

WBD Steering Committee Agenda

November 12, 2015

12 p.m. PST, 1 p.m. MST, 2 p.m. CST, 3 p.m. EST

Teleconference number:

From the USGS National Center in Reston, dial internally **x4848**

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Conference Security Code: **12864940 #**

<http://usgs.webex.com>

(15) WBD Steering Committee

Password **wbdhydro**

Attendees:

USGS-Nate Booth (Chair), Vicki Lukas, Al Rea, Kim Jones, Steve Aichele, Pete Steeves, Jeff Simley, Dave Blodgett

NRCS-Steve Nechero (Co-Chair), Laura Davenport

BLM-Jay Stevens

EPA-Wendy Blake-Coleman, Tommy Dewald

USFS-Mike Eberle

1. **Welcome:** *Nate Booth-Chair*

a. Updates to WBD personnel –

- i. Positions are still in transition. The detail periods are over. Sue Buto continues to provide assistance around WBD activities until position requirements are fleshed out.
- ii. New Product Owner at NGTOC is Elizabeth Stevens-Klein. She was previously with U.S. Army Corps of Engineers (USACE). She is slated to start duties the week of Nov. 16. Kim Jones will go to Denver train her during that week.
- iii. Kim continues to coordinate stewardship and data enhancement work with UT WSC and within the Product owner realm and will continue with National Technical Coordinators providing guidance and institutional knowledge for that group.
- iv. We appreciate the groups patience - trying to structure a new WBD coordination position with big picture needs of the hydrography program and hydrologic science in mind

b. Other USGS Water activities –

- i. OWI is up to the eyeballs with re-tooling NWIS. Challenges with federal use of cloud technology. Vague rules are creating some uncertainty and discomfort that needs to be worked through.

c. BLM membership

- i. Lee Koss has retired so Jay Stevens (formerly BLM alternate) will take the BLM representative role. An alternate may need to be found.

2. **NRCS**

a. **NRCS activities:** *Steve Nechero-Co-Chair*

- i. Presented a map showing conservation work at field offices highlighting, conflicting information within easement databases from different offices. Easements are legal entities accurate boundaries are needed. The utopia is to resolve geometry problems so that each program is using the same base data. NRCS is training field offices to publish web services. Services and data behind them show value added on to WBD and NHD: i.e. merging EPA and NHD data, embedding water quality data in WBD. Working on looking at big picture management issues in consistent manner across the agency. Integration of the data happens at the local level using copies of NHD, WBD and then data are published as services. Data enhancement is the key.

- ii. It is exciting to listen to Al, Pete, and Jeff discuss advancements in the hydro program.
- iii. "gssurgo" data are available on gateway. This is ssurgo data rasterized for model work.

b. **NRCS WBD update:** *Laura Davenport*

- i. The most recent data on the Gateway is the snapshot from September
- ii. Last week WBD 10.2 edit tools were certified for use in NRCS.

3. **Hydrography program updates:**

a. *Jeff Simley:*

- i. *The big activity is building of NHD+HiRes and Al will brief the group on that.*
- ii. *NHD team is doing network improvement in preparation for NHD+HiRes.*
- iii. *Distribution of WBD is changing – working on the capability to download by HU2 as prestaged file as well as options to get HU4, HU8.*

b. *Al Rea:*

- i. *Last week's Ele-hydro seminar focused on WBD. Mike Eberle was the main speaker discussing the USFS watershed condition framework. Curtis Price discussed automated NWIS drainage area delineation. David Richey from Lane County Oregon discussed a riparian ecosystem health initiative in the McKenzie watershed. The next seminar will focus on NHD+HiRes. Information about the seminar is accessible from nhd.usgs.gov.*
- ii. *NHD management and Ele-hydro meeting is December 8-10 in Reston.*
- iii. *Jeff is retiring and his last day is January 3.*
- iv. *No secret we've been working on NHD+HiRes.*
 - 1. *Based on 10m elevation and high res NHD/WBD. Porting code from NHD+ v. 2.1 to work with the high res data. Progress is slow but we're nearly through testing code and the first production run is imminent – hopefully the first 2 regions will be done by the holidays.*
 - 2. *The program acquired year-end funds to fund Horizon Systems for initial production of NHD+HiRes for CONUS. Processing is dependent on delivery of data to Horizon Systems so may not be completed this FY – hopefully a substantial portion will be completed. There is positive movement forward despite bumps in the road.*
 - 3. *Next, after the initial production run – which is almost completely automated so data problems are real – will be a data refresh. Planned for soon after initial production run or as initial run is finishing. Refresh team will consist of local stakeholders and a national team to identify and get fixes to ingredient datasets (vector). Elevation errors will be another issue. Refresh may occur simultaneously with initial production run – as regions are completed. Hope is that the initial refresh gets data in good shape so then we're in maintenance mode going forward.*

