# Criteria for Legacy Name and Code Changes

**Date: 03/11/15**
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**Updated: 7/09/18**
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Hydrologic unit names are a common identifier used by many agencies for reporting hydrologic unit characteristics. Many reports are tied solely to the name of the hydrologic unit. During the creation of the Watershed Boundary Dataset (WBD), it was implied that the 2-, 4-, 6-, and 8-digit hydrologic units shouldn't have any codes or names changed. Legacy codes and names are defined in the The Department of Interior, U.S. Geological Survey, Water Supply Paper 2294, authored by Paul R. Seaber, F. Paul Kapinos, and George L. Knapp was first printed in 1987, with a second printing in 1994http://pubs.usgs.gov/wsp/wsp2294/ However, some states have made changes to these legacy names and codes during development of the higher resolution WBD.

Reasons for these code or name changes vary from the hydrologic units being significantly altered during the development of the larger scaled product, to the splitting of hydrologic units, hydrologic errors detected in the legacy hydrologic units, in-state recommendations, or just liberties taken by the technician performing the work.

The WBD State Stewardship Work Group and WBD Technical Team agree that the following evaluation rules be used to determine if these changes should be officially accepted or declined as part of the national database.

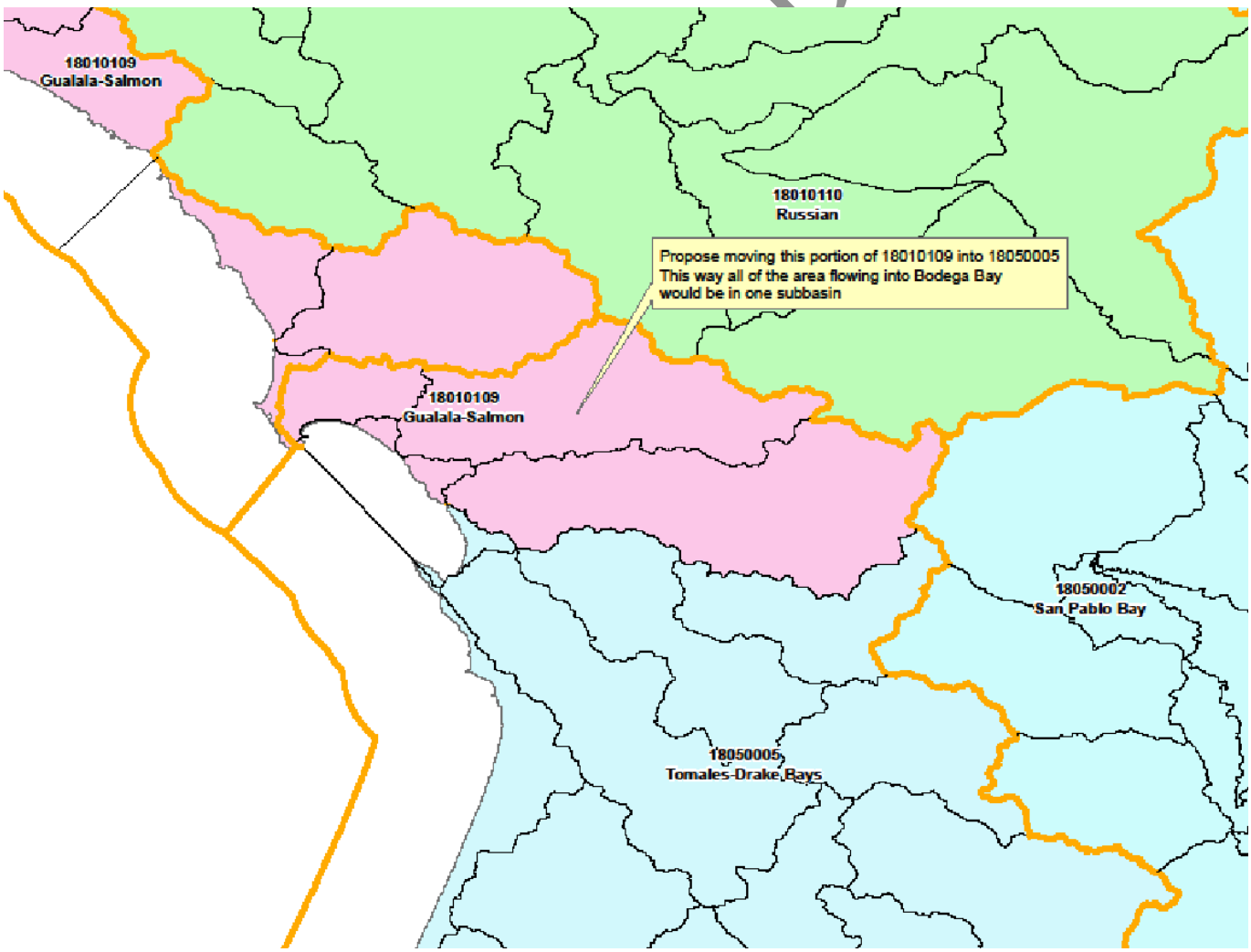
1. Legacy names and codes should be left as they are whenever possible. There is no way to determine the impact on all agencies that have been using these for reporting.
2. Names that are misspelled or contain obvious typographical errors can be changed to reflect what is in the Geographic Names Information System (GNIS).
3. If delineation changes significantly and the predominant hydrologic feature is no longer contained within the hydrologic unit, a name change is warranted.
4. If a hydrologic unit is subdivided or aggregated such that one or more hydrologic units no longer exist, names and codes should be retired, even if this causes a skip in the numbering sequence.

