

# USGS National Hydrography Dataset Newsletter

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## How to Become an NHD Editor

*Contact: Ryan Teter ([rteter@usgs.gov](mailto:rteter@usgs.gov)), Annalisa Stasey, ([astasey@usgs.gov](mailto:astasey@usgs.gov)), Joel Skalet ([nhd@usgs.gov](mailto:nhd@usgs.gov))*

The [Markup Application](#) is the best way for a user to report a small number of errors or updates in the NHD, WBD, or NHDPlus HR. For those who need to do more extensive revision of the NHD, and who can dedicate the substantial amount of time required, the USGS National Geospatial Technical Operations Center (NGTOC) Partner Support section provides training for new and current National Hydrography Dataset (NHD) Editors. Approval for users to become NHD Editors, including attending NHD Update Tool Training, must be coordinated through the appropriate [State Steward](#).

The process to become an NHD Editor is intensive and requires approximately 50+ hours of time: up to six hours for pre-course computer prep, 13 hours of training, eight hours of homework, and approximately 24 hours to complete training jobs. The goal of the NHD Editor training is to produce well prepared NHD Editors who know how to access various NHD editing resources.

Becoming an NHD Editor is a three-part process. First, new NHD Editors complete two required training classes: NHD Basics and NHD Update Tool Training. Then, after successfully fulfilling the training requirements, new NHD Editors submit two NHD Jobs on the [Hydrography Maintenance Portal \(HMP\)](#) training website. Finally, new NHD Editors submit at least their first two NHD Production Jobs for review by Partner Support. During these four jobs, Partner Support will provide one-on-one feedback to the user. Training materials (presentations, user guide, exercises) are available through the [Hydrographic Data Community \(HDC\)](#) website (for HDC access, contact Lily Niknami at [lniknami@usgs.gov](mailto:lniknami@usgs.gov)).

### NHD Basics Training

The NHD Basics course introduces the NHD and associated datasets, such as the Watershed Boundary Dataset (WBD) and NHDPlus High Resolution (NHDPlus HR) in relation to the NHD. The course objectives are to provide a brief history of the NHD; details of the NHD model; NHD features, codes, and feature interactions; NHD

geodatabase schema, including relationships; and the NHD Stewardship Model. **This course also covers important account set-up and software downloads necessary for NHD Update Tool Training.** This course is approximately two and a half hours long. NGTOC Partner Support conducts the NHD Basics remotely using Microsoft Teams. The target audience for this course are NHD users, stewards, editors, managers, and anyone interested in the details of the NHD. Users must complete NHD Basics before attending the NHD Update Tool Training.

