



National Trails Office (NTIR) ArcGIS Online (AGOL)

OCTA Mapping Workshop

September 9-11, 2021

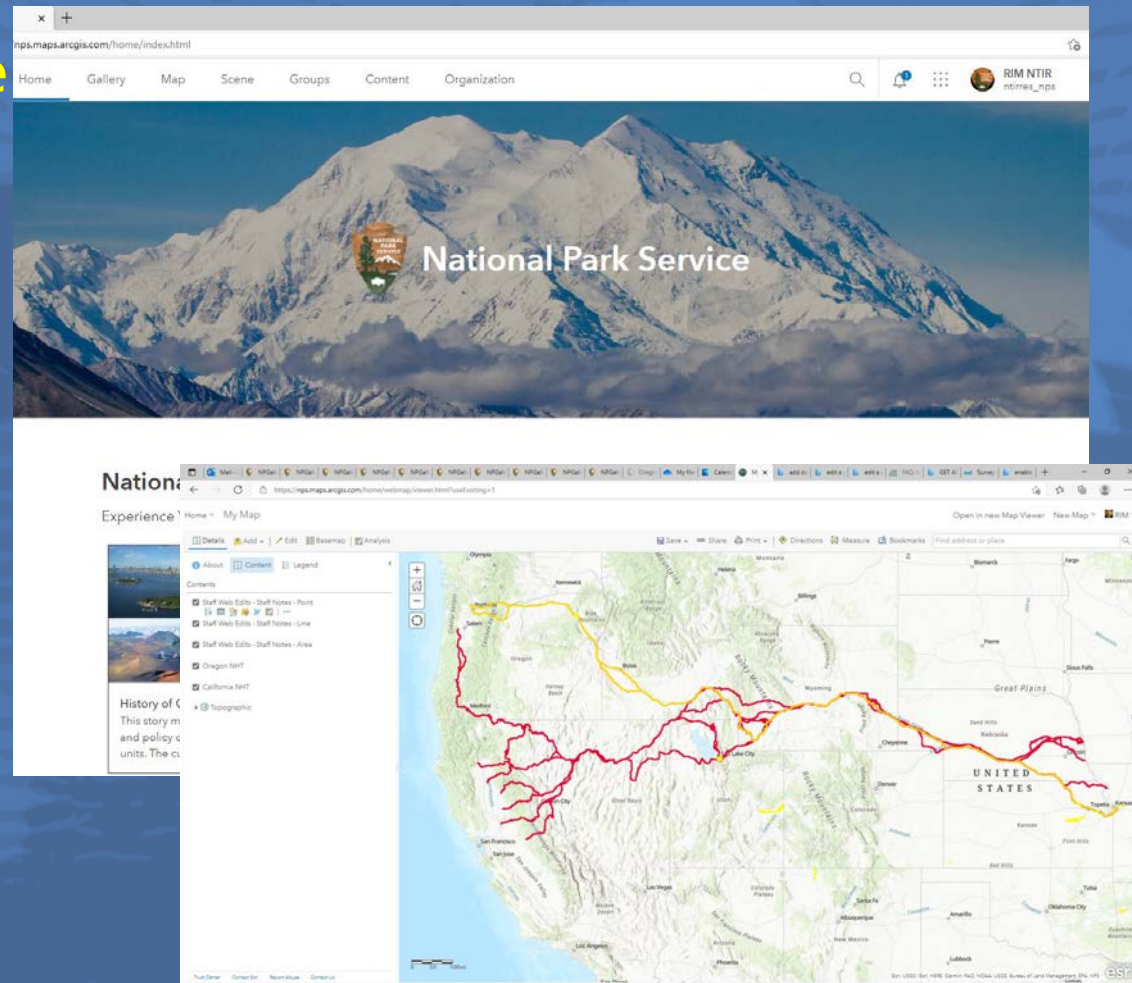
National Park Service – National Trails

Brian Deaton – GIS Specialist



ArcGIS Online (AGOL)

- Web Platform
 - Data Creation/Update
 - Data Visualization – web maps
 - Access Controls – individual accounts, Groups
 - Data Sharing
 - Multi-User Editing
 - Field App Integration





Data Creation

- Add zipped shapefiles to AGOL
- Use a template (existing data already on AGOL)