5. In the case of coastal delineations, characteristics with new consideration of the submerged river basin may warrant, revised boundary, code or name changes from legacy information. These instances should be carefully coordinated on a case by case basis with the national technical coordinators.
6. For international borders, special accommodations may be made in order to satisfy data harmonization with Canada or Mexico.



# California

Legacy 18010109 Gualala-Salmon had an area the size of several 12-digit HU's that will be aggregated into the adjacent legacy 18050005 Tomales-Drake Bays as a result of coastal implementation. This is approved by the in-state WBD Steward and T3.



Legacy 18080001 check that Surprise Valley name isn't spelled Suprise Valley.

Legacy code 18030003 Middle Kern-Upper Tehachapi-Grapevine should be left as is.

Legacy 18030012 and new 18030012 Tulare-Buena Vista Lakes name should change to Tulare Lake Bed as the boundary has changed so significantly that Buena Vista Lakes are no longer in the adjusted hydrologic unit.

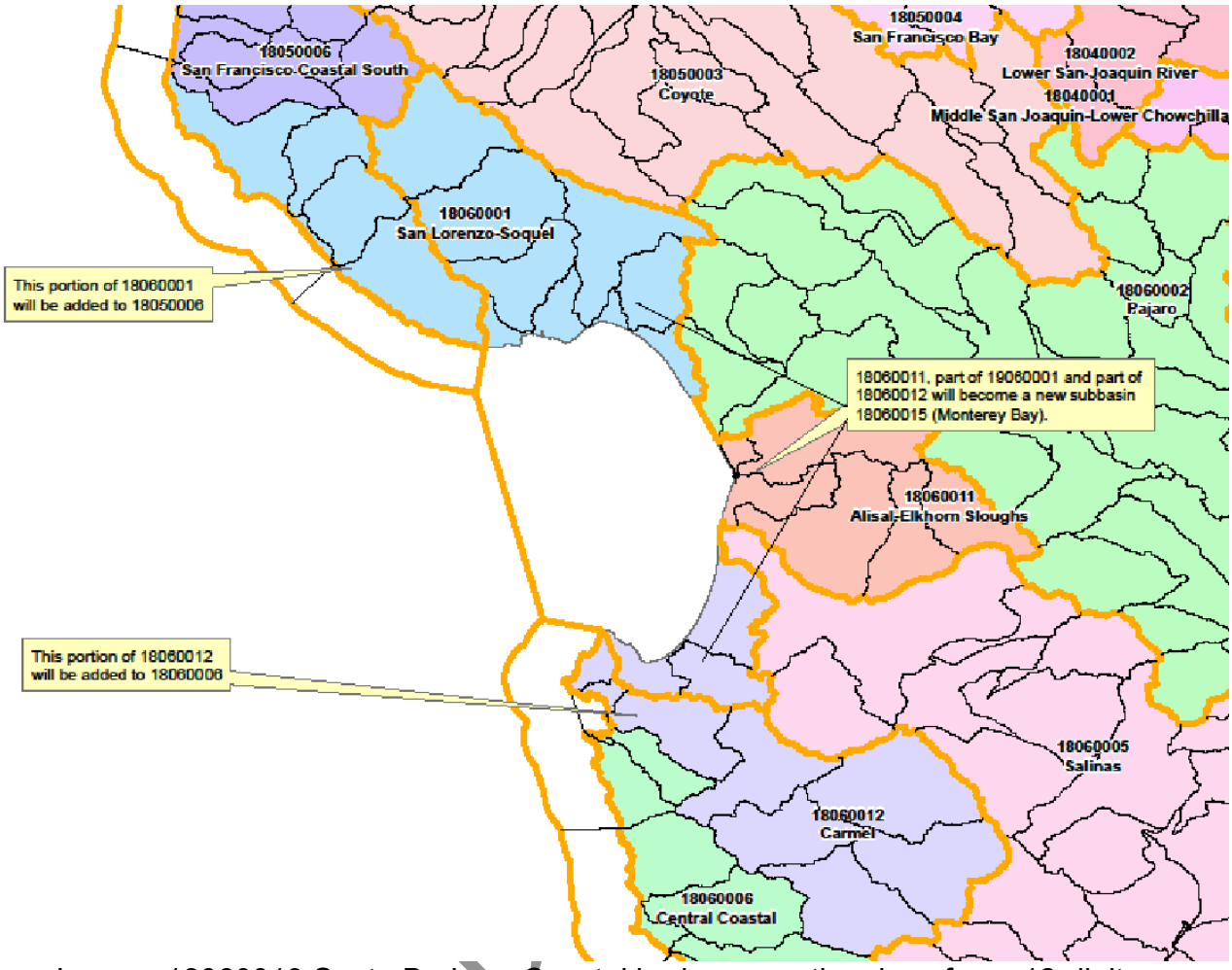
Legacy 18040001 and new 18040007 name should change from Upper Chowchilla-Upper Fresno to Fresno River as the Chowchilla is no longer in the adjusted hydrologic unit.

Legacy 18040002 and new 18040002 name should change from Middle San Joaquin-Lower Merced-Lower Stanislaus to Lower San Joaquin River as Merced and Stanislaus Rivers are no longer in the adjusted hydrologic unit.

