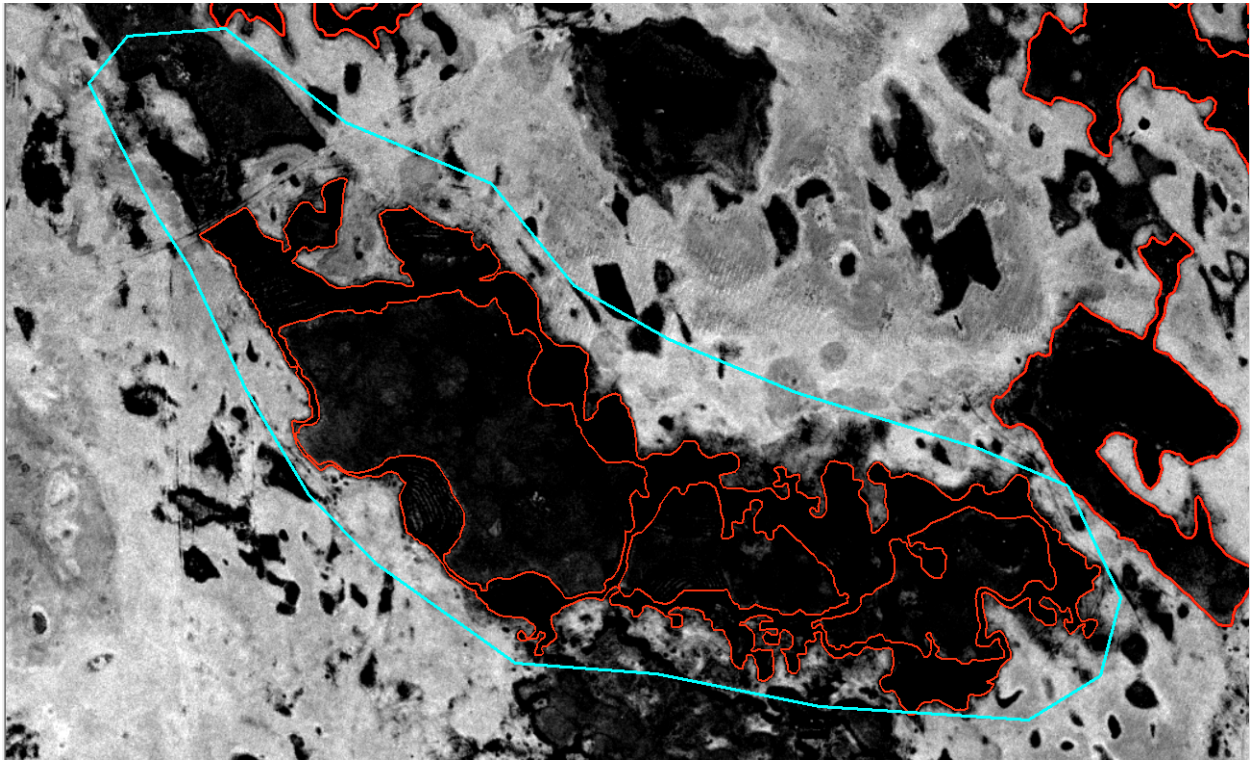


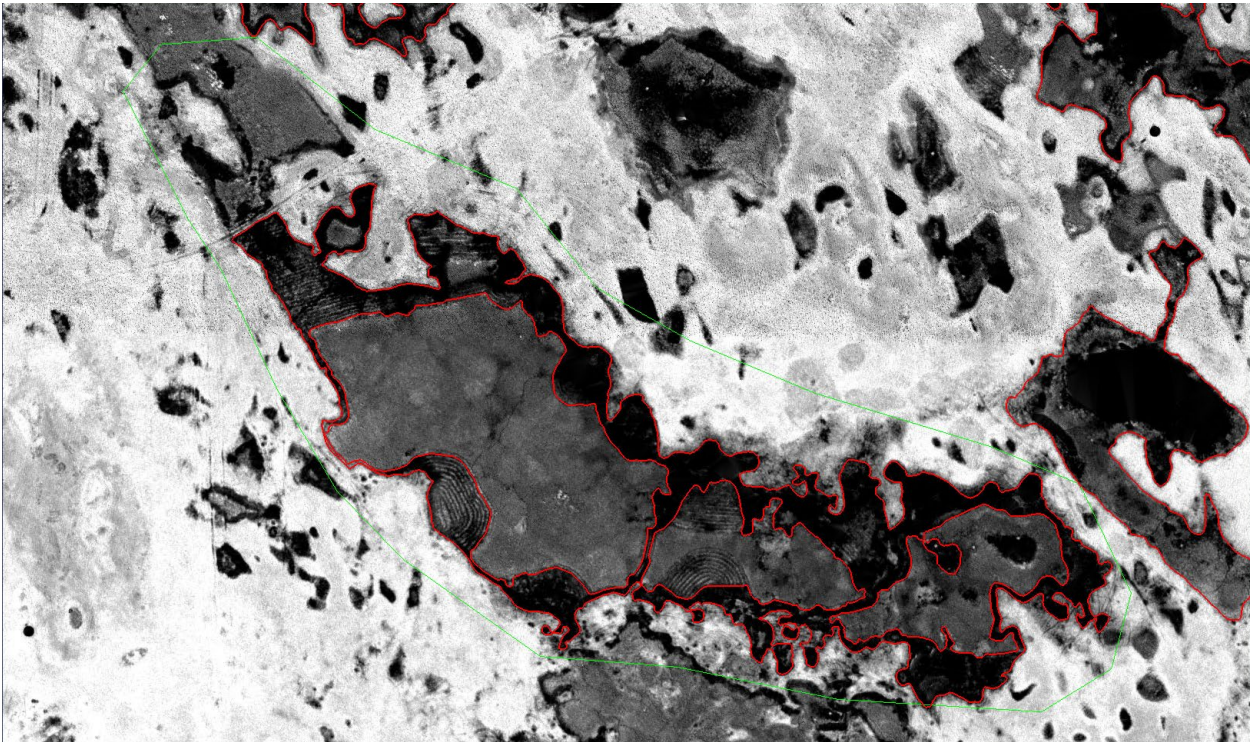
USGS – NE Cherry Brown Custer Partial (Weather conditions, 8-bit vs 16-bit intensity vs elevation color-ramp)