The image shows two screenshots from the ArcGIS Online (AGOL) interface. The top screenshot is the 'New item' dialog, which offers four options to create a new item: 'Your device', 'Google Drive', 'Dropbox', and 'OneDrive'. Below these are four templates: 'Feature layer' (Create an editable layer with fields copied from a template or feature layer), 'URL' (Link to a ArcGIS Server web service, KML, OGC WFS, OGC WMS, OGC WMFS), 'Application' (Link to an application on the web or create a new registered application), and 'Tile layer' (Create a fast drawing tile layer from a feature layer). The bottom screenshot shows the 'New item' dialog with the 'File' type selected as 'cali_nht_100k_line.zip'. It then asks 'How would you like to add this Shapefile?' and provides two options: 'Add cali_nht_100k_line.zip and create a hosted feature layer' (selected) and 'Add cali_nht_100k_line.zip only'. The 'Add cali_nht_100k_line.zip and create a hosted feature layer' option is selected. The bottom screenshot also shows the 'Item details' page for 'NTR OCTA Example CAU NHT', which includes a description, layers, terms of use, comments, and item information.



Update Data

- Add data to existing spatial data in AGOL

Append Data ?

Upload the file that contains the data with which to append or update your layer.

Supported file types:

- Comma separated values (.csv)
- Excel (.xls or .xlsx)
- GeoJSON (.geojson)
- Compressed (.zip) shapefile or file geodatabase

Filename:

Choose File cali_nht_100k_line.zip

Contents:

Shapefile

Note: For best results, the field names in the file you upload should match the field names in your layer.

Upload and Continue Cancel

Append Data ?

Append features to your data and optionally update existing features.

Update existing features:

Optionally, you can choose to update existing features by matching a field that contains a unique identifier. If this option is left unchecked, all updates will be created as new features.

☒ Update existing features

Select the fields used to match the layer's unique identifier to the uploaded data.

<None> Matches to: <None>

☐ Ignore features without a match

☐ Update geometry for existing features

Hide field matching

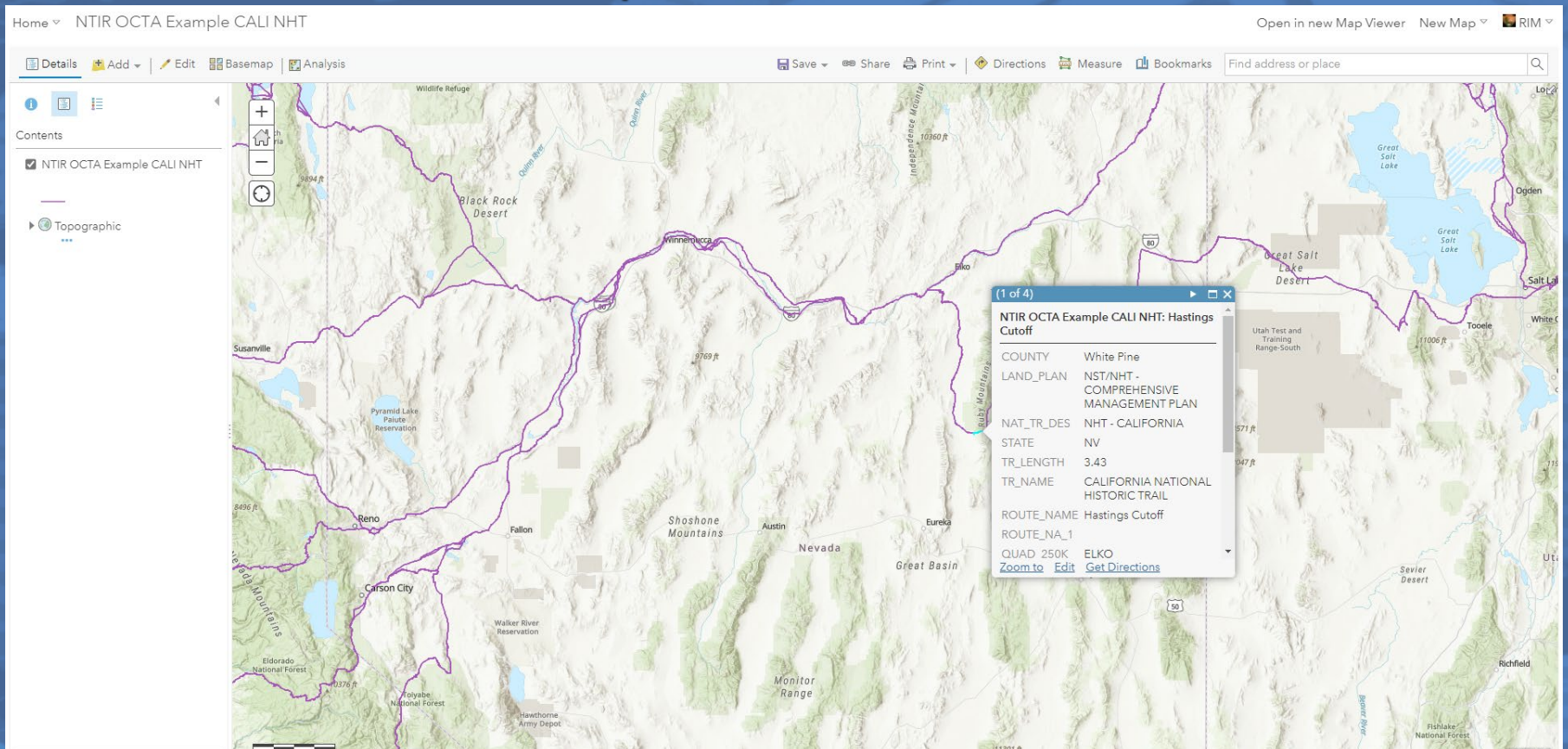
Fields	Match Field
COUNTY	COUNTY
GROUPCODE	GROUPCODE
LAND_PLAN	LAND_PLAN