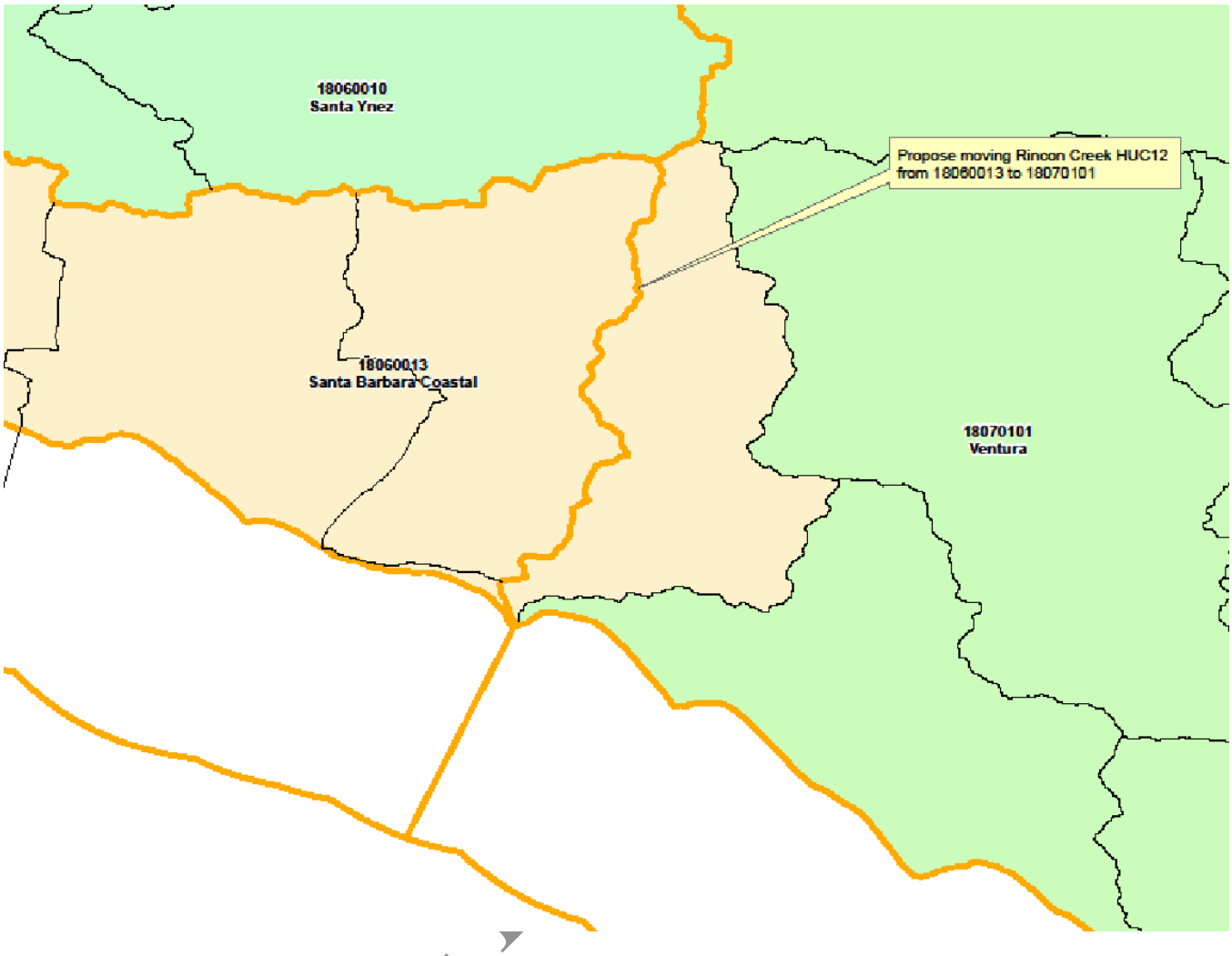
Legacy 18050006 San Francisco-Coastal South will absorb 4 coastal 12-digit HU's from legacy 18060001 San Lorenzo-Soquel as a result of coastal implementation. This is approved by the in-state WBD Steward and the national WBD Technical Team (shown below).

Legacy 18060006 Central Coastal will absorb an area the size of 6 12-digit HU's from legacy 18060012 Carmel which all drains directly to the Pacific Ocean. This is approved by the in-state WBD Steward and the national WBD Technical Team (shown below).