Excessive hydro features – Due to recent rainfalls at the time of acquisition, (03/19/2021 to 04/13/2021 local time) there is significant number of hydrographic features. This has made the project extremely challenging to collect the hydrographic features, as there is tremendous amount of standing and draining water. When digitizing/collecting these hydrographic features, a variety of methods are used to display and represent these features. Intensity should not be the only viewable method when reviewing/collecting the horizontal placement of the vectors. As shorelines are saturated with water, the lidar return will have a very low intensity and it will appear very dark in the 8-bit intensity imagery as it is rescaled from 16-bit lidar. Using the lidar that is 16-bit intensity will potentially display additional detail, the color-ramp will illustrate what is happening in greater detail, whether it is standing water or draining. Below are several examples of 8-bit, 16-bit, color ramp, and ArcGIS base map imagery to assist in interpreting the hydro graphic features.

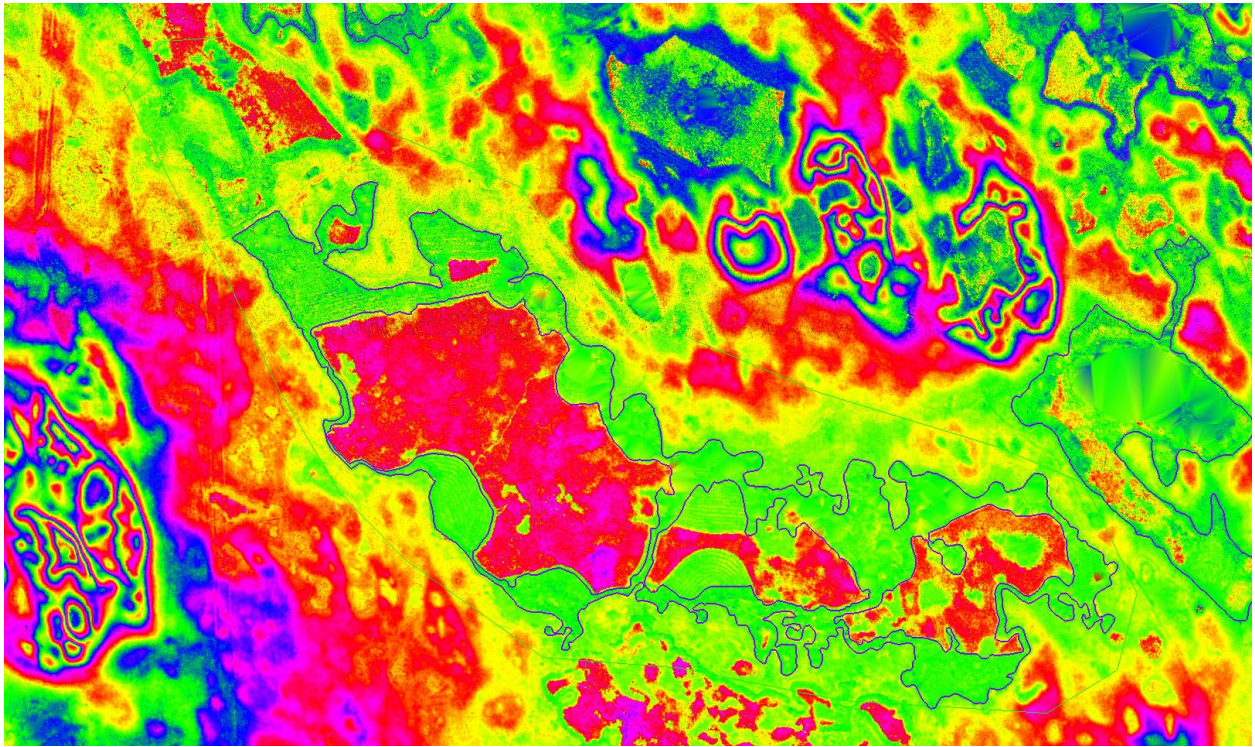
Error ID 4527, # 1 – Breakline was removed from final delivery.