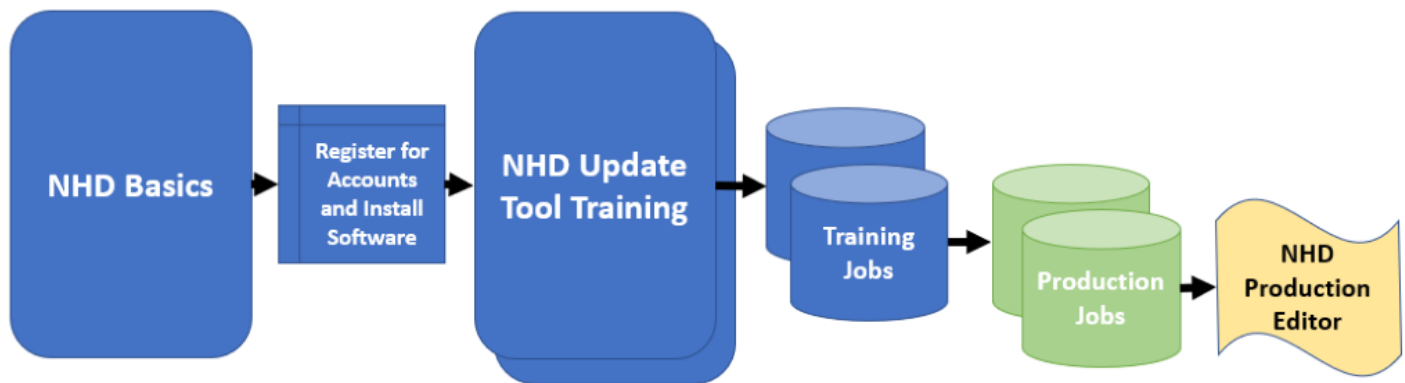
### NHD Update Tool Training

The target audience for the NHD Update Tool course are NHD editors who desire to routinely and directly edit the NHD Production Database. This course introduces the NHD Update Tool to new and current users. Training provides exercise data and numerous resources for best editing practices. The overall course length is 10 hours, over the course of two days with a one-hour lunch each session. Partner Support conducts the NHD Update Tool Training remotely using Microsoft Teams. Participants will learn more effectively by already having the NHD Update Tool installed on their computer. **The NHD Update Tool currently requires ArcMap 10.5.1 to operate, in addition to an internet connection to access USGS web services.**

Day 1 introduces the NHD Update Tool software, NHD Job Workflow, establishing a workspace, important NHD concepts, editing the NHD, and beginning quality control checks. Homework from this session includes completing exercises and initiating quality control checks.

Day 2 explains the quality control check review and resolution process, incorporating editing concepts from Day 1. Day 2 finishes with outstanding questions and next steps.

*For questions or register for classes, please contact Joel Skalet at [nhd@usgs.gov](mailto:nhd@usgs.gov).*



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## ScienceBase Download Links Issue

Contact: Annalisa Stasey, ([astasey@usgs.gov](mailto:astasey@usgs.gov))

An issue has been identified with ScienceBase download links for some NHDPlus HR Beta raster files released over the past few months. Users attempting to download this data receive the error:

*“This XML file does not appear to have any style information associated with it. The document tree is shown below.”*

The USGS has identified the cause of this issue and are working to fix the problem to ensure NHD and NHDPlus HR Beta ScienceBase data download links accurately reflect the correct data.

### What do you need to do?

If you encounter this issue, you can instead access the same data through either the [Access National Hydrography Products](#) webpage or [The National Map \(TNM\) Download](#) webpage. Also, you can utilize the web-based map services from [The National Map Service Endpoints](#).

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## Tech Tips - Markup Application and Reviewer Tools

Contact: Marcelle Caturia ([markup@usgs.gov](mailto:markup@usgs.gov))

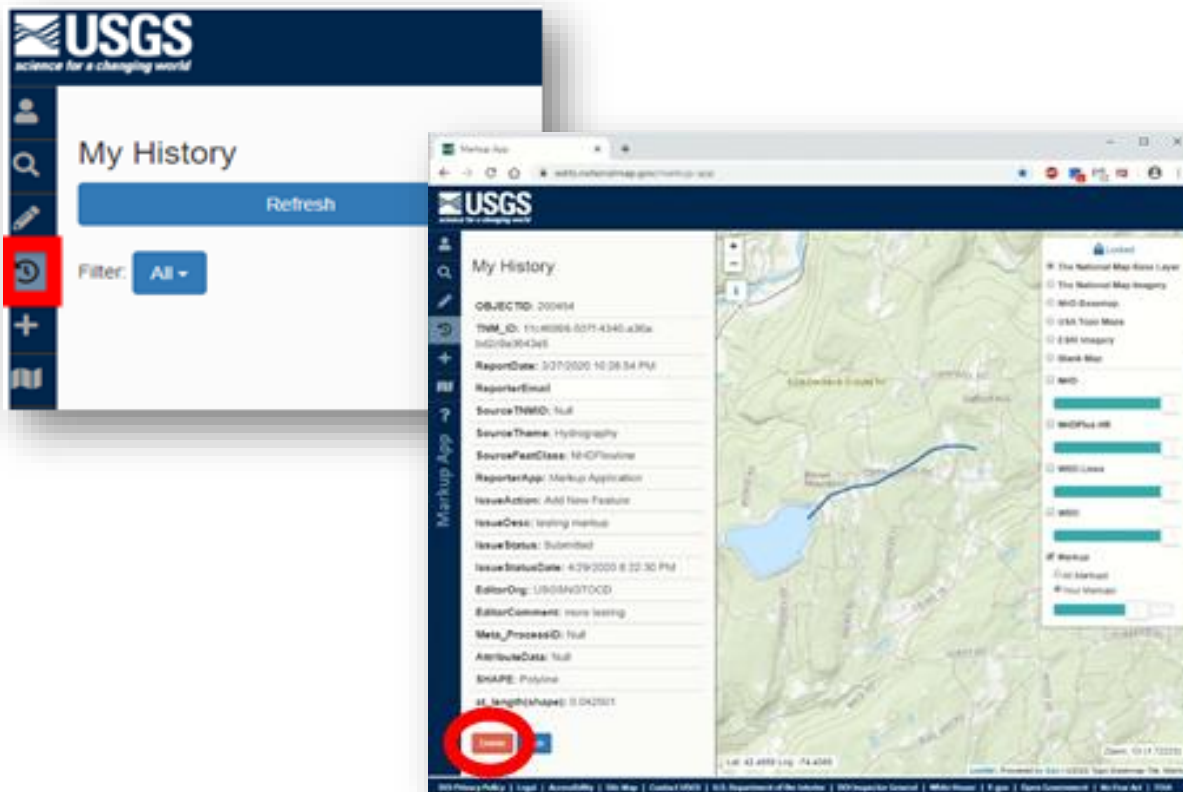
We'd like to share some technical tips to help you make the best use of the [Markup Application and Reviewer tools](#). We always receive great input and questions from our data partners regarding how you use the tools, what helps you use them well, and what is stumping you. Please keep in touch and let us know what is on your mind. You can email a question to [nhd@usgs.gov](mailto:nhd@usgs.gov) anytime!