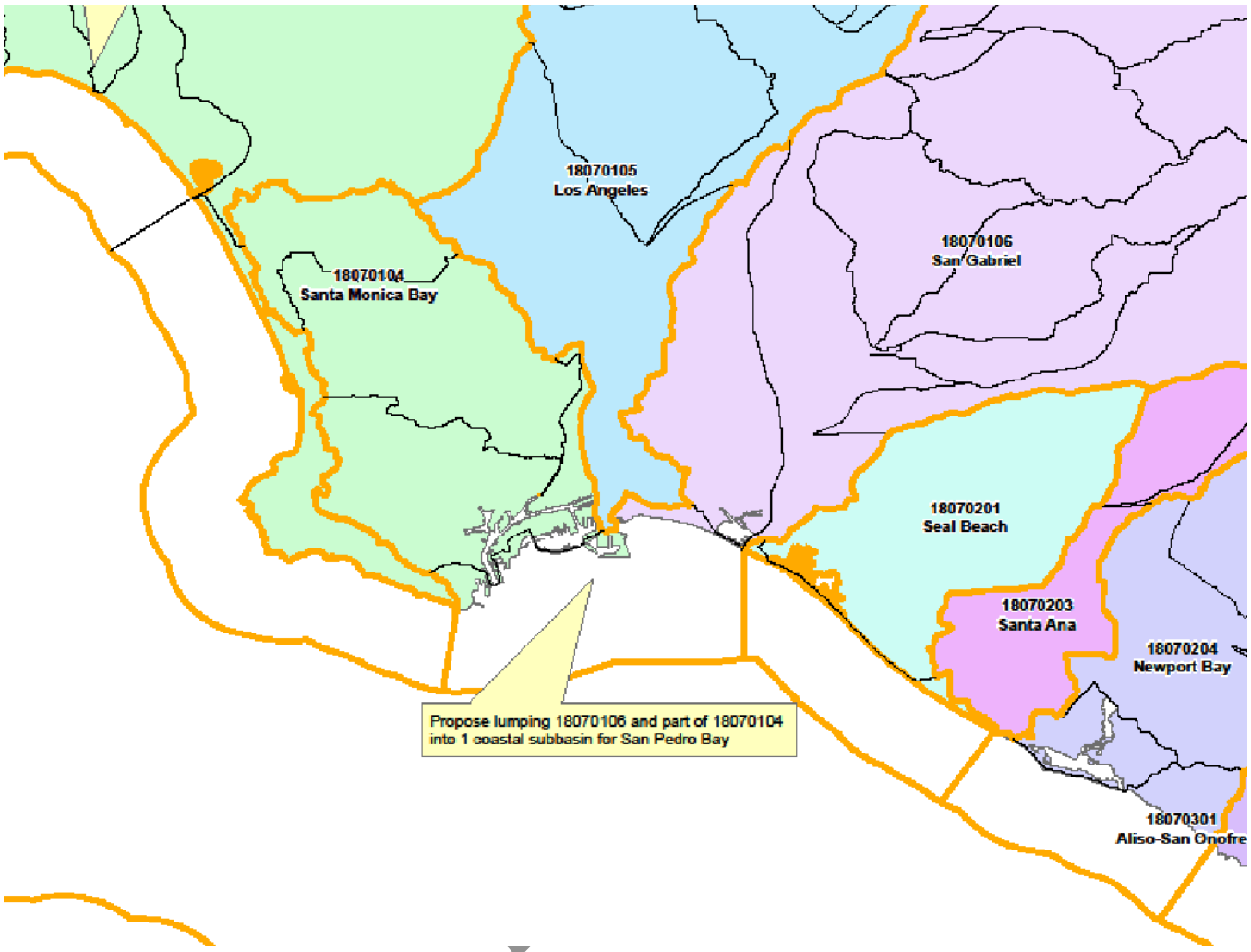
Portions of legacy 18060011, 18060012, and part of 19060001 will become a new subbasin accounting for all of these frontal pieces. It will be coded 18060015 and named Monterey Bay. This is approved by the in-state WBD Steward and the national WBD Technical Team (shown below).




Legacy 18060013 Santa Barbara Coastal had an area the size of one 12-digit HU which will be aggregated with legacy 18070101 Ventura as a result of coastal implementation. This is approved by the in-state WBD Steward and the national WBD Technical Team (shown below).




Legacy 18070104 Santa Monica Bay had an area the size of several 12-digit HU's which will be aggregated with legacy 18070106 San Gabriel as a result of coastal implementation. This is approved by the in-state WBD Steward and national WBD Technical Team (shown below).




Legacy 18100200 has now been subdivide into 18100201, 18100202, 18100203, and 18100204. The technical team agrees with this, and recommends that 18100200 be retired. OK

The legacy name for 180100200 has been retained as the Salton Sea for new code 18100204. New names for the other subdivisions have been reviewed and accepted as follows:
18100201 Whitewater River
18100202 Carrizo Creek
18100203 San Felipe Creek

***Note: A line work change recommendation has been proposed to California between 18100202 and 18100203, to capture the full Carrizo Creek drainage within 18100202. COMPLETED

Legacy 18040002 and new 18040051 name Middle San Joaquin-Lower Merced-Lower Stanislaus will change to Rock Creek-French Camp Slough.

Legacy  18020109 and new 18020163 name Lower Sacramento should remain the same for that area. This area still reflects the lower Sacramento River.

Legacy 18020117 and new 18020162 name Upper Putah should remain the same for that area.

Legacy 18020127 and new 18020161 name Upper Coon-Upper Auburn should remain the same for that area.

Legacy 18020124 Honcut Headwaters name and code should be retired.  It was absorbed in to legacy 18020106 Lower Feather to form the new 18020159. Technical Team recommends the name retain the combined legacy names of Honcut Headwaters-Lower Feather. OK

Legacy 18020120 Upper Butte and legacy 18020105 Lower Butte will be retired. The two hydrologic units were combined in to the new accepted code and name of 18020158 Butte Creek. OK

Legacy 18020119 Mill-Big Chico, 18020103 Sacramento-Lower Thomes, and 18020114 Upper Elder Thomes will all be retired.  The accepted names and codes for the newly delineated hydrologic units  to replace those areas are 18020157 Big Chico Creek-Sacramento River, 18020156 Thomes Creek-Sacramento River, and 18020155 Paynes Creek-Sacramento River. OK

***Note: A line work change recommendation has been proposed to California between 18020154 and 18020152.  The remnant area would be dissolved in to 18020151.  COMPLETED

The following legacy names and codes should be retired: 18020113 Cottonwood Headwaters, 18020102 Lower Cottonwood, 18020101 Sacramento-Lower Cow-Lower Clear, 18020118 Upper Cow-Battle, and 18020112 Sacramento-Upper Clear.  The accepted codes for the newly delineated hydrologic units to replace those areas will be 18020151-18020154, but will require rework of the sequence if the proposed delineation correction above is accepted.  The approved names should be:
18020151 Cow Creek
18020152 Cottonwood Creek
18020153 Battle Creek
18020154 Clear Creek-Sacramento River

