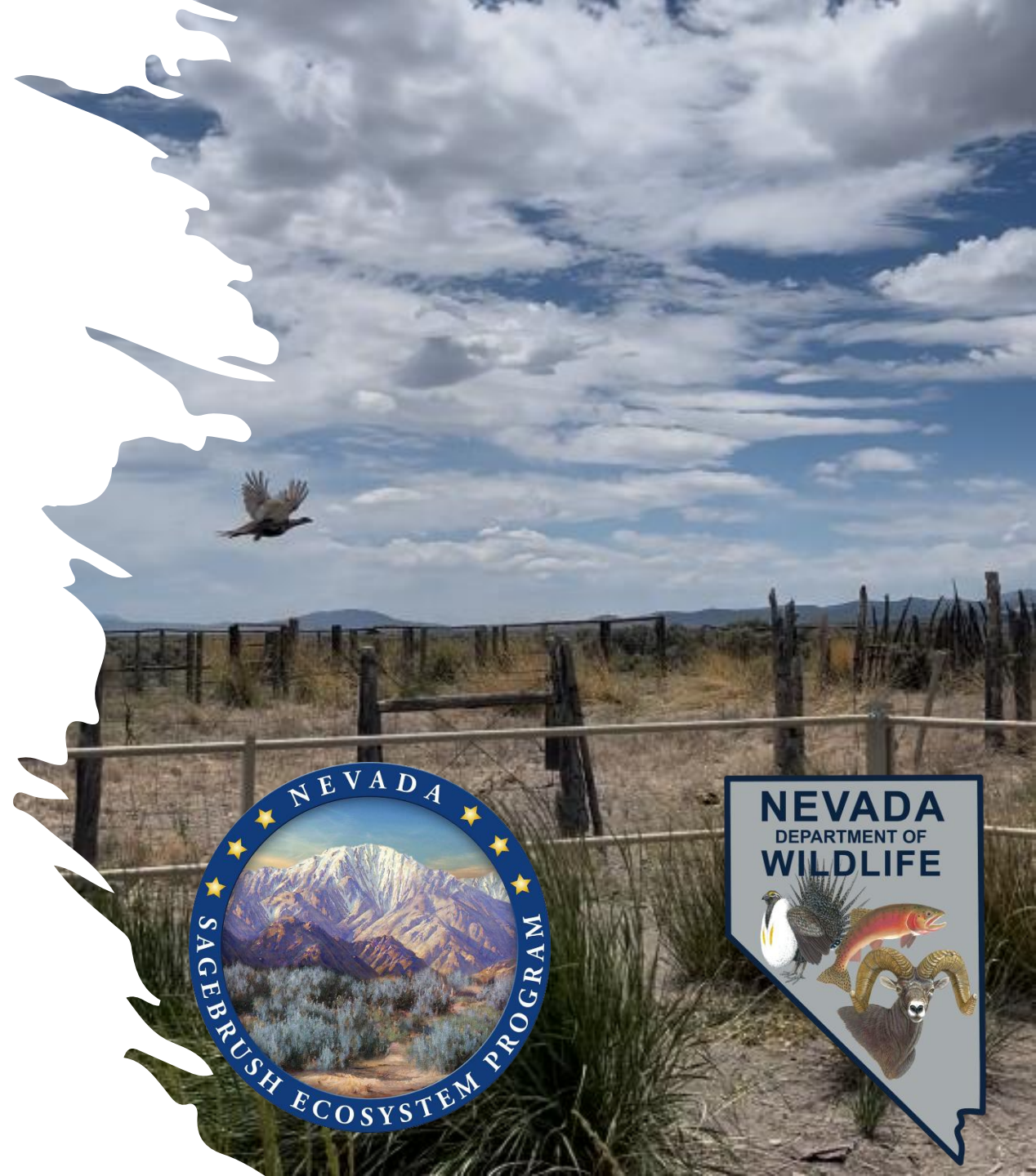


# SETT Roles and Responsibilities: Nevada Department of Wildlife Representative

Presented by: Cheyenne Acevedo

Sagebrush Ecosystem Council Meeting  
April 17, 2025



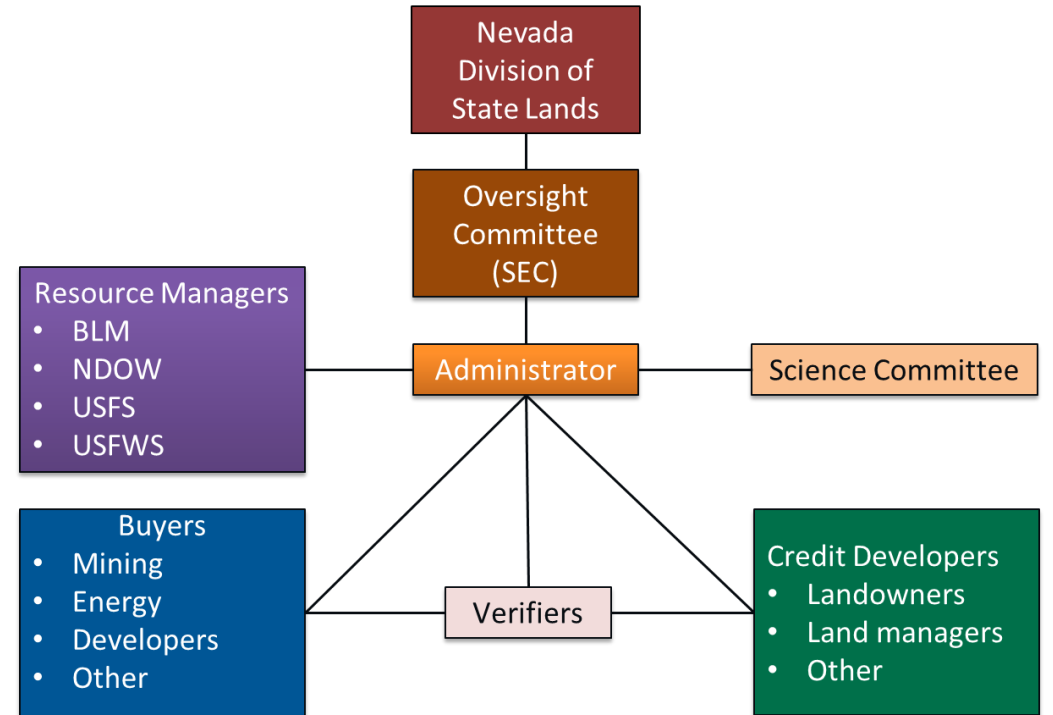
# Today's Topics

- NDOW Roles and Responsibilities
- General Overview of the Debit Project Process in the CCS
- Run through the GIS and HQT tools for a Debit Project



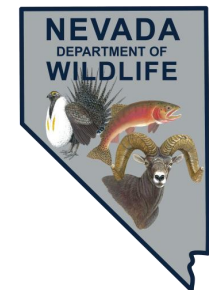


# Organizational Structure



# SETT Structure

- **Multidisciplinary team** established to implement the Nevada Conservation Credit System
- Composed of representatives from three state agencies:
  - **Nevada Department of Conservation and Natural Resources**
    - Director's Office – **Program Manager**
    - Division of Forestry – **Team Member**
    - Division of State Lands – **Team Member**
  - **Nevada Department of Agriculture – Team Member**
  - **Nevada Department of Wildlife – Team Member**





# General Responsibilities – NDOW Member

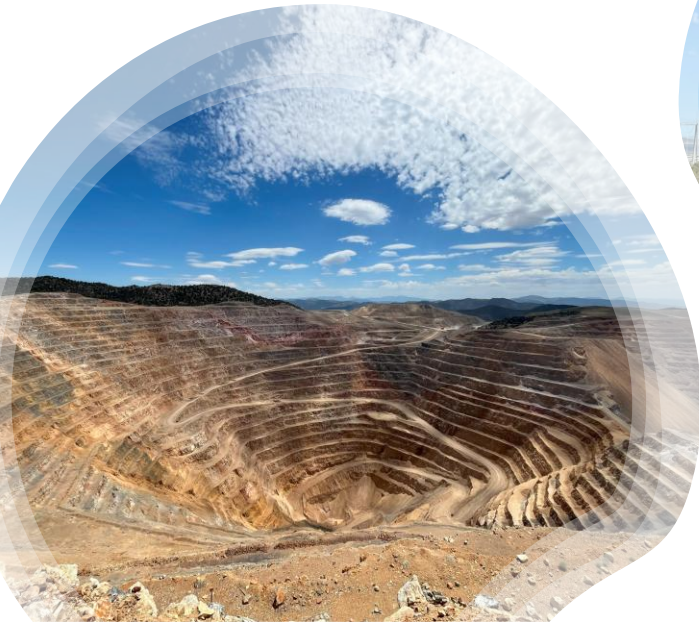
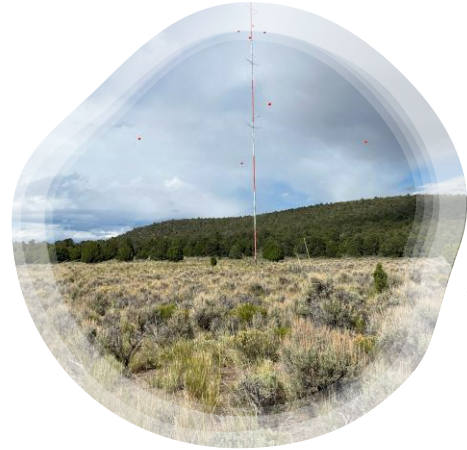
- Debit Projects
- Strategic Action Plan
- Greater Sage-grouse Expertise
- Collaboration (e.g., WAFWA, Mitigation Summit)
- Debit Projects End-of-Life Management (Closure/Rehabilitation)
- Update the User's Guide, HQT, and Data Package (Debit)
- Annual Layers Updates for HQT Tools
- CCS/Tools Science Updates





# Debit Project Involvement

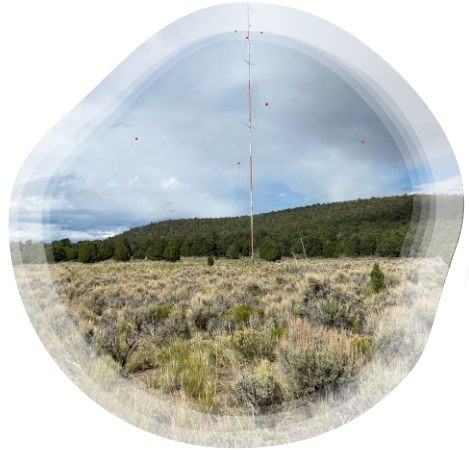
- Attend cooperating agency meetings during project planning (discussing project aspects, NEPA timelines, project siting to reduce impacts, etc.)
- Provide relevant comments on NEPA documents during administrative and public comment periods
- Enter projects into the CCS once an NOI is filed
- Provide clarification on project qualification and initial debit estimates to project proponents
- Conduct pre-field QA and generate transects for fieldwork
- Perform full desktop analysis if the proponent opts out of field verification
  - Assume Greater Sage-Grouse habitat quality is 100%
  - Beneficial for small-impact projects where fieldwork costs outweigh the cost of offsetting the maximum possible debit amount





# Debit Project Involvement

- Conduct post-field QA for projects that choose field verification
- Issue the final debit estimate upon NEPA finalization
- Log transactions/transfers and assist with paperwork
- Issue Notification of Compliance with NAC 232.400–480
- Work with proponents on reclamation (not yet reached this stage for any projects)







# Strategic Action Plan

- The Strategic Action Plan (SAP) complements the 2019 State Plan by outlining its implementation through the Sagebrush Ecosystem Program over the next 5–10 years.
- The SAP provides a framework for:
  - **Planning and goal setting**
  - **Prioritizing rehabilitation, restoration, and conservation projects**
  - **Guiding best management practices to improve sagebrush ecosystem habitat and support Greater Sage-Grouse (GRSG) populations across Nevada**
- Updated approximately every five years
- Serves as the SETT’s guiding document
- Next updated draft expected in late 2025

# Greater Sage Grouse

- Sage-grouse expert on SETT
  - Responsible for tracking the latest research and conservation science
- Attend **WAFWA's Greater Sage-Grouse & Columbia Sharp-tailed Grouse Conference** every two years
- Use emerging research to inform:
  - CCS & HQT tool updates
  - Science advancements in the program
  - Strategic conservation planning
- Collaborate with agencies, researchers, and partners to integrate best practices for GRSG conservation





# Debit Projects End of Life Management

## Closure and Rehabilitation Requirements

- Debit Projects must restore the land to **pre-project habitat quality** at closure.
- **Closure and rehabilitation procedures** for the CCS are **in development**.
- A formal **rehabilitation plan** will be required as part of project decommissioning.

## In Development:

- Criteria for successful habitat restoration
- Monitoring and adaptive management expectations
- Coordination with land management agencies
- Timelines for restoration and verification

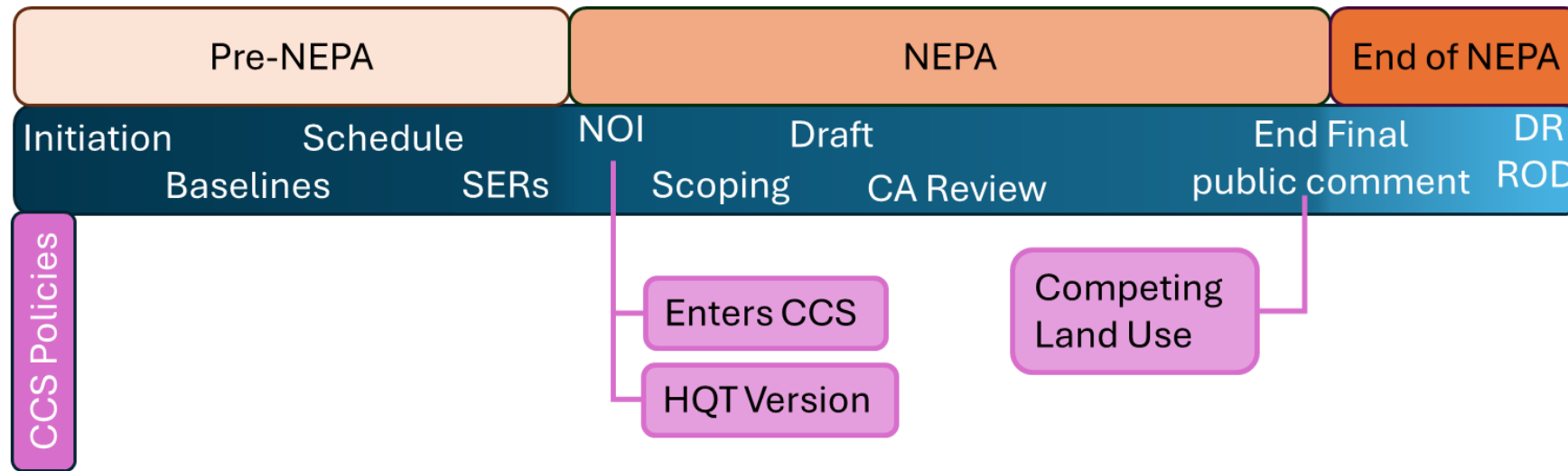






# Debit Project Process Overview

- CCS policies and the NEPA process
- General Estimate
- Pre-field Submission
- Field Work
- Post-field submission
- Final Debit Estimate & QA
- Debit Project Compliance
- End of Life
- GIS and HQT Tools



# CCS Policies and the NEPA Process

- Debit Project **enters the CCS and commits to an HQT version** at the time of public notice (start of the NEPA clock).
  - If a new HQT version is released before a final debit obligation is issued, the proponent **may opt to update** but is not required to do so.
- Projects become a **Competing Land Use, and debits are finalized** at the end of the final public comment period (end of the NEPA clock).