### Markup App Tip: How to delete test markups

When learning how to use the Markup App, you can practice submitting test markups. But do you delete them once you are finished testing?

Using the 'My History' menu (shown with the reverse timer symbol), you can filter your markups by: *All, Submitted, In Progress, Resolved, or Won't Fix*. Click in the list on an individual markup to view its details, then click on the red 'Delete' button to remove it. Keep in mind that once a markup has gone through the validation or editing process, it cannot be deleted.

**Bonus:** If you can't see your markups on the map, make sure the 'Markup' layer is turned on. If the 'Delete' button is hidden by the bottom frame, zoom out on the page using your browser Zoom settings.



## Markup Reviewer Tip: How to copy Markup attributes from the Review Results table

The Markup Reviewer is used by stewards to review markups. Sometimes you may need to copy Markup attributes from the Review Results table for use in another tool. For example, you may be tracking your markup work in a separate data table and want to search by the TNM-ID.

Follow these steps:

- 1) For your record of interest, left click in the Editor Comment field to activate your cursor in that cell.
- 2) Type 'Ctrl+a' followed by 'Ctrl+c', then paste to a text editor (e.g. Notepad). You'll see that the attributes from all fields have been copied.
- 3) Within the text editor, select and copy-paste whichever attribute(s) you need (such as the TNM-ID) into your other tool.

Review Results

Issue Description	Issue Status	Issue Status Date	Editor Organization	Editor Comment	Attribute Data	Container Name
Extend Stream up hill match the DRG. The stream was cut back because it crossed the Hub "Dragon Back" boundary	Submitted	3/23/2020 4:25 PM				mu_container_line
Update Waterbody location to match imagery and to avoid intersecting WBD boundary.	Submitted	3/25/2020 3:11 PM				mu_container_poly
Update Waterbody to avoid intersecting WBD Boundary.						mu_container_poly
Adjust Waterbody to match imagery and to avoid intersecting WBD Boundary.						mu_container_poly
Update location to match imagery and avoid intersecting WBD boundary.	Submitted	4/2/2020 3:56 PM				mu_container_poly

