

How To Manage GIS Data

June 2, 2022

Overview

- Discussion of state management of GIS data
- Demo of creating GIS data from NHDPlus in ArcGIS Pro-Jesse
- Overview of HydroAdd Tool-Shelly

Introducing HydroAdd

USGS science for a changing world
Hydrography Addressing Tool

SOURCE ID | HUICS | REAC >

Service Layer: MN StreamStats test

Search Source ID

DRAW EXTENT | CLEAR EXTENT | Show approved | Show unapproved

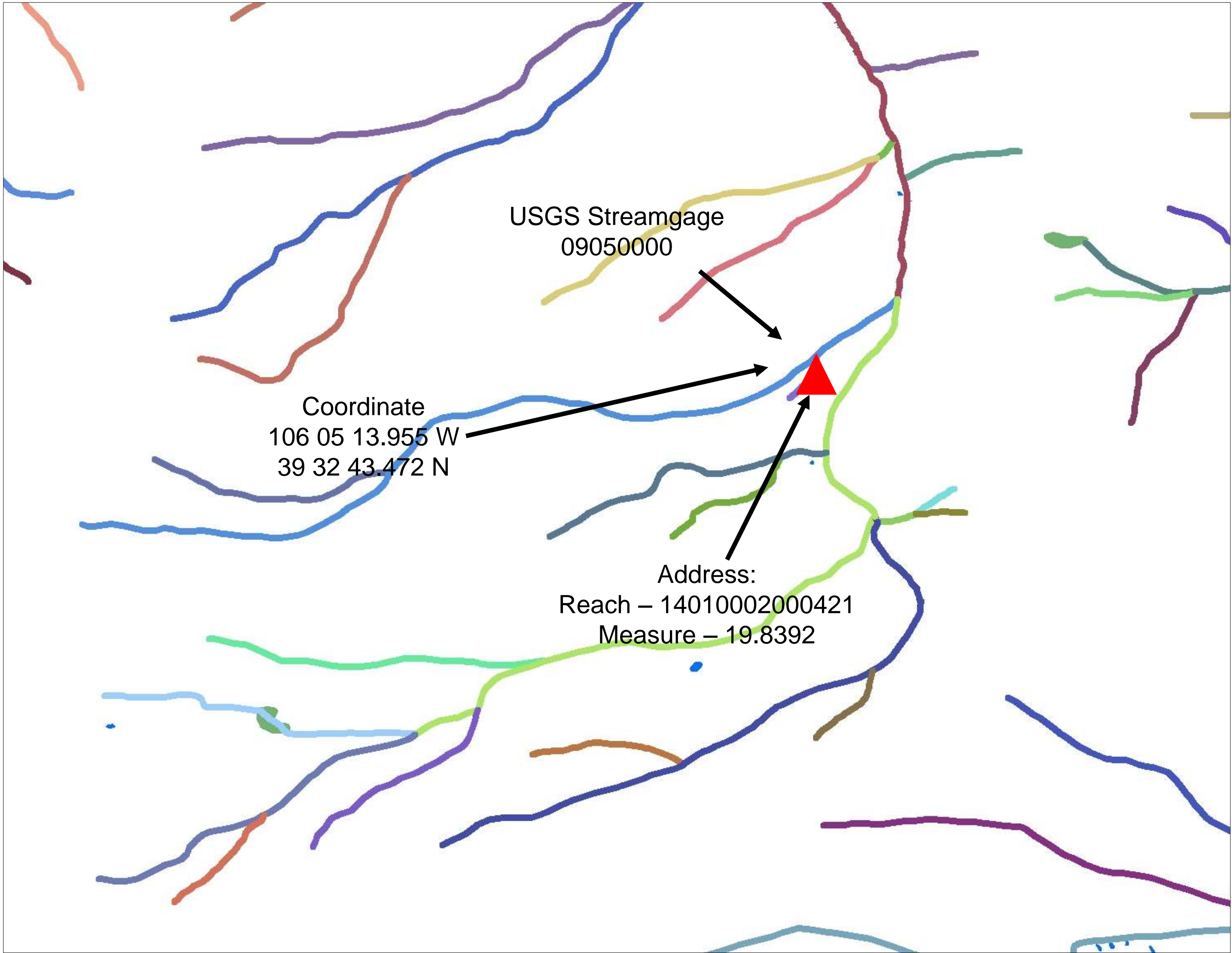
05288470 Minn StrStats
05288480 Minn StrStats
05288487 Minn StrStats
05288490 Minn StrStats
05288500 Minn StrStats
05288705 Minn StrStats
05288840 Minn StrStats

Zoom: 9 | XY: -93.813761°, 44.503258°

objectid	permanent_identifier	fdate	resolution	gnis_id	gnis_name ↓	lengthkm
23407258	45714404	Mon, Apr 2, 2012 11:06 AM	2	00654181	Willow Creek	1.159
27947885	45714332	Mon, Apr 2, 2012 11:06 AM	2	00654181	Willow Creek	5.561
82404	45352052	Mon, Apr 2, 2012 11:20 AM	2	00648637	North Fork Crow River	3.559

DOI Privacy Policy | Legal | Accessibility | Site Map | Contact USGS | U.S. Department of the Interior | DOI Inspector General | White House | E-gov | Open Government | No Fear Act | FOIA | Last Modified: 12/03/2021 | Version 1.0.0.11 BETA

NHD is a Hydrographic Addressing System

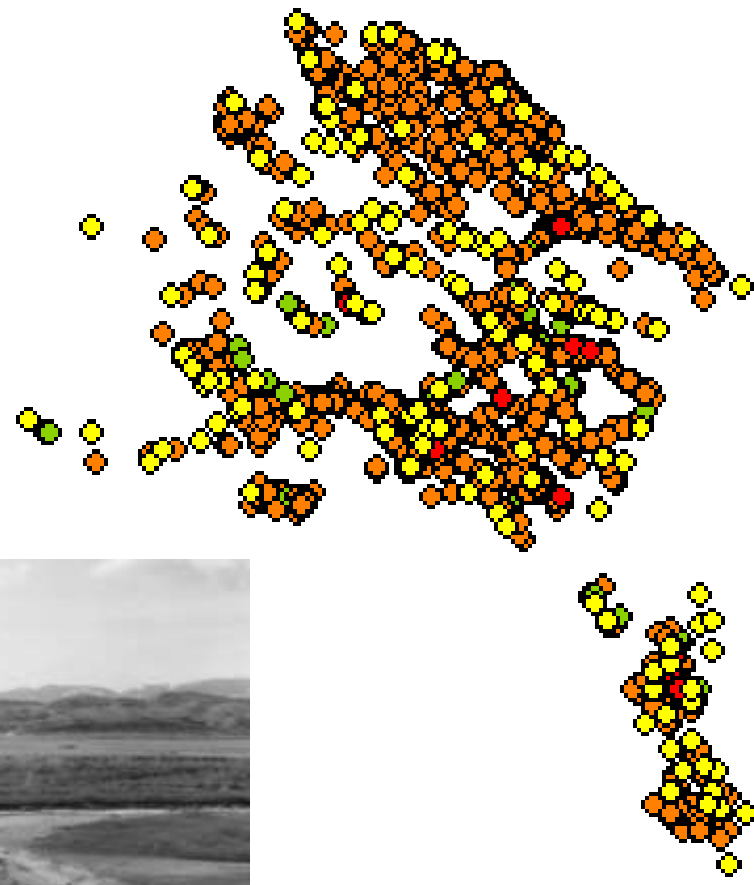


Other Terms for Addressing

- Addressing
- Linear referencing
- Indexing
- Linking
- “Events”



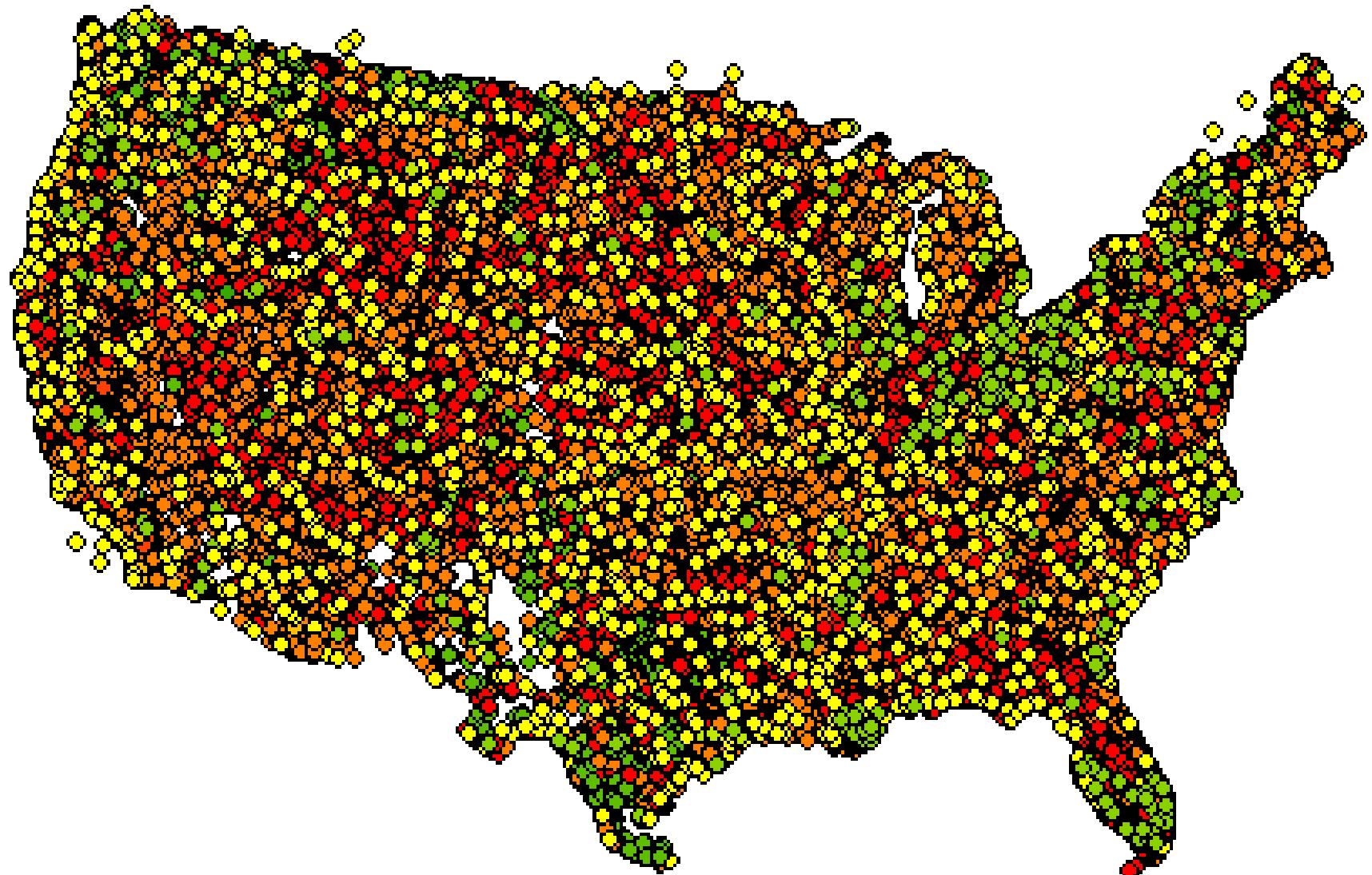
NHD Point Events



NHDPointEvent

286,005, EventType

- ◆ 60,439, Dam
- ◆ 40, Flow Alteration Unknown
- ◆ 66, Flow Alteration=Addition
- ◆ 1,283, Flow Alteration=Removal
- ◆ 2,207 Hydrologic Unit Outlet 8
- ◆ 9,036, Streamgage: Streamgage Status=Active; Record=Continuous
- ◆ 1,005, Streamgage: Streamgage Status=Active; Record=Partial
- ◆ 118,149, Streamgage: Streamgage Status=Inactive
- ◆ 93,780, Water Quality Station