18010111 code and name have been retired and the area has been split. A portion is in 18010109 Gualala-Salmon, and the other portion in 18050005 Tomales-Drake Bays

18020107 code and name have been retired and the area is now included with 18020125 Upper Yuba

18020108 code and name have been retired and the area is now included with 18020126 Upper Bear

18020110 code and name have been retired and the area is now included with 18020116 Upper Cache

18030008 code and name have been retired and the area is now included with 18030012 Tulare Lake Bed

18030011 code and name have been retired and the area has been split. A portion is in 18030012 Tulare Lake Bed, and the other portion in 18030009 Upper Dry

18040004 code and name have been retired and the area is now part of 18040011 Upper Calaveras California

18040005 code and name have been retired and the area is now part of 18040003 San Joaquin Delta, 18040012, 18040012 Upper Mokelumne, and 18040003 Upper Cosumnes

18020109 code and name have been retired and the area is now part of 18020163 Lower Sacramento

18020117 code and name have been retired and the area is now part of 18020162 Upper Putah

18060001 code and name have been retired, and the areas are now split between 18050006 San Francisco Coastal South and 18060015 Monterey Bay

18060011 code and name have been retired and now is split between 18060015 Monterey Bay and 18060005 Salinas

18060012 code and name have been retired and the area is now part of 18060006 Central Coast and 18060015 Monterey Bay



# Idaho

16010202 Middle Bear is in current WBD

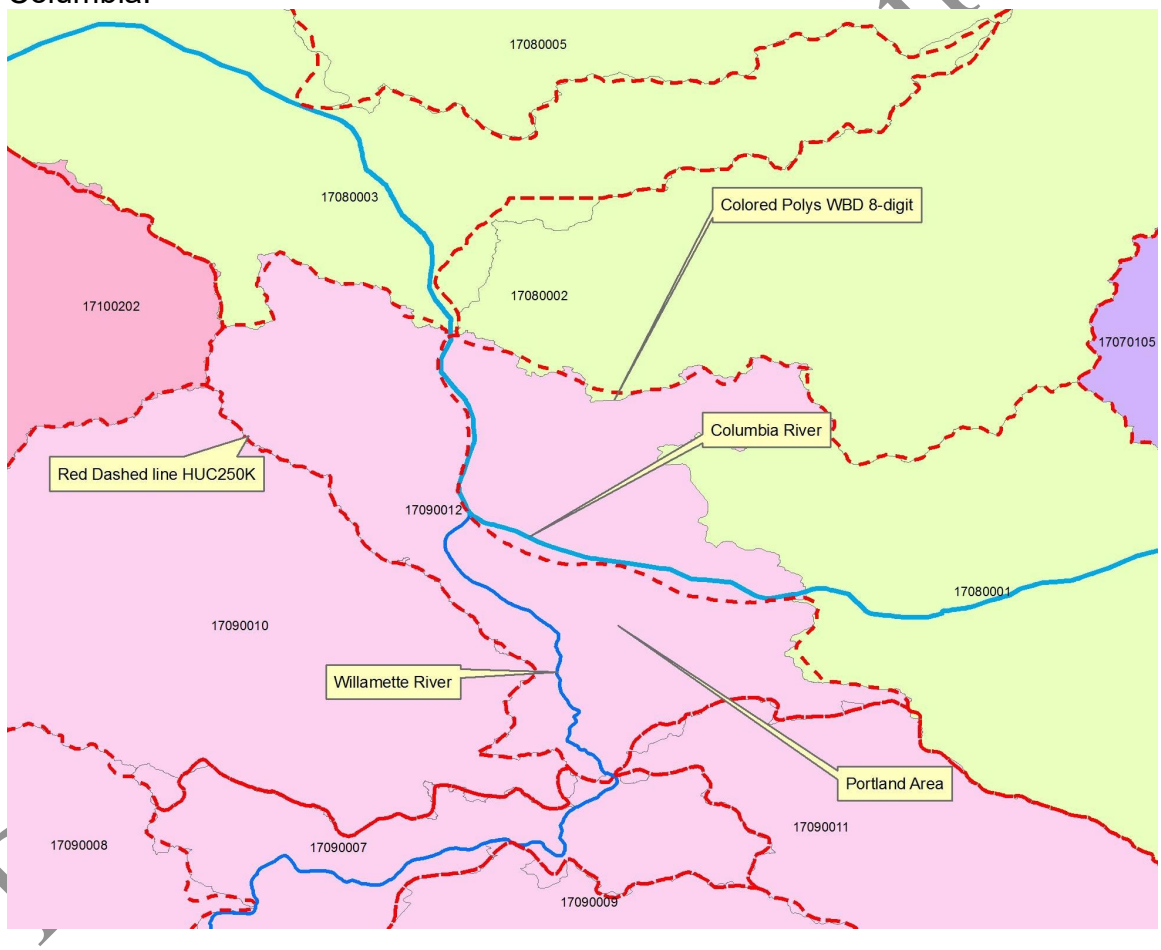
17010303 Coeur d'Alene Lake is in current WBD