# Debit Projects and the CCS Timeline

- Major Milestones and deadlines
  - **January** – Verifier Selection
  - **March 15** – Pre-field project package submission
  - **April 15-June 30** – Conduct Fieldwork
  - **October 31** – Post-field project package submission
    - Flexible depending on completion of NEPA





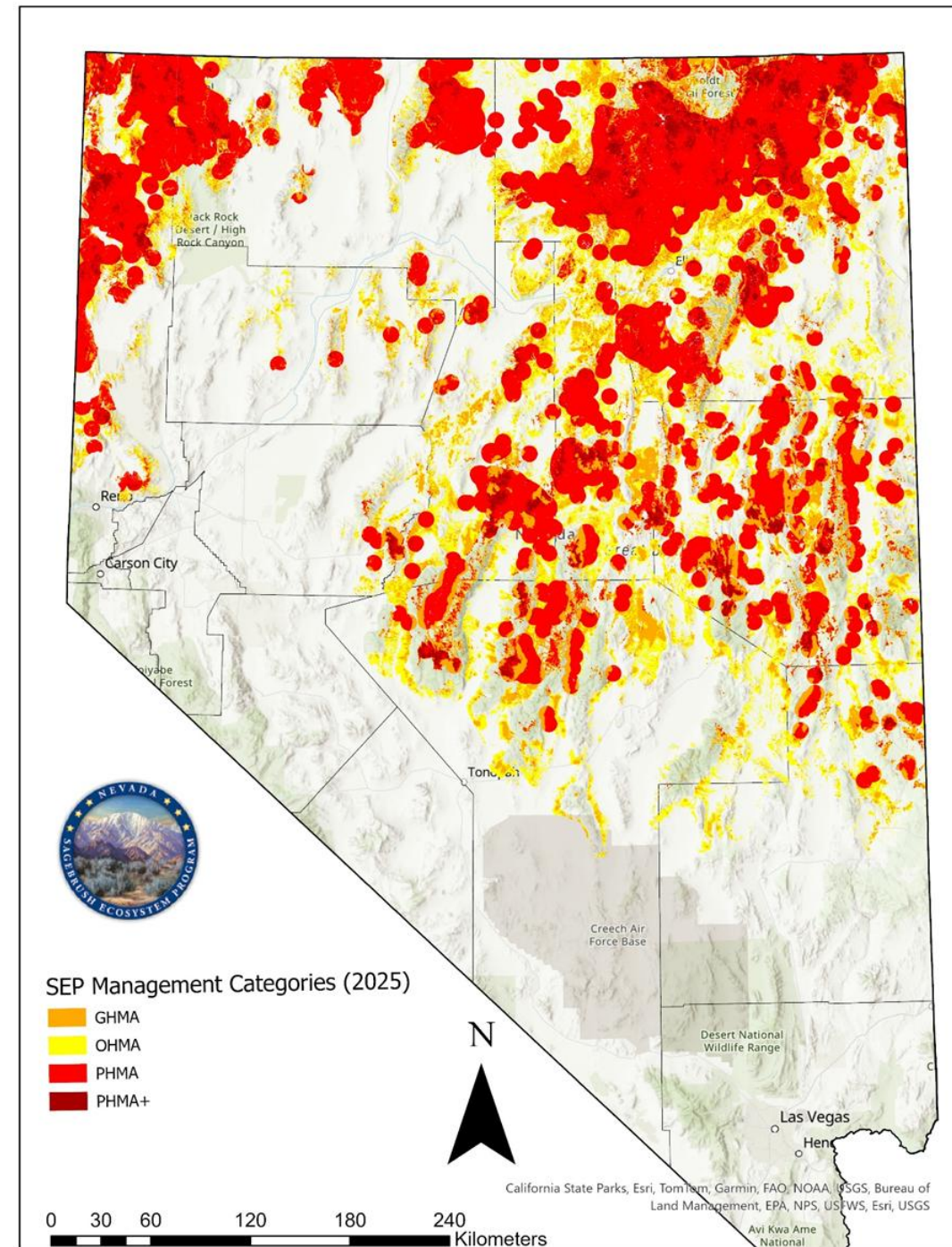
# When CCS Applies to Debit Projects

## Applicability Criteria (NAC 232.400-480):

- Projects that cause **anthropogenic disturbance**
- Occur **on public lands**
- In or within **6 km of Greater Sage-grouse habitat**

## Exemptions may apply to:

- Private lands or local/tribal jurisdictions
- Projects approved before CCS adoption
- <5-acre mineral exploration
- Routine agency activities or emergencies
- Public health and safety projects
- Projects with **de minimis** impacts



# Coordinating with the SETT During NEPA

- Coordination typically begins during **NEPA planning**
- Projects submit **boundary and disturbance footprint**
- SETT reviews for CCS applicability under **NAC 232.400–480**
- Official CCS process starts with **NOI or NEPA Public Notice**
- Required for eligible projects on **public lands**





# General Debit Estimate

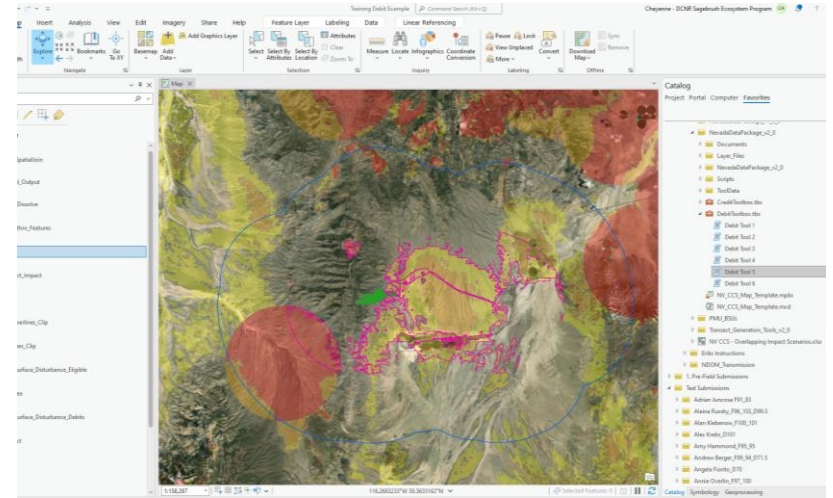
- Initiated once a project boundary is provided
- Layers run through HQT tools and calculator
- Produces a general debit estimate
- Helps inform NEPA avoidance/minimization strategies





# Desktop vs Field Assessment

- $\leq 10$  debits: Desktop-only assessment recommended
- $> 10$  debits: Field verification recommended
- Fieldwork conducted by certified verifiers
- Project timelines influence assessment type



# Pre-field Submission & QA

- Verifiers submit by **March 15**
- Includes:
  - Conflict of Interest form
  - Debit Project Review Form Part 1
  - Pre-field debit calculator
  - Map unit shapefiles
- SETT conducts pre-field QA and generates transects

## NEVADA CONSERVATION CREDIT SYSTEM

### PRE-FIELD SUBMISSION QUALITY ASSESSMENT FORM

This form is intended for use by the SETT to ensure that pre-field submissions for proposed credit and debit projects undergo a consistent Quality Assessment (QA) process. This pre-field QA process is intended to ensure project footprints, map units, and transects provided by certified verifiers are assessed by the SETT following the same process prior to the commitment of significant resources to complete field work.

#### SIGNATURE

The pre-field QA process has been completed and the information provided in this form is accurate to the best of my knowledge.

\_\_\_\_\_  
Credit System Administrator Name

\_\_\_\_\_  
Credit System Project Lead

\_\_\_\_\_  
Date of Completion

#### QA SUBMISSION STATUS

Please mark the applicable QA submission status below.

Acceptable

Requires revisions (describe)

#### PROJECT INFORMATION

Project Name \_\_\_\_\_

County \_\_\_\_\_ State **NV**

WAFWA Zone: \_\_\_\_\_ Biologically Significant Unit: \_\_\_\_\_ Population Management Unit: \_\_\_\_\_

#### PROJECT PROPONENT INFORMATION



# Field Season

- Field work: April 15 – June 30
- Transect measurements:
  - Forbs, grasses, shrub cover
  - Species ID (including invasives)
- Map unit and anthropogenic features may be updated



# Post-field Submission & QA

- Submitted by the end of October
- Includes:
  - Final debit calculator
  - Field datasheets
  - Photos
  - Updated map units
- SETT conducts a detailed QA review
- The QA process is a collaborative effort between the SETT, field verifiers, and GIS verifiers

## NEVADA CONSERVATION CREDIT SYSTEM DEBIT PROJECT QUALITY ASSESSMENT FORM

This Quality Assessment (QA) process is intended to validate a project's debit estimate provided by certified verifiers. The following debit estimate has been confirmed by the SETT and is valid for five years, under the current HQT version listed below, from the date of the earliest field collection. Any changes to the proposed disturbance footprint will require an updated HQT analysis to verify potential changes in calculated debits. Any revisions within the five-year time frame will be completed in the HQT version listed below. A formal QA letter will be issued during the final stages of the NEPA process (to ensure additional HQT analysis is no longer required) that will incorporate the debit calculation, range of credit obligation, and other project details.

### SIGNATURE

The full Quality Assessment process has been completed and the information provided in this form is accurate to the best of my knowledge.

\_\_\_\_\_  
Credit System Administrator

\_\_\_\_\_  
Credit System Project Lead

\_\_\_\_\_  
Date of QA Completion

### QA SUBMISSION STATUS

\_\_\_\_\_  
Debits calculated (Term/Perm)

\_\_\_\_\_  
Version/Year of Earliest Field Collection

\_\_\_\_\_  
Acres Direct/Indirect

### PROJECT INFORMATION

Project Name \_\_\_\_\_ Term Length \_\_\_\_\_

County \_\_\_\_\_ State \_\_\_\_\_

WAFWA Zone: \_\_\_\_\_ Biologically Significant Unit: \_\_\_\_\_ Population Management Unit: \_\_\_\_\_

### PROJECT PROPONENT INFORMATION



An aerial photograph of a desert landscape. In the foreground, there is a power substation with several metal structures and a fenced area. A road curves through the middle ground. In the background, there is a large body of water, possibly a reservoir or lake, surrounded by a low wall. The sky is clear and blue.

# Final Debit Estimate & QA

- A **final submission** may differ from the post-field submission
- Final assessments can be **desktop-only** or **field-based**
- The SETT conducts a **Final Quality Assessment (QA)** after receiving the submission
- **Final debit obligation is locked** only after:
  - The close of the Final EIS/EA comment period, or
  - Signature of a CX/DNA by BLM, or
  - State equivalent (for state-owned land)
- Final submission must include:
  - Project shapefile (matching NEPA docs)
  - Project Assessment Submission Form
  - HQT calculator + field data (if applicable)
- SETT issues:
  - **Final QA Form (signed)**
  - **Formal QA Letter with final debit amount (signed)**
- Once issued, a **credit transaction can occur**



# Debit Project Transactions

- **Transactions for debit projects are generally more straightforward** than for credits
- **Debit Review Form 2** completed after Final QA—summarizes projected term and permanent debits
- **Credit obligation  $\neq$  Total debits**—due to proximity ratio and phasing factor (optional)
- **Proponents must coordinate with the SETT** when selecting credit sources
- **Credit Purchase Agreements and Debit Review Form 3** finalize the transaction
- **Transactions occur between parties**—outside of SETT and Registry systems
- **Phased credit purchasing is allowed**, but must follow a defined structure
  - One-third of term + all permanent debits required before breaking ground
  - Up to two additional phases allowed
  - All credits must be acquired within 10 years or within 1/3 of the project term







# Debit Project Compliance

- **Compliance Letter issued** after initial and final credit purchase
- Confirms compensatory mitigation obligation has been fulfilled
- **Proponent is in full compliance** with NAC 232.400–232.480
- No additional sage-grouse mitigation quantification required by SETT
- **Future phases or new disturbance** require updated HQT analysis



# Debit Projects End of Life Management

## Closure & Rehabilitation

- All **Debit Projects** require credits for their duration, plus an additional **10 years** for reclamation
- **Temporary disturbances (<10 years)** have a **minimum 10-year term duration**
- Debit Projects can be **term-based** or **in-perpetuity**, depending on whether they are expected to restore pre-project **GRSG habitat function**

## Term Debit Rehabilitation Requirements

- Third-party verification is required to confirm habitat recovery to pre-project function.
- If recovery is incomplete:
  - **Additional credits** are required to cover the remaining impact, or
  - The term may be **extended** with additional credits until recovery is achieved.
- The **closure and rehabilitation process** is still being developed for the CCS







# GIS - HQT Tools and Process





Conservation Credit System

# USER'S GUIDE

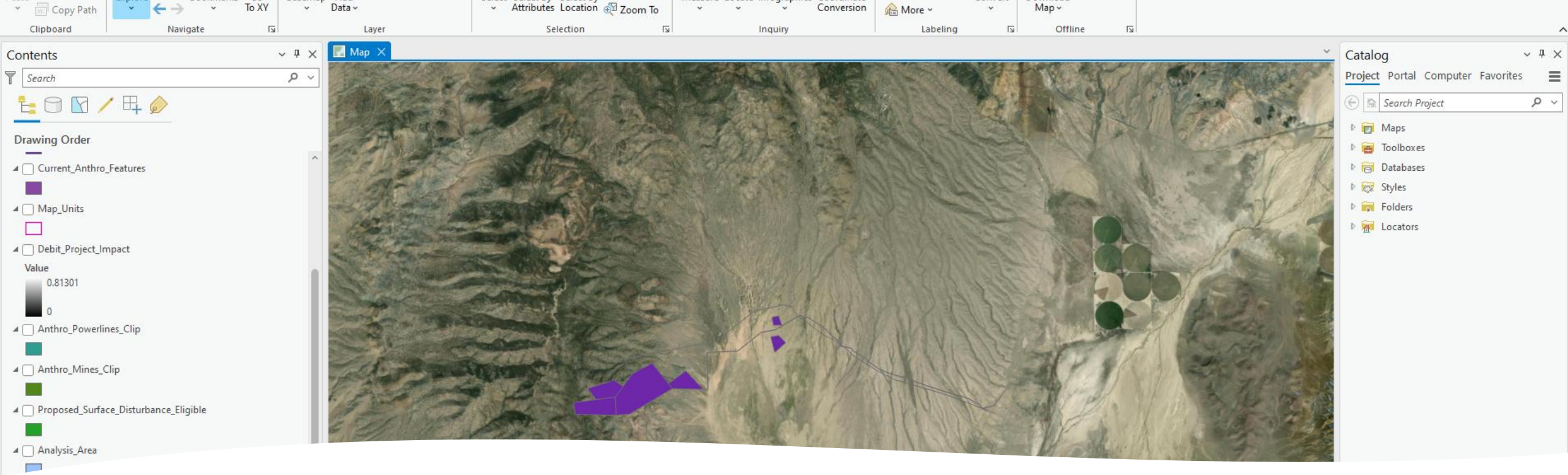
January 2025

Version 2.0

## What Happens Behind the Scenes

- A quick look at the GIS side of the CCS and how debits are generated
  - Using the HQT Tool & Process
  - SETT and verifiers
- More detail available in the ***HQT Version 2.0 User's Guide***