Addressed Data for Tracking Assets

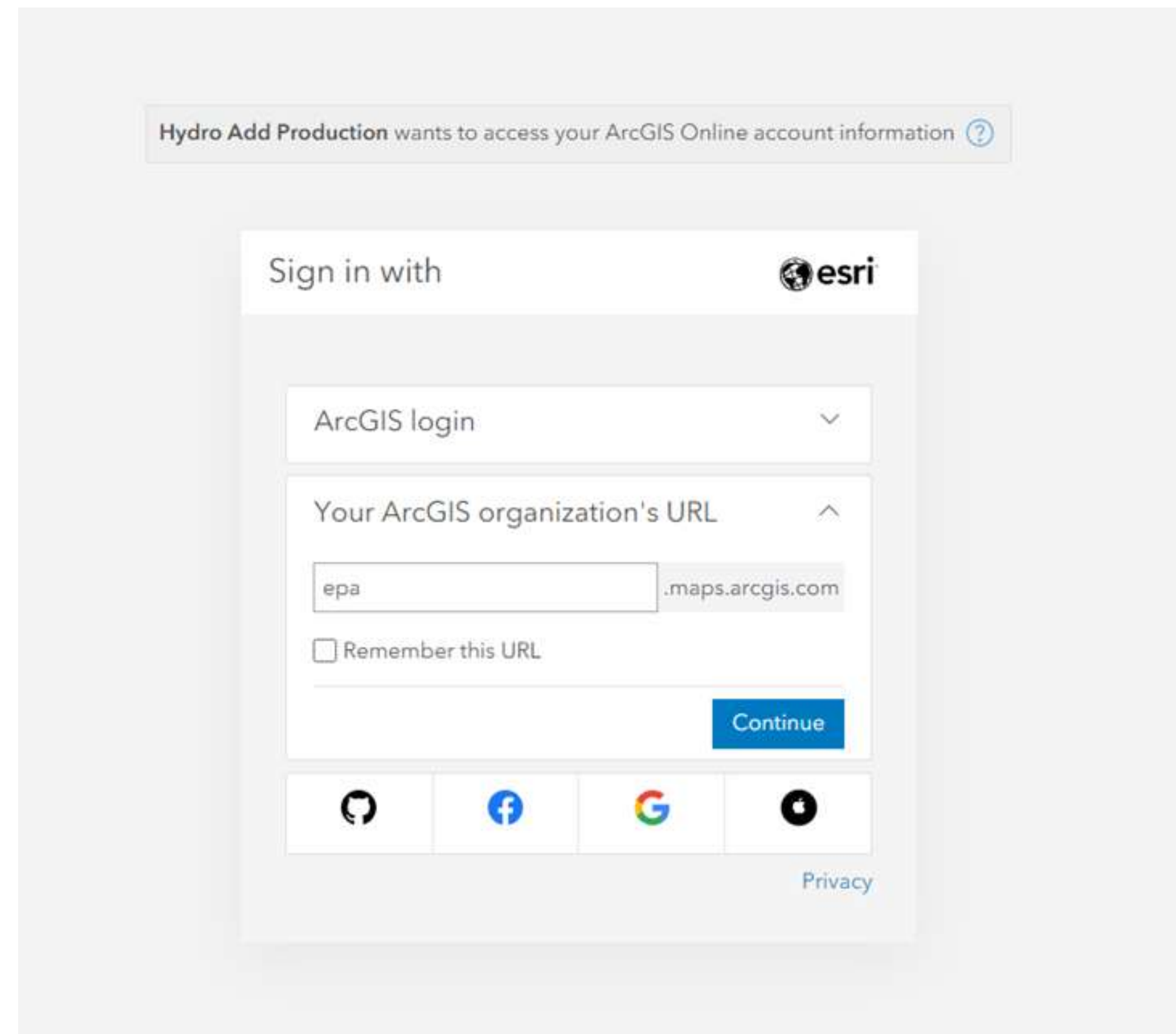


Any Hydro Observation can be Addressed to the NHD

- Point source pollution
- Biological sampling sites
- Invasive species in riparian zones
- Recreational stretches of river
- Llama river crossings
- Hyacinth overgrowth
- Supply canals
- Fish ladders



Software Requirements



ArcGIS Online (AGOL) account

Free option available*

Introducing HydroAdd Tool

Create and maintain addressed data online

The screenshot displays the USGS Hydrography Addressing Tool interface. The top header shows the USGS logo and the title "Hydrography Addressing Tool". The left sidebar contains navigation options: "My Profile", "Edit History", "Search/Select", "Edit Queues", "Make New Queue", "WA dams", "Minn StrStats", "Batch QC", "Make New Point", "Make New Line", "Download Schema", "HydroAdd Schema", "Admin", and "USER GUIDE".

The main interface is divided into several sections:

- Service Layer:** "MN StreamStats test"
- Search:** "Search Source ID"
- Map:** A map of Minnesota showing stream networks. A dashed box highlights a specific area. The map includes a zoom control and a coordinate display: "Zoom: 9", "XY: -93.813761°, 44.503258°".
- Map Style Selector:** A panel on the right side of the map offers various map styles: "World Hillshade", "US Topo", "US Imagery", "US Topo Hillshade", and "Light Gray Canvas".
- Data Table:** A table below the map displays stream statistics. The table has columns for "objectid", "permanent_identifier", "fdate", "resolution", "gnis_id", "gnis_name", and "lengthkm".

objectid	permanent_identifier	fdate	resolution	gnis_id	gnis_name	lengthkm
23407258	45714404	Mon, Apr 2, 2012 11:06 AM	2	00654181	Willow Creek	1.159
27947885	45714332	Mon, Apr 2, 2012 11:06 AM	2	00654181	Willow Creek	5.561
82404	45352052	Mon, Apr 2, 2012 11:20 AM	2	00648637	North Fork Crow River	3.559

<https://hydromaintenance.nationalmap.gov/hydro-add>

HydroAdd Basic Workflow

Prepare your data for HydroAdd

1. Download the HydroAdd empty schema from the HydroAdd tool.
2. Add any fields you need to the HydroAdd schema with ArcGIS Pro.
3. Append your data to the empty schema with the Append tool.

Share your data as a web map at ArcGIS Online

1. Create a group at AGOL.
2. Enter group membership.
3. Prepare a map with ArcGIS Pro.
4. Publish a web map from ArcGIS Pro to the AGOL group.
5. Enable editing of the web layer in AGOL.

Add the web map to HydroAdd

1. Copy the web layer URL from AGOL.
2. Add a new Esri service in HydroAdd
3. Paste the URL

Use HydroAdd to address your data to the NHD

1. Make new points, lines.
2. Search and select.
3. Create an editing queue.
4. Identify items.
5. Run Batch QC.
6. Publish to AGOL.

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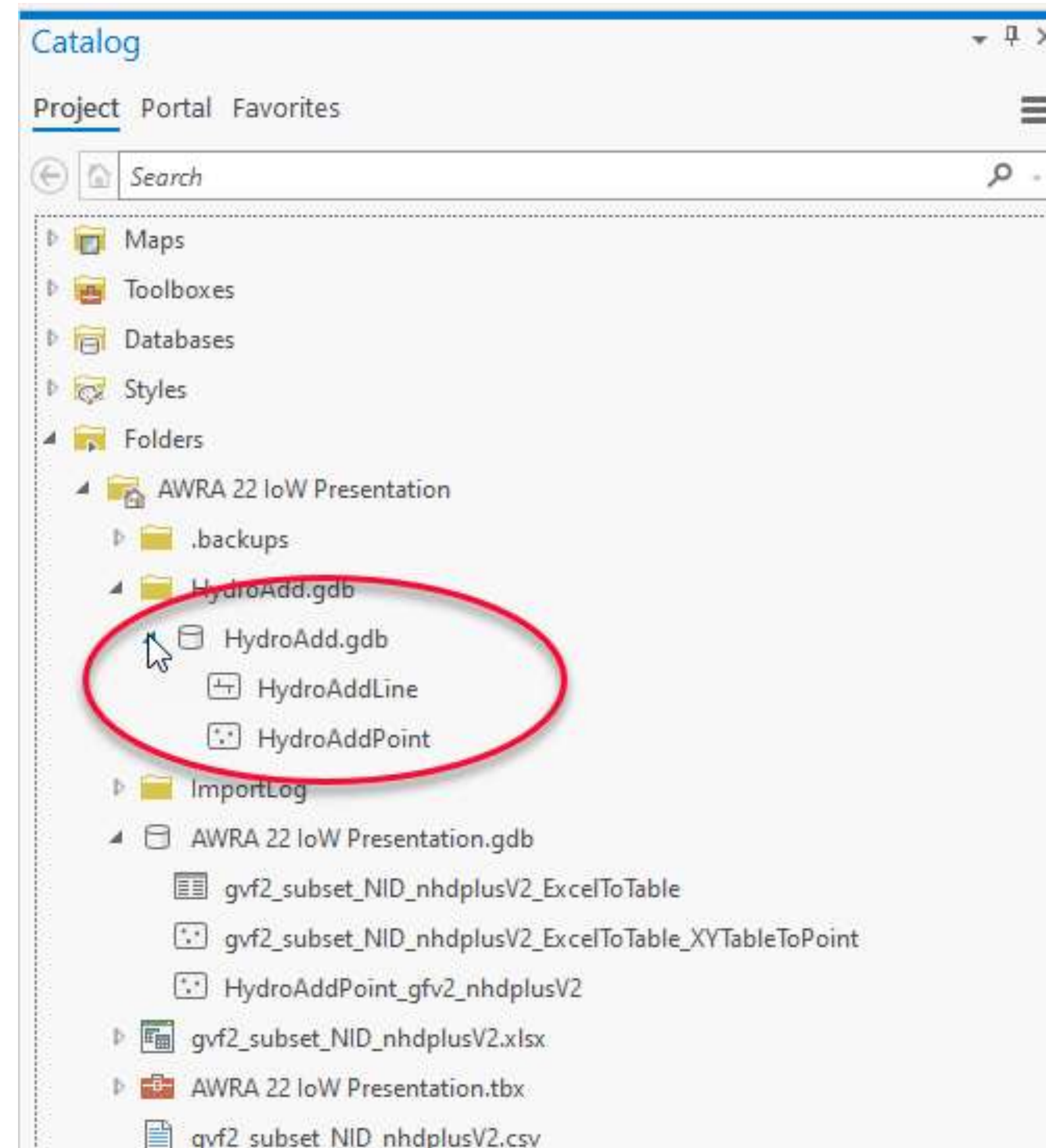
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2. Search and select.
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5. Run Batch QC.
6. Publish to AGOL.

Download the empty HydroAdd Schema from HydroAdd tool

The screenshot displays the USGS Hydrography Addressing Tool interface. The top header includes the USGS logo and the title "Hydrography Addressing Tool". The left sidebar contains navigation options: My Profile, Edit History, Search/Select, Edit Queues, Batch QC, Make New Point, Make New Line, **Download Schema** (circled in red), HydroAdd Schema, and Admin. Below the sidebar is a "USER GUIDE" button. The main content area shows the user profile for "Mike Prod AGOL" with email "mdtinker@usgs.gov", roles "Editor, Admin", and login information. Below the profile is a list of services under "Mike Prod AGOL's Services": 303d lines, HydroAdd point, HydroAdd line, 303d points, HI falls, WA dams, HU8PPs, Three Dots, three lines, HydroAdd Practice Lines, and AWRA IoW. The right side of the interface features a map of North America with various cities and regions labeled. The bottom footer contains legal and contact information, including "DOI Privacy Policy", "Legal", "Accessibility", "Site Map", "Contact USGS", "U.S. Department of the Interior", "DOI Inspector General", "White House", "E-gov", "Open Government", "No Fear Act", "FOIA", "Last Modified: 04/07/2022", and "Version 1.0.1.0 BETA".