4. **WBD FY15 and planned FY16 data improvements:** *Kim Jones*

- a. *Working on names national QC to ensure consistent method is used based on standards and the names are in sync with GNIS. UT shop is working on it and is about 70% ready to go to states for review.*
- b. *Mods domains were updated about 2 years ago and the initial pilot project is complete. Need to add to pilot extent to make sure mods are geographically flexible. After documentation as a standards update, the hope is that states can do the work but it may need to go to UT WSC in instances where steward's funding is limited. Work is very important to stakeholders – particularly receiving and withdrawal MODs. Quantities of interbasin transfers are not in the plan at this point but should be kept in mind for future work.*
- c. *Coastal 8-digit limit to NOAA 3 nautical mile is progressing. The West coast is largely done but there is much high-priority work to do on east coast. Much of east coast has a "buffer" coastline but not necessarily at the 3 nautical mile. TX state steward took on*

update for TX coast but a miscommunication on how it the work would be done put it on hold. Steve Nechero offered help with TX issues. Florida coast is unfinished. Steward has had training but the work is in limbo. GA should be in completed status on the graphic but is not.

- d. Working on 10-12 digit HU for US/CAN harmonization. Work is ~40% complete. There has been no workshop with Great Lakes yet.
 - e. Also supporting NWIS drainage areas, NHD+HiRes improvements. There is a disconnect with high resolution NHD improvements and related WBD improvements – need to get people up to speed that NHD improvements need corresponding WBD improvements
5. **Data, Tools and Stewardship support update:** *Kim Jones*
- a. 10.2.2 version of WBD update tools are available. A post release issue has been resolved.
 - b. 10.3 development will happen on the next 2 sprints with a possible release in January.
 - c. New functionality slated for development after migration to 10.3 – state names field tool, acres/sw km tool
 - d. September NRCS refresh has been delivered. The national seamless extract is in work. Updates to distribution model is in work (per Jeff's discussion earlier). There are continued tool training and support meetings – these will be the responsibility of the new Product Owner when she's up to speed. Kim will continue in the meantime.
6. **NWIS in WBD:** *Sue Buto*
- a. Current problems include:
 - i. developing a mechanism for making official gaged basin boundaries available to the public and standardizing delineation methods
 - ii. Standard and consistent methods for determining non-contributing areas
 - b. Goals of the group are to address those problems and make spatial representations of the DA available to users via a variety of methods. Also provide a tool for water science center field staff to create new drainage areas and populate the DA field in NWIS.
 - c. A pilot study to delineate DA boundaries for 16 states was successful and the data are being prepped for delivery to the WBD. Mississippi data is outstanding and will be followed up on. A non-contributing area workgroup is in the planning stages with a list of potential members compiled and submission of a statement of interest for a CDI grant to fund the cost of an in-person meeting.
 - d. Work will continue toward generating boundaries for real-time gages for the remaining 34 states as well as developing data delivery methods and a method for field office delineation and NWIS updates.
 - e. Working with the TX USACE, Ft. Worth office to delineate DA boundaries for all gages in TX. The USACE has also verbally committed to financial assistance with the non-contributing area workgroup.
7. **Water Information:** *Steve Aichele*
- a. Hydrography Relevance and Benefits Study has been ongoing for the last 9 months or so. The work is pivoting from data collection to analysis. All 50 states and 23 federal agencies participated. 417 mission critical uses or activities were identified. These will help inform what the long term goals for hydrography are (5 years out). Single biggest desire was drainage area for gages but spatial representation (polygon) was graded as less useful than the DA number. Cost estimates for implementation will happen next year. Data report describing study will be delivered in March by Dewberry. Collected data should also be included. Evidence for interpretive products to make the case going forward to changes in data program. Can go over results in next quarterly meeting if necessary.
8. **US/Canada harmonization:** *Pete Steeves*
- a. Had a data harmonization task force meeting in Quebec last week. Majority of time spent at Natural Resources Canada (NRCAN) in Sherbrooke. Attended by representatives from