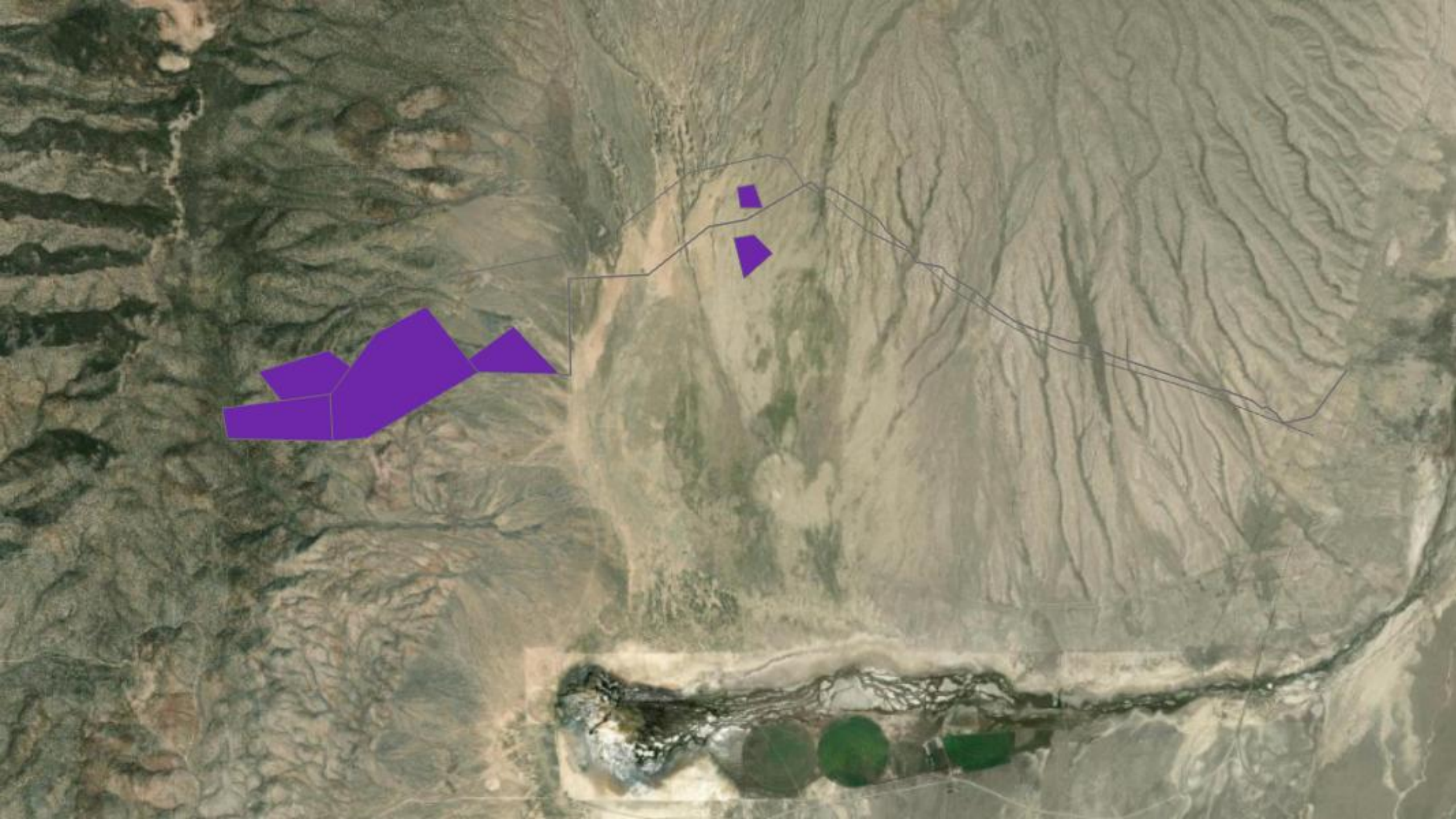


# Starting a GIS Review – Project Footprint

Proponent submits:

- Project boundary & direct disturbance footprint
- GIS shapefile showing all relevant features
- SETT pulls project into GIS for spatial review
- Example shown: Proposed **mine site** (in dark purple)

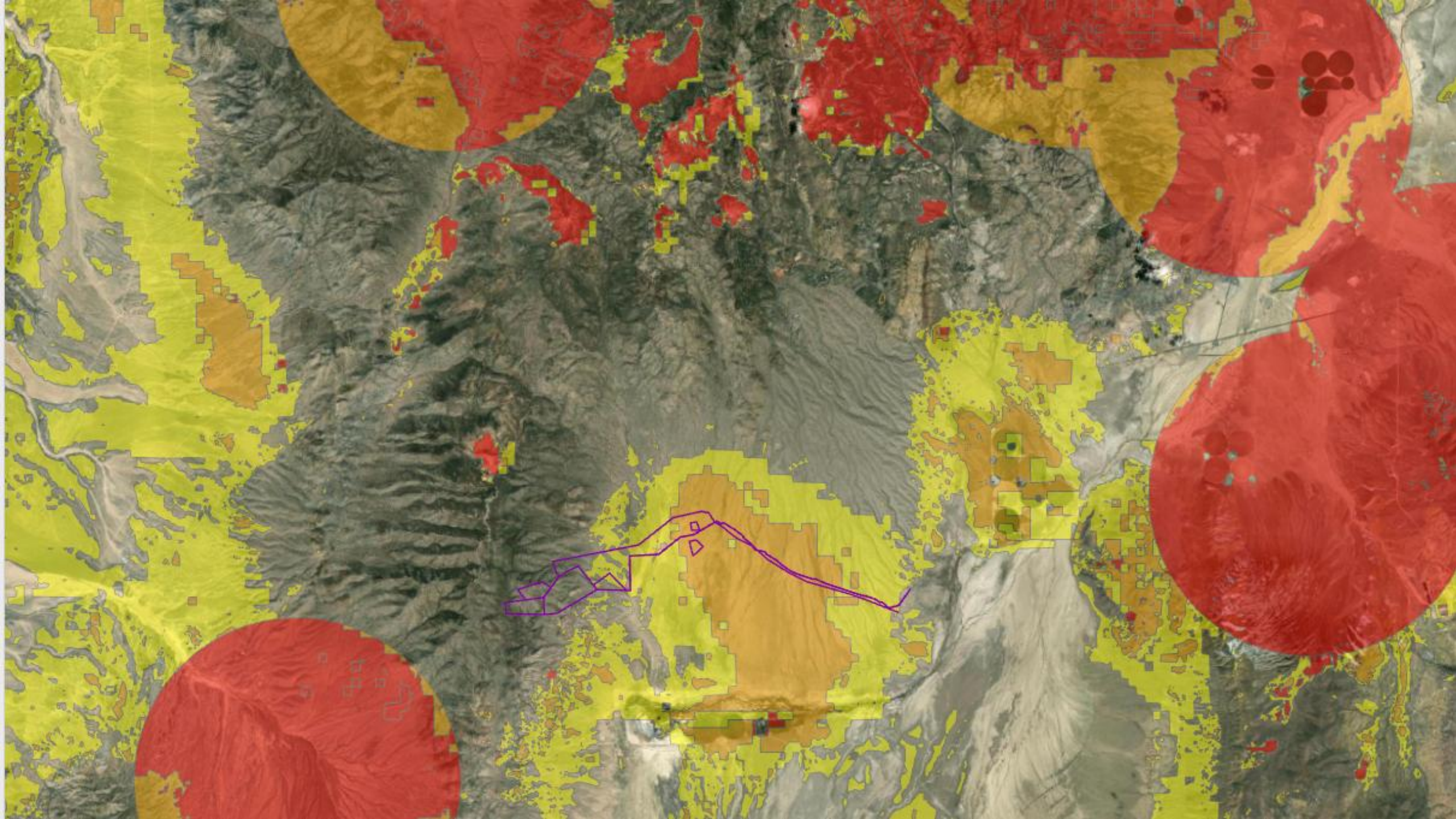














Map Insert Analysis View Edit Imagery Share Help

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Swipe Flicker 500.0 ms

Symbology Stretch Type DRA Lock stats

Resampling Type Band Combination Masking

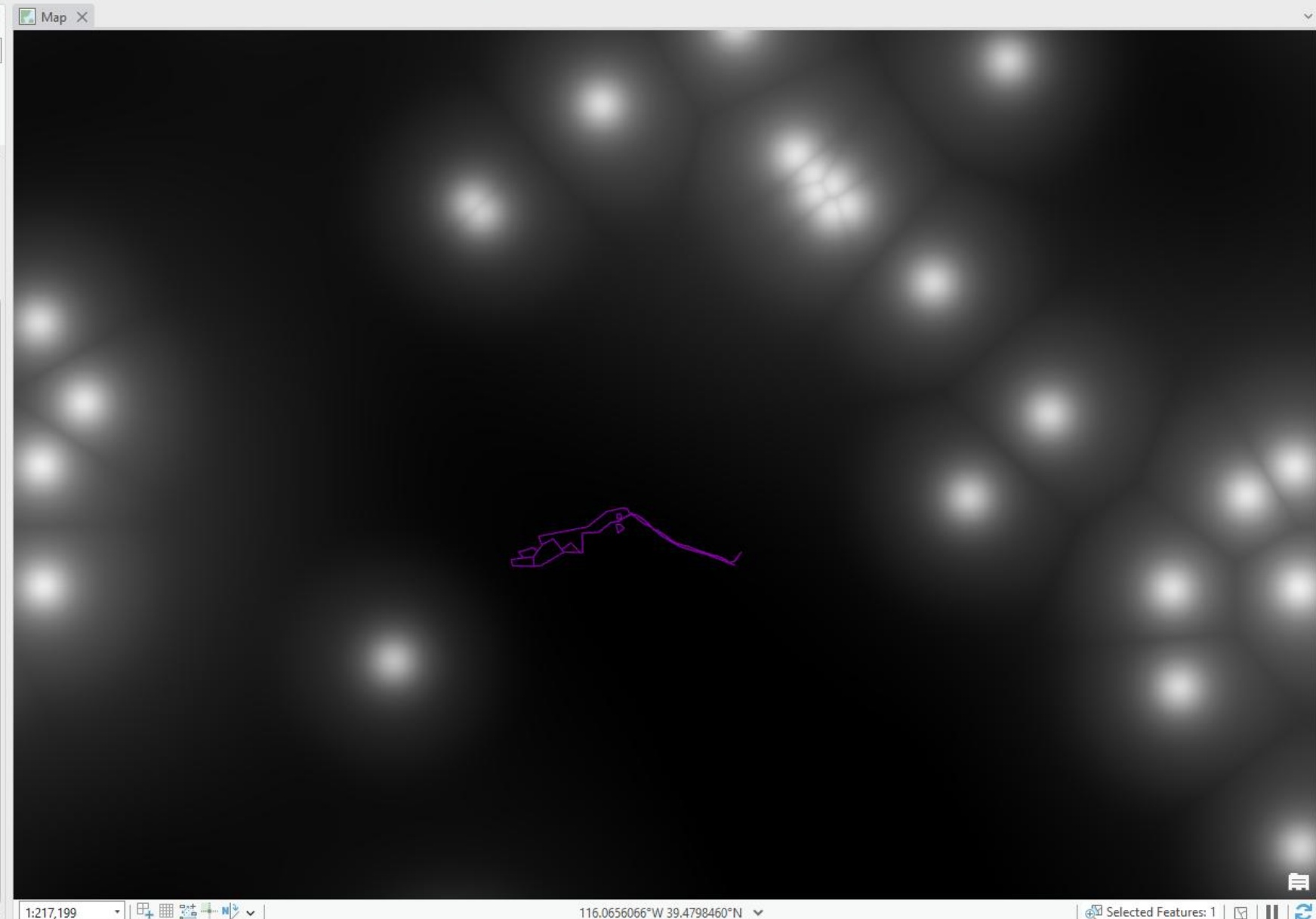
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Rotation Type

Order

- Anthro\_Features
- its
- Project\_Impact
- 1
- Powerlines\_Clip
- Mines\_Clip
- d\_Surface\_Disturbance\_Eligible
- \_Area
- d\_Surface\_Disturbance\_Debits
- Project
- Cat
- A
- A
- A
- hal\_2024\_NV.tif

Imagery



Catalog

Project Portal Computer Favorites

Add Item

- SEP data
  - Conservation Credit System
    - 2024 HMA Raster
    - Annual\_Updated\_Layers
    - Archive
    - ASUI
    - NevadaCreditSummaryTool\_v
    - NevadaDataPackage\_v1\_7\_0
    - NevadaDataPackage\_v1\_8\_3
    - NevadaDataPackage\_v2\_0
      - Documents
      - Layer\_Files
      - NevadaDataPackage\_v2\_0
      - Scripts
      - ToolData
      - CreditToolbox.tbx
        - DebitToolbox.tbx
          - Debit Tool 1
          - Debit Tool 2
          - Debit Tool 3
          - Debit Tool 4
          - Debit Tool 5
          - Debit Tool 6
        - NV\_CCS\_Map\_Template.m
        - NV\_CCS\_Map\_Template.m
      - PMU\_BSUs
      - Transect\_Generation\_Tools\_v2
      - NV CCS - Overlapping Impact
    - Eriks Instructions
    - NDOM\_Transmission
  - 1. Pre-Field Submissions