Place the HydroAdd schema into the ArcGIS Pro project



HydroAdd point data schema

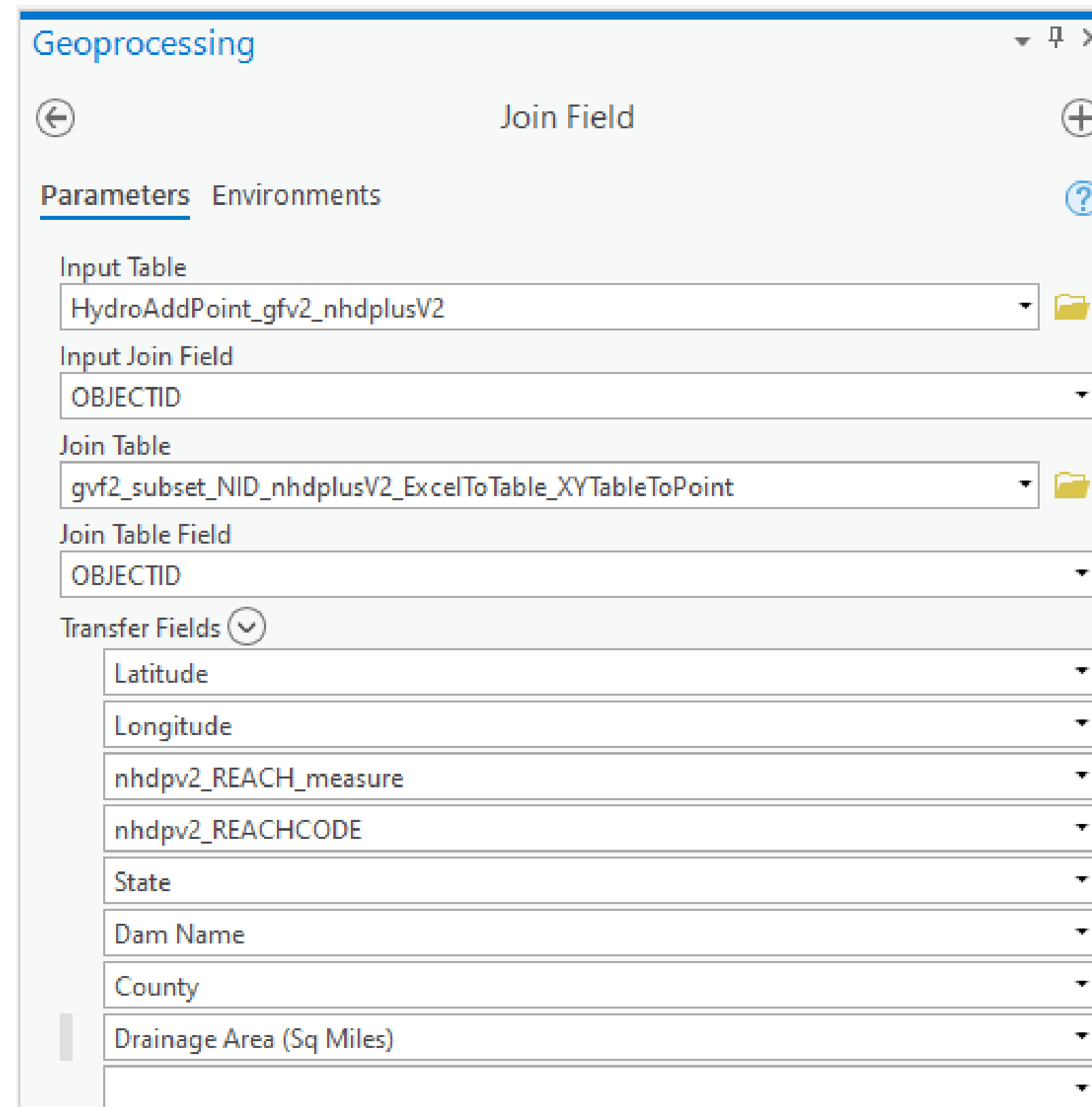
Field Name	Alias	Data Type	<input checked="" type="checkbox"/> Allow NULL	<input type="checkbox"/> Highlight	Number Format	Domain	Default	Length
SourceDataset	SourceDataset	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				130
SourceFeatureURL	SourceFeatureURL	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				255
FeatureType	FeatureType	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				60
ReachCode	ReachCode	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				14
Measure	Measure	Double	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Numeric			
ReachSMDate	ReachSMDate	Date	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
AddressDate	AddressDate	Date	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Catchment	Catchment	Double	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Numeric			
HU	HU	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				16
OnNetwork	OnNetwork	Short	<input type="checkbox"/>	<input type="checkbox"/>	Numeric	NoYesDomain	No	
HydroAddressID	HydroAddressID	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				40
GNIS_NAME	GNIS_NAME	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				65
GNIS_ID	GNIS_ID	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				10
SnapTolerance	SnapTolerance	Double	<input type="checkbox"/>	<input type="checkbox"/>	Numeric		0	
SnapDistance	SnapDistance	Double	<input type="checkbox"/>	<input type="checkbox"/>	Numeric		0	
InSnapTolerance	InSnapTolerance	Short	<input type="checkbox"/>	<input type="checkbox"/>	Numeric	NoYesDomain	No	
QCTolerance	QCTolerance	Double	<input type="checkbox"/>	<input type="checkbox"/>	Numeric		0	
InQCTolerance	InQCTolerance	Short	<input type="checkbox"/>	<input type="checkbox"/>	Numeric	NoYesDomain	No	
QCApproved	QCApproved	Short	<input type="checkbox"/>	<input type="checkbox"/>	Numeric	NoYesDomain	No	

HydroAdd Line schema

Field Name	Alias	Data Type	<input checked="" type="checkbox"/> Allow NULL	<input type="checkbox"/> Highlight	Number Format	Domain	Default	Length
SourceID	SourceID	Text	<input type="checkbox"/>	<input type="checkbox"/>				130
SourceAgency	SourceAgency	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				130
SourceDataset	SourceDataset	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				130
SourceFeatureURL	SourceFeatureURL	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				255
FeatureType	FeatureType	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				60
ReachCode	ReachCode	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				14
FromMeasure	FromMeasure	Double	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Numeric			
ToMeasure	ToMeasure	Double	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Numeric			
ReachSMDate	ReachSMDate	Date	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
AddressDate	AddressDate	Date	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
FromCatchment	FromCatchment	Double	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Numeric			
ToCatchment	ToCatchment	Double	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Numeric			
FromHU	FromHU	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				16
ToHU	ToHU	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				16
OnNetwork	OnNetwork	Short	<input type="checkbox"/>	<input type="checkbox"/>	Numeric	NoYesDomain	No	
HydroAddressID	HydroAddressID	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				40
GNIS_NAME	GNIS_NAME	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				65
GNIS_ID	GNIS_ID	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				10
SnapTolerance	SnapTolerance	Double	<input type="checkbox"/>	<input type="checkbox"/>	Numeric		0	
FromSnapDistance	FromSnapDistance	Double	<input type="checkbox"/>	<input type="checkbox"/>	Numeric		0	
ToSnapDistance	ToSnapDistance	Double	<input type="checkbox"/>	<input type="checkbox"/>	Numeric		0	
MaxSnap	MaxSnap	Double	<input type="checkbox"/>	<input type="checkbox"/>	Numeric		0	
InSnapTolerance	InSnapTolerance	Short	<input type="checkbox"/>	<input type="checkbox"/>	Numeric	NoYesDomain	No	
QCTolerance	QCTolerance	Double	<input type="checkbox"/>	<input type="checkbox"/>	Numeric		0	
InQCTolerance	InQCTolerance	Short	<input type="checkbox"/>	<input type="checkbox"/>	Numeric	NoYesDomain	No	
LengthChangeTolerance	LengthChangeTolerance	Double	<input type="checkbox"/>	<input type="checkbox"/>	Numeric		0	
LengthChange	LengthChange	Double	<input type="checkbox"/>	<input type="checkbox"/>	Numeric		0	
InLengthChangeTolerance	InLengthChangeTolerance	Short	<input type="checkbox"/>	<input type="checkbox"/>	Numeric	NoYesDomain	No	
QCApproved	QCApproved	Short	<input type="checkbox"/>	<input type="checkbox"/>	Numeric	NoYesDomain	No	
Shape_Length	Shape_Length	Double	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Numeric			

Add fields to the HydroAdd schema

ArcGIS Pro: Join Field tool



Field Name	Alias	Data Type	<input checked="" type="checkbox"/> Allow NUL	<input type="checkbox"/> Highlight	Number Format	Domain	Default	Length
SourceID	SourceID	Text	<input type="checkbox"/>	<input type="checkbox"/>				130
SourceAgency	SourceAgency	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				130
SourceDataset	SourceDataset	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				130
SourceFeatureURL	SourceFeatureURL	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				255
FeatureType	FeatureType	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				60
ReachCode	ReachCode	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				14
Measure	Measure	Double	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Numeric			
ReachSMDate	ReachSMDate	Date	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
AddressDate	AddressDate	Date	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
Catchment	Catchment	Double	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Numeric			
HU	HU	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				16
OnNetwork	OnNetwork	Short	<input type="checkbox"/>	<input type="checkbox"/>	Numeric	NoYesDomain	No	
HydroAddressID	HydroAddressID	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				40
GNIS_NAME	GNIS_NAME	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				65
GNIS_ID	GNIS_ID	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				10
SnapTolerance	SnapTolerance	Double	<input type="checkbox"/>	<input type="checkbox"/>	Numeric		0	
SnapDistance	SnapDistance	Double	<input type="checkbox"/>	<input type="checkbox"/>	Numeric		0	
InSnapTolerance	InSnapTolerance	Short	<input type="checkbox"/>	<input type="checkbox"/>	Numeric	NoYesDomain	No	
QCTolerance	QCTolerance	Double	<input type="checkbox"/>	<input type="checkbox"/>	Numeric		0	
InQCTolerance	InQCTolerance	Short	<input type="checkbox"/>	<input type="checkbox"/>	Numeric	NoYesDomain	No	
QCApproved	QCApproved	Short	<input type="checkbox"/>	<input type="checkbox"/>	Numeric	NoYesDomain	No	
nhdpv2_COMID	nhdpv2_COMID	Long	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Numeric			
nhdpv2_REACHCODE	nhdpv2_REACHCODE	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				255
nhdpv2_REACH_measure	nhdpv2_REACH_measure	Double	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Numeric			
Dam_Name	Dam Name	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				255
Latitude	Latitude	Double	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Numeric			
Longitude	Longitude	Double	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Numeric			
County	County	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				255
State	State	Text	<input checked="" type="checkbox"/>	<input type="checkbox"/>				255
Drainage_Area_Sq_Miles	Drainage Area (Sq Miles)	Long	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Numeric			