IJC, NRCAN, Environment Canada, and USGS (Kim Jones and Pete Steeves).
Discussing ongoing activities in coordination with each other.

- b. One day was spent at innovation day at NRCAN which allows other agencies to present on topics related to geospatial data and hydrography. Pete gave presentations on Streamstats and border activities.
- c. Agencies are in transition with respect to who will lead Canadian WBD-equivalent moving forward. IJC is helping to move that forward. Successful collaboration between USGS and NRCS is a model. Next year or two may see solidification of the data and harmonization.
- d. Roland Viger participated on a call and had discussion with NRCAN technical and Quebec provincial folks in terms of types of data we work on (networks, catchments, generalization) – Roland rolled out ideas including code and collaboration tools (wikis, images). Ideas will help move ahead in open source, collaborative ways.

9. **National Water Census: Dave Blodgett)**

- a. With reorganization of OWI, role is liaison to water availability and use science program. Central strategy of the program is the national water census. Data resource portal demonstrated (production server). WBD polygons and identifiers are used as set of reporting units i.e. water availability by HUC. The data are the framework for reporting (from local or aggregated up to smaller scales). Turning the crank in that reporting is shown in the development application. Water use by watershed still has to happen. The information is being brought together now. The portal and data will likely change with time – work in progress as science and data changes. Note the WBD is clipped to the conterminous US because no water budget data are available for over border. This work is moving forward faster than harmonization is happening. In the near future there will be an underlay of full boundaries to make clear that polygons extend across border. Can compare watersheds side-by-side. Water use data – using identifiers as permanent units for reporting in future.
- b. Trying to determine relationship between NWIS gages and adjoint catchments represented by HU12. Determined by to-HUC codes in June snapshot of the WBD. They have a dataset of the entire upstream area for each HU12.
- c. Currently, gages are not always at the outlet of watershed so statistics don't relate to the gage. Working on picking out "good" vs "bad" gages based in drainage area in NWIS. Watershed modeling and estimating daily streamflow at outlet of HU12. Big need is the outlet point for every HU12. Can be used as an event on the NHD (discussed in last NHD data model call) and as proxy for HU boundaries.

10. **Agency round table**

- a. **EPA: NHD Plus: Tommy Dewald**
 - i. Perhaps this should be rebranded "*NHD Plus Classic*"
 - ii. *Data have been produced for Guam, American Samoa, North Marianna Islands using high resolution ingredient data. The data are available on the NHD Plus website. New MOU is in place between NGP and EPA for shared maintenance of NHD, NHD+, WBD.*
- b. **EPA: A-16: Wendy Blake-Coleman**
 - i. *Baseline maturity assessments are 99% complete in November. NHD and WBD came in as mostly mature datasets. Currently doing overviews and assessments. Dashboards which depict dataset maturity as well as overall theme maturity are being tested.*
 - ii. *The next big challenge is determining if the information is being collected for naught. Will it be used to realign or enhance budget decisions? Tracking process has hit a bit of a dead end making fund shifting difficult. HRBS should be leveraged as the hydrography strategic plan.*
 - iii. *There are errors on geoplatform tagging of NGDA datasets – over 19k datasets are tagged as NGDA. Working to make NGDA more be more visible on geoplatform.*

- c. **BLM:** *Jay Stevens*
 - i. *No big hydrography news to report. There has been progress filling empty positions. Geospatial lead in WA office has been filled.*