Transparency 0.0%  
Layer Blend Normal  
Feature Blend Normal

Swipe  
Flicker 500.0 ms

Symbology  
Stretch Type  
Lock stats

Resampling Type  
Band Combination

Masking

Enhancement  
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0  
1.0

Rotation Type

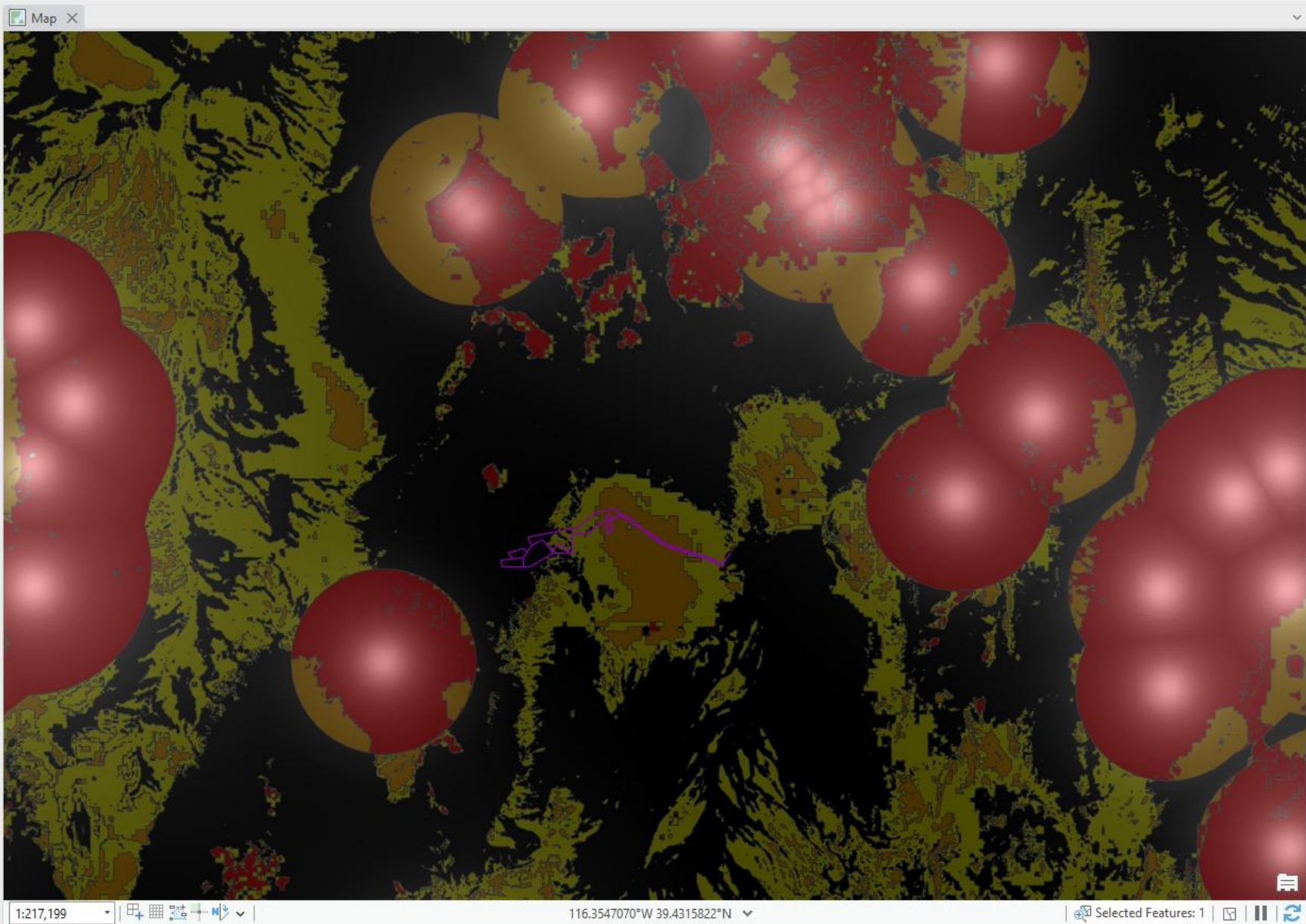
Map X

1:217,199

116.3547070°W 39.4315822°N

Selected Features: 1

Catalog Symbology Geoprocessing



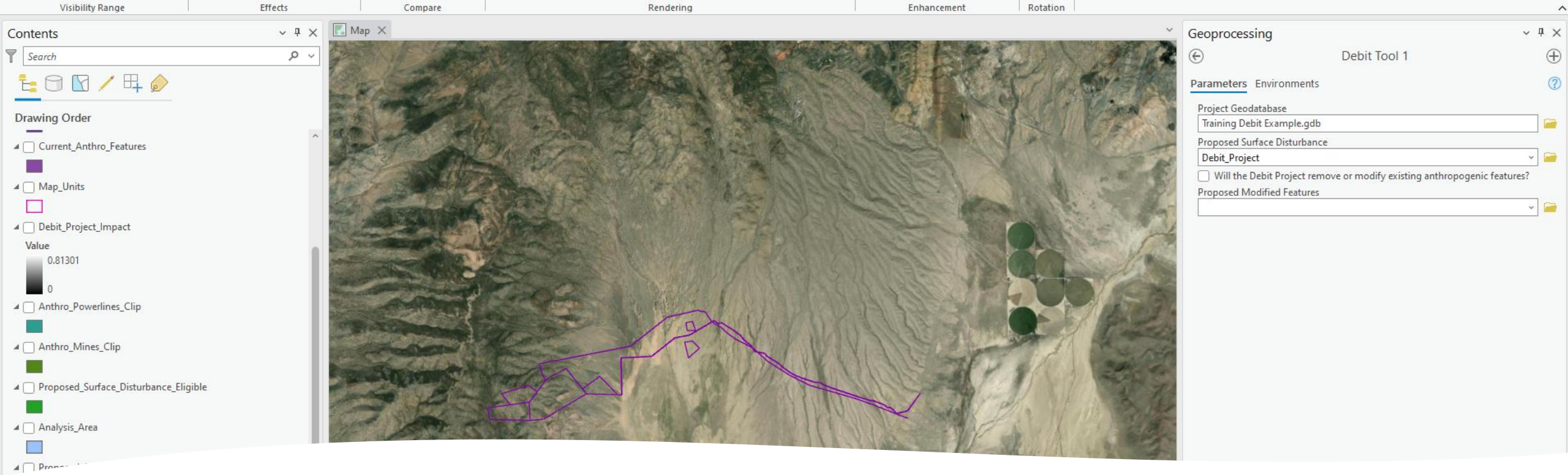
Catalog

Project Portal Computer Favorites

Add Item

- SEP data
  - Conservation Credit System
    - 2024 HMA Raster
    - Annual\_Updated\_Layers
    - Archive
    - ASUI
    - NevadaCreditSummaryTool\_v
    - NevadaDataPackage\_v1\_7\_0
    - NevadaDataPackage\_v1\_8\_3
    - NevadaDataPackage\_v2\_0
      - Documents
      - Layer\_Files
      - NevadaDataPackage\_v2\_0
      - Scripts
      - ToolData
      - CreditToolbox.tbx
      - DebitToolbox.tbx
        - Debit Tool 1
        - Debit Tool 2
        - Debit Tool 3
        - Debit Tool 4
        - Debit Tool 5
        - Debit Tool 6
        - NV\_CCS\_Map\_Template.m
        - NV\_CCS\_Map\_Template.m
      - PMU\_BSUs
      - Transect\_Generation\_Tools\_v2
      - NV CCS - Overlapping Impact
    - Eriks Instructions
    - NDOM\_Transmission
  - 1. Pre-Field Submissions





# Debit Tool 1

## Input:

- ID project geodatabase
- Proposed Surface Disturbance shapefile
- If applicable, a shapefile of any anthropogenic features proposed to be modified or removed by the project.

## Output:

- Proposed\_Surface\_Disturbance layer: a template for digitizing and categorizing proposed surface disturbance
- Proposed\_Modified\_Features layer (if applicable)

Project Map Insert Analysis View Edit Imagery Share Help

Feature Layer Labeling Data Linear Referencing

Transparency 0.0% Layer Blend Normal Feature Blend Normal

Swipe Flicker 500.0 ms

Symbology Masking Display Filters Aggregation Type Unit

Field No fields Unit

Face Culling Lighting

Contents

Search

Drawing Order

- Current\_Anthro\_Features
- Map\_Units
- Debit\_Project\_Impact
- Value: 0.81301 to 0
- Anthro\_Powerlines\_Clip
- Anthro\_Mines\_Clip
- Proposed\_Surface\_Disturbance\_Eligible
- Analysis\_Area
- Proposed\_Surface\_Disturbance\_Debits
- Debit\_Project
- Mgmt\_Cat
- Category: GHMA, OHMA, PHMA
- ASUI\_Final\_2024\_NV.tif
- Value: 1 to 0
- World Imagery



1:88,965 116.1345335°W 39.3231349°N Selected Features: 1

Proposed\_Surface\_Disturbance\_Debits

Field: Add Calculate Selection: Select By Attributes Zoom To Switch Clear Delete Copy

OBJECTID *	Shape *	Id	Name	Type	Subtype	Surface_Disturbance	Reclassified_Subtype	Shape_Length	Shape_Area
1	Polygon	0	Main Mine	Mines	Active_Large	Term_Reclaimed	<Null>	4727.262555	1322396.082939
2	Polygon	0	Mine Pit	Mines	Active_Large	Term_Retired	<Null>	3224.673578	505480.32108
3	Polygon	0	Misc Mine Buildings	Mines	Active_Large_Ancillary	Term_Reclaimed	<Null>	2454.647155	344826.330049
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7	Polygon	0	Misc Mine Buildings	Mines	Active_Large	Term_Reclaimed	<Null>	2417.550907	283988.569815
8	Polygon	0	Road	Roads	High_Use	Term_Reclassified	Low_Use	22393.776753	111845.668336

Click to add new row.

0 of 8 selected

Geoprocessing

Debit Tool 1

Parameters Environments

Project Geodatabase: Training Debit Example.gdb

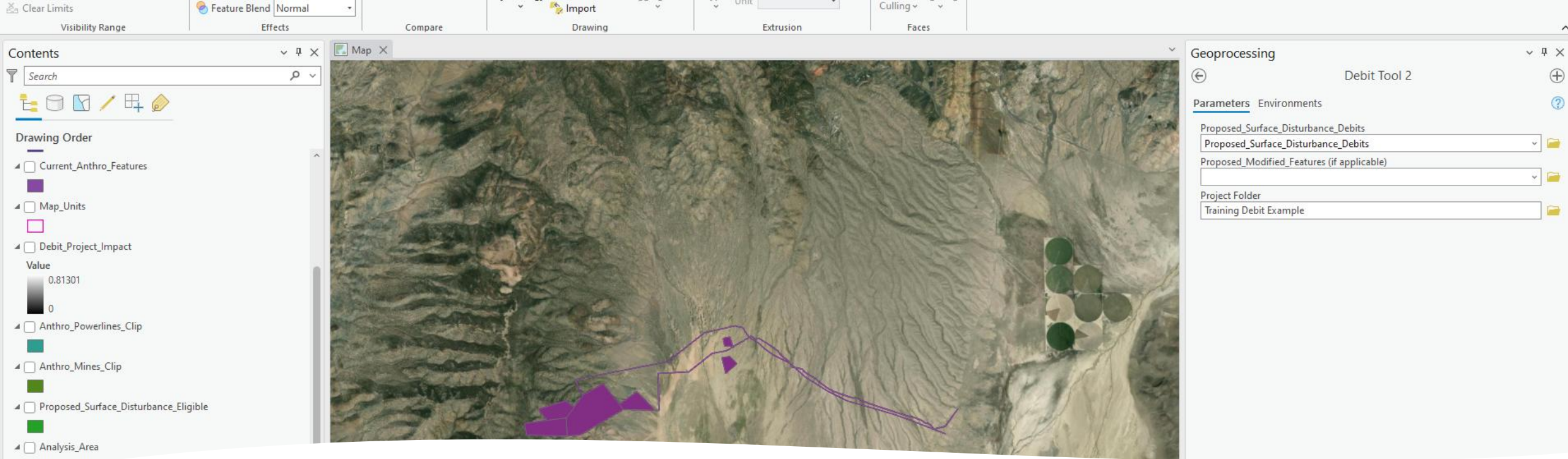
Proposed Surface Disturbance: Debit\_Project

Will the Debit Project remove or modify existing anthropogenic features?

Proposed Modified Features

Catalog Symbology Geoprocessing





# Run Debit Tool 2 – Generate Analysis Area & Eligible Layer

## Input:

- Proposed\_Surface\_Disturbance\_Debits
- If applicable, Proposed\_Modified\_Features

## Output:

- Proposed\_Surface\_Disturbance\_Eligible (removes private land)
- Analysis\_Area

Project Map Insert Analysis View Edit Imagery Share Help

Feature Layer Labeling Data Linear Referencing

In Beyond <None> Transparency 0.0% Swipe  
Out Beyond <None> Layer Blend Normal Flicker 500.0 ms  
Clear Limits Feature Blend Normal

Visibility Range Effects Compare

Symbology Masking Display Filters Aggregation  
Import

Drawing

Type Field No fields  
Unit

Extrusion

Face Culling Lighting  
Faces

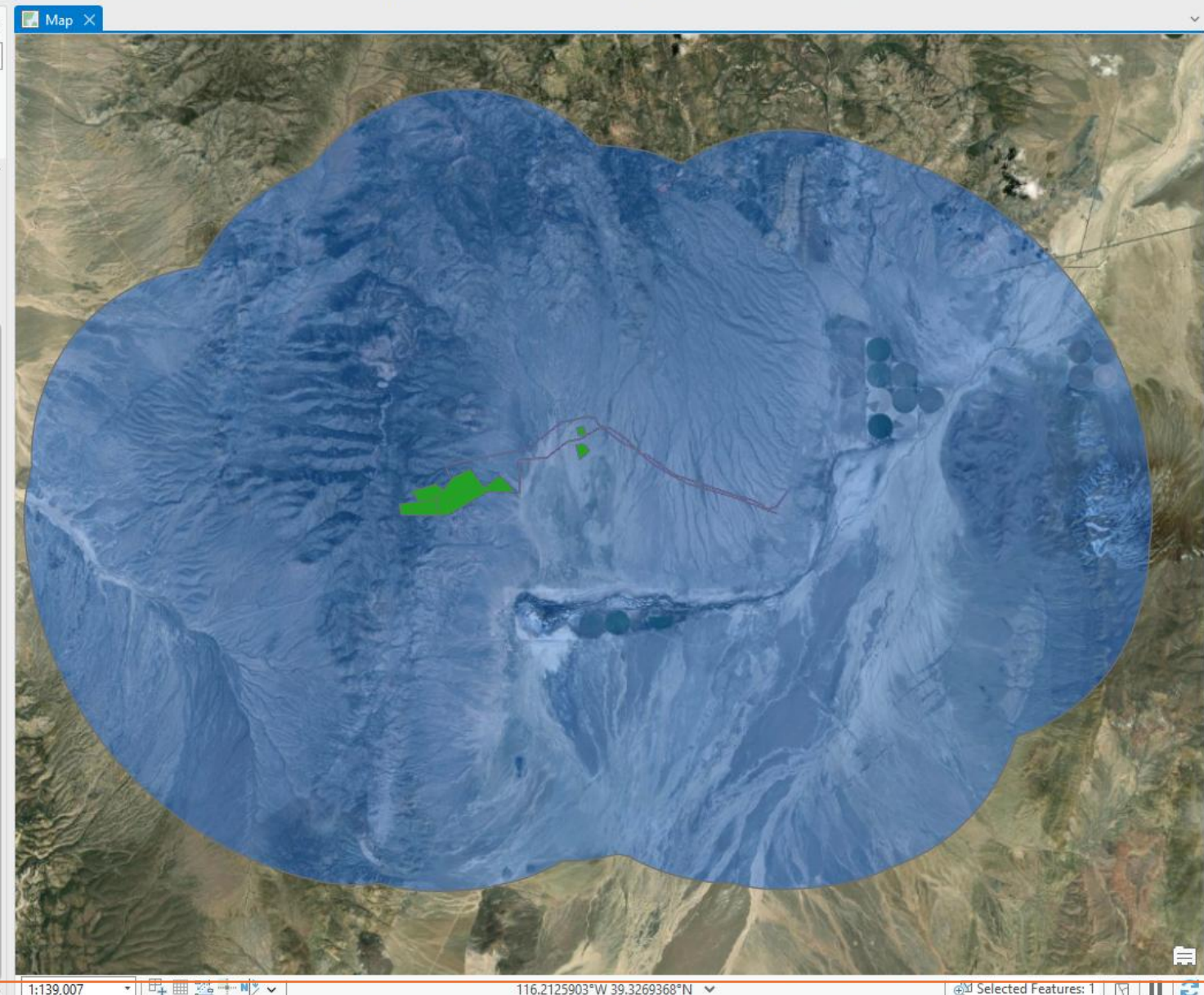
Contents

Search

Drawing Order

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- Map\_Units
- Debit\_Project\_Impact  
Value  
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0
- Anthro\_Powerlines\_Clip
- Anthro\_Mines\_Clip
- Proposed\_Surface\_Disturbance\_Eligible
- Analysis\_Area
- Proposed\_Surface\_Disturbance\_Debits
- Debit\_Project
- Mgmt\_Cat  
Category  
GHMA  
OHMA  
PHMA
- ASUI\_Final\_2024\_NV.tif  
Value  
1  
0