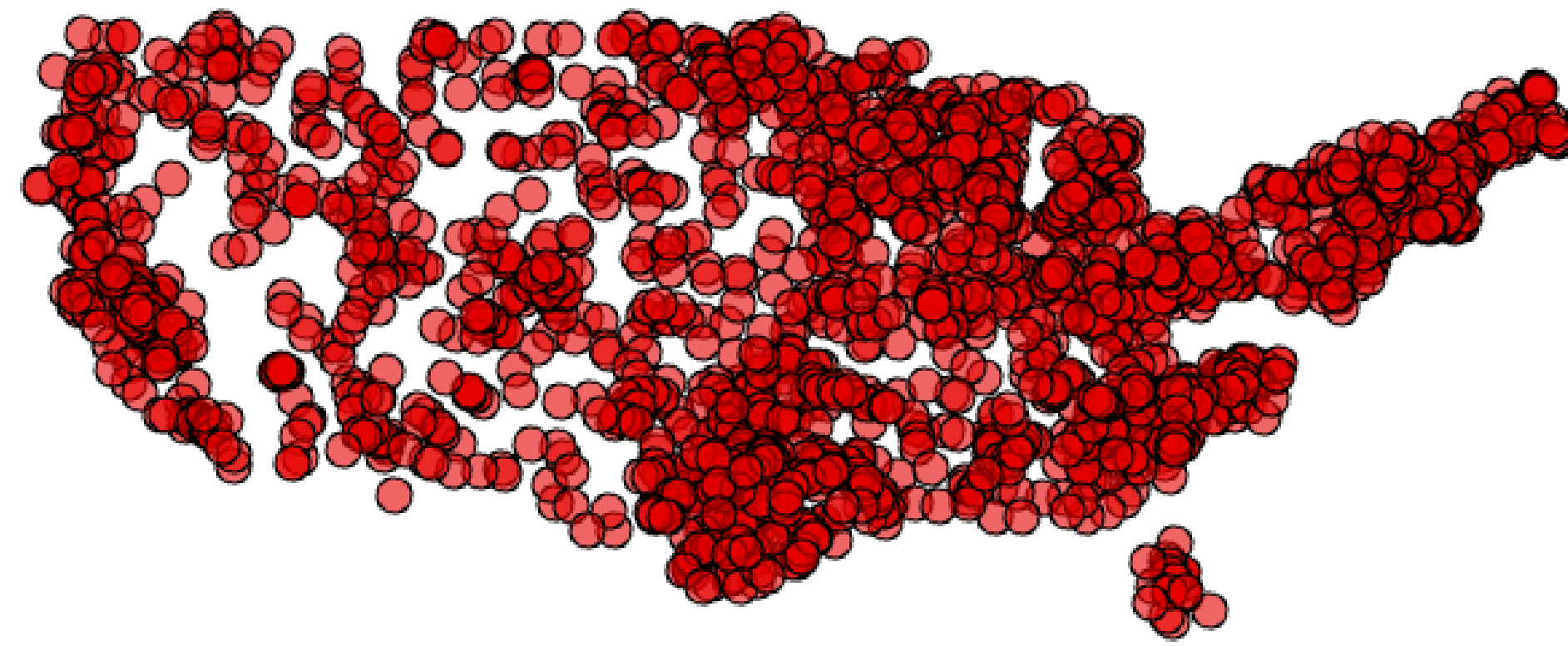
Append your data to the empty HydroAdd schema

The screenshot shows the 'Append' tool in the Geoprocessing environment. The 'Input Datasets' field contains 'gvf2_subset_NID_nhdplusV2_ExcelToTable_XYTableToPoint'. The 'Target Dataset' is 'HydroAddPoint_gvf2_nhdplusV2'. The 'Schema Type' dropdown is highlighted with a red box and set to 'Use the Field Map to reconcile schema differences'. The 'Field Map' section shows a table with 'Output Fields' and 'Source' columns. The 'Source' column is currently empty, and the 'Merge Rule' is set to 'First'.

Output Fields (+)	Source	Properties
SourceID	Merge Rule: First	
SourceAgency (0)	gvf2_subset_NID_nhdplusV2_ExcelToTabl	
SourceDataset (0)	Type_NID	
SourceFeatureURL (0)		
FeatureType (0)		
ReachCode		
Measure		
ReachSMDate (0)		
AddressDate (0)		
Catchment (0)		
HU		
OnNetwork (0)		

The screenshot shows the 'Field Map' dialog box. The 'Output Fields' list includes 'nhdpv2_REACHCODE', which is highlighted. The 'Source' column is currently empty, and the 'Merge Rule' is set to 'First'.

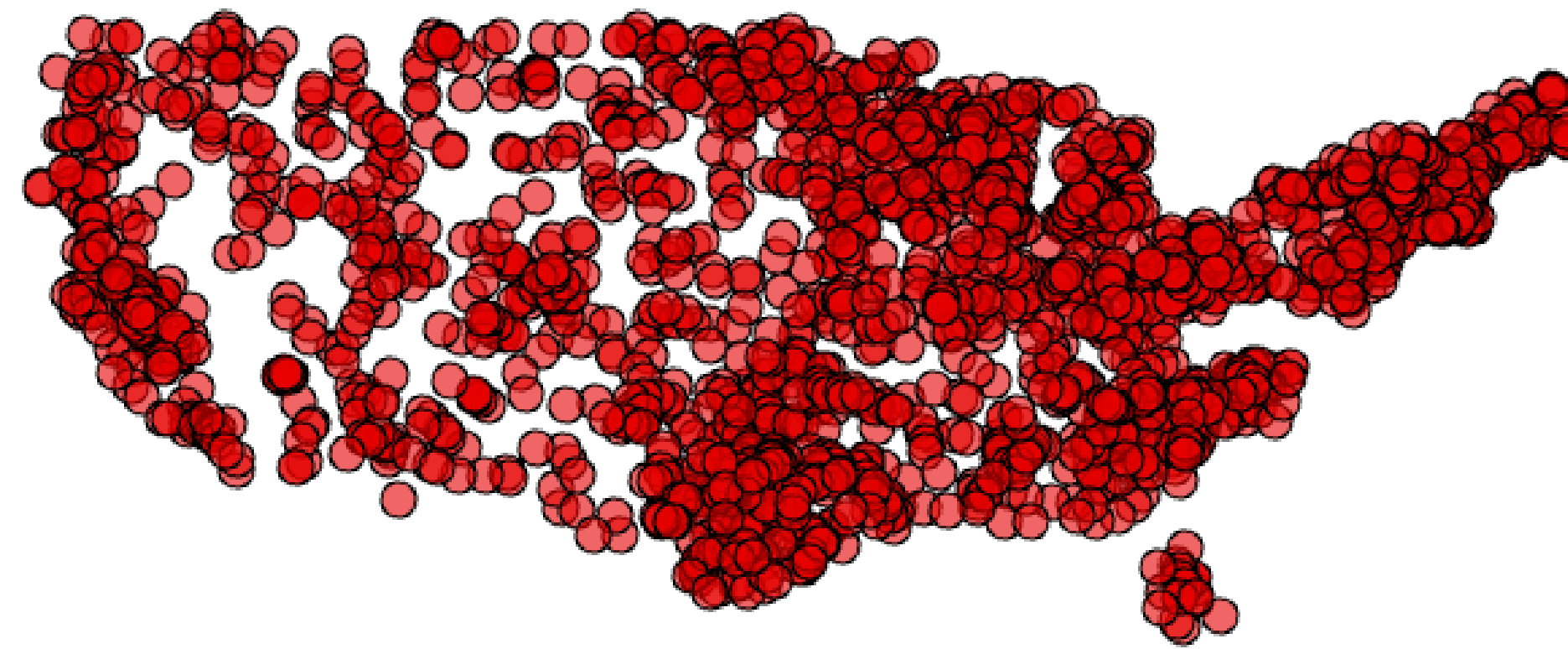
Output Fields (+)	Source	Properties
QCTolerance (0)	Merge Rule: First	
InQCTolerance (0)	gvf2_subset_NID_nhdplusV2_ExcelToTabl	
QCApproved (0)	nhdpv2_REACHCODE	
nhdpv2_COMID		
nhdpv2_REACHCODE		
nhdpv2_REACH_measure		
Dam_Name		
Latitude		
Longitude		
County		
State		
Drainage_Area_Sq_Miles_		



1:42,404,419 | 97.9646800°W 25.2974637°N | Selected Features: 0

HydroAddPoint_gfv2_nhdplusV2

OBJECTID *	Shape *	SourceID	SourceAgency	SourceDataset	SourceFeatureURL	FeatureType	ReachCode	Measure	ReachSMDate	AddressDate
28	Point Z	ME00122	Maine	<Null>	https://damsafety.org...	Gravity;Concrete;Other	01030003000489	0	<Null>	<Null>
29	Point Z	ME00468	Maine	<Null>	https://damsafety.org...	Rockfill;Gravity;Timber...	01030003000537	0	<Null>	<Null>
30	Point Z	ME00302	Maine	<Null>	https://damsafety.org...	Earth;Gravity	01030003000789	0	<Null>	<Null>
31	Point Z	ME00101	Maine	<Null>	https://damsafety.org...	Rockfill;Masonry;Earth...	01030003000789	0	<Null>	<Null>
32	Point Z	ME00088	Federal Energy Regulat...	<Null>	https://damsafety.org...	Earth;Gravity;Concrete	01030003001833	18.0713	<Null>	<Null>
33	Point Z	ME00115	Maine	<Null>	https://damsafety.org...	Concrete	01030003002738	0	<Null>	<Null>
34	Point Z	ME00106	Federal Energy Regulat...	<Null>	https://damsafety.org...	Gravity;Concrete	01030003002797	0	<Null>	<Null>
35	Point Z	ME00096	Maine	<Null>	https://damsafety.org...	Rockfill;Concrete	01030003002853	0	<Null>	<Null>
36	Point Z	ME00089	Federal Energy Regulat...	<Null>	https://damsafety.org...	Earth;Gravity;Concrete	01030003002999	0	<Null>	<Null>
37	Point Z	NH00191	Federal Energy Regulat...	<Null>	https://damsafety.org...	Rockfill;Earth;Timber C...	01040001000006	10.75794	<Null>	<Null>
127	Point Z	NH00161	Federal Energy Regulat...	<Null>	https://damsafety.org...	Rockfill;Concrete;Other	01040001000024	0	<Null>	<Null>
38	Point Z	ME00025	Federal Energy Regulat...	<Null>	https://damsafety.org...	Rockfill;Buttress;Earth	01040001003431	0	<Null>	<Null>
39	Point Z	ME00026	Federal Energy Regulat...	<Null>	https://damsafety.org...	Rockfill;Buttress;Earth	01040001003439	0	<Null>	<Null>
40	Point Z	ME00004	Federal Energy Regulat...	<Null>	https://damsafety.org...	Gravity;Concrete	01040002000007	10.44906	<Null>	<Null>
41	Point Z	ME00011	Federal Energy Regulat...	<Null>	https://damsafety.org...	Rockfill;Timber Crib	01040002000031	0	<Null>	<Null>
43	Point Z	ME83013	Federal Energy Regulat...	<Null>	https://damsafety.org...	Masonry;Gravity	01040002000158	4.63325	<Null>	<Null>
44	Point Z	ME00379	Federal Energy Regulat...	<Null>	https://damsafety.org...	Masonry;Gravity;Conc...	01040002000163	0	<Null>	<Null>
45	Point Z	ME00207	Maine	<Null>	https://damsafety.org...	Earth;Gravity;Concrete	01040002000183	43.82375	<Null>	<Null>
46	Point Z	ME00295	Maine	<Null>	https://damsafety.org...	Masonry;Gravity;Conc...	01040002000183	43.82375	<Null>	<Null>
128	Point Z	ME00748	Maine	<Null>	https://damsafety.org...	NA	01040002000349	0	<Null>	<Null>