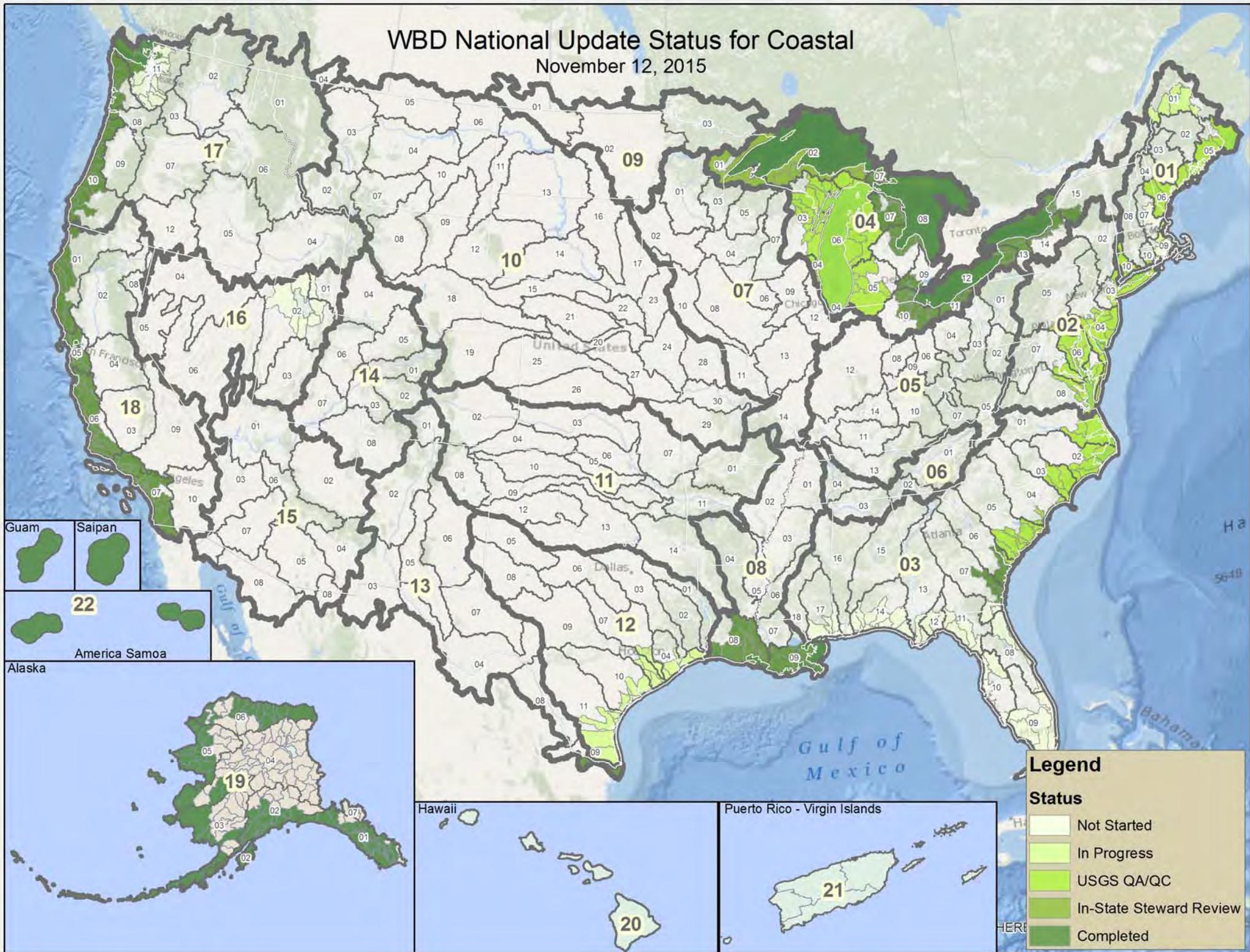
- d. **USFS** (*Mike Eberle*)