World Imagery



Geoprocessing

Debit Tool 2

Parameters Environments

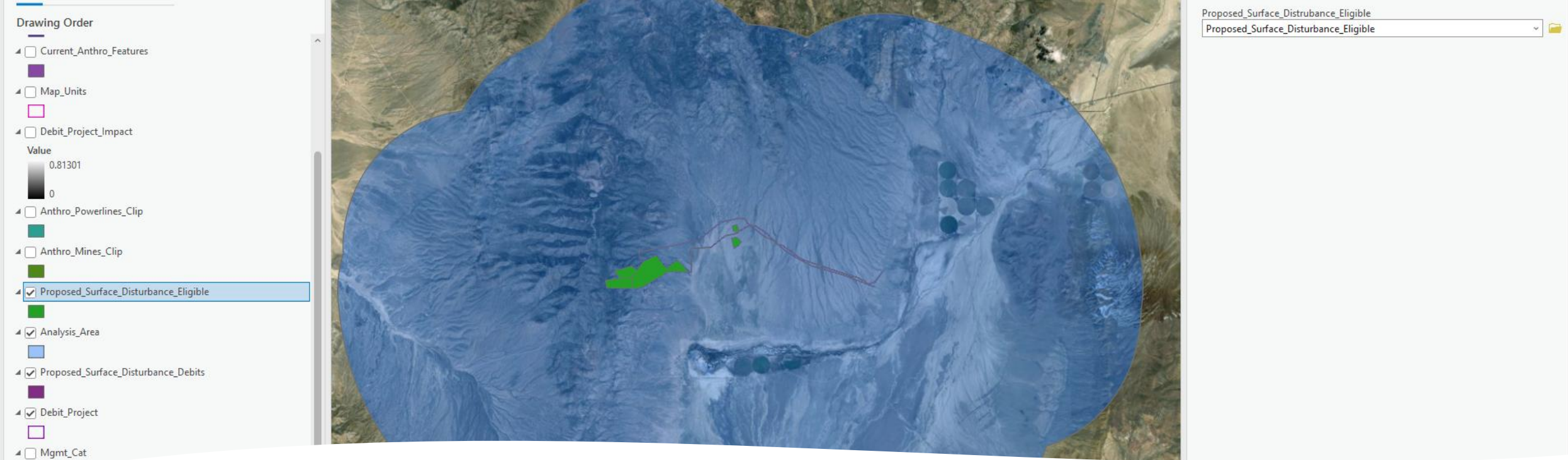
Proposed\_Surface\_Disturbance\_Debits  
Proposed\_Surface\_Disturbance\_Debits  
Proposed\_Modified\_Features (if applicable)

Project Folder  
Training Debit Example

1:139,007 116.2125903°W 39.3269368°N Selected Features: 1

Catalog Symbology Geoprocessing





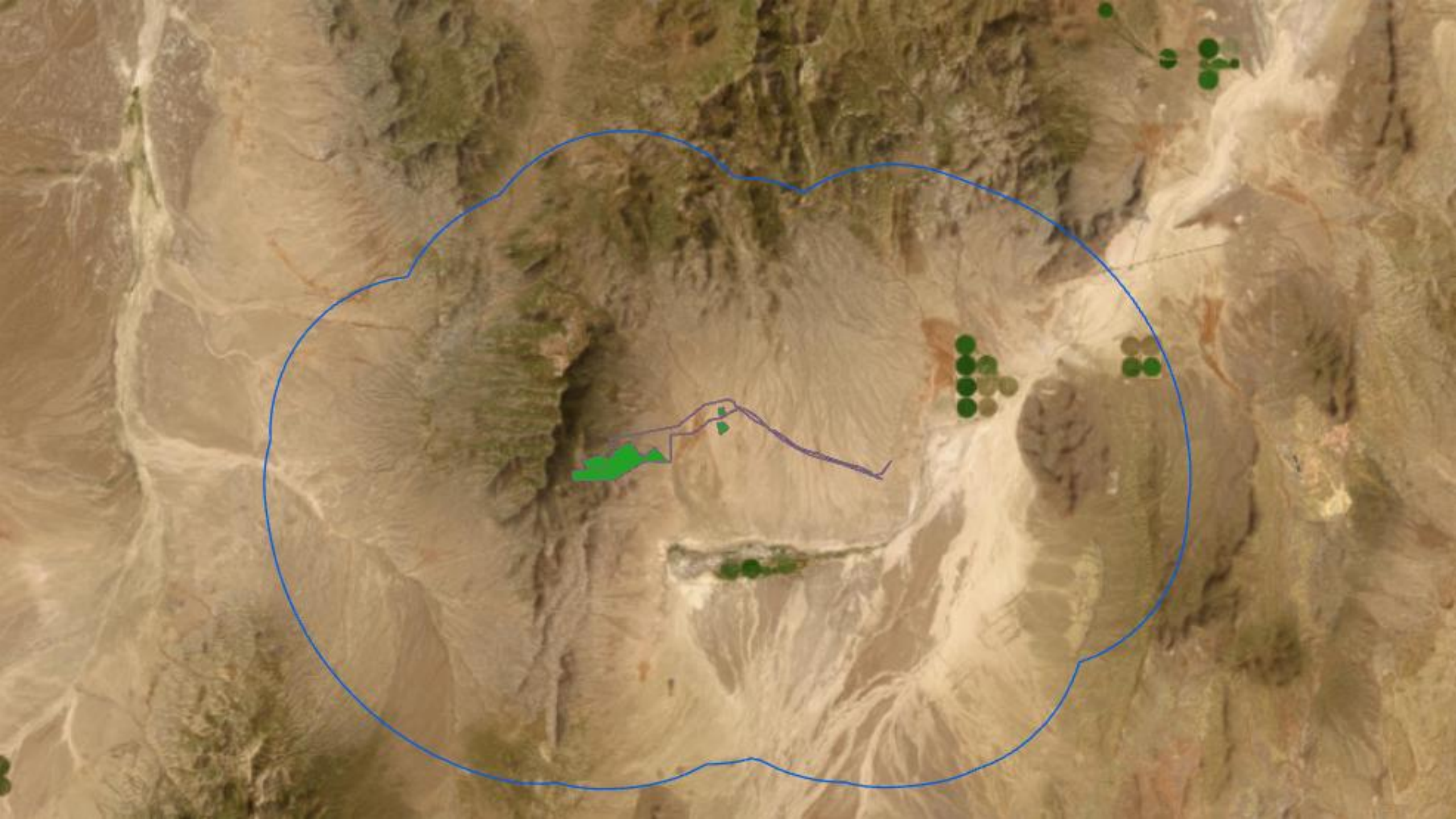
# Run Debit Tool 3 – Current Anthropogenic Features

## Input:

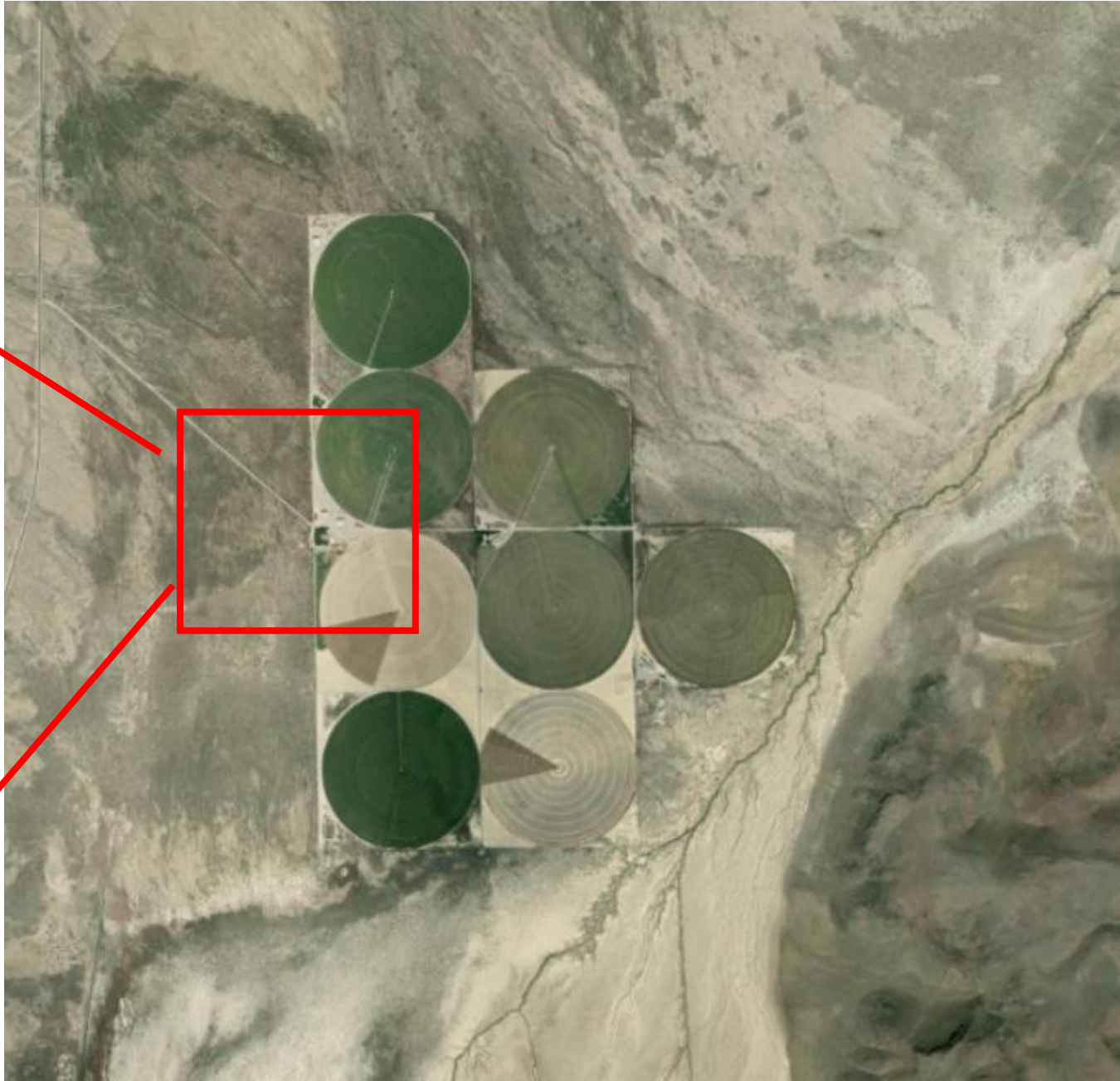
- Proposed\_Surface\_Disturbance\_Eligible

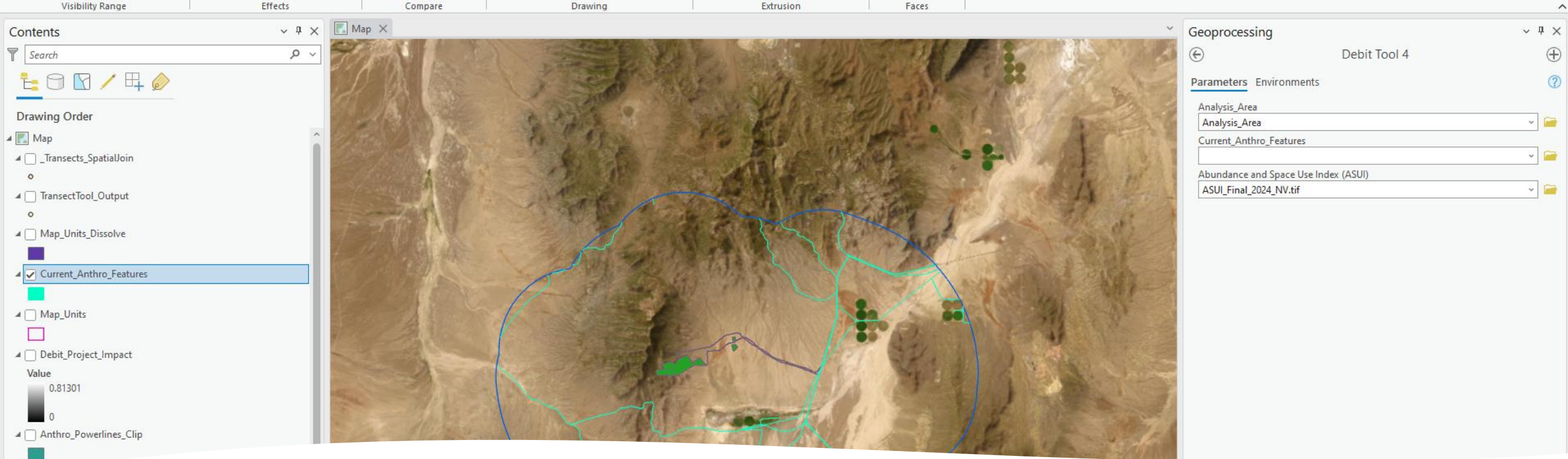
## Output:

- Anthro\_\*feature type\*\_Clip layers









# Debit Tool 4

## Input:

- Analysis\_Area
- ASUI (must request from NDOW)

## Output:

- Map\_Units layer (template for refining map unit delineation)
- Debit\_Project\_Impact raster (can help with adjusting project location)
- Current\_Anthro\_Features layer and Current\_Anthro\_Disturbance raster
- Projected\_Anthro\_Features layer and Projected\_Anthro\_Disturbance raster
- Permanent\_Anthro\_Features layer and Permanent\_Anthro\_Disturbance raster