Apply Updates Cancel



Web Mapping


- Users can view data within web maps
- Add other data to maps from across AGOL and the internet





Access Control

- Multiple Levels of Access Controls to Data
 - Individual Accounts
 - Groups
 - Limit Access to data and web maps

Sign in to National Park Service with 

National Park Service

ArcGIS login

Username

Password

☐ Keep me signed in

Sign In

[Forgot username? or Forgot password?](#)

Not a member of this organization?
[Sign in to your account on ArcGIS Online](#)

The screenshot shows the ArcGIS Online Groups interface. The top navigation bar includes Home, Gallery, Map, Scene, Groups, Content, and Organization. The 'Groups' page is active, showing a list of groups with filters on the left. The groups listed include:

- CALI ATR Group**: Owner: ntrms_nps, Created: Feb 17, 2021, Last updated: Feb 17, 2021, Visible by: Group members. Description: California National Historic Trail ATR Development Group.
- CalTrans**: Owner: ntrms_nps, Created: May 18, 2016, Last updated: Jun 29, 2017, Visible by: Group members. Description: Sign planning CALTRANS auto tour route - California NHT, Pony Express NHT.
- Dos Caminos**: Owner: ntrms_nps, Created: Jan 18, 2017, Last updated: Feb 9, 2017, Visible by: Group members. Description: This group is for managing data and partners related to the Dos Caminos. Este grupo es para la gestión de datos y socios relacionados con el Dos Caminos.
- Juan Bautista de Anza NHT - Sign Planning**: Owner: bweardon@nps.gov, Created: Oct 17, 2016, Last updated: Jun 15, 2018, Visible by: Organization.

Below the groups list, there is a section for 'NTIR - Wayside Inventory' with tabs for Overview, Content, Members, and Settings. The 'Members' tab is selected, showing a list of members with filters on the left. The members listed include:

- Brian Deaton**: bdeaton@nps.gov
- Sarah Rivera**: srivera@nps.gov
- RIM NTIR**: ntrms_nps

At the bottom, there is a section for 'Who can be in this group?' with a list of members and a 'Add members to group' button.



