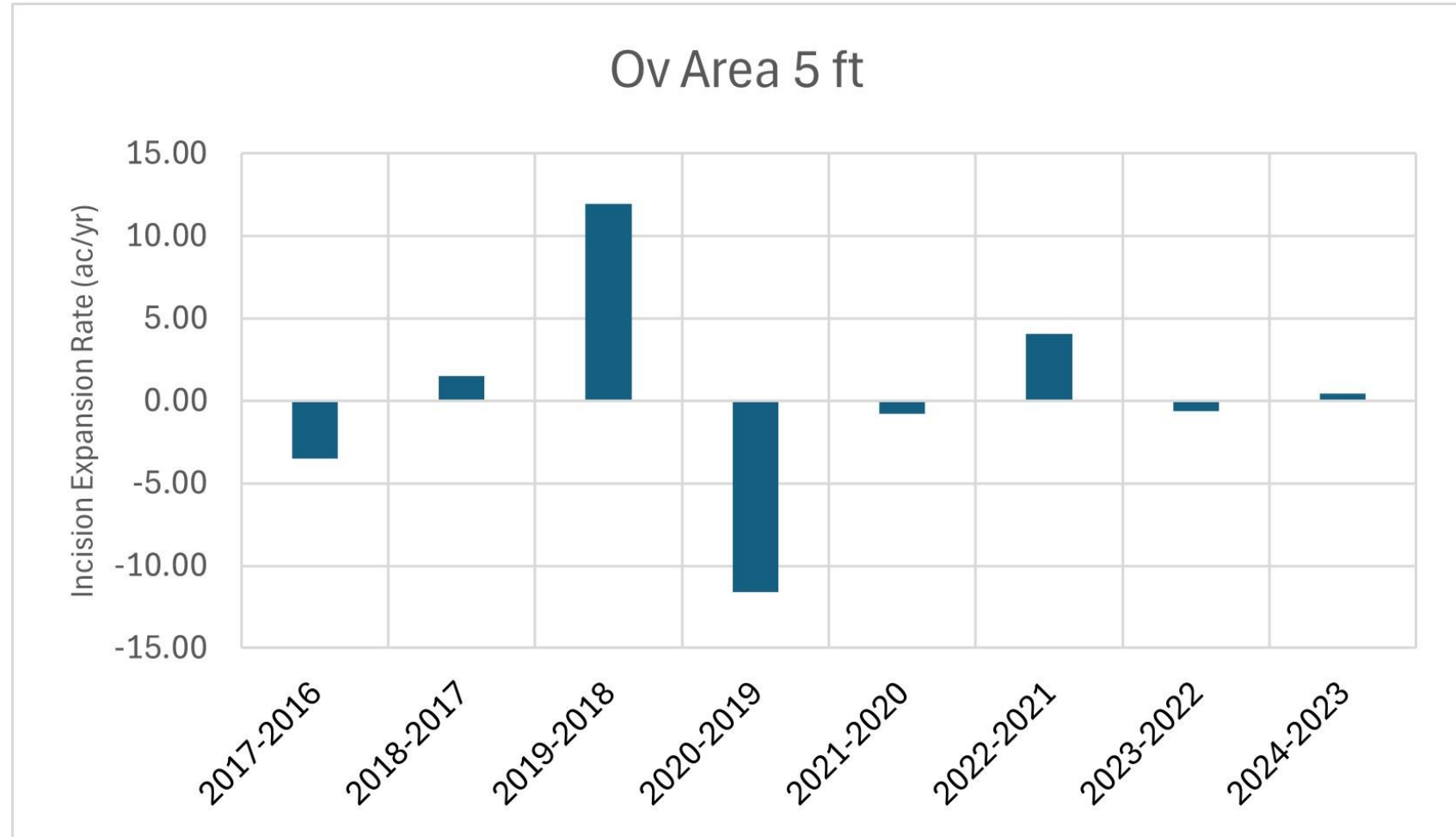
16.60 to 17.03 acres;
0.43 ac/yr expansion



Lidar Area Calculations

Summed **area** of 5 foot or deeper class downstream of Overton Bridge = almost no change

14.20 to 14.28 acres;
0.08 ac/yr expansion



Summary

What did we learn from the 2024 lidar and aerial photos?

- In a typical (non-wet) year, we observed typical channel morphology
- REM analysis very similar to past years – no change in incisional area #s
- 2023 to 2024 changes in-line with past data
- US of 70K still laterally eroding, 70K continues to be transition location

More detailed report for next TAC meeting