Project Map Insert Analysis View Edit Imagery Share Help

Feature Layer Labeling Data Linear Referencing

Transparency 0.0% Swipe

Layer Blend Normal Flicker 500.0 ms

Feature Blend Normal

Symbology Masking Display Filters Aggregation

Import

Field No fields Type Unit

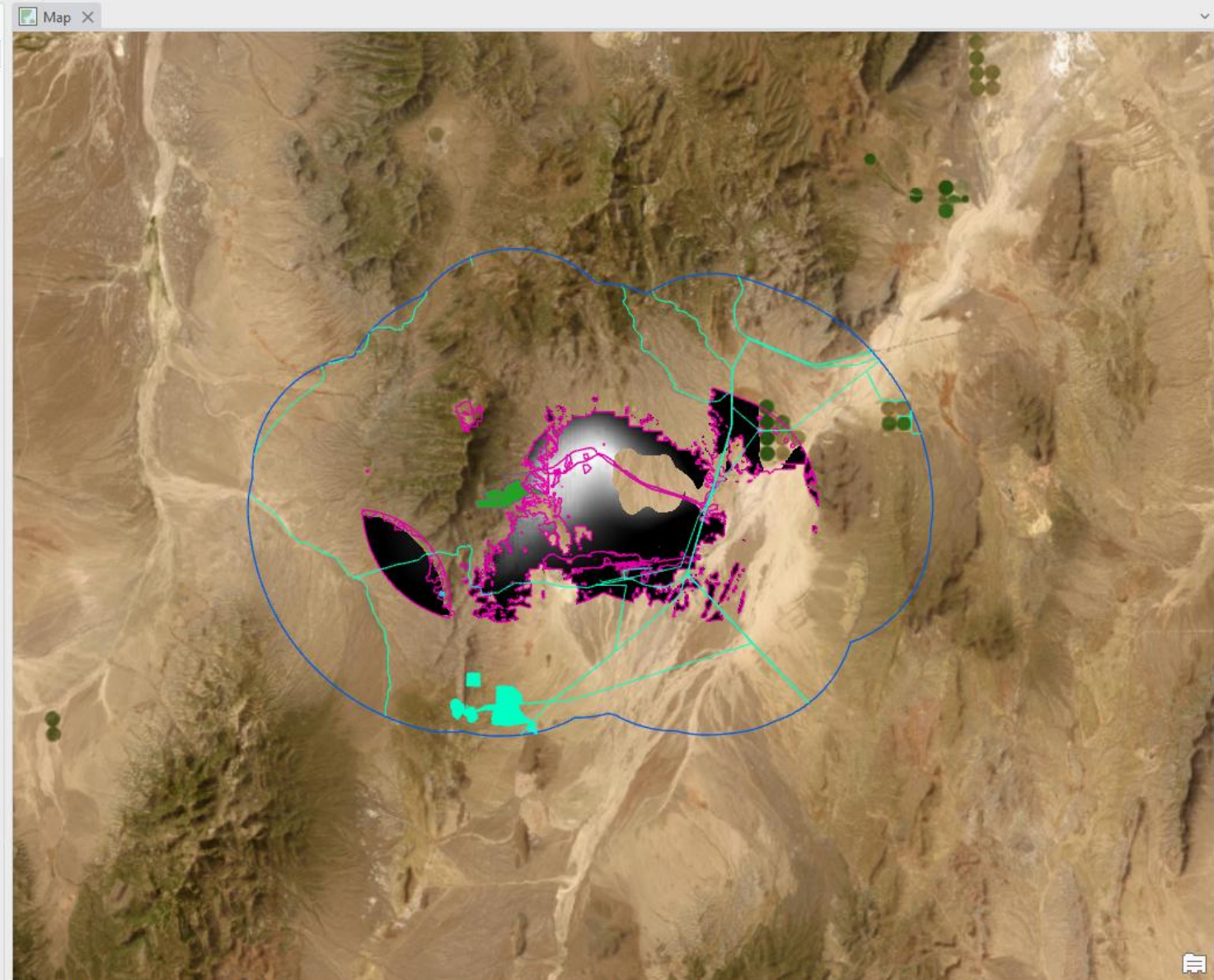
Face Culling Lighting

Contents

Search

Drawing Order

- Map
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- TransectTool\_Output
- Map\_Units\_Dissolve
- Current\_Anthro\_Features
- Map\_Units
- Debit\_Project\_Impact
- Value
- Anthro\_Powerlines\_Clip
- Anthro\_Mines\_Clip
- Proposed\_Surface\_Disturbance\_Eligible
- Analysis\_Area
- Proposed\_Surface\_Disturbance\_Debits
- Debit\_Project
- Mgmt\_Cat
- Category
- GHMA



Geoprocessing

Debit Tool 4

Parameters Environments

Analysis\_Area

Analysis\_Area

Current\_Anthro\_Features

Abundance and Space Use Index (ASUI)

ASUI\_Final\_2024\_NV.tif



Map Insert Analysis View Edit Imagery Share Help Feature Layer Labeling Data Linear Referencing

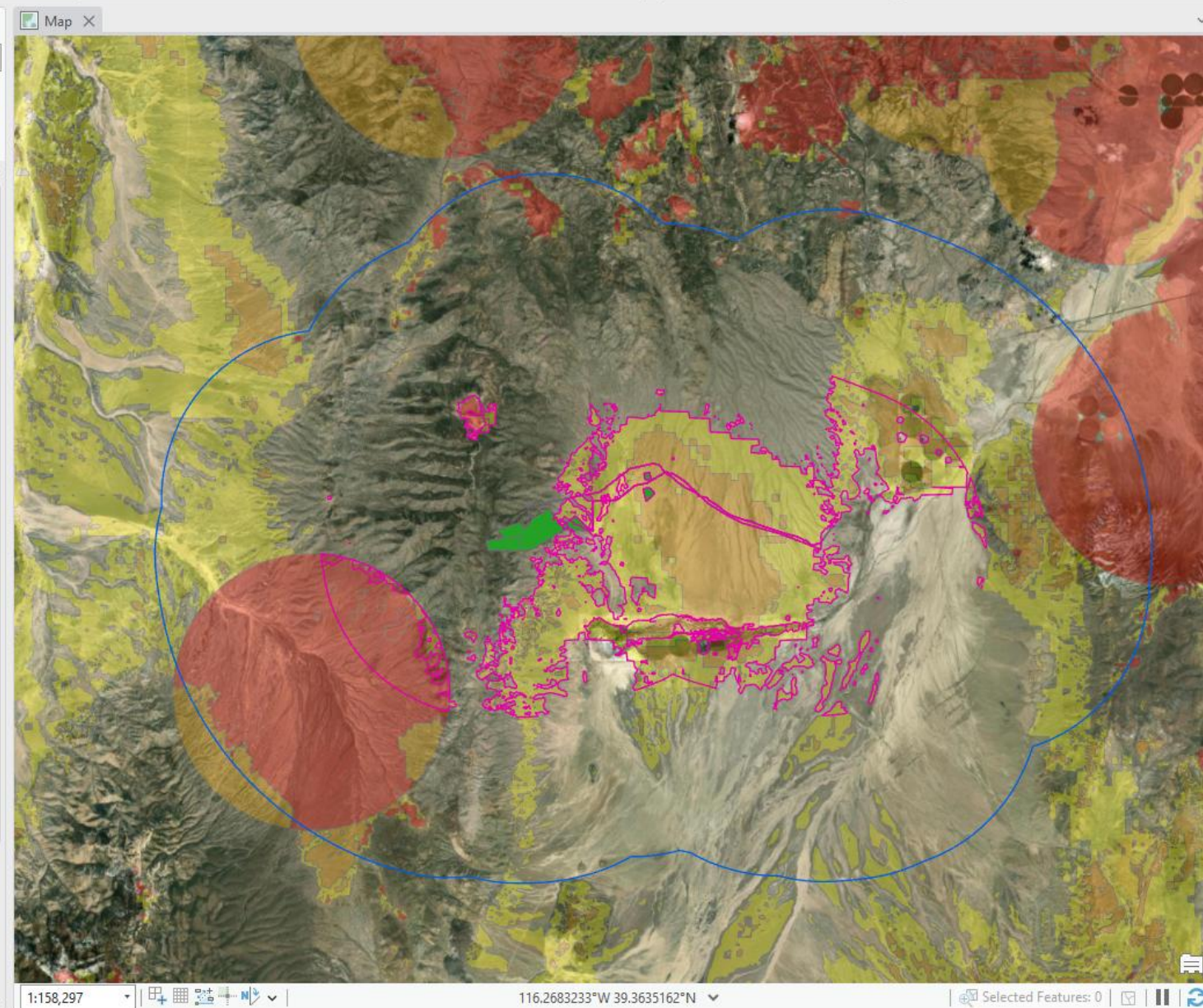
Cut Copy Copy Path Explore Bookmarks Go To XY Basemap Add Data Add Graphics Layer Select Select By Attributes Select By Location Clear Zoom To Measure Locate Infographics Coordinate Conversion Pause Lock View Unplaced Convert Download Map Sync Remove More

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- Value: 0.81301 to 0
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Catalog

Project Portal Computer Favorites

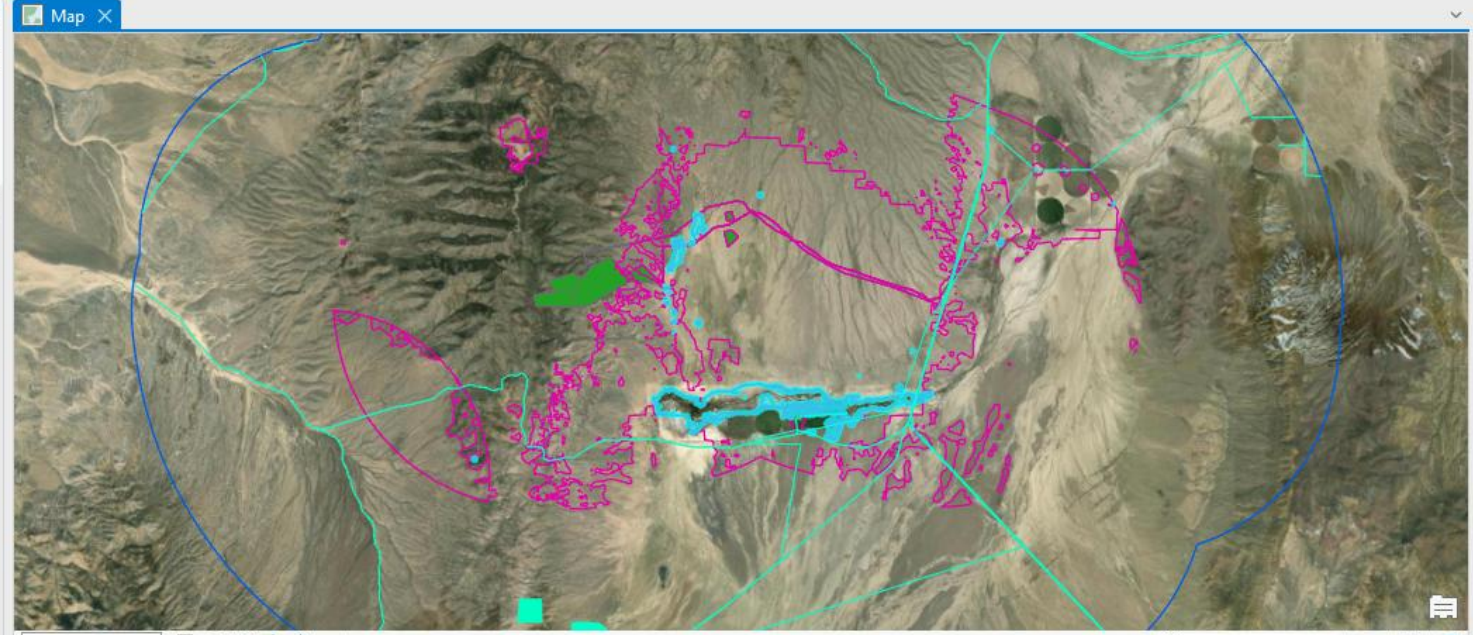
- NevadaDataPackage\_v2\_0
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  - ToolData
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    - Debit Tool 6
  - NV\_CCS\_Map\_Template.mplx
  - NV\_CCS\_Map\_Template.mxd
  - PMU\_BSUs
  - Transect\_Generation\_Tools\_v2\_0
  - NV CCS - Overlapping Impact Scenarios.xlsx
- Eriks Instructions
- NDOM\_Transmission
- 1. Pre-Field Submissions
- Test Submissions
  - Adrian Juncosa F91\_83
  - Alaina Russky\_F96\_103\_D99.5
  - Alan Klebenow\_F100\_101
  - Alex Krebs\_D101
  - Amy Hammond\_F95\_95
  - Andrew Berger\_F89\_94\_D71.5
  - Angela Fiorito\_D70
  - Annie Overlin\_F97\_100

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  - Analysis\_Area
  - Proposed\_Surface\_Disturbance\_Debits
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  - Mgmt\_Cat
  - Category: GHMA



1:158,297 116.2480269°W 39.3520651°N Selected Features: 5

Map\_Units

Field: Add Calculate Selection: Select By Attributes Zoom To Switch Clear Delete Copy

OBJECTID*	Shape*	Meadow	Conifer_Phase	Disturbance_Type	Map_Unit_ID	Map_Unit_Name	Notes	Shape_Length	Shap
1	Polygon ZM	No Meadow	N/A	Indirect	1	Upland Indirect	<Null>	456629.772806	1063
2	Polygon ZM	No Meadow	N/A	Direct_Permanent	2	Upland Direct Perm	<Null>	19917.112932	
3	Polygon ZM	No Meadow	N/A	Direct_Term_Reclaimed	3	Upland Direct Reclaim	<Null>	6540.891762	3
4	Polygon ZM	No Meadow	N/A	Direct_Term_Reclassified	4	Upland Direct Reclass	<Null>	20526.254305	1
5	Polygon ZM	No Meadow	Phase III	Indirect	5	Phase III PJ Indirect	<Null>	30540.475851	2
6	Polygon ZM	Unaltered	N/A	Indirect	6	Meadow Indirect	<Null>	74132.566052	49
7	Polygon ZM	Unaltered	N/A	Direct_Permanent	7	Meadow Direct Perm	<Null>	294.865992	
8	Polygon ZM	Unaltered	N/A	Direct_Term_Reclassified	8	Meadow Direct Reclass	<Null>	520.603481	
9	Polygon ZM	Unaltered	Phase III	Indirect	9	Phase III PJ Meadow In...	<Null>	253.947579	

Click to add new row.