1:42,404,419

127.9991189°W 26.3053307°N

Selected Features: 0

HydroAddPoint_gfv2_nhdplusV2

Field:	Add	Calculate	Selection:		Zoom To	Switch	Clear	Delete	Copy
QCApproved	nhdpv2_COMID	nhdpv2_REACHCODE	nhdpv2_REACH_measure	Dam Name	Latitude	Longitude	County	State	Drainage Area (Sq Miles)
No	720078	01010002001002	0	Churchill	6.493333	-69.288333	Piscataquis	Maine	0
No	805079	01010004000009	0	Caribou	46.8489	-68.0015	Aroostook	Maine	1943
No	803111	01010004000533	1.88643	Libby Brook	6.753333	-67.846667	Aroostook	Maine	0
No	811531	01010004000561	0.92457	North Vassalboro	4.484392	-69.622996	Kennebec	Maine	43
No	811531	01010004000561	0.92457	State Street	6.681657	-68.017351	Aroostook	Maine	0
No	1699108	01020001002199	0	Dole Pond	46.0112	-70.1935	Somerset	Maine	43
No	1702358	01020001002378	0	Harrington Lake	45.9478	-69.1922	Piscataquis	Maine	40
No	1711668	01020002001096	0	Grand Lake (Matagam...	46.1411	-68.790438	Penobscot	Maine	485
No	1712388	01020002001118	0	Telos	6.148056	-69.126667	Piscataquis	Maine	0
No	5635	01020003000014	0	Village	5.359135	-68.284474	Penobscot	Maine	0
No	1726313	01020004000001	3.75439	Howland	45.2394	-68.6575	Penobscot	Maine	1500
No	1720933	01020004000206	0	Wilson Stream	5.452075	-69.532694	Piscataquis	Maine	0
No	1722257	01020004000243	0	Upper Dam	45.1837	-69.23	Piscataquis	Maine	295
No	1722335	01020004000250	0	Guilford	5.168386	-69.385165	Piscataquis	Maine	295
No	1737066	01020005000004	63.20769	Alamoosook Lake	4.592142	-68.721345	Hancock	Maine	0
No	1743128	01020005000115	0	Lowell Tannery	45.1838	-68.465	Penobscot	Maine	301
No	1737122	01020005000434	0	Frankfort	4.609096	-68.873128	Waldo	Maine	166
No	1737262	01020005001742	2.97386	Orono	4.883277	-68.664883	Penobscot	Maine	7710
No	1022672	01030001000048	27.31791	Moosehead - East Outl...	45.5859	-69.7147	Somerset	Maine	1268
No	1022290	01030001000213	0	Lazy Tom	5.691504	-69.434125	Piscataquis	Maine	0

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Use HydroAdd to address your data to the NHD

1. Make new points, lines.
2. Search and select.
3. Create an editing queue.
4. Identify items.
5. Run Batch QC.
6. Publish to AGOL.

Share your data to AGOL from ArcGIS Pro

Share As Web Layer ? ▾ ⌵ ×

Sharing AWRA'22 IoW Presentation As A Web Layer

General Configuration Content

Item Details

Name
AWRA_22 IoW Presentation

Summary
Demo of map share for AWRA

Tags
AWRA × NHD × HydroAdd ×

Layer Type ⓘ

Feature
 Tile
 Vector Tile

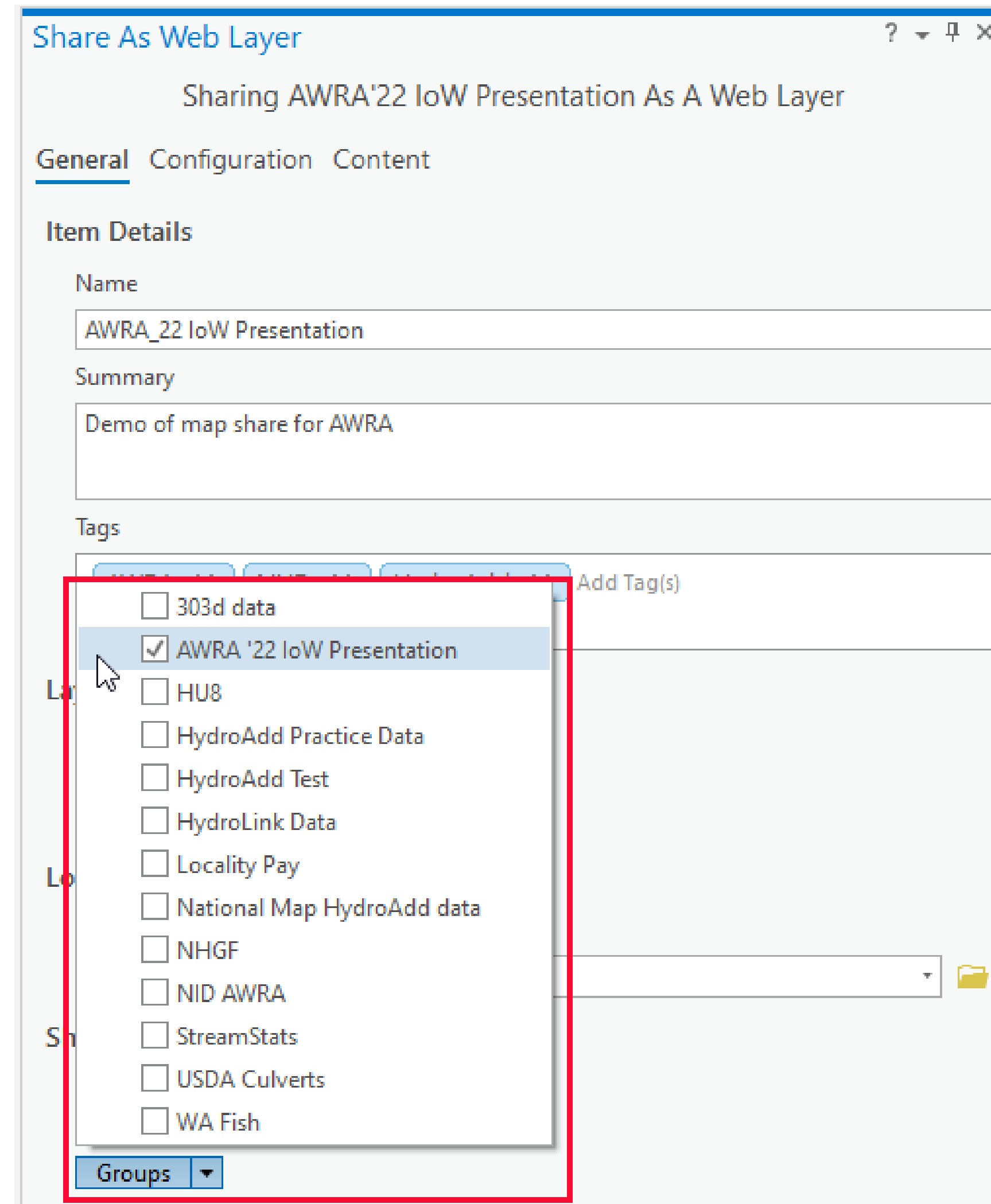
Location

Folder
Select or create folder ▾ 📁

Share with

Everyone
 U.S. Geological Survey
Groups ▾

Share your data to AGOL from ArcGIS Pro



Groups at ArcGIS Online (AGOL)

Home Gallery Map Scene Notebook **Groups** Content Organization

Michael Tinker
mdtinker_USGS

Groups My Groups Featured Groups My Organization's Groups

Create group Search My Groups Title Filter

Filters

Only show groups with new membership requests

Owner

- mdtinker_USGS
- Another organization member
- Someone outside the organization

Group membership setting

- My organization only
- Partnered organizations
- Any organization

Current members are from

- My organization only
- Another organization
 - GeoPlatform ArcGIS Online
 - NOAA GeoPlatform

Special groups

- Open Data
- Shared Update
- Distributed
- Administrative
- Organization Settings ⓘ


1 - 13 of 13

- 3** 303d data
Owner: mdtinker_USGS
Created: Sep 24, 2021 Last updated: Mar 10, 2022 Viewable by: Organization
Any organization 303d testing data for HydroAdd Delete group
- A** AWRA '22 IoW Presentation
Owner: mdtinker_USGS
Created: Apr 29, 2022 Last updated: May 2, 2022 Viewable by: Organization
Any organization AWRA '22 IoW Presentation Delete group
- H** HU8
Owner: mdtinker_USGS
Created: Mar 15, 2022 Last updated: Mar 15, 2022 Viewable by: Group members
Any organization NHD HR Hydrologic Unit 8 Outlets Delete group
- H** HydroAdd Practice Data
Owner: mdtinker_USGS
Created: Mar 14, 2022 Last updated: Apr 6, 2022 Viewable by: Everyone (public)
Any organization HydroAdd Practice Data Delete group


AGOL Group Overview


Home Gallery Map Scene Notebook Groups Content Organization


Michael Tinker
mdtinker_USGS


AWRA '22 IoW Presentation 

Overview Content Members **Settings**

 Edit thumbnail


 AWRA '22 IoW Presentation
owned by mdtinker_USGS

 Any organization

 Edit

Invite users


Add items to group

Create Web App 


Membership requests **0**


Description


Materials for American Water Resources Conference, Internet of Water Presentation, May 9, 2022





 Edit

Recently added content








AWRA_22 IoW Presentation
 by mdtinker_USGS
Created: Apr 29, 2022
Updated: May 4, 2022
View Count: 15

 +   


Details


Created: April 29, 2022
Viewable by: **Organization**
Contributors: **Members**
Members list: **Visible to all group members**

 4  1



Owner

 mdtinker_USGS

Tags 

NHD, AWRA, HydroAdd

Trust Center | Content Edit | Report Abuse | Contact Us

AGOL Group Settings

Home Gallery Map Scene Notebook Groups Content Organization



Michael Tinker
mdtinker_USGS

AWRA '22 IoW Presentation

Overview

Content

Members

Settings

Delete protection

Delete protection

Prevent this group from being accidentally deleted.



Delete group

Group membership

Who can view this group?

Only group members

All organization members

Everyone (public)

Who can be in this group?

My organization's members only

Partnered collaboration and my organization's members only

Any organization's members

How can people join this group?

By invitation

By request

By adding themselves

Who can contribute content?

All group members

Group owner and managers


AGOL Group Overview

Home Gallery Map Scene Notebook Groups Content Organization

Michael Tinker
mdtinker_USGS

AWRA '22 IoW Presentation 


Overview Content Members Settings

 Edit thumbnail



AWRA '22 IoW Presentation

owned by mdtinker_USGS

 Any organization

 Edit

Invite users

Add items to group

Create Web App 

 Membership requests 0

Description

Materials for American Water Resources Conference, Internet of Water Presentation, May 9, 2022

 Edit

Details

Created: April 29, 2022

Viewable by: **Organization**


Contributors: **Members**

Members list: **Visible to all group members**

 4  1



Owner

 mdtinker_USGS

Tags

NHD, AWRA, HydroAdd


 Edit

Curate featured content

Recently added content



AWRA_22 IoW Presentation

 by mdtinker_USGS

Created: Apr 29, 2022

Updated: May 4, 2022

View Count: 15



AGOL Content Overview



Demo of map share for AWRA
Feature Layer (hosted) by mdtinker_USGS
Created: Apr 29, 2022 Updated: May 4, 2022 View Count: 15

Description

Add an in-depth description of the item.

Layers

- HydroAddPoint_gfv2_nhdplusV2
Point layer
- gvf2_subset_NID_nhdplusV2_ExcelToTable_XYTableToPoint
Point layer

Terms of Use

Add any special restrictions, disclaimers, terms and conditions, or limitations on using the item's content.