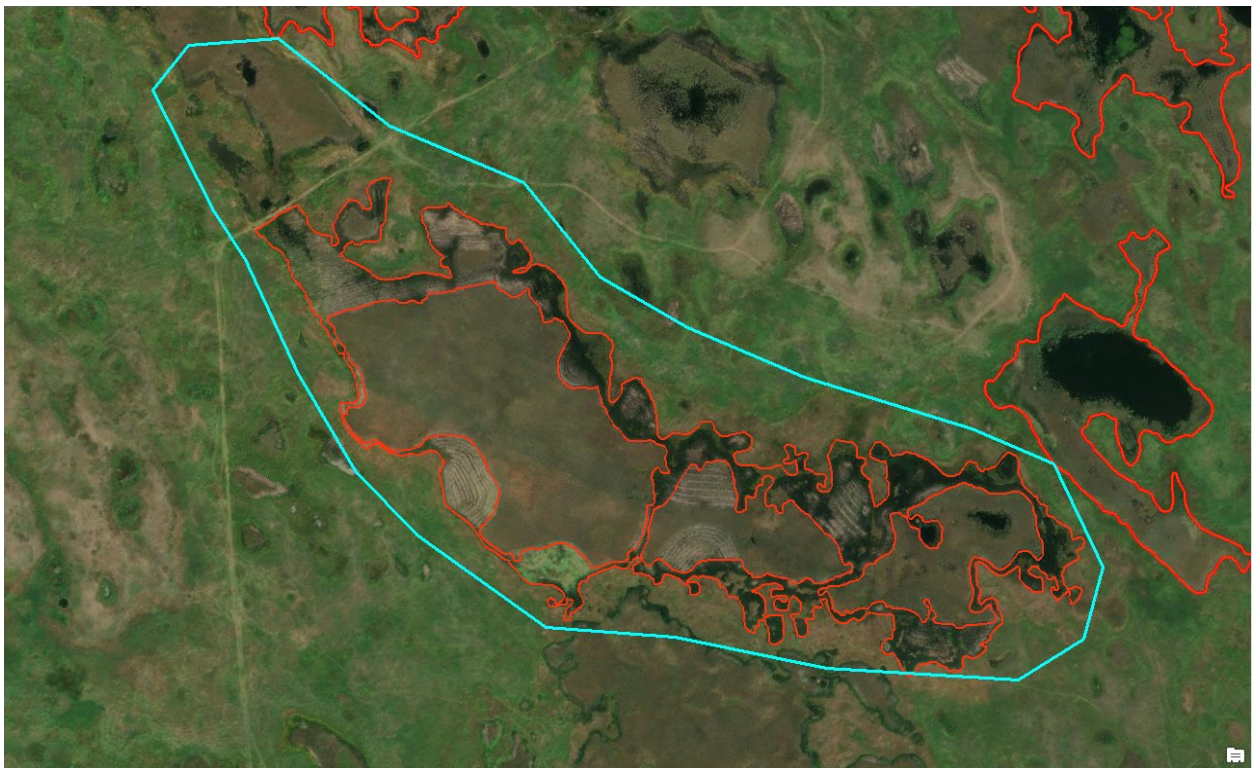
16-bit intensity – Reveals significant additional detail.



Color by elevation - Color gradient is 0.3m, approximately a foot, showing elevation differences.

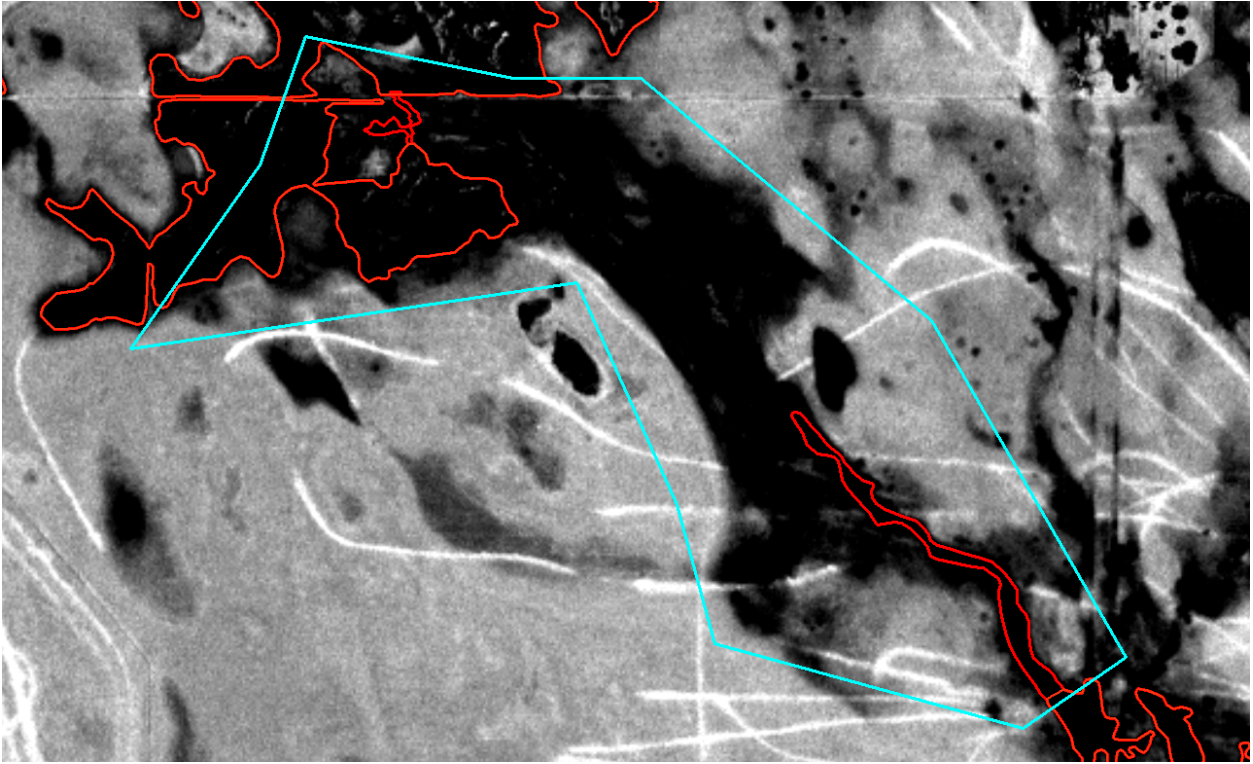


ArcGIS base map imagery (Imagery date - 8/27/2020)