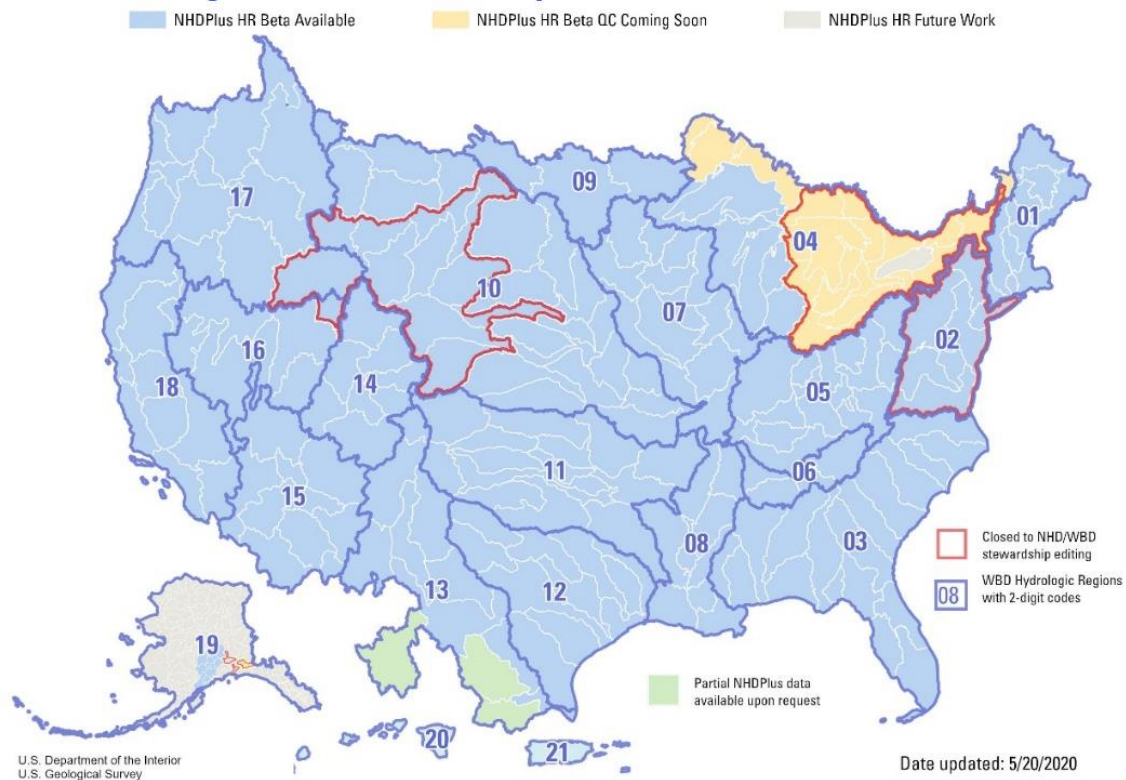
Left click, Ctrl+a, Ctrl+c, Paste to text editor

## NHD, WBD, and NHDPlus HR Status Updates

### NHDPlus High Resolution Beta Production Status

Contact: Karen Adkins ([kadkins@usgs.gov](mailto:kadkins@usgs.gov)), Hayley Thompson ([hnthompson@usgs.gov](mailto:hnthompson@usgs.gov))

#### NHDPlus High Resolution Availability



The map above provides an overview of NHDPlus HR availability. This status map is updated frequently on the [NHDPlus HR webpage](#).

- Red outline - These areas are currently closed to NHD and WBD editing. Please contact the National NHD Point of Contact (Joel Skalet, [nhd@usgs.gov](mailto:nhd@usgs.gov)) or National WBD Point of Contact (Lily Niknami, [lniknami@usgs.gov](mailto:lniknami@usgs.gov)) for more information on the status of NHD and WBD editing in these areas.
- Blue areas - NHDPlus HR Beta is currently available and Beta QC is either in process or completed for these areas. Please see the [NHDPlus HR Beta QC](#) section of the [NHDPlus HR webpage](#).
- Yellow areas - The NHDPlus HR Beta is in production and the USGS is currently seeking volunteers for the upcoming Beta QC for these areas. Please see the [NHDPlus HR Beta QC](#) section of the [NHDPlus HR webpage](#) for more information. Please contact the National NHD Point of Contact (Joel Skalet, [nhd@usgs.gov](mailto:nhd@usgs.gov)) or National WBD Point of Contact (Lily Niknami, [lniknami@usgs.gov](mailto:lniknami@usgs.gov)) for more information on the status of NHD and WBD editing in these areas.
- Gray areas - NHDPlus HR Beta will be produced at a later date. These areas are currently open for NHD and WBD editing.
- Green areas - The NHDPlus HR Beta was produced using contributing areas in Mexico to improve the NHDPlus HR Beta along the Rio Grande River. Minimal hydrography was included in the Beta build but will be improved when the areas are refreshed. The NHDPlus HR Beta production data with minimal hydrography content is available upon request.