Access Control Sharing

- Share Data/Maps Across Groups, Organization, and Public

Share

Set sharing level

☒

Owner

Owner of the item(s) has access

☐

Organization

All members of your organization have access

☐

Everyone (public)

People outside your organization have access

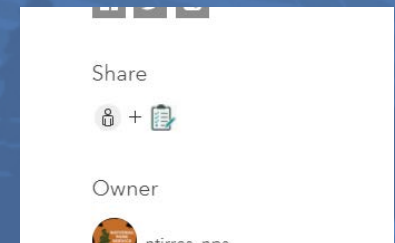
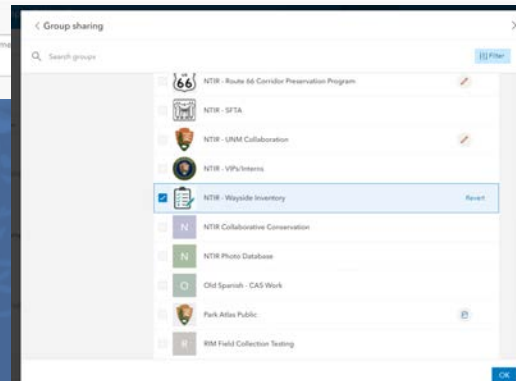
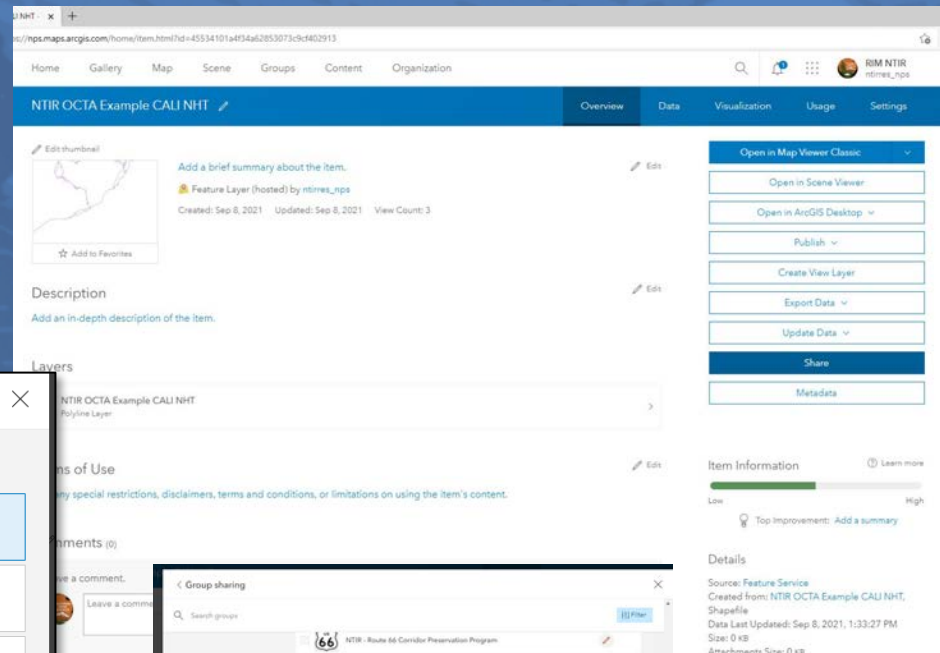
Set group sharing