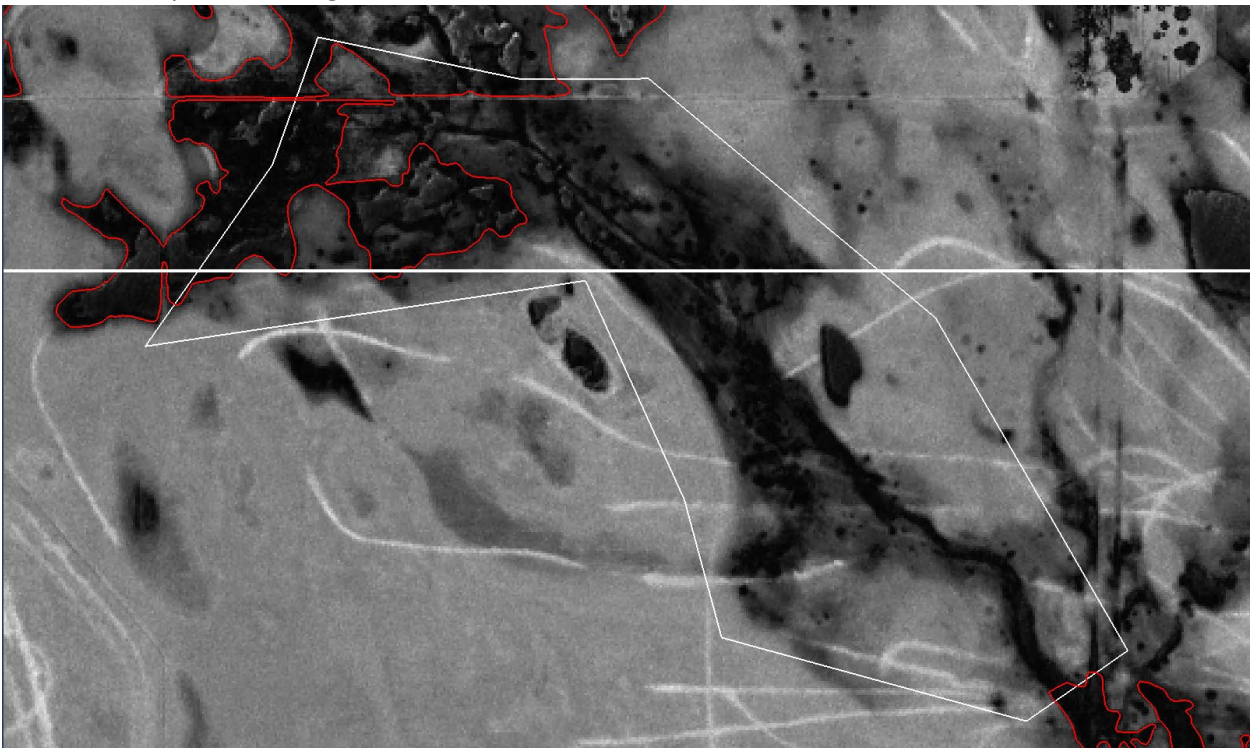


Error ID – 4529, # 5 – No additional breaks were added to join existing hydro.

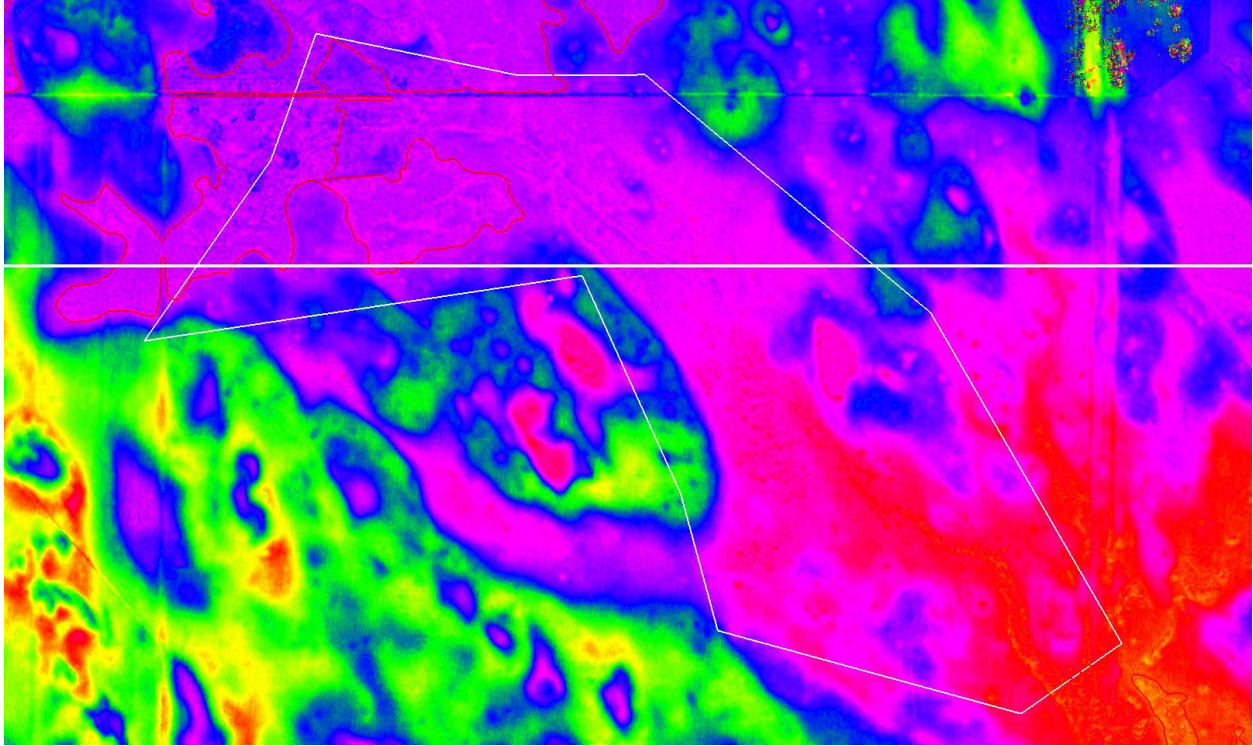
8-bit intensity – Degrades the detail of the intensity image.