Comments (0)

Edit

Edit

Edit

- Open in Map Viewer
- Open in Scene Viewer
- Open in ArcGIS Desktop
- Publish
- Create View Layer
- Export Data
- Update Data
- Share
- Metadata

Item Information

Progress bar from Low to High. A lightbulb icon with the text: Top Improvement: Add a longer summary

Details

Source: Feature Service
Created from: AWRA_22 IoW Presentation, Service Definition

Enable editing

Feature Layer (hosted)

Editing

- Enable editing
- Keep track of changes to the data (add, update, delete features).
- Keep track of who edited the data (editor name, date and time).
- Enable Sync (required for offline use and collaboration).

• Who can edit features?

Share the layer to specific groups of people, the organization or publicly via the Share button on the Overview tab. This layer is currently shared with: [AWRA '22 IoW Presentation](#)

• What kind of editing is allowed?

- Add
- Delete
- Update
 - Attributes only
 - Attributes and geometry

[Manage geometry updates](#)

• What features can editors see?

- Editors can see all features
- Editors can only see their own features (requires editor tracking)
- Editors can't see any features, even those they add

• What features can editors edit?

- Editors can edit all features
- Editors can only edit their own features (requires editor tracking)

• What access do anonymous editors (not signed in) have?

- The same as signed in editors
- Only add new features, if allowed above (requires editor tracking)

• Who can manage edits?

- You
- Administrators
- Data curators with the appropriate privileges

Add your data to HydroAdd

Prepare your data for HydroAdd

1. Download the HydroAdd empty schema from the HydroAdd tool.
2. Add any fields you need to the HydroAdd schema with ArcGIS Pro.
3. Append your data to the empty schema with the Append tool.

Share your data as a web map at ArcGIS Online

1. Create a group at AGOL.
2. Enter group membership.
3. Prepare a map with ArcGIS Pro.
4. Publish a web map from ArcGIS Pro to the AGOL group.
5. Enable editing of the web layer in AGOL.

Add the web map to HydroAdd

1. Copy the web layer URL from AGOL.
2. Add a new Esri service in HydroAdd
3. Paste the URL

Use HydroAdd to address your data to the NHD

1. Make new points, lines.
2. Search and select.
3. Create an editing queue.
4. Identify items.
5. Run Batch QC.
6. Publish to AGOL.

AGOL Content Overview

Home Gallery Map Scene Notebook Groups Content Organization

Michael Tinker
mdtinker_USGS

AWRA_22 IoW Presentation

Overview

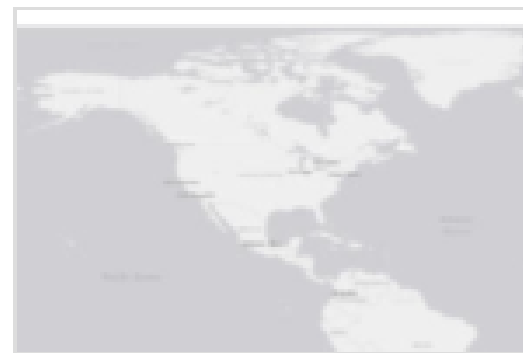
Data

Visualization

Usage

Settings

Edit thumbnail



Add to Favorites

Demo of map share for AWRA

Feature Layer (hosted) by mdtinker_USGS

Created: Apr 29, 2022 Updated: May 4, 2022 View Count: 15

Edit

Description

Add an in-depth description of the item.

Edit

Layers

HydroAddPoint_gfv2_nhdplusV2
Point layer

gvf2_subset_NID_nhdplusV2_ExcelToTable_XYTableToPoint
Point layer



>

>

Edit

Open in Map Viewer

Open in Scene Viewer

Open in ArcGIS Desktop

Publish

Create View Layer

Export Data

Update Data

Share

Metadata

Item Information

Learn more

Low

High

Top Improvement: Add a longer summary

Details

Source: Feature Service

Created from: AWRA_22 IoW Presentation,

Comments (0)

Copy the service layer URL from AGOL

The screenshot shows the ArcGIS Online interface for a specific layer. At the top, there is a navigation bar with links for Home, Gallery, Map, Scene, Notebook, Groups, Content, and Organization. On the right, the user's name 'Michael Tinker' and profile picture are visible. Below the navigation bar, there is a breadcrumb trail: '← AWRA_22 IoW Presentation / HydroAddPoint_gfv2_nhdplusV2'. To the right of the breadcrumb are three tabs: 'Overview' (selected), 'Data', and 'Visualization'. The main content area is divided into two columns. The left column contains metadata for the layer: 'Point layer', the user 'mdtinker_USGS', and the date 'Data Last Updated: May 4, 2022, 1:38:43 PM'. Below this are sections for 'Summary', 'Description', and 'Credits (Attribution)', each with an 'Add a short...' prompt. The right column contains a vertical menu with buttons: 'Open in Map Viewer', 'Export Data', 'Create View Layer', 'Append Data to Layer', and 'Metadata'. Below this menu are three 'Edit' buttons. The 'URL' section is highlighted with a red oval, showing the URL 'https://services.arcgis.com/v01g...' and a 'Copy' button. Below the URL section is an 'Attachments' section with a toggle switch for 'Enable Attachments'.

Home Gallery Map Scene Notebook Groups Content Organization

Michael Tinker
mdtinker_USGS

← AWRA_22 IoW Presentation / HydroAddPoint_gfv2_nhdplusV2

Overview Data Visualization

Point layer

mdtinker_USGS

Data Last Updated: May 4, 2022, 1:38:43 PM

Summary

Add a short summary for this layer.

Description

Add a short description for this layer.

Credits (Attribution)

Acknowledge this layers's source.

Open in Map Viewer

Export Data

Create View Layer

Append Data to Layer

Metadata

Edit

Edit

URL

Copy

Attachments

Enable Attachments

HydroAdd lists your web feature services

The screenshot displays the USGS Hydro Address Tool interface. The top left features the USGS logo and the title "Hydro Address Tool". A navigation sidebar on the left includes options like "My Profile", "Edit History", "Search/Select", "Edit Queues", "Batch QC", "Make New Point", "Make New Line", "HydroAdd Schema", and "Admin". The main content area shows the user profile for "mdtinker" (mdtinker@usgs.gov) and a list of services under "mdtinker's Services".

Service Name
HydroAddLineQC_NAD83_1404
PPs 125m
PPs 55m
PPs by RC, moved w/gnis
NHD1404
Missing Gages3
HydroAddPointQC_NAD83_1
Empty lines
v9 bad
PPs_GNIS
Nat Map USGS gages to update

The right side of the interface features a map of the United States with various cities and geographical features labeled. A coordinate box at the bottom of the map shows "XY -112.293286°, 37.983913°" and "Zoom: 4".

DOI Privacy Policy | Legal | Accessibility | Site Map | Contact USGS | U.S. Department of the Interior | DOI Inspector General | White House | E-gov | Open Government | No Fear Act | FOIA

Paste the service layer URL from AGOL...

The screenshot displays the USGS Hydrography Addressing Tool interface. The top left corner features the USGS logo and the text "USGS science for a changing world" and "Hydrography Addressing Tool". The user profile for "Mike Prod AGOL" is visible, with email "mdtinker@usgs.gov", roles "Editor, Admin", and login information. A list of services is shown on the left, including "303d lines", "HydroAdd point", "HydroAdd line", "303d points", "HI falls", "WA dams", "HU8PPs", "Three Dots", "three lines", and "HydroAdd Practice Lines". A central map shows a geographic area with purple points. A dialog box titled "Add Esri Service" is open, containing a "Nickname*" field with the text "AWRA loW", a "Service URL*" field with the URL "https://services.arcgis.com/v01gqwM5QqNysAAi/arcgis/res", and a checked "Visible" checkbox. The dialog box has "CANCEL" and "SUBMIT" buttons. The bottom of the screen contains a footer with various links and the text "Powered by Esri".

...and you data appears in HydroAdd

The screenshot displays the USGS Hydrography Addressing Tool interface. On the left is a dark sidebar with navigation options: My Profile, Edit History, Search/Select, Edit Queues, Batch QC, Make New Point, Make New Line, Download Schema, HydroAdd Schema, Admin, and a USER GUIDE button. The main content area shows the user profile for Mike Prod AGOL (mdtinker@usgs.gov) and a list of services under 'Mike Prod AGOL's Services'. The services list includes 303d lines, HydroAdd point, HydroAdd line, 303d points, HI falls, WA dams, HU8PPs, Three Dots, three lines, HydroAdd Practice Lines, and AWRA loW (circled in red). A map of the United States is shown with a dense distribution of red and purple circular data points. A legend on the right side of the map shows 'Mike Prod AGOL's services' with 'AWRA loW' circled in red. The bottom of the interface contains a footer with various links and the text 'Last Modified: 04/07/2022 | Version 1.0.1.0 BETA'.

Address your data with HydroAdd

Prepare your data for HydroAdd

1. Download the HydroAdd empty schema from the HydroAdd tool.
2. Add any fields you need to the HydroAdd schema with ArcGIS Pro.
3. Append your data to the empty schema with the Append tool.

Share your data as a web map at ArcGIS Online

1. Create a group at AGOL.
2. Enter group membership.
3. Prepare a map with ArcGIS Pro.
4. Publish a web map from ArcGIS Pro to the AGOL group.
5. Enable editing of the web layer in AGOL.

Add the web map to HydroAdd

1. Copy the web layer URL from AGOL.
2. Add a new Esri service in HydroAdd
3. Paste the URL

Use HydroAdd to address your data to the NHD

1. Make new points, lines.
2. Search and select.
3. Create an editing queue.
4. Identify items.
5. Run Batch QC.
6. Publish to AGOL.

Editing points

The screenshot displays the USGS Hydro Address Tool interface. The top header features the USGS logo and the title "Hydro Address Tool". A left sidebar contains navigation options: My Profile, Edit History, Search/Select, Edit Queues, Batch QC, Make New Point, Make New Line, HydroAdd Schema, and Admin. The main panel includes a filter section with "SOURCE ID", "HUCS", and "RE/" tabs, a "Service Layer" dropdown set to "CDEC gages", and a "Search Source ID" field. Below this are checkboxes for "DRAW EXTENT", "Show approved", and "Show unapproved". The central map shows a stream network with a highlighted section in blue and purple. A point labeled "SVC" is marked with a red dot. The map includes zoom controls and a coordinate display showing XY: -120.537884°, 38.823372° and Zoom: 16. The footer contains a navigation menu with links for DOI Privacy Policy, Legal, Accessibility, Site Map, Contact USGS, U.S. Department of the Interior, DOI Inspector General, White House, E-gov, Open Government, No Fear Act, and FOIA. A small text at the bottom right of the map area reads "USGS The National Map: 3D Elevation Program, USGS Earth Resources Observation & Science (EROS) Center: GMTED2010, Data refreshed March, 2021, | U... Powered by Esri".

Editing points

The screenshot displays the USGS Hydro Address Tool interface. On the left is a dark navigation sidebar with the following items: My Profile, Edit History, Search/Select, Edit Queues (with a dropdown arrow), Batch QC, Make New Point, Make New Line, HydroAdd Schema, and Admin. The top header features the USGS logo and the text "Hydro Address Tool".

The main content area is split into two panels. The left panel is a metadata form with the following fields:

SOURCE ID	HUCS	RE/
Geometry *	Source ID *	
-120.538013°, 38.824005°	SVC	
Source Agency	Source ID *	
Sacramento Municipal Utility	3/130	
37/130	Source Dataset	
Source Feature URL	0/130	
0/255	FeatureType	
Reach Code	0/60	
0/14	Measure	
Reach SM Date		
Address Date		
Catchment	HU	
	0/16	
On Network	Hydro Address ID	
No	0/40	
GNIS_NAME	GNIS_ID	
0/65	0/10	

The right panel is a map showing a network of brown lines with arrows representing flow direction. A specific point is highlighted with a red circle and labeled "SVC". A black crosshair is positioned over the map. At the bottom of the map, there is a coordinate display showing "XY -120.536909°, 38.823919°" and a "Zoom: 16" indicator. The bottom of the interface contains a footer with various links: DOI Privacy Policy | Legal | Accessibility | Site Map | Contact USGS | U.S. Department of the Interior | DOI Inspector General | White House | E-gov | Open Government | No Fear Act | FOIA.