4 of 9 selected

Filters: 100%

Catalog

- Project Portal Computer Favorites
- NevadaDataPackage\_v2\_0
    - Documents
    - Layer\_Files
    - NevadaDataPackage\_v2\_0
    - Scripts
    - ToolData
    - CreditToolbox.tbx
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    - Transect\_Generation\_Tools\_v2\_0
    - NV CCS - Overlapping Impact Scenarios.xlsx
    - Eriks Instructions
    - NDOM\_Transmission
    - 1. Pre-Field Submissions
    - Test Submissions
      - Adrian Juncosa\_F91\_83
      - Alaina Russky\_F96\_103\_D99.5
      - Alan Klebenow\_F100\_101
      - Alex Krebs\_D101
      - Amy Hammond\_F95\_95
      - Andrew Berger\_F89\_94\_D71.5
      - Angela Fiorito\_D70
      - Annie Overlin\_F97\_100



Project **Map** Insert Analysis View Edit Imagery Share Help

Feature Layer Labeling Data Linear Referencing

Clipboard: Cut, Copy, Paste, Copy Path

Navigate: Explore, Bookmarks, Go To XY

Layer: Basemap, Add Data

Selection: Select, Select By Attributes, Select By Location, Clear, Zoom To

Inquiry: Measure, Locate, Infographics, Coordinate Conversion

Labeling: Pause, Lock, View Unplaced, Convert, More

Offline: Download Map, Sync, Remove

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- Debit\_Project
- Mgmt\_Cat
- Category: GHMA



Symbology - Map\_Units

Primary symbology

Single Symbol

Symbol:

Label:

Description:

Map\_Units

Field: Add Calculate Selection: Select By Attributes Zoom To Switch Clear Delete Copy

OBJECTID *	Shape *	Meadow	Conifer_Phase	Disturbance_Type	Map_Unit_ID	Map_Unit_Name	Notes	Shape_Length	Shap
1	1	Polygon ZM	No Meadow	N/A	Indirect	1 Upland Indirect	<Null>	456629.772806	1063
2	2	Polygon ZM	No Meadow	N/A	Direct_Permanent	2 Upland Direct Perm	<Null>	19917.112932	
3	3	Polygon ZM	No Meadow	N/A	Direct_Term_Reclaimed	3 Upland Direct Reclaim	<Null>	6540.891762	3
4	4	Polygon ZM	No Meadow	N/A	Direct_Term_Reclassified	4 Upland Direct Reclass	<Null>	20526.254305	1
5	5	Polygon ZM	No Meadow	Phase III	Indirect	5 Phase III PJ Indirect	<Null>	30540.475851	2
6	6	Polygon ZM	Unaltered	N/A	Indirect	6 Meadow Indirect	<Null>	74132.566052	45
7	7	Polygon ZM	Unaltered	N/A	Direct_Permanent	7 Meadow Direct Perm	<Null>	294.865992	
8	8	Polygon ZM	Unaltered	N/A	Direct_Term_Reclassified	8 Meadow Direct Reclass	<Null>	520.603481	
9	9	Polygon ZM	Unaltered	Phase III	Indirect	9 Phase III PJ Meadow In...	<Null>	253.947579	

Click to add new row.

Filters: 4 of 9 selected

Catalog Symbology Geoprocessing



Project Map Insert Analysis View Edit Imagery Share Help

Feature Layer Labeling Data Linear Referencing

Clipboard Navigate Layer Selection Inquiry Labeling Offline

Explore Bookmarks Go To XY

Basemap Add Data Add Graphics Layer

Select Select By Attributes Select By Location Clear Zoom To

Measure Locate Infographics Coordinate Conversion

Pause Lock View Unplaced Convert Download Map Sync Remove

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- Mgmt\_Cat
- Category: GHMA

Value: 0 to 0.81301



Symbology - Map\_Units

Primary symbology

Single Symbol

Symbol: [Pink square]

Label: [Empty field]

Description: [Empty field]

Map\_Units

Field: Add Calculate Selection: Select By Attributes Zoom To Switch Clear Delete Copy

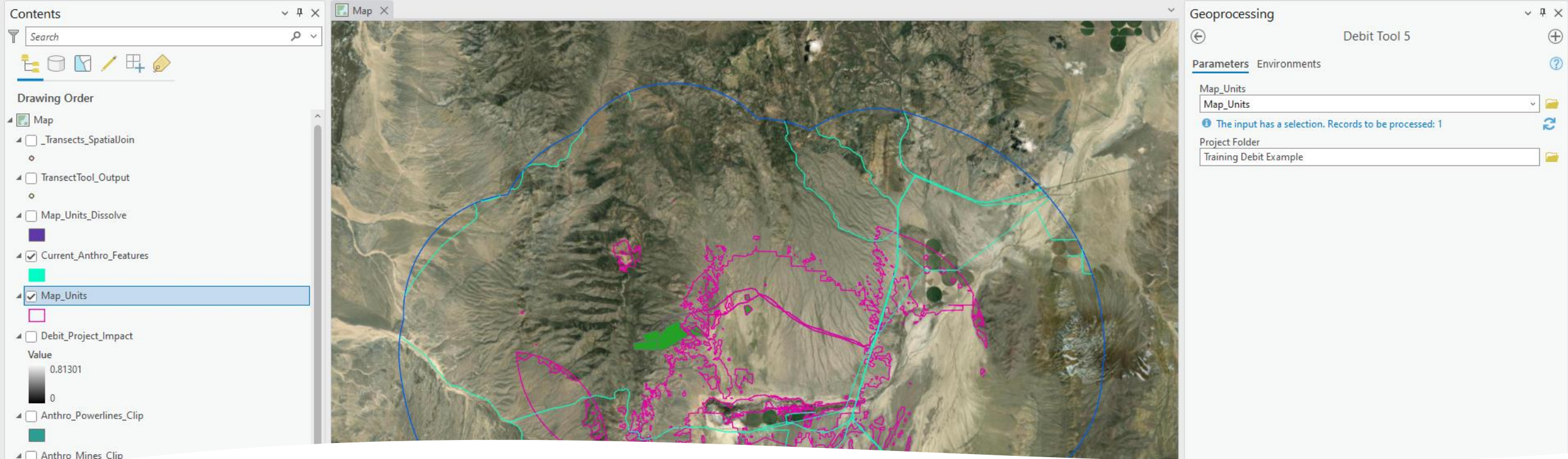
OBJECTID *	Shape *	Meadow	Conifer_Phase	Disturbance_Type	Map_Unit_ID	Map_Unit_Name	Notes	Shape_Length	Shaj
1	1	Polygon ZM	No Meadow	N/A	Indirect	1 Upland Indirect	<Null>	456629.772806	1063
2	2	Polygon ZM	No Meadow	N/A	Direct_Permanent	2 Upland Direct Perm	<Null>	19917.112932	
3	3	Polygon ZM	No Meadow	N/A	Direct_Term_Reclaimed	3 Upland Direct Reclaim	<Null>	6540.891762	3
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5	5	Polygon ZM	No Meadow	Phase III	Indirect	5 Phase III PJ Indirect	<Null>	30540.475851	2
6	6	Polygon ZM	Unaltered	N/A	Indirect	6 Meadow Indirect	<Null>	74132.566052	45
7	7	Polygon ZM	Unaltered	N/A	Direct_Permanent	7 Meadow Direct Perm	<Null>	294.865992	
8	8	Polygon ZM	Unaltered	N/A	Direct_Term_Reclassified	8 Meadow Direct Reclass	<Null>	520.603481	
9	9	Polygon ZM	Unaltered	Phase III	Indirect	9 Phase III PJ Meadow In...	<Null>	253.947579	

Click to add new row.

Filters: 4 of 9 selected

1:10,878 115.9706945°W 39.2814497°N Selected Features: 4

Catalog Symbology Geoprocessing



# Debit Tool 5

## Input:

- Map\_Units
- Identify Project Folder (where excel files will be exported to)

## Output:

- Map\_Units\_Dissolve layer
- Excel files for Debit Project Calculator (Map\_Units\_Dissolve, Current\_Mgmt\_Cat, Current\_Precip, Current\_PMU, Current\_WMZ)

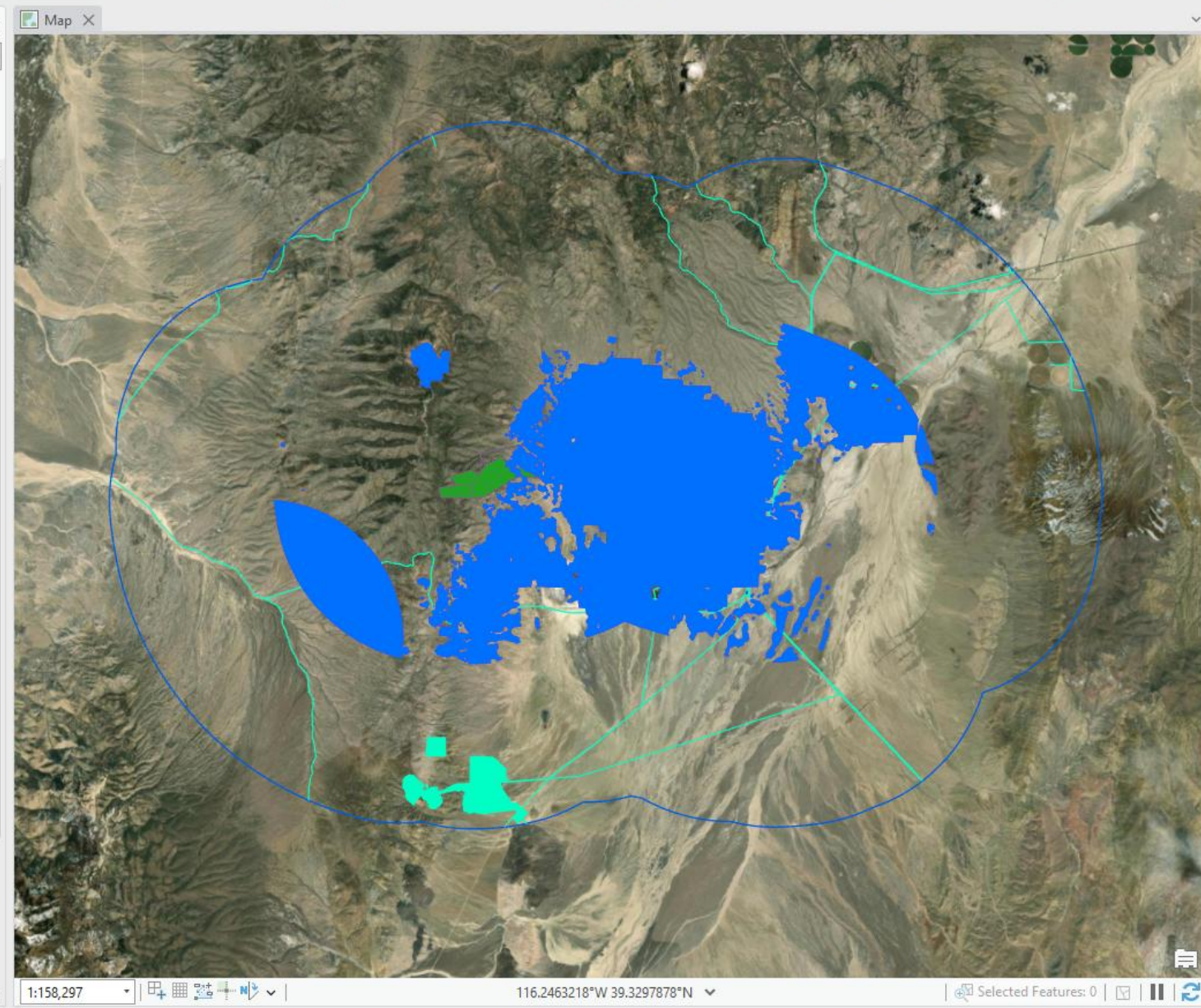


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- Value  
0.81301  
0
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- Anthro\_Mines\_Clip
- Proposed\_Surface\_Disturbance\_Eligible
- Analysis\_Area
- Proposed\_Surface\_Disturbance\_Debits
- Debit\_Project
- Mgmt\_Cat
- Category
  - GHMA



### Geoprocessing

Debit Tool 5

Parameters Environments

Map\_Units  
Map\_Units

**The input has a selection. Records to be processed: 1**

Project Folder  
Training Debit Example

1:158,297 | 116.2463218°W 39.3297878°N | Selected Features: 0

Catalog Symbology Geoprocessing



Project **Map** Insert Analysis View Edit Imagery Share Help

Clipboard: Cut, Copy, Copy Path

Navigate: Explore, Bookmarks, Go To XY

Layer: Basemap, Add Data

Selection: Select, Select By Attributes, Select By Location, Clear, Zoom To

Inquiry: Measure, Locate, Infographics, Coordinate Conversion

Labeling: Pause, Lock, View Unplaced, Convert, More

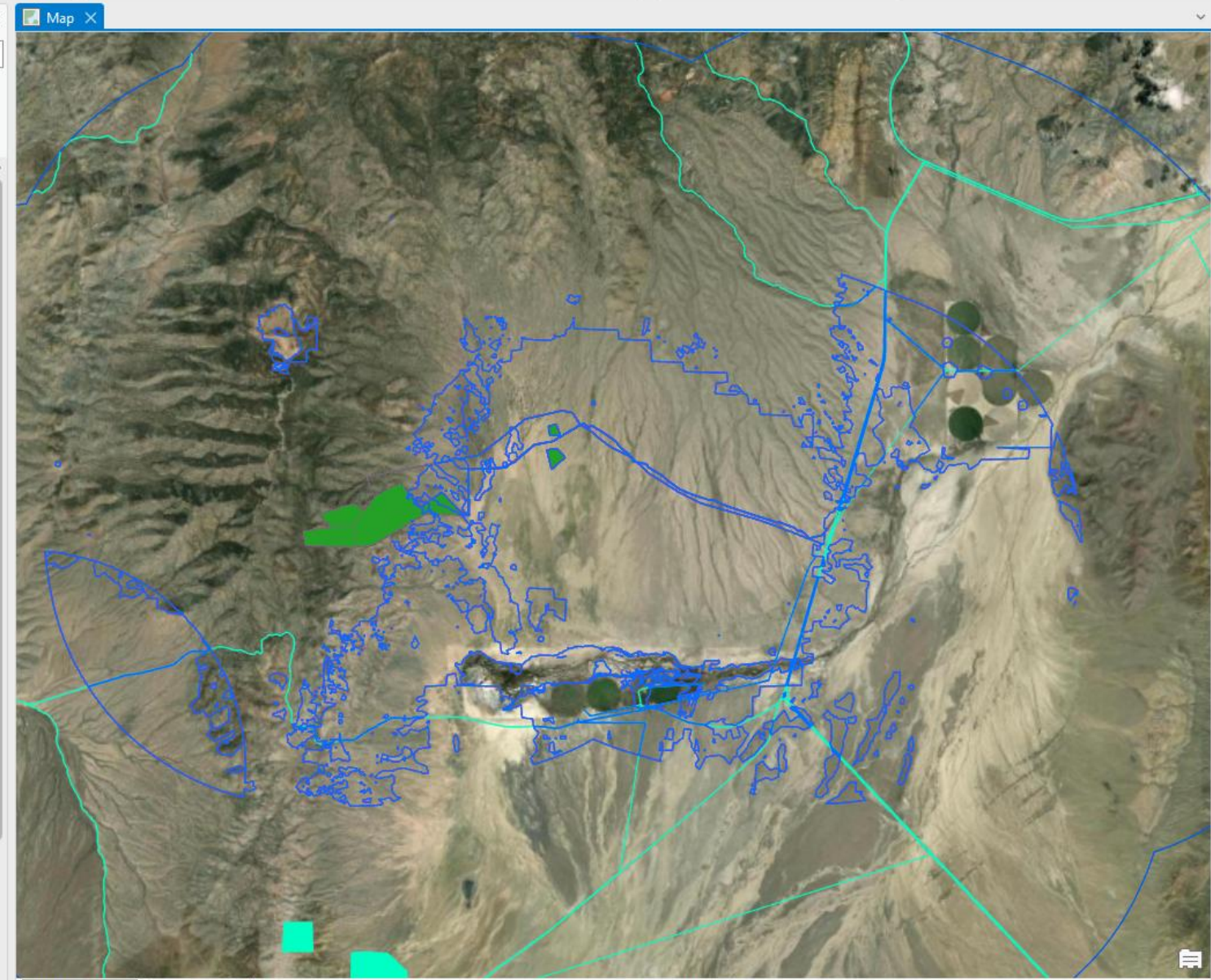
Offline: Download Map, Sync, Remove

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  - Current\_Anthro\_Features
  - Map\_Units
  - Debit\_Project\_Impact
  - Value: 0.81301 to 0
  - Anthro\_Powerlines\_Clip
  - Anthro\_Mines\_Clip
  - Proposed\_Surface\_Disturbance\_Eligible
  - Analysis\_Area
  - Proposed\_Surface\_Disturbance\_Debits
  - Debit\_Project
  - Mgmt\_Cat
  - Category: GHMA