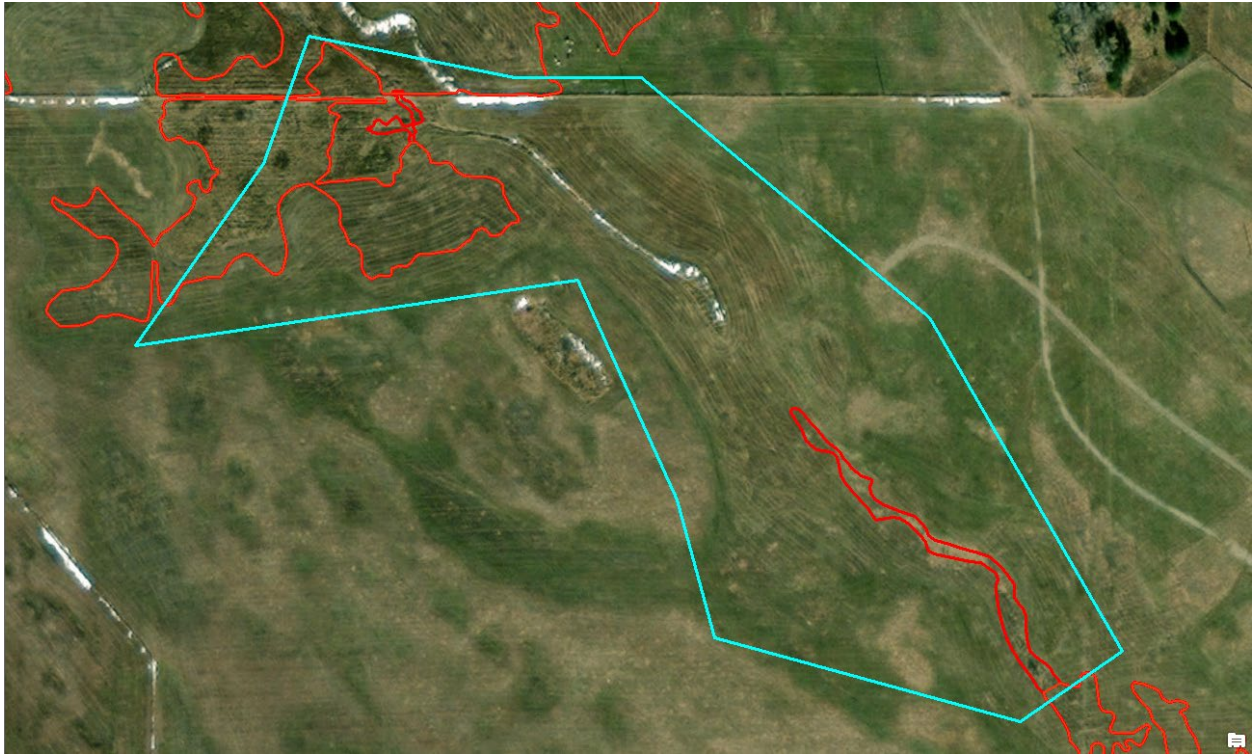
16-bit intensity – Reveals significant additional detail.



Color by elevation - Color gradient is 0.3m, approximately a foot, showing elevation differences.