11. Next quarterly meeting March/February 2015

- a. Sue will send out Doodle in the near future

WBD National Update Status for Coastal

November 12, 2015



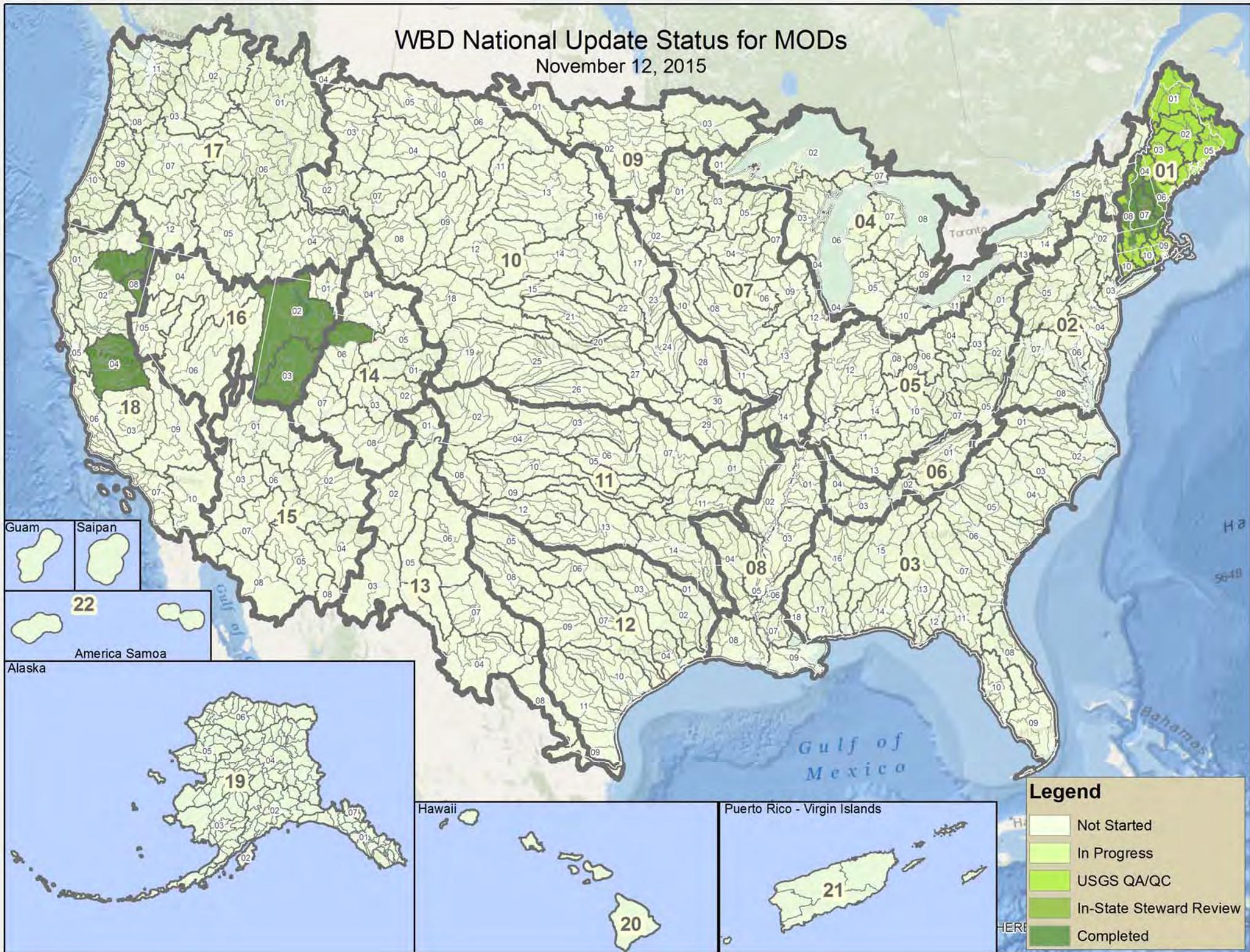
Legend

Status

- Not Started
- In Progress
- USGS QA/QC
- In-State Steward Review
- Completed