Symbology - Map\_Units\_Dissolve

Format Polygon Symbol

Gallery Properties

Appearance

- Color
- Outline color
- Outline width
- Enable scale-based sizing
- Angle alignment

100%

Selected Features: 0



Project Map Insert Analysis View Edit Imagery Share Help

Clipboard Navigate Layer Selection Inquiry Labeling Offline

Feature Layer Labeling Data Linear Referencing

Select Select By Select By Attributes Clear Measure Locate Infographics Coordinate Conversion

Pause Lock View Unplaced Convert Download Map Sync Remove

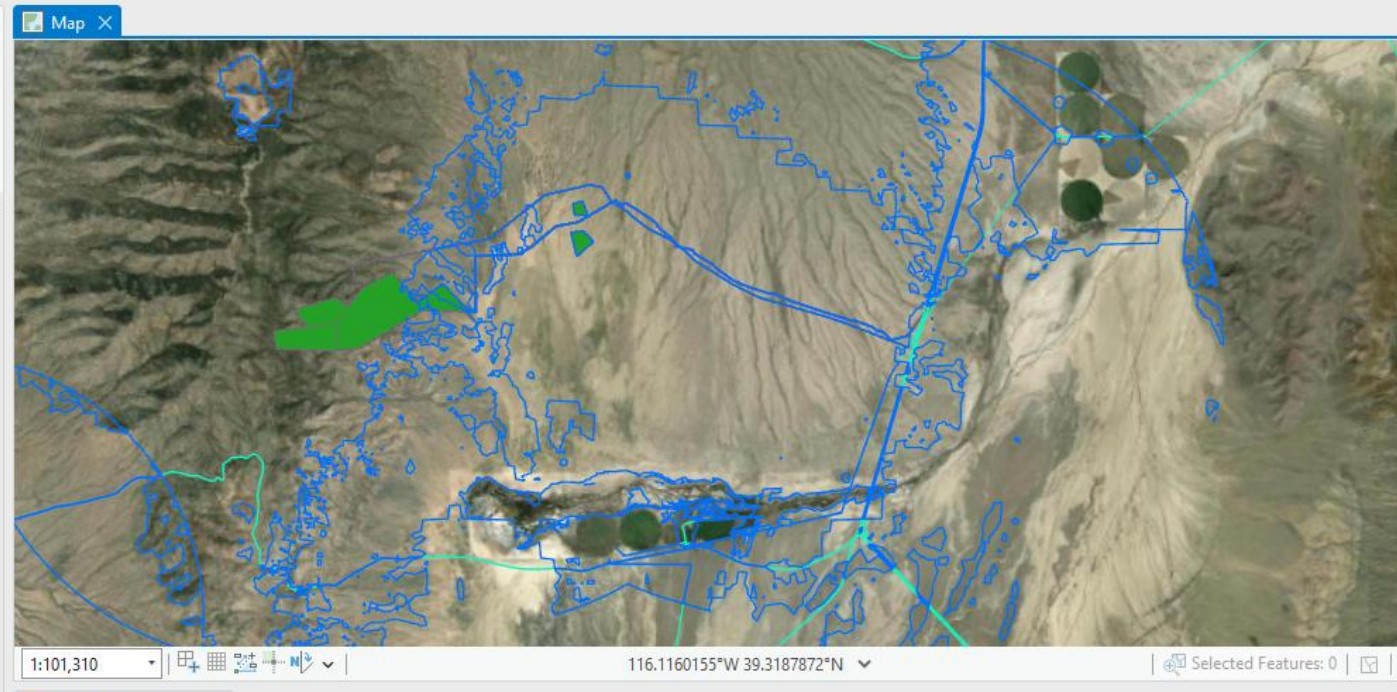
Contents Search

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  - TransectTool\_Output
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  - Map\_Units
  - Debit\_Project\_Impact
- Anthro\_Powerlines\_Clip
- Anthro\_Mines\_Clip
- Proposed\_Surface\_Disturbance\_Eligible
- Analysis\_Area
- Proposed\_Surface\_Disturbance\_Debits
- Debit\_Project
- Mgmt\_Cat

Value: 0.81301 to 0

Category: GHMA



Map\_Units\_Dissolve X

Field: Add Calculate Selection: Select By Attributes Zoom To Switch Clear Delete Copy

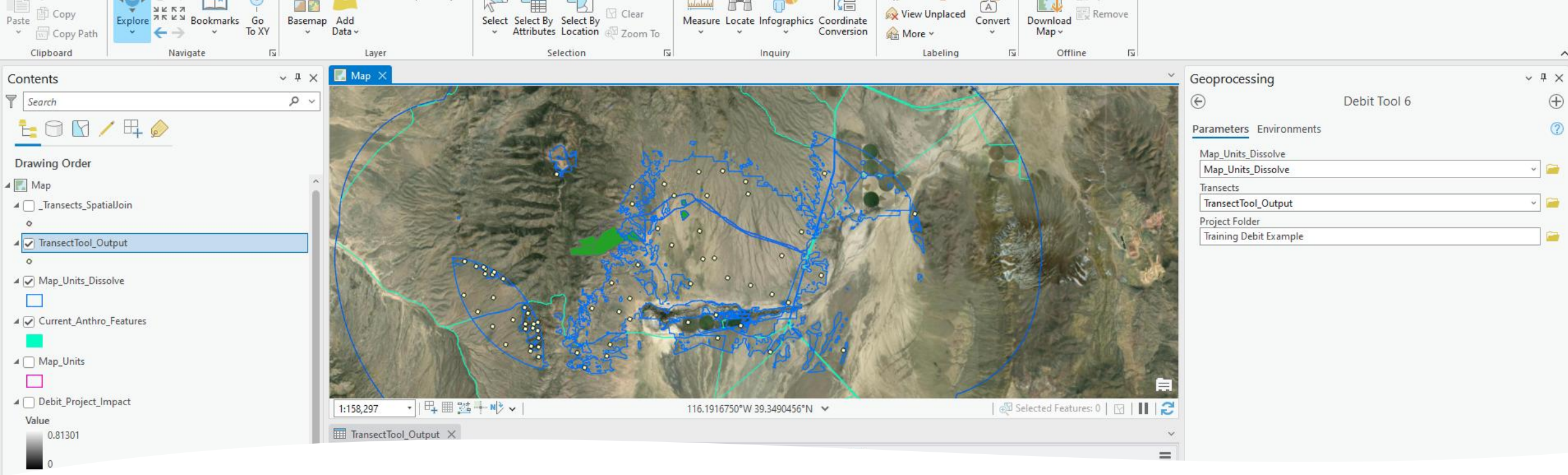
pe_Area	Notes	Acres	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	Transects
1	24872.339216	6.146089	0.500839	0.735206	0.57718	0.103156	0.594028	0.474723	0.006597	0.037287	0.030313	0.068434	0.39126	0.313819	2	
2	321848.146426	79.530409	0.534904	0.6369	0.557691	0.135983	0.648083	0.567341	0.002853	0.02122	0.016309	0.101487	0.473019	0.417015	3	
3	101036.848533	24.966749	0.472507	0.744325	0.583208	0.095479	0.598854	0.47712	0	0	0	0.056877	0.356919	0.28433	2	
4	935308.838264	26177.184901	0.532946	0.679545	0.561357	0.106804	0.497733	0.410752	0.072985	0.3235	0.264429	0.098899	0.454928	0.375652	19	
5	569442.417096	634.923049	0.250816	0.380049	0.241041	0.072936	0.399966	0.254365	0.065624	0.363727	0.232625	0.071904	0.39753	0.25285	8	
6	393.884207	0.097331	0.586551	0.730732	0.641642	0.149559	0.745289	0.654423	0.017137	0.085405	0.074981	0.107168	0.534052	0.468935	2	
7	2402.784	0.593741	0.501489	0.679737	0.640166	0.127488	0.691209	0.65097	0	0	0	0.074645	0.404581	0.381062	2	
8	894604.165005	1209.483029	0.446172	0.749969	0.474046	0.074091	0.506674	0.319103	0.060734	0.428107	0.258326	0.071351	0.491905	0.305701	9	
9	3998.075825	0.987946	0.137777	0.527586	0.286907	0.04422	0.564474	0.306965	0.043019	0.549039	0.298577	0.04422	0.564474	0.306965	2	

Filters: 100% 0 of 9 selected

Acres	Meadows, Uplift Areas, Heterogeneous Uplands on Credit Projects		Homogeneous Uplands on Credit Projects		Uplands on Debit Projects	
	0-9*	2-4	2	2	2	2
10-24	4	2	2	2	2	2
25-99	5	3	3	3	3	3
100-199	6	4	4	4	4	4
200-249	7	5	5	5	5	5
250-299	7	5	5	5	5	5
300-349	8	5	5	5	5	5
350-399	8	6	6	6	6	6
400-449	9	6	6	6	6	6
450-499	9	7	7	7	7	7
500-549	10	7	7	7	7	7
550-999	10	8	8	8	8	8
1000-1249	11	9	9	9	9	9
1250-1499	11	9	9	9	9	9
1500-1749	12	10	10	10	10	10
1750-1999	12	10	10	10	10	10
2000-2499	13	11	11	11	11	11
2500-2749	13	11	11	11	11	11
2750-2999	14	12	12	12	12	12
3000-3249	14	12	12	12	12	12
3250-3499	14	12	12	12	12	12
3500-3999	15	13	13	13	13	13
4000-4249	15	13	13	13	13	13
4250-4499	16	14	14	14	14	14
4500-4999	16	14	14	14	14	14
5000-5499	17	15	15	15	15	15
5500-5999	17	15	15	15	15	15
6000-6499	17	15	15	15	15	15

Catalog Symbology Geoprocessing





# Debit Tool 6

## Input:

- Map\_Units\_Dissolve layer
- Transects layer (generated by the SETT)
- Select Project Folder (where you want output to go)

## Output:

- Transects\_SpatialJoin (excel file that will be copied into the calculator)

**Note:** you do not need to run Debit Tool 6 if conducting a desktop-only debit analysis (no fieldwork involved, so no need for transects)



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- Anthro\_Powerlines\_Clip
- Anthro\_Mines\_Clip
- Proposed\_Surface\_Disturbance\_Eligible
- Analysis\_Area
- Proposed\_Surface\_Disturbance\_Debits
- Debit\_Project
- Mgmt\_Cat
- GHMA

0.81301

0

0 of 68 selected



TransectTool\_Output

Field: Add Calculate Selection: Select By Attributes Zoom To Switch Clear Delete Copy

OBJECTID *	Shape *	Transect_Number	UTM_E	UTM_N	Bearing1	Bearing2	Bearing3	Sample_Type	Notes	Map_Unit_ID	Map_Unit_Name
1	Point	1	4353801.95	586167.21	205	10	347	Sample		1	Upland Indirect
2	Point	2	4353800.59	584508.53	106	29	77	Sample		1	Upland Indirect
3	Point	3	4352113.87	583643.04	185	259	129	Sample		1	Upland Indirect
4	Point	4	4351283.13	584379.28	10	227	137	Sample		1	Upland Indirect
5	Point	5	4352003.76	585807.93	327	200	173	Sample		1	Upland Indirect
6	Point	6	4350276.14	582655.4	90	260	319	Sample		1	Upland Indirect
7	Point	7	4354390.43	583974.66	44	157	51	Sample		1	Upland Indirect
8	Point	8	4355007.44	585751.41	67	246	35	Sample		1	Upland Indirect
9	Point	9	4353391.74	582348.36	98	252	288	Sample		1	Upland Indirect
10	Point	10	4349350.68	581324.54	325	222	282	Sample		1	Upland Indirect
11	Point	11	4350550.33	585967.64	337	103	65	Sample		1	Upland Indirect
12	Point	12	4350609.23	586541.15	222	295	352	Sample		1	Upland Indirect

Filters: 100%

Geoprocessing

Debit Tool 6

Parameters Environments

Map\_Units\_Dissolve

Map\_Units\_Dissolve

Transects

TransectTool\_Output

Project Folder

Training Debit Example

Catalog Symbology Geoprocessing

# Add Exported Data to Debit Calculator

- The HQT will have outputs that are then imported into the Debit Project calculator.
- Field Data is entered into the calculator if applicable.
- You can see the Term and Permanent debits generated by a project.
- These amounts are then communicated to the proponent.
- Depending on the stage of evaluation can move on to the credit transaction.

The screenshot shows the Debit Project Calculator Excel spreadsheet. The interface includes a ribbon with tabs for File, Home, Insert, Page Layout, Formulas, Data, Review, View, Automate, Help, and Acrobat. The Home tab is active, showing options for Cut, Copy, Paste, Format Painter, and Clipboard. The font is set to Calibri, size 11. The alignment and number sections are also visible.

The spreadsheet content is as follows:

PROJECT INFORMATION			
Project Name			
DEBIT ESTIMATE SUMMARY			
Total Area (acres)	28,133.9		
Current Area-Weighted Average Habitat Function (%)	34%	Current Area-Weighted Average Habitat Function (%)	34%
Projected Area-Weighted Average Habitat Function (%)	22%	Permanent Area-Weighted Average Habitat Function (%)	31%
Projected Functional Acres below Current (f-acres)	3,228.5	Permanent Functional Acres below Current (f-acres)	792.2
Projected Area-Weighted Average Multiplier (multiplier)	0.98	Permanent Area-Weighted Average Multiplier (multiplier)	1.24
Term Debits Generated (credits)	3,163	Permanent Debits Generated (credits)	986
VERIFICATION AND TRACKING			
HQT Version			
Lead Verifier			
Date of Assessment			
Final Submission by Verifier (YES or NO)			
<b>To be Filled Out by SETT</b>			
SETT Lead on QA			
Date of SETT QA			
Final Project Calculator (YES or NO)			

At the bottom of the spreadsheet, there are navigation buttons: Instructions, Summary, 1.1 Enter Map Unit Data, 1.2 Enter Transect Data, 1.3 Enter Mgmt Cats Data, and 1.4 Review Desktop. The status bar at the bottom indicates 'Ready' and 'Accessibility: Investigate'.



# Questions?

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- [cacevedo@sagebrusheco.nv.gov](mailto:cacevedo@sagebrusheco.nv.gov)