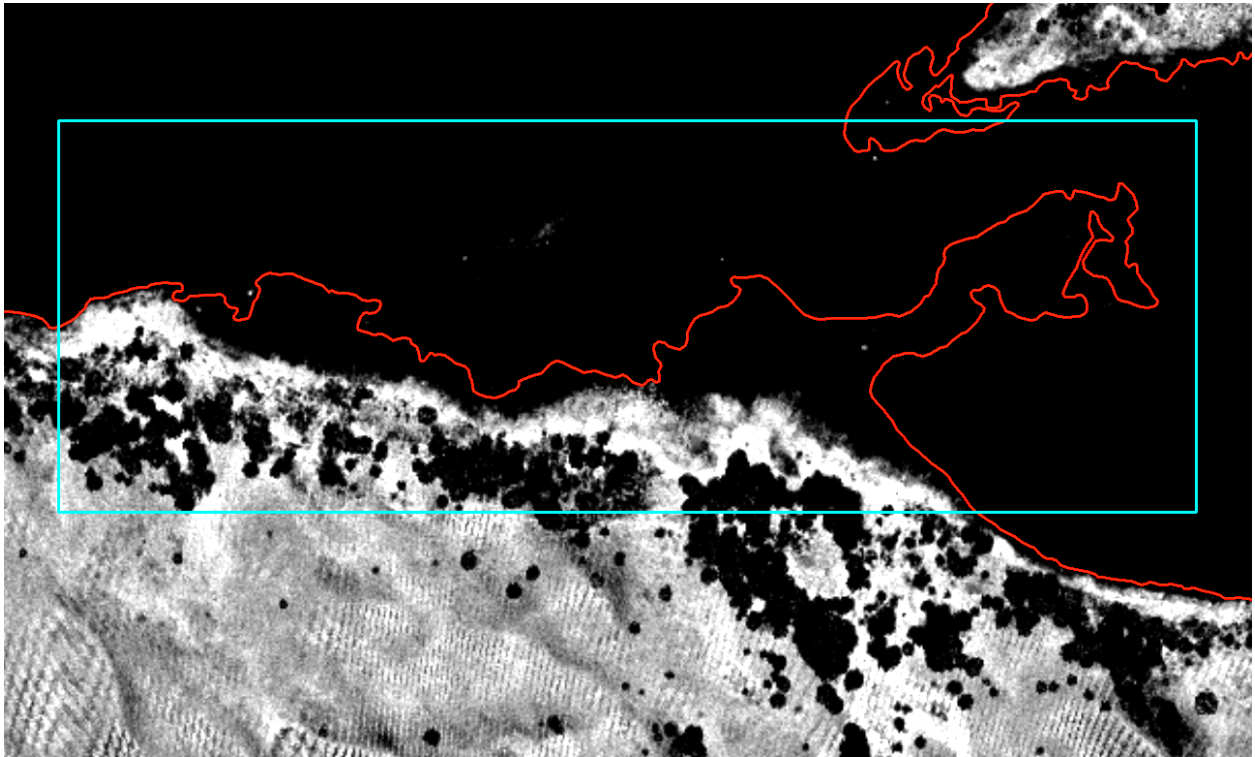


ArcGIS base map imagery. (Imagery date – 10/30/2020)

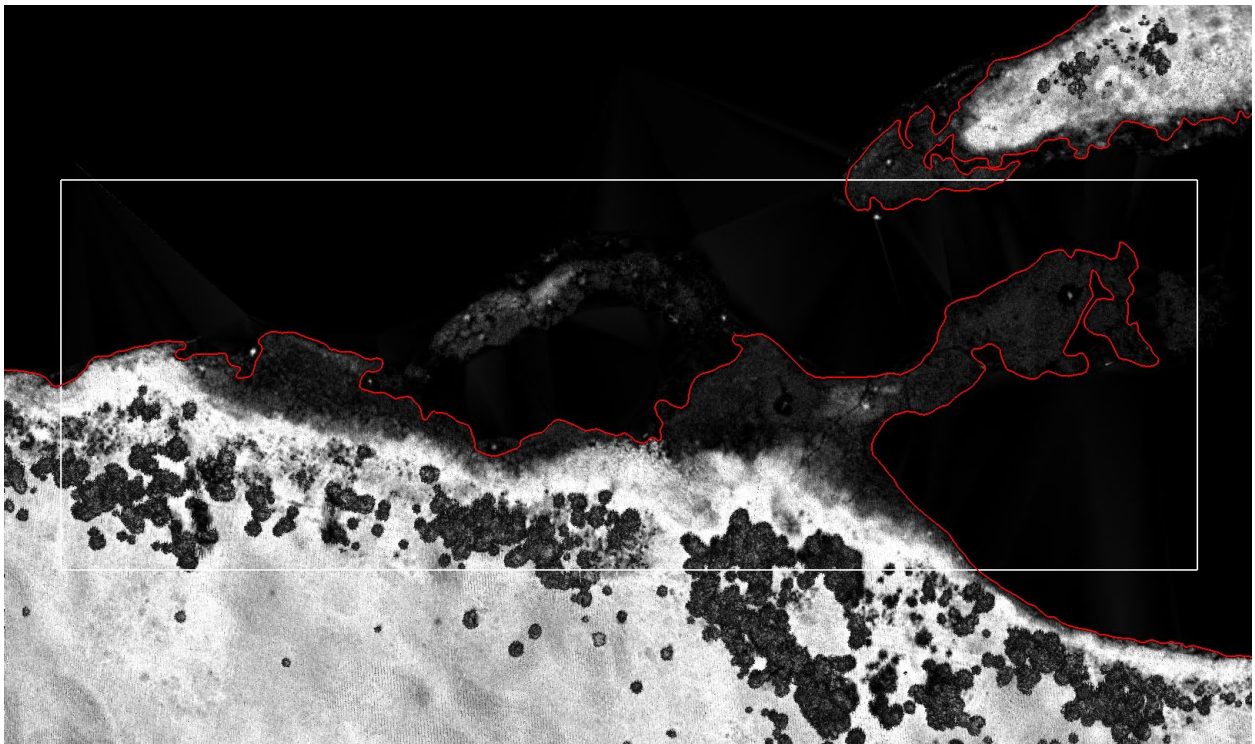


Error ID – 4529, # 4 – No change to the breakline was made

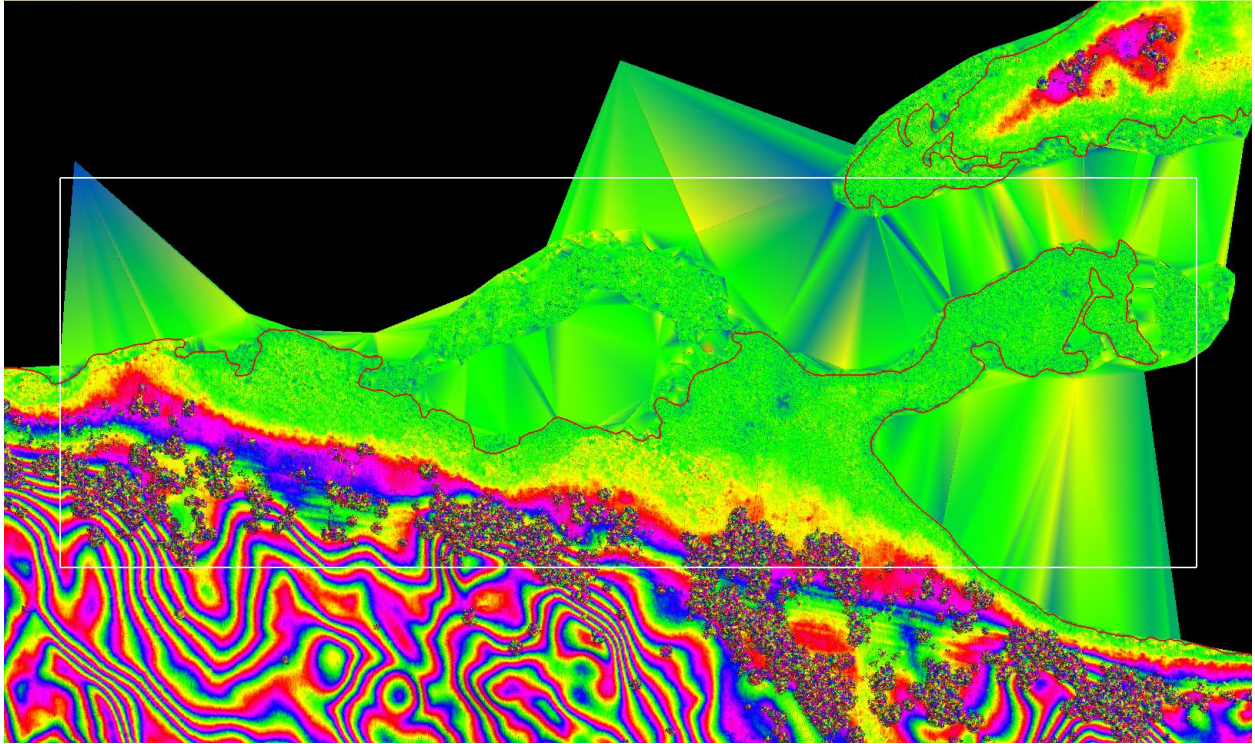
8-bit intensity – Degrades the detail of the intensity image.