Editing points

The screenshot displays the USGS Hydro Address Tool interface. The top left features the USGS logo and the title "Hydro Address Tool". A dark sidebar on the left contains navigation options: My Profile, Edit History, Search/Select, Edit Queues, Batch QC, Make New Point, Make New Line, HydroAdd Schema, and Admin. The main content area is split into a metadata panel on the left and a map on the right.

Metadata Panel:

SOURCE ID	HUCS	REACH
Geometry*	Source ID*	
-120.538013°, 38.824005°	SVC	
	3/130	
Source Agency	Source Dataset	
Sacramento Municipal Utility	0/130	
37/130		
Source Feature URL	FeatureType	
0/255	0/60	
Reach Code	Measure	
18020129000663	2.84577	
14/14		
Reach SM Date		
Address Date		
Catchment	HU	
	0/16	
On Network	Hydro Address ID	
No	0/40	
GNIS_NAME	GNIS_ID	
0/65	0/10	

Map Panel:

The map shows a network of hydrological features on a topographic background. A specific point is highlighted with a red dot and labeled "SVC". The map includes standard navigation controls (zoom in/out, pan, info) and a coordinate display at the bottom showing XY coordinates: -120.536694°, 38.824451° and a zoom level of 16. The bottom of the map area contains a footer: "USGS The National Map: 3D Elevation Program, USGS Earth Resources Observation & Science (EROS) Center, GMTED2010, Data refreshed March 2021, | U.S. Department of the Interior | U.S. Geological Survey | Powered by Esri".

Footer:

DOI Privacy Policy | Legal | Accessibility | Site Map | Contact USGS | U.S. Department of the Interior | DOI Inspector General | White House | E-gov | Open Government | No Fear Act | FOIA

Address new points

The screenshot displays the USGS Hydro Address Tool interface. On the left is a dark navigation sidebar with the following menu items: My Profile, Edit History, Search/Select, Edit Queues (with a dropdown arrow), Batch QC, Make New Point (highlighted with a red circle), Make New Line, HydroAdd Schema, and Admin. The main content area is split into two panels. The left panel is a metadata form with the following fields and values:

Esri Service	CDEC gages
Geometry*	Source ID*
Geometry is required	0/130
Source Agency	Source Dataset
0/130	0/130
Source Feature URL	FeatureType
0/255	0/60
Reach Code	Measure
0/14	
Reach SM Date	
Address Date	
Catchment	HU
	0/16
On Network	Hydro Address ID
No	0/40
GNIS_NAME	GNIS_ID
0/65	0/10

The right panel is a map showing a network of brown lines representing stream reaches on a grayscale elevation map. A specific reach is highlighted in blue and purple. A red crosshair is positioned on a reach labeled 'SVC'. The map includes standard navigation controls like zoom in (+) and zoom out (-) buttons, and a coordinate display at the bottom showing XY coordinates: -120.536178°, 38.823661° and a zoom level of 16. The footer contains the text: 'USGS The National Map: 3D Elevation Program, USGS Earth Resources Observation & Science (EROS) Center: GMTED2010. Data refreshed March, 2021. | U... Powered by Esri' and a navigation bar with links: DOI Privacy Policy | Legal | Accessibility | Site Map | Contact USGS | U.S. Department of the Interior | DOI Inspector General | White House | E-gov | Open Government | No Fear Act | FOIA.

Address new lines

The screenshot displays the USGS Hydro Address Tool interface. On the left is a dark navigation sidebar with the following menu items: My Profile, Edit History, Search/Select, Edit Queues (with a dropdown arrow), Batch QC, Make New Line, another Make New Line, HydroAdd Schema, and Admin. The main panel is divided into a top control area and a data entry form. The top control area includes the Esri Service dropdown (HydroAddLineQC_NAD83_1404), a yellow status indicator, and buttons for 'USE FULL REACH', 'SPLIT', and 'MERGE'. A red 'Unsaved changes' notification is present. The data entry form contains two sections: 'Start Point' and 'End Point', each with fields for Reachcode and Measure. Below these is a 'Source ID' field containing 'NEW LINE EVENT|' and a table of source information. The table has columns for Source ID, Source Agency, Source Dataset, Source Feature URL, FeatureType, and Reach Code. The map on the right shows a network of hydrological lines in blue and purple, with a new yellow line being added. A red circle highlights the yellow line. The map includes a coordinate display showing XY: -120.538129°, 38.819421° and a zoom level of 16. The footer contains various links: DOI Privacy Policy, Legal, Accessibility, Site Map, Contact USGS, U.S. Department of the Interior, DOI Inspector General, White House, E-gov, Open Government, No Fear Act, and FOIA. The text 'Powered by Esri' is also visible.

USGS science for a changing world

Hydro Address Tool

Esri Service
HydroAddLineQC_NAD83_1404

Unsaved changes

USE FULL REACH

SPLIT MERGE

Start Point *
-120.539183°, 38.822984°

Reachcode
18020129008020

Measure
17.95921

End Point *
-120.536844°, 38.819744°

Reachcode
18020129008020

Measure
92.21373

Source ID *
NEW LINE EVENT|

Source ID	Source Agency
14/130	0/130

Source Dataset	Source Feature URL
0/130	0/255

FeatureType	Reach Code
Polyline	18020129008020

Source ID	Reach Code
8/60	14/14

XY -120.538129°, 38.819421° Zoom: 16

USGS The National Map: 3D Elevation Program, USGS Earth Resources Observation & Science (EROS) Center: GMTED2010. Data refreshed March, 2021. | U... Powered by Esri

DOI Privacy Policy | Legal | Accessibility | Site Map | Contact USGS | U.S. Department of the Interior | DOI Inspector General | White House | E-gov | Open Government | No Fear Act | FOIA

Make a queue

The screenshot displays the USGS Hydro Address Tool interface. The top header features the USGS logo and the title "Hydro Address Tool". A left sidebar contains navigation options: "My Profile", "Edit History", "Search/Select", "Edit Queues", "Make New Queue", and a list of existing queues including "1404 ALL", "points in 1404", "WAish", "te3st", "new q", "PPs125m", "PPs by RC", "PPs55m", "new gages edit", and "MissingG3".

The main interface is divided into several sections. At the top, there are tabs for "SOURCE ID", "HUGS", and "RE/". Below these is a "Service Layer" dropdown menu set to "CDEC gages". A search bar labeled "Search Source ID" is present. Action buttons include "DRAW EXTENT", "CLEAR EXTENT", "Show approved" (checked), and "Show unapproved" (checked). A toolbar contains icons for selection, refresh, delete, and zoom. Below the toolbar is a table with a "Select" column and a list of source IDs: BPG, BRA, BRE, BRI, and BRK, each with a checkmark and thumbs-up/down icons.

The right side of the interface shows a 3D topographic map of the western United States. A black rectangular box highlights a specific region containing numerous pink and black circular markers representing data points. At the bottom of the map, a coordinate box shows "XY -125.989650°, 36.305384°" and a "Zoom: 6" indicator.

At the bottom of the page, there is a footer with the text: "USGS The National Map: 3D Elevation Program. USGS Earth Resources Observation & Science (EROS) Center: GMTED2010. Data refreshed March, 2021. Powered by Esri" and a navigation bar with links for "DOI Privacy Policy", "Legal", "Accessibility", "Site Map", "Contact USGS", "U.S. Department of the Interior", "DOI Inspector General", "White House", "E-gov", "Open Government", "No Fear Act", and "FOIA".

Make a queue

The screenshot displays the USGS Hydro Address Tool interface. The top left features the USGS logo and the text "science for a changing world". The main header is "Hydro Address Tool". On the left side, there is a navigation menu with options: "My Profile", "Edit History", "Search/Select", "Edit Queues", "Make New Queue", and a list of existing queues including "1404 ALL", "points in 1404", "WAish", "te3st", "new q", "PPs125m", "PPs by RC", "PPs55m", "new gages edit", and "MissingG3".

The main content area shows a map with a list of "CDEC gages" on the left. The list includes entries like "BPG CDEC", "BRA CDEC", "BRE CDEC", "BRI CDEC", and "BRK CDEC", each with a checkmark and thumbs up/down icons. Above the list are controls for "DRAW EXTENT", "CLEAR EXTENT", "Show approved", and "Show unapproved". A search bar for "Search Source ID" is also present.

A "Create Edit Queue" dialog box is open in the center, with the following fields:

- Esri Service: CDEC gages
- Edit queue nickname: CDEC
- Color: Purple

Buttons for "CANCEL" and "SUBMIT" are at the bottom of the dialog.

The map background shows a topographic view of a region with numerous purple and black circular markers representing gages. The map includes a coordinate display showing "XY -130.504032°, 36.866754°" and a "Zoom: 6" indicator.

At the bottom of the interface, there is a footer with the text: "USGS The National Map: 3D Elevation Program. USGS Earth Resources Observation & Science (EROS) Center. GMTED2010. Data refreshed March, 2021. Powered by Esri." and a navigation bar with links for "DOI Privacy Policy", "Legal", "Accessibility", "Site Map", "Contact USGS", "U.S. Department of the Interior", "DOI Inspector General", "White House", "E-gov", "Open Government", "No Fear Act", and "FOIA".

Editing in a queue

The screenshot displays the USGS Hydro Address Tool interface. The top left corner features the USGS logo and the text "science for a changing world". The main title is "Hydro Address Tool".

On the left side, there is a navigation menu with the following items: WAish, te3st, new q, PPs125m, PPs by RC, PPs55m, new gages edit, MissingG3, call it, CDEC (highlighted), Batch QC, Make New Point, Make New Line, HydroAdd Schema, and Admin.

The main content area is titled "CDEC" and includes the following information:

- Creation Date: Apr 11, 2021 4:37 PM
- Service: CDEC gages
- User: [mdtinker](#)

Below this information is a search bar labeled "Search Source ID". Two checkboxes are visible: Show approved and Show unapproved, both of which are circled in red.

A list of gages is displayed below the checkboxes:

- BRA CDEC
- BRE CDEC
- BRI CDEC
- BRK CDEC (highlighted in blue, with its edit icon circled in red)
- BRW CDEC
- BSD CDEC

The right side of the interface shows a map of a river network. A specific gage location, labeled "BRK", is marked with a blue circle on the map. The map includes zoom controls (+, -, info) and a coordinate display showing XY: -120.872330°, 35.928794° and Zoom: 16.

At the bottom of the interface, there is a footer with the following text: "USGS The National Map: 3D Elevation Program, USGS Earth Resources Observation & Science (EROS) Center: GMTED2010. Data refreshed March, 2021. | U... Powered by Esri". Below this is a navigation bar with links: DOI Privacy Policy | Legal | Accessibility | Site Map | Contact USGS | U.S. Department of the Interior | DOI Inspector General | White House | E-gov | Open Government | No Fear Act | FOIA.

Editing in a queue

The screenshot displays the USGS Hydro Address Tool interface. The top header includes the USGS logo and the title "Hydro Address Tool". On the left, a dark sidebar contains a menu with options such as "Make New Queue", "1404 ALL", "points in 1404", "WAish", "te3st", "new q", "PPs125m", "PPs by RC", "PPs55m", "new gages edit", "MissingG3", "call it", "CDEC", "Batch QC", and "Make New Point".

