



California GIS Council Workgroup Report

Workgroup: National Hydrography Dataset (NHD) Workgroup page*: http://cgia.org/cagiscouncil/workgroups/hydrography/ Workgroup Chair: Jane Schafer-Kramer (jane.schafer-kramer@water.ca.gov)	Report Date: June 13, 2019
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*See the workgroup page for workgroup charter, members, contact information, and prior reports.

Requests for Council Action

None at this time

Status Update

Members of the NHD workgroup regularly interact as part of the ongoing work of the California Department of Water Resources (DWR) NHD Stewardship Program. (Stand-alone CA GIS Council NHD Workgroup meetings have not been held.)

Drew Decker and Carol Ostergren of the US Geological Survey (USGS) and John Lance and Jane Schafer-Kramer of DWR presented on California NHD Stewardship and held a mini-workshop on using the NHD at CalGIS 2019 in Fresno on April 9-10.

In the past three months DWR has had conversations with Redwood National and State Park, and (separately) with a consortium that includes County of Marin, Golden Gate National Parks Conservancy, and Quantum Spatial about getting their local-resolution hydrography data into the NHD. Additionally, DWR received some new training materials on the time- and labor-intensive process to prepare LiDAR-derived hydrography for conflation into the NHD; this documentation was prepared by a contractor with the US Forest Service and will be a valuable resource for our stewardship effort.

DWR's partners at California State University-Chico (CSU-C) and California State University-Northridge (CSU-N) continue to make progress on updating the 1:24,000 scale NHD while USGS works on bringing the 1:24,000 scale NHD data into NHDPlus. NHDPlus High Resolution has been released in beta for all hydrologic subregions (HU4) in California except Sacramento, San Joaquin, and Tulare-Buena Vista Lakes (see attached figure.) These remaining subregions are expected to be released in beta this fall, at which time DWR will participate in the QC review of the dataset. More information on NHDPlus may be found at <https://www.usgs.gov/core-science-systems/ngp/national-hydrography/nhdplus-high-resolution>.

USGS is populating the VisibilityFilter attribute in NHD vector features. The VisibilityFilter attribute allows the user to filter the features at eight approximate scales. A given VisibilityFilter coded-value indicates the feature is appropriate for use at approximately the defined scale and all larger scales. Some areas of the NHD have a much higher density of features than adjoining areas, and the Visibility Filter is helpful for generalizing the features for cartography. Instructions for using the Visibility Filter are available at: <https://www.usgs.gov/core-science-systems/ngp/national-hydrography/visibilityfilter>

As the California Steward, DWR is hosting an NHD Stewardship Special Interest Group meeting at the Esri User Conference on July 10, 2019 at 11:30. This is an informal meetup for those around the nation involved in or interested in NHD State Stewardship. Two members of the ArcGIS Pro product team have been invited to discuss the status of the geometric network functionality in ArcGIS Pro.

The California Department of Water Resources NHD Program will begin stewardship of the California Wild and Scenic Rivers dataset, formerly maintained by the Department of Fish & Wildlife (currently available on BIOS <https://www.wildlife.ca.gov/Data/BIOS>). DWR currently maintains two other derivative datasets: Major Rivers, and Major



Rivers and Creeks. DWR recently began archiving static snapshots of the California state extract of the NHD, which is updated approximately four times per year. All of these data products can be discovered by typing "NHD" in the search box of the California Natural Resources Agency's Open Data site: <https://data.cnra.ca.gov/>

An update of the California Business Rules is in review. The current version is available on our website: <http://www.water.ca.gov/waterdatalibrary/NHD/index.cfm>

DWR is scoping several interesting pilot projects with interagency partners at CSU-C and CSU-N; more details to come next quarter!

Errors in the NHD may be brought to the attention of DWR and USGS using USGS' Markup Application: <https://www.usgs.gov/core-science-systems/ngp/national-hydrography/tools#Markup> or by contacting Jane directly.

Legislative/Policy Update

The Memorandum of Understanding between DWR and USGS has been approved by DWR and is pending USGS internal review.

Action	Key Date
Finalize MOU (awaiting action by USGS)	open
Continue NHD Update work	ongoing
Formalize pilot projects	Fall 2019

Notes

Organizations can participate in California's NHD Stewardship Program by contributing reference datasets and/or becoming NHD editors. Contact Jane at jane.schafer-kramer@water.ca.gov or at 916-653-4441 for additional information. Any questions on NHD stewardship in California may also be directed to Jane. The California NHD Stewardship Program website is: <http://www.water.ca.gov/waterdatalibrary/NHD/index.cfm>

Documents and Attachments

NHD Plus High Resolution (1:24,000) Beta Availability