16-bit intensity – Reveals additional detail.



Color by elevation - Color gradient is 0.3m, approximately a foot, showing elevation differences.

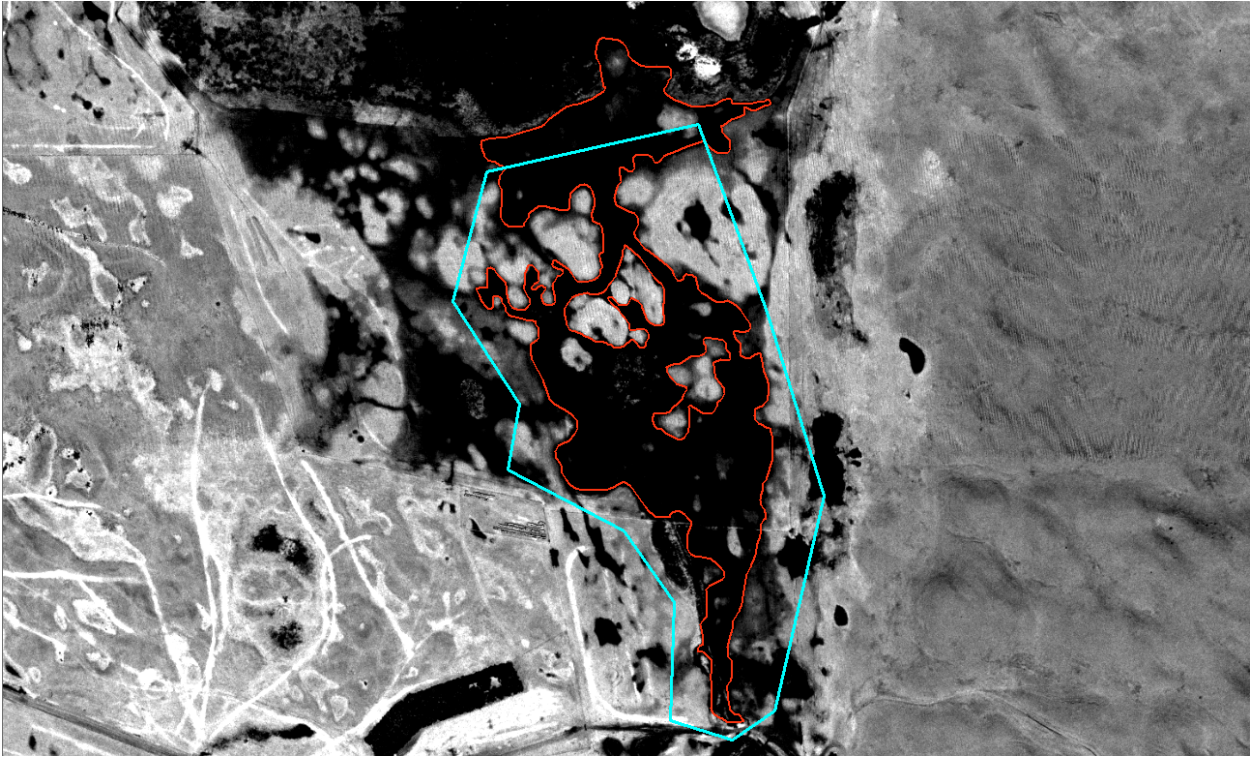


ArcGIS base map imagery. (Imagery date – 9/6/2017)