17010308 Little Spokane is in current WBD

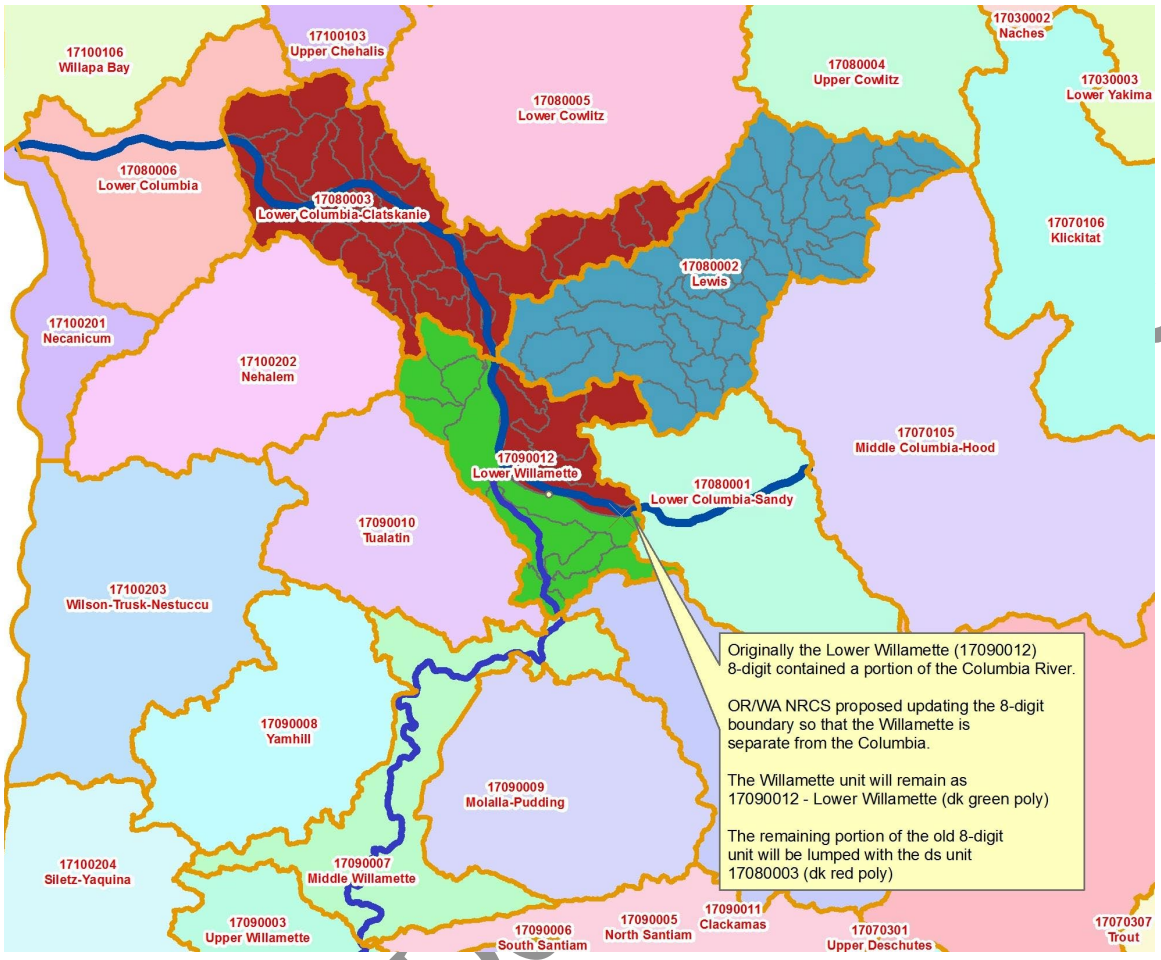
# Oregon

Legacy 17100304 Coos was subdivided into 17100304 Coos to the north and 17100306 Sixes to the south. The Technical team accepts this change.

17090002 and 17080001will change at the Subregion level this fall when Oregon does updates. The Willamette  should never have been lumped with the Lower Columbia.