The main content area is titled "CDEC" and shows the following details:

- Creation Date: Apr 11, 2021 4:37 PM
- Service: CDEC gages
- User: [mdtinker](#)

Below the details is a search bar for "Search Source ID" and two checked checkboxes: "Show approved" and "Show unapproved". A list of gages is displayed, each with a checkbox, a thumbs-up/down icon, and a "CDEC" label. The gages listed are BRE, BRI, BRK, BRW, and BSD. The "BRK" entry is highlighted in blue, and its thumbs-up icon is circled in red.

At the bottom of the list, it shows "Rows per page: 250" and "1-250 of 396". To the right of the list is a map showing a watershed area with a blue stream network. A red circle on the map highlights a specific gage location labeled "BRK". The map includes zoom controls and a coordinate display showing "XY -122.344949°, 38.962850°" and "Zoom: 16".

At the very bottom of the page, there is a footer with various links: "DOI Privacy Policy | Legal | Accessibility | Site Map | Contact USGS | U.S. Department of the Interior | DOI Inspector General | White House | E-gov | Open Government | No Fear Act | FOIA".

Batch QC

The screenshot displays the USGS Hydro Address Tool interface. The top header includes the USGS logo and the text "Hydro Address Tool". A left sidebar contains a navigation menu with items such as "WAish", "te3st", "new q", "PPs125m", "PPs by RC", "PPs55m", "new gages edit", "MissingG3", "call it", "CDEC", "Batch QC", "Make New Point", "Make New Line", "HydroAdd Schema", and "Admin".

The main content area is titled "Batch QC Jobs" and features a list of three job entries:

- Cdec S500 Q200**: Created: Mar 31, 2021, 6:41 PM; Edit Queue: CDEC; QC Tolerance: 200 · Snap Tolerance: 500; Approved: 385/396 (97.22%); Processed: 395/396 (99.75%); Published: 395/396 (99.75%).
- cdec s200q180**: Created: Mar 31, 2021, 6:32 PM; Edit Queue: CDEC; QC Tolerance: 180 · Snap Tolerance: 200; Approved: 381/396 (96.21%); Processed: 395/396 (99.75%); Published: 0/396 (0.00%).
- CDEC**: Created: Mar 31, 2021, 6:24 PM; Edit Queue: CDEC; QC Tolerance: 135 · Snap Tolerance: 150; Approved: 377/396 (95.20%); Processed: 395/396 (99.75%); Published: 0/396 (0.00%).

Each job entry includes "Build" and "Process" buttons, and a "PUBLISH" button. The right side of the interface shows a 3D topographic map of the western United States with numerous pink points representing hydro addresses. A coordinate box at the bottom of the map shows "XY -125.576110°, 36.801902°" and "Zoom: 6".

At the bottom of the page, there is a footer with links for "DOI Privacy Policy", "Legal", "Accessibility", "Site Map", "Contact USGS", "U.S. Department of the Interior", "DOI Inspector General", "White House", "E-gov", "Open Government", "No Fear Act", and "FOIA".

Batch QC

The screenshot displays the USGS Hydro Address Tool interface. On the left is a navigation sidebar with items like 'WAish', 'te3st', 'new q', 'PPs125m', 'PPs by RC', 'PPs55m', 'new gages edit', 'MissingG3', 'call it', 'CDEC', 'Batch QC', 'Make New Point', 'Make New Line', 'HydroAdd Schema', and 'Admin'. The main panel shows a list of 'Batch QC Jobs' with details for 'Cdec S500 Q200', 'cdec s200q180', 'CDEC', and 'CDEC s125q113'. A 'Create Batch QC Job' dialog box is open, allowing configuration of a new job. The dialog includes fields for 'Edit Queue' (set to 'CDEC gages'), 'Nickname *' (set to 'CDEC gages'), 'Snap Tolerance *' (set to 100), and 'QC Tolerance *' (set to 50). 'CANCEL' and 'CREATE' buttons are at the bottom of the dialog. The background shows a map with purple points and a coordinate display at the bottom: 'XY -127.413823°, 41.057340°' and 'Zoom: 6'. The footer contains various links and the text 'Powered by Esri'.

USGS science for a changing world

Hydro Address Tool

Batch QC Jobs

Cdec S500 Q200
Created: Mar 31, 2021, 6:41 PM
Edit Queue: CDEC
QC Tolerance: 200 · Snap Tolerance: 500
Approved: 385/396 (97.22%)
Processed: 395/396 (99.75%)
Published: 395/396 (99.75%)

cdec s200q180
Created: Mar 31, 2021, 6:32 PM
Edit Queue: CDEC
QC Tolerance: 180 · Snap Tolerance: 200
Approved: 381/396 (96.21%)
Processed: 395/396 (99.75%)
Published: 0/396 (0.00%)

CDEC
Created: Mar 31, 2021, 6:24 PM
Edit Queue: CDEC
QC Tolerance: 135 · Snap Tolerance: 150
Approved: 377/396 (95.20%)
Processed: 395/396 (99.75%)
Published: 0/396 (0.00%)

CDEC s125q113
Created: Mar 31, 2021, 6:10 PM
Edit Queue: CDEC

Create Batch QC Job

Edit Queue: CDEC gages

or

Esri Service: CDEC gages

Nickname *: CDEC gages

Snap Tolerance *: 100

QC Tolerance *: 50

CANCEL CREATE

XY -127.413823°, 41.057340° Zoom: 6

USGS The National Map: 3D Elevation Program. USGS Earth Resources Observation & Science (EROS) Center. GMTED2010. Data refreshed March, 2021. Powered by Esri

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Batch QC

The screenshot displays the USGS Hydro Address Tool interface. The top left features the USGS logo and the title "Hydro Address Tool". A left-hand navigation menu includes options like "WAish", "te3st", "new q", "PPs125m", "PPs by RC", "PPs55m", "new gages edit", "MissingG3", "call it", "CDEC", "Batch QC", "Make New Point", "Make New Line", "HydroAdd Schema", and "Admin".

The main content area is titled "Cdec S500 Q200" and contains a data table with the following columns: SourceID, Published, In Snap Tolerance, In QC Tolerance, Approved, and Details. The "JBP" row is highlighted in blue.

SourceID	Published	In Snap Tolerance	In QC Tolerance	Approved	Details
IHC	☑	Yes	Yes	👍	☰
INC	☑	Yes	Yes	👍	☰
IST	☑	Yes	Yes	👍	☰
JBP	☑	Yes	Yes	👍	☰
JBR	☑	Yes	Yes	👍	☰
JED	☑	Yes	Yes	👍	☰
JTR	☑	Yes	Yes	👍	☰
KBC	☑	Yes	Yes	👍	☰
KCK	☑	Yes	Yes	👍	☰

Below the table, it shows "Rows per page: 250" and "1-250 of 396". To the right of the table is a map showing a hydrological network with a highlighted yellow line and a red point labeled "JBP". The map includes a coordinate box showing "XY -120.179448°, 36.652516°" and a "Zoom: 19" indicator. The bottom of the interface contains a footer with various links: "DOI Privacy Policy | Legal | Accessibility | Site Map | Contact USGS | U.S. Department of the Interior | DOI Inspector General | White House | E-gov | Open Government | No Fear Act | FOIA".

Batch QC

The screenshot displays the USGS Hydro Address Tool interface. The top left features the USGS logo and the title "Hydro Address Tool". A left-hand navigation menu includes options like "WAish", "te3st", "new q", "PPs125m", "PPs by RC", "PPs55m", "new gages edit", "MissingG3", "call it", "CDEC", "Batch QC", "Make New Point", "Make New Line", "HydroAdd Schema", and "Admin". The main area is titled "Cdec S500 Q200" and contains a data table with columns for SourceID, Published, In Snap Tolerance, In QC Tolerance, and Approved Details. The "FRE" row is highlighted. To the right, a map shows a blue hydrological area with a red point labeled "FRE" and a yellow arrow pointing to it. The bottom of the interface includes a coordinate field showing "XY -121.667276°, 38.759509°" and a zoom level of "Zoom: 19". A footer at the very bottom contains various links and the text "Powered by Esri".

SourceID	Published	In Snap Tolerance	In QC Tolerance	Approved Details
FCK	☑	Yes	Yes	👍
FCT	☑	Yes	Yes	👍
FER	☑	Yes	Yes	👍
FFB	☑	Yes	Yes	👍
FHH	☑	Yes	Yes	👍
FHL	☑	Yes	Yes	👍
FPT	☑	Yes	Yes	👍
FRE	☑	Yes	Yes	👍
FRU	☑	Yes	Yes	👍
FSB	☑	Yes	Yes	👍

Rows per page: 250 1-250 of 396

XY -121.667276°, 38.759509° Zoom: 19

USGS The National Map: 3D Elevation Program. USGS Earth Resources Observation & Science (EROS) Center: GMTED2010. Data refreshed March, 2021. | U... Powered by Esri

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Batch QC

USGS science for a changing world **Hydro Address Tool**

← Cdec S500 Q200

SourceID ↓	Published	In Snap Tolerance	In QC Tolerance	Approved	Details
BGF	☑	Yes	Yes	👍	☰
BIC	☑	Yes	Yes	👍	☰
BJP	☑	Yes	Yes	👍	☰
BND	☑	Yes	Yes	👍	☰
BOC	☑	Yes	No	🗨️	☰
BPD	☑	Yes	Yes	👍	☰
BPG	☑	Yes	Yes	👍	☰
BRA	☑	Yes	Yes	👍	☰
BRE	☑	Yes	Yes	👍	☰
BRI	☑	Yes	Yes	👍	☰

Rows per page: 250 1-250 of 396

USGS The National Map, 3D Elevation Program, USGS Earth Resources Observation & Science (EROS) Center, GMTED2010, Data refreshed March, 2021, I.U. Powered by Esri

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Use batch QC to synchronize your addressed data

Batch QC honors preexisting ReachCode and GNIS

The screenshot displays the USGS Hydro Address Tool interface. The top header includes the USGS logo and the title "Hydro Address Tool". A left sidebar contains navigation options: WAish, te3st, new q, PPs125m, PPs by RC, PPs55m, new gages edit, MissingG3, call it, CDEC, Batch QC, Make New Point, Make New Line, HydroAdd Schema, and Admin. The main content area is titled "Batch QC Jobs" and lists three jobs:

- Cdec S500 Q200**: Created: Mar 31, 2021, 6:41 PM; Edit Queue: CDEC; QC Tolerance: 200 · Snap Tolerance: 500; Approved: 385/396 (97.22%); Processed: 395/396 (99.75%); Published: 395/396 (99.75%).
- cdec s200q180**: Created: Mar 31, 2021, 6:32 PM; Edit Queue: CDEC; QC Tolerance: 180 · Snap Tolerance: 200; Approved: 381/396 (96.21%); Processed: 395/396 (99.75%); Published: 0/396 (0.00%).
- CDEC**: Created: Mar 31, 2021, 6:24 PM; Edit Queue: CDEC; QC Tolerance: 135 · Snap Tolerance: 150; Approved: 377/396 (95.20%); Processed: 395/396 (99.75%); Published: 0/396 (0.00%).
- CDEC s125q113**: Created: Mar 31, 2021, 6:10 PM; Edit Queue: CDEC.

Each job entry includes "Build" and "Process" buttons, and a "PUBLISH" button. To the right, a map shows a topographic view of the western United States with numerous pink points representing addressed data. The map includes a coordinate display (XY: -125.576110°, 36.801902°) and a zoom level of 6. The footer contains links for DOI Privacy Policy, Legal, Accessibility, Site Map, Contact USGS, U.S. Department of the Interior, DOI Inspector General, White House, E-gov, Open Government, No Fear Act, and FOIA.

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