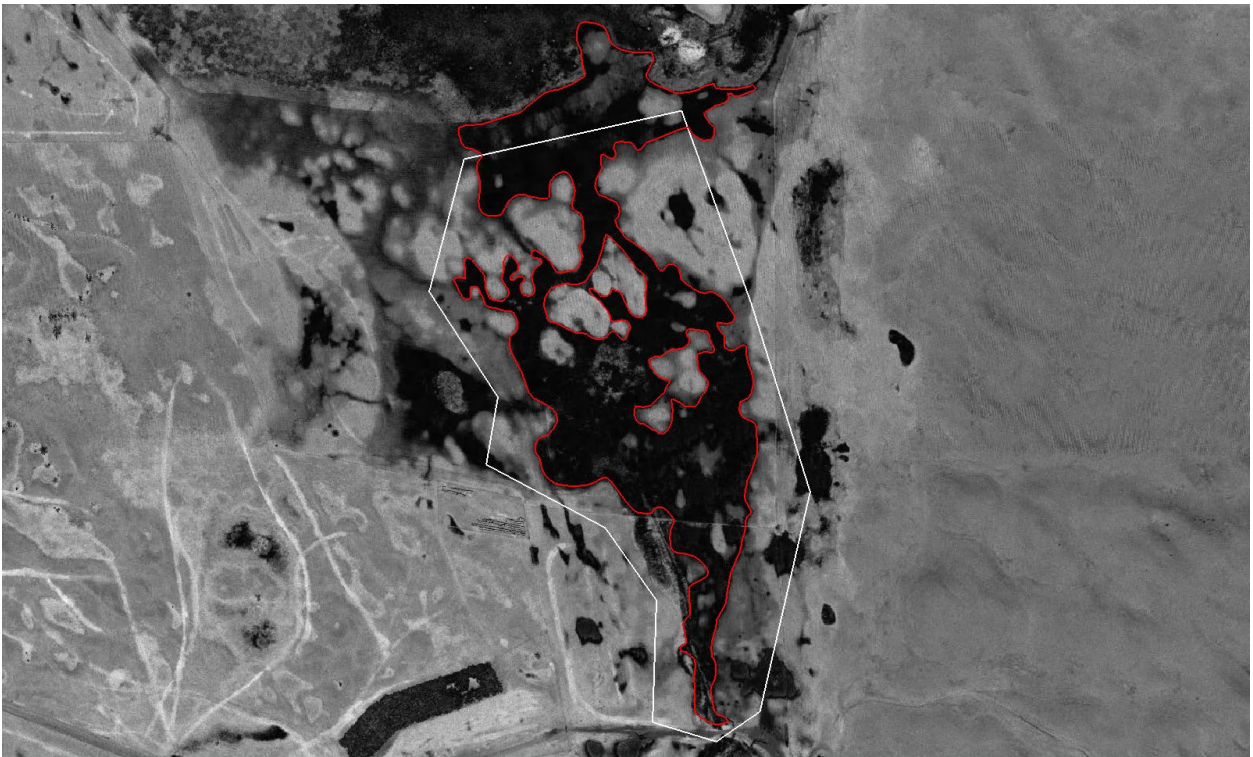


Error ID – 4528, # 1 – Breakline was removed from final delivery.

8-bit intensity – Degrades the detail of the intensity image.

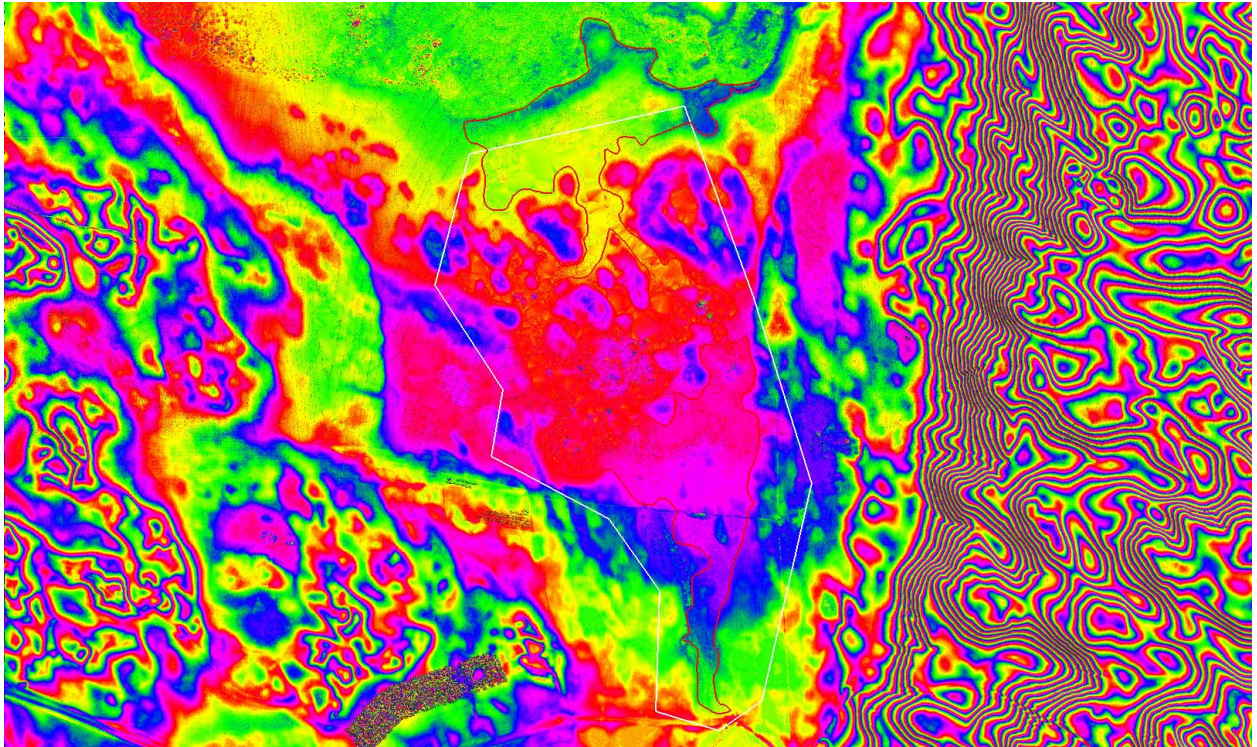


16-bit intensity – Reveals additional detail.





Color by elevation - Color gradient is 0.3m, approximately a foot. This is not a lake rather flooded area, draining to a river.



ArcGIS base map imagery. (Imagery date – 6/11/2017)