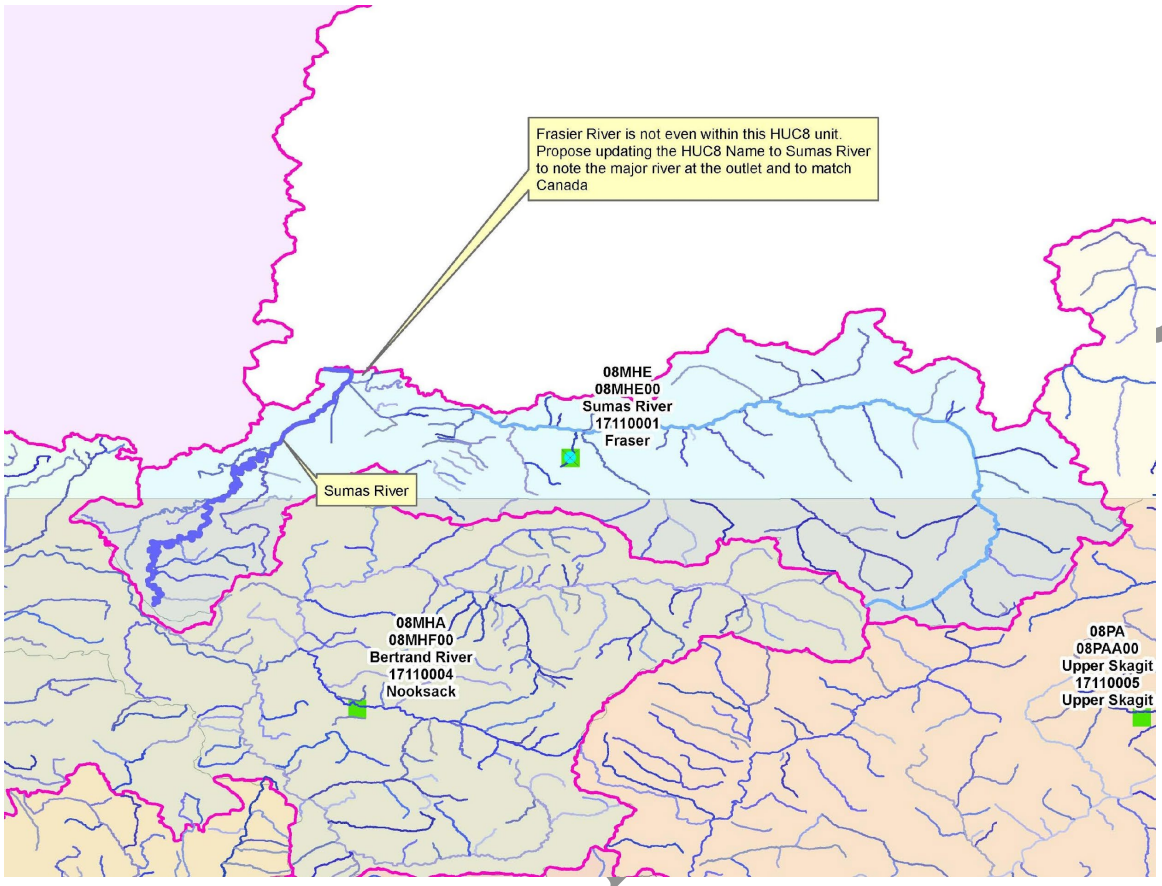



**Result of fall meeting with T3 agreement follows. Determined result for least impact overall.**




# Washington

17110001 legacy name “Fraser” is being changed to “Sumas River” to match with Canada, and because the Fraser River doesn’t flow through this unit.




**Rock Creek**

- This proposed modification originates from a King County Department of Natural Resources field investigation related to Rock Creek. The information was forwarded to me by Rick Jordan, the NHD State Steward. I reviewed the information and data provided by King County in conjunction with 2009 imagery and LiDAR elevation data (to derive detailed contours and a shaded-relief), and decided that the proposal had merit. I developed a draft WBD boundary that Rick and I reviewed during several NetConferences. Subsequently, we agreed that Rock Creek flows to the north instead of to the west and that the proposed boundary addressed the issue.

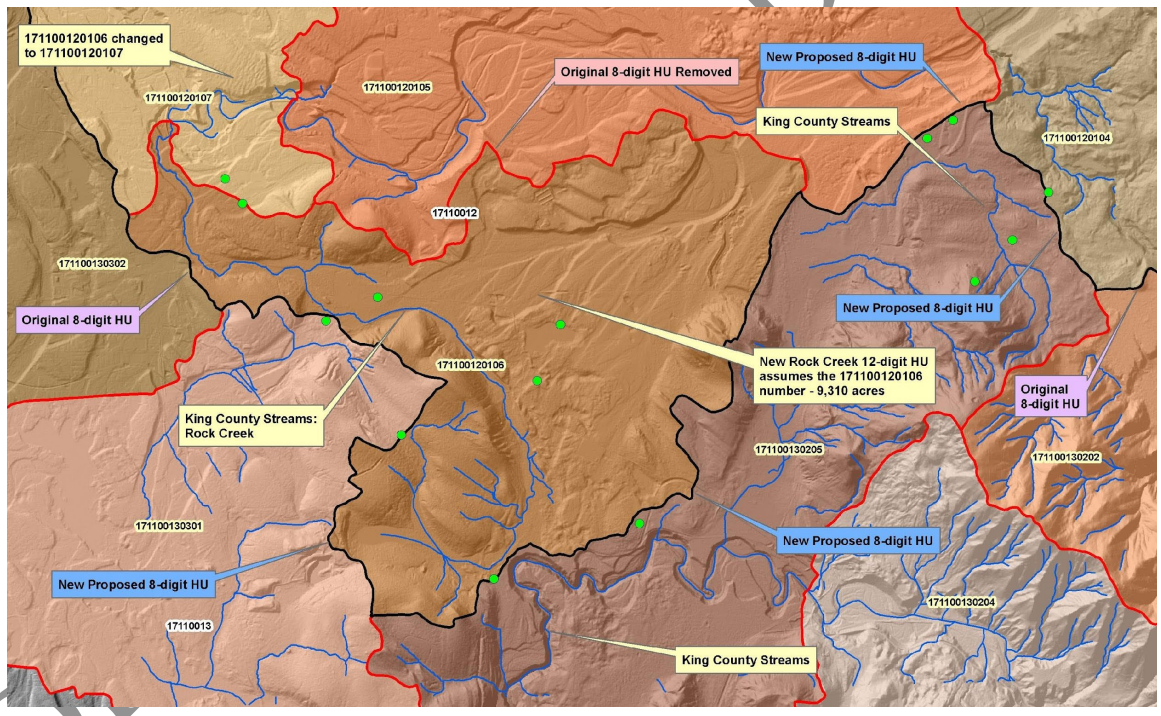
- This proposed modification changes the 8-digit boundary between 17110012 and 17110013 and creates a new Rock Creek 12-digit unit. The new 12-digit Rock Creek would assume the 171100120106 code, and the downstream 12-digit unit would become 171100120107. Because 171100120107 is the outlet of the 1711001201 10-digit unit, no other unit number is affected.