None yet

Edit group sharing

Save

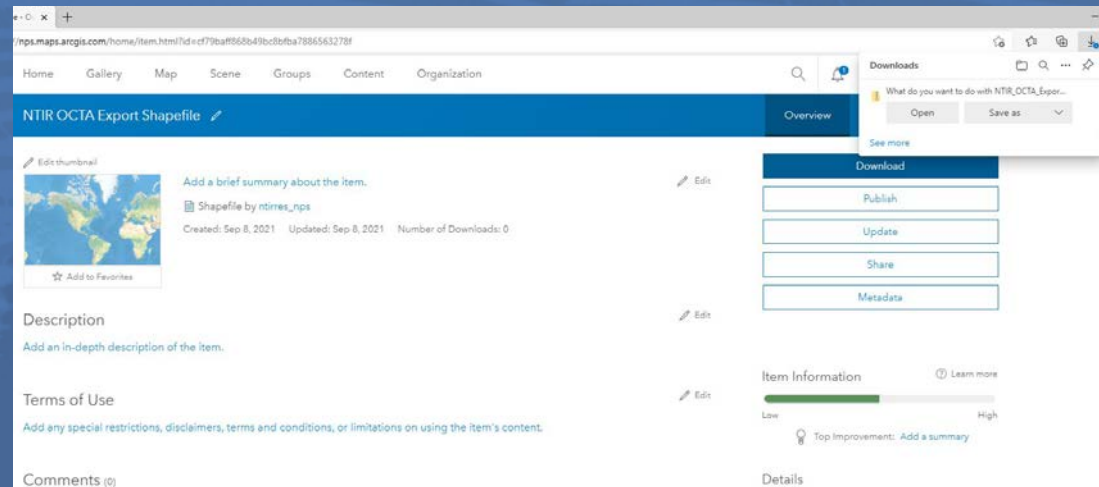
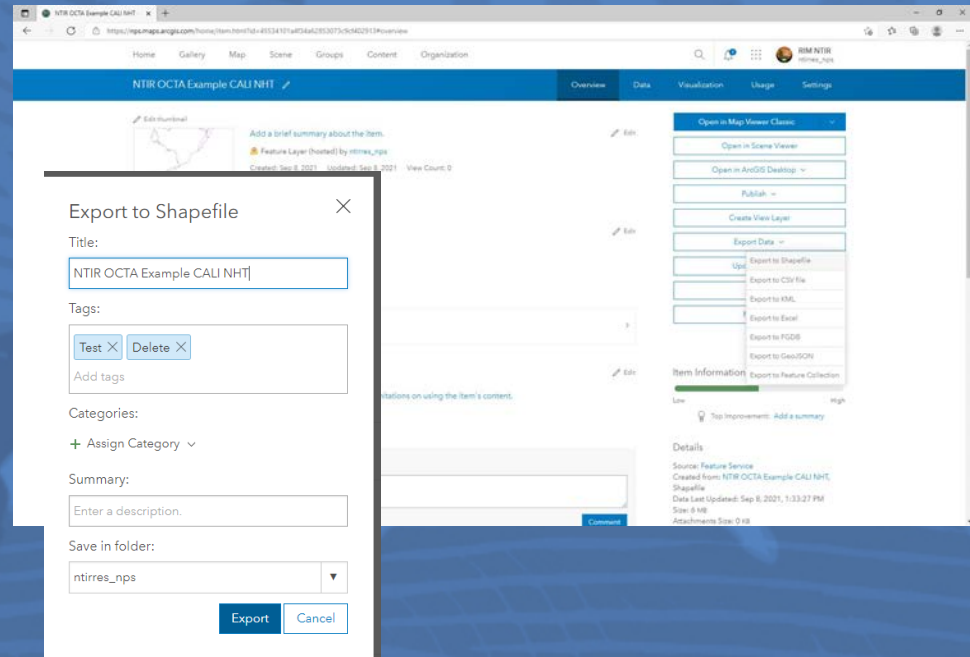
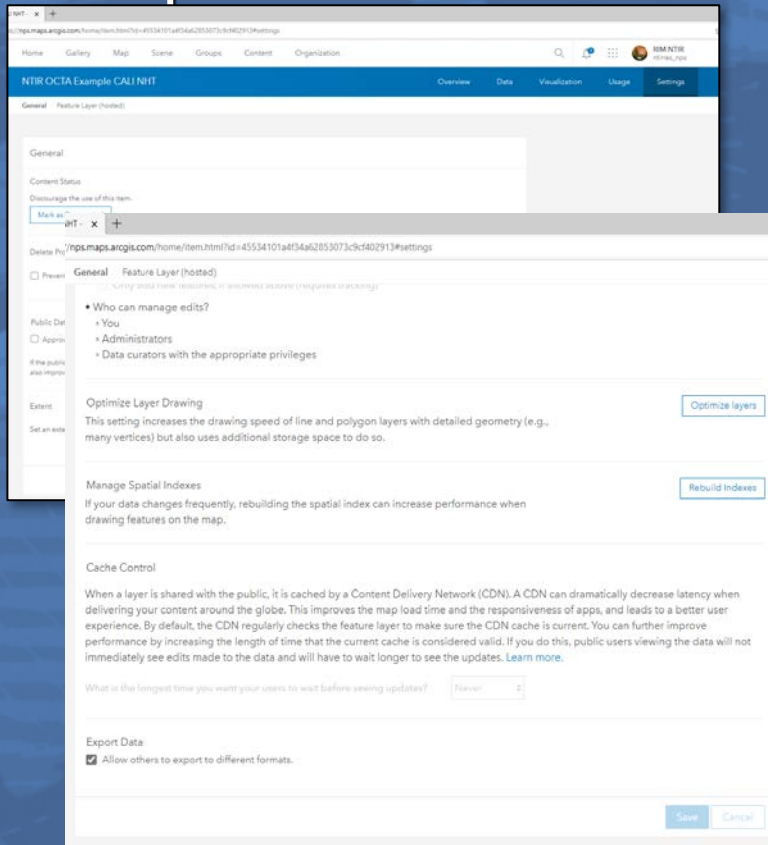
Cancel