WBD National Update Status for MODs

November 12, 2015

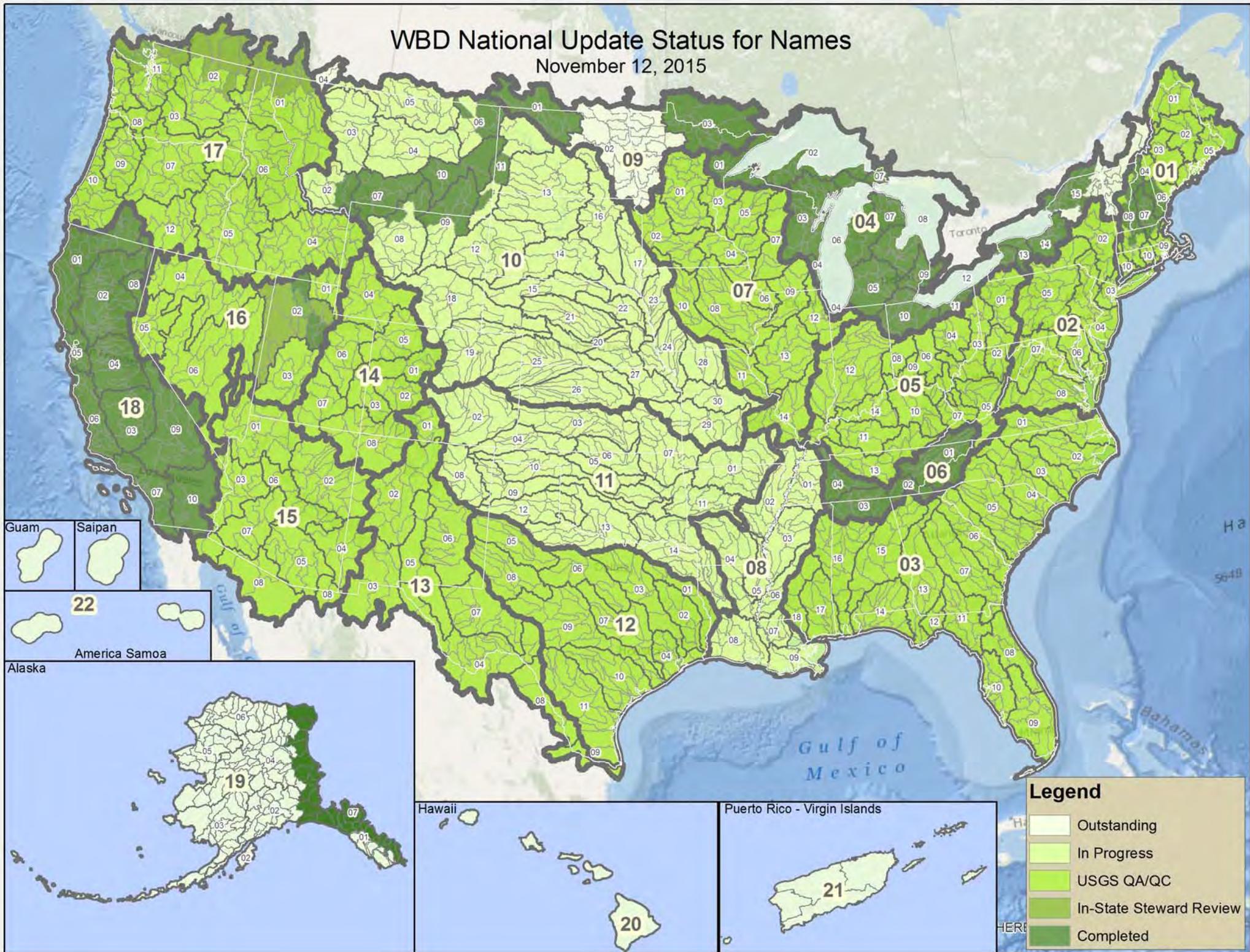


Legend

- Not Started
- In Progress
- USGS QA/QC
- In-State Steward Review
- Completed

WBD National Update Status for Names

November 12, 2015



Legend

- Outstanding
- In Progress
- USGS QA/QC
- In-State Steward Review
- Completed