· The King County investigation, elevation data and existing NHD linework also identified a necessary 8-digit boundary modification for an area coincident between 171100120105 and 171100130205.

· There are several significant modifications to the NHD as a result of this proposal that Rick agrees should be made. The Rock Creek flow will no longer be associated with Ravensdale Creek in the west, or the Green River to the south. There are also several intermittent NHD streams between the new outlet of Rock Creek and the outlet of 171100120105 that are not supported by the topography or imagery and would be removed from the NHD.

· GNIS has a named point for Rock Creek at the outlet of the proposed unit.

· The draft Rock Creek WBD boundaries have been delineated to follow the DRG contours…only using the LiDAR contours as a guide.






**Offutt Lake**

· This proposed modification originates from Rick Jordan's discovery of a conflict between the NHD and WBD. At Rick's request, I reviewed the area utilizing 2009 imagery and a LiDAR elevation dataset (with derived shaded-relief and detailed contours), but because of the nature of the topography I could not make a determination as to whether the NHD was correct or not. I asked one of our NRCS employees who works near this

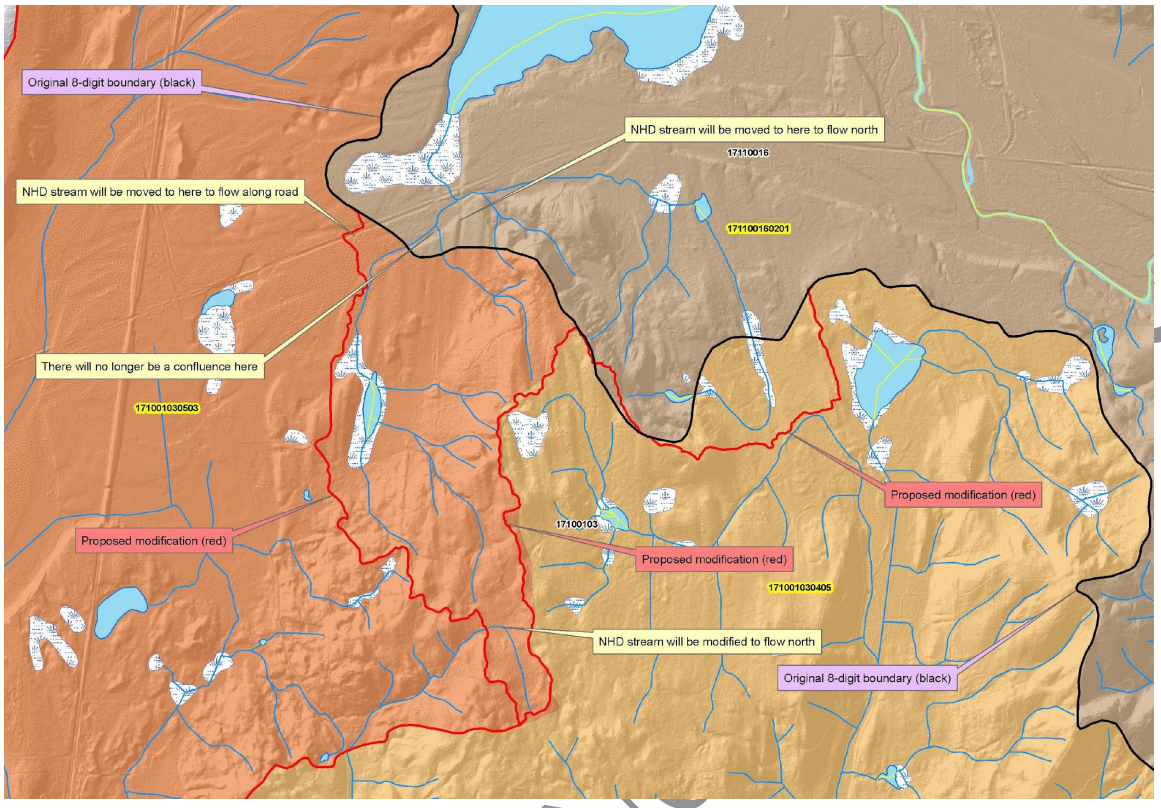
area if he could investigate and he indicated that he could. I sent him three coordinates and a map and he used a GPS to find these three locations on the ground. He indicated that there is indeed streamflow in the direction that the NHD indicates, which supported the need to make a modification to the WBD.

- This employee's field visit also indicated that the NHD is in error and that it would need to be modified. Similarly, the LiDAR information showed that there were several other places along the proposed boundary where either the current NHD or WBD needed to be modified. Rick and I reviewed these developments during several NetConferences and agreed to the draft WBD boundary and the NHD modifications.

- This WBD modification would change the 8-digit boundary between 17100103 and 17110016. There are no number or name changes.

- The proposed boundary has been delineated following LiDAR contours, not DRG contours, and is therefore at a higher resolution and level of detail.

- The boundary was only modified to account for the change in streamflow in this specific area. Therefore the draft LiDAR-derived boundary is highly detailed until it attaches into the original DRG-derived boundary at either end of the proposed modification. No other part of the WBD was reviewed or modified to a higher resolution beyond these ends because the conflict in the area effected was resolved.


Original 8-digit boundary (black)
NHD stream will be moved to here to flow north
17110015
NHD stream will be moved to here to flow along road
171100160201
There will no longer be a confluence here
171001030503
Proposed modification (red)
Proposed modification (red)
17100103
Proposed modification (red)
171001030405
NHD stream will be modified to flow north
Original 8-digit boundary (black)