Export Data

- Add data to existing spatial data in AGOL





Multi-User Editing

- Users can edit data owned or shared:
 - Groups
 - Organization
- Enable editing and tracking
- Configure editing properties



Multi-User Editing

- Data editing is done through web maps
- Features (segments) can be:
 - Added
 - Deleted
 - Altered
 - Field (Attributes) changed

The screenshot displays an ArcGIS web map interface. The map shows a trail segment highlighted in red on a satellite view. A pop-up window titled "NTIR OCTA Example CALI NHT:" displays the following attributes:

COUNTY	LAND_PLAN	NAT_TR_DES	STATE	TR_LENGTH	TR_NAME	ROUTE_NAME	ROUTE_NA_1	QUAD_250K	QUAD_100K	QUAD_24K	NHTNOST_AL
Dawson	NST/NHT - COMPREHENSIVE MANAGEMENT PLAN	NHT - CALIFORNIA	NE	5.42	CALIFORNIA NATIONAL HISTORIC TRAIL	Primary Route		GRAND ISLAND	KEARNEY	COZAD	NPS - NATIO SERVICE
Dawson	NST/NHT - COMPREHENSIVE MANAGEMENT PLAN	NHT - CALIFORNIA	NE	0.00	CALIFORNIA NATIONAL HISTORIC TRAIL	Primary Route		MCCOOK	GOTHENBURG	GOTHENBURG SE	NPS - NATIO SERVICE
Thayer	NST/NHT - COMPREHENSIVE MANAGEMENT PLAN	NHT - CALIFORNIA	NE	2.05	CALIFORNIA NATIONAL HISTORIC TRAIL	Primary Route		LINCOLN	FAIRBURY	HEBRON	NPS - NATIO SERVICE
Thayer	NST/NHT - COMPREHENSIVE MANAGEMENT PLAN	NHT - CALIFORNIA	NE	1.21	CALIFORNIA NATIONAL HISTORIC TRAIL	Primary Route		LINCOLN	FAIRBURY	ALEXANDRIA	NPS - NATIO SERVICE
					test						

Below the map, a table titled "NTIR OCTA Example CALI NHT (Features: 6979, Selected: 1)" displays the same data as the pop-up window.



Multi-User Editing

Home ▾ NTIR OCTA Example CALI NHT

Open in new Map Viewer New Map ▾ RIM ▾

Map interface showing a topographic map with a purple line representing a trail. The interface includes a toolbar with icons for zooming, home, and full screen, and a search bar.

Map controls: + (Zoom In), Home, - (Zoom Out), Full Screen.

Map features: A purple line representing a trail (NTIR OCTA Example CALI NHT) is overlaid on a topographic map. The map shows rugged terrain with ridges and valleys.

Map metadata: Scale bar (0.5, 1 mi). Powered by Esri, Earthstar Geographics | Esri, HERE, Garmin.

Map navigation: Home ▾ NTIR OCTA Example CALI NHT. Open in new Map Viewer New Map ▾ RIM ▾.

Map tools: Details, Add ▾, Edit, Basemap, Analysis, Save ▾, Share, Print ▾, Directions, Measure, Bookmarks, Find address or place.

Map layers: About, Content, Legend. Contents: ☒ NTIR OCTA Example CALI NHT, Imagery with Labels.

Map footer: Trust Center, Contact Esri, Report Abuse, Contact Us.



ESRI App Integration

- GPS Field Data Collection Apps
 - Survey123
 - Field Maps (Collector)
- Web App Development
 - Specialized Web Applications
 - Storymaps





Questions/Demos?

References to non-U.S. Department of the Interior (DOI) products do not constitute an endorsement by the DOI.





Contact



Brian Deaton
RIM Team Lead
GIS Specialist
505-819-9040
Brian_deaton@nps.gov