## WBD 4-digit Improvement Status

Contact: Kimberly Jones ([kjones@usgs.gov](mailto:kjones@usgs.gov)), Lily Niknami ([lniknami@usgs.gov](mailto:lniknami@usgs.gov))

### WBD 4-digit Improvement - Work Completed

- Regions - 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21 and 22
- Mexico contributing 4-digit hydrologic units in Region 13
- Region 19 – 19020101, 19020103, 19020104, 19020202, 19020301, 19020302, 19020401, 19020402, 19020501, 19020502, 19020503, 19020504, 19020505, 19020601, and 19020602, 19020800

### WBD 4-digit Improvement - Currently in Work

- Region 19 (19020102, 19060102, 19080301, 19070402)

### WBD 4-digit Improvement - Future Work

- Region 19 (not listed above)
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## Photo of the Month



This month's photo, by Annalisa Stasey, is of the Blackfoot River in western Montana (reach code 17010203000144). The Blackfoot River was made famous by the Norman Maclean book, *A River Runs Through It*, which was later adapted into film and nominated for three Academy Awards. The river is a popular destination for fly fishing and inner tubing for local Missoulians throughout the summer.

**We'd love to see photos of the hydrology near you or from your travels! Please send submissions to Alexander Jones (ajonesi@usgs.gov).**

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## Hydrography Quiz

Congratulations to **Evan Hammer** who won the February/March Hydrography Quiz with the correct answer of **Lake Sequoyah**. Evan has been in Helena Montana about 14 years and works at the Montana State Library. He doesn't get to work with the NHD as much as he used to, but the Montana State Library is the NHD state steward and the great GIS employees that he works with directly steward 11 of the 15 Montana Spatial Data Infrastructure Themes. They are currently working on collecting statewide Lidar data through the 3DEP program and have high hopes for how that will transform their statewide elevation and hydrography layers (among others). Great job, Evan!

This was such a tough quiz that we only had two other participants. Thanks, and congrats to **Jon Becker** and **Robert Olive** with the US Environmental Protection Agency, Region 4, in Atlanta for also getting the correct answer this month!

### This Month's Quiz

*By Alexander Kaufman*

This river was named for the place of origin of three trappers who were tasked with exploring this river but were never seen after embarking on this task. This river cuts through a plateau of the same name, creating steep canyons, some as deep as 1,000 feet! At one time, this river was given the name Sandwich Island River.



Please email your answer to Becci Anderson ([rdanderson@usgs.gov](mailto:rdanderson@usgs.gov))



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## Upcoming USGS Hydrography Calls, Trainings, and Meetings

Date	Time	Event
5/26	11:30 AM ET	NHD Update Tools Training Part 2 (5 hours)
5/26	1:00 PM ET	USGS Hydrography Advisory Call
6/10	12:00 PM ET	WBD Technical Exchange Meeting (TEM)
6/15	11:30 AM ET	NHD Basics Training (2 ½ hours)
6/22	11:30 AM ET	NHD Update Tools Training Part 1 (5 hours)
6/29	11:30 AM ET	NHD Update Tools Training Part 2 (5 hours)

To be added to the USGS Hydrography Advisory Call email list, please email [nhd@usgs.gov](mailto:nhd@usgs.gov). For information on training, please contact Joel Skalet ([nhd@usgs.gov](mailto:nhd@usgs.gov), 608-238-9333 x152). For more information on technical exchange meetings, please see the [Hydrographic Data Community \(HDC\)](#) site. For access to the HDC site, please contact Lily Niknami ([lniknami@usgs.gov](mailto:lniknami@usgs.gov)).

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### Thank you to this month's USGS National Hydrography Dataset Newsletter contributors:

Ryan Teter, Annalisa Stasey, Joel Skalet, Marcelle Caturia, Karen Adkins, Hayley Thompson, Kim Jones, Lily Niknami, Vanessa Baez, Alexander Jones, Drew Lane, Al Rea, Drew Decker, and Becci Anderson.

### Join Our Community!

For more information, to sign up for the newsletter, or to contribute, please contact Becci Anderson, Hydrography Management and Planning Lead, at [rdanderson@usgs.gov](mailto:rdanderson@usgs.gov).

**Visit us anytime at [usgs.gov/NatHydro](https://usgs.gov/NatHydro) and follow us on Twitter @USGSNHD**

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