Pacific Northwest Hydrography Framework Clearinghouse Hydrologic Unit Boundary Data Dictionary

Physical Data Model Version 1.1

Prepared by the

Washington and Oregon Hydrography Framework Technical Work Groups

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Section 1 – Hydrologic Unit Layer Description

The purpose of the Hydrologic Unit Boundaries dataset is to simultaneously maintain an index representing Level One (1) through Eight (8) Hydrologic Unit Boundaries. This dataset is intended as a tool for water-resource management and planning activities, particularly for site-specific and localized studies, which require the amount of detail provided by a large-scale map. The Hydrologic Unit Boundaries coverage contains attributes for polygons, arcs and eight Arc/Info regions. Hydrologic Unit delineations are closed polygons that encompass all area draining toward the lowest point (called pour point) in the polygon.

To better classify hydrologic units, the dataset is divided into separate size classifications called "Levels" or "Fields," which define drainage areas of specific size within a network of hydrologic units. The largest classification of this kind is called a 1st Level hydrologic unit (also referred to as Region). An example of a 1st Level hydrologic unit is the Columbia River Basin Region, which defines the drainage network for the majority of the States of Oregon and Washington. As part of the ranking system, 1st Level units can be subdivided into smaller 2nd Level units, which can be further subdivided into 3rd Level units and so on. These divisions currently may continue until much smaller 8th Level units are reached. The methods for delineating these units are based on the Interagency Guidelines on Delineation of Hydrologic Unit and Subwatershed Hydrologic Unit Boundaries (http://wwwga.usgs.gov/gis/iag.html).

Several nested hydrologic unit boundaries have been incorporated to create this geospatial dataset, which allow for mapping to the 8th Level. The dataset was developed by delineating the boundary lines on 1:24,000 base maps and digitizing the delineated lines. Digital Elevation Model data was used in part of the process to establish preliminary boundaries. The Hydrologic Unit Code attached to each delineated polygon is linked to the attribute data, which can contain information on area in acres, non-contributing area, state(s) the Hydrological Unit (HU) falls within, name for 5th and 6th level HU, 5th and 6th level code for downstream hydrologic unit and hydrologic unit modifications. Each line has attributes that describe the HU level (1-6), originating source for that line and a metadata ID number that links the line to its associated metadata file.

The following procedures were used to produce this dataset:

- Hydrologic units were incorporated into this dataset from an aggregate of pre-existing HU's.
- A number of new Hydrological Unit Boundaries were delineated using flow lines and basins computed from 10- and 30-meter horizontal resolution Digital Elevation data based on flow derived from the elevation grid to determine potential pour points.
- The DEM data is derived from hypsography represented on 1:24000 USGS topographic quadrangles.
- Additional hydrography data was used as a template to control pourpoint locations for the delineated HU's.

Examples have been listed for all attributes where possible, as have all relevant attribute domains. For those instances where domains are sequential unique whole numbers that are automatically generated, this value has been omitted.

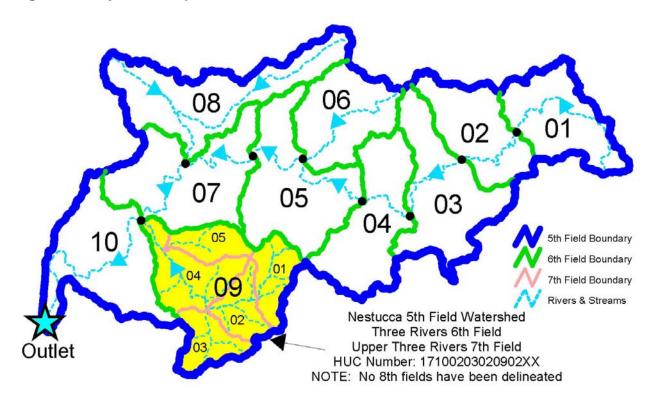
Maintenance Coverage versus Distribution Coverage

Two separate coverages exist for the Hydrologic Unit Layer dataset: the publicly distributed coverage (referred hereafter as **Distribution**) and the maintenance coverage (referred hereafter as **Maintenance**).

The Distribution coverage is available to all users for query and analysis purposes and includes the Polygon Attribute Table, the Arc Attribute Table and all region feature classes, e.g. PATHUC1 – PATHUC8. The Distribution coverage uses the following naming convention: HU_BOUNDARY. This dataset can be downloaded at http://hydro.reo.gov.

The Maintenance coverage is to be checked out for editing purposes using the Interim HU Guidelines and includes the Polygon Attribute and Arc Attribute Tables only. The Maintenance coverage uses the following naming convention: HU<mm/dd/yy>, e.g. HU082203. This dataset and the interim HU Guidelines can be downloaded at http://hydro.reo.gov.

Hydrologic Unit Layer Description



Example Explanation: When delineating 7th level units, all units within a given 6th level unit have the same first 12 digits.

Starting at the uppermost end of the drainage, the first 7th level hydrologic unit would be assigned the code "01" for the 13th and 14th digits. When combined with the 6th level code, the full Hydrologic Unit Code in the above example would be 17100203020901XX. The next downstream unit would be assigned the code "02" for its 13th and 14th digits, making its full HUC code be 17100203020902XX and so on. The "XX" at the end of the example tells users that 8th level units have not been delineated in this area.

For a full description of layer attributes, please see the "Pacific Northwest Hydrologic Unit Boundaries Dataset Standards" document located at http://hydro.reo.gov/hu_edit_guidelines.html.

Polygon Attribute Tables: Hydrologic Unit PolygonsTable

Name: HU_BOUNDARY.PAT (Distribution Coverage Name)

HUMM/DD/YY.PAT Example: HU082203.PAT (Maintenance Coverage Name)

Hydrologic Unit Boundary Polygon Attributes

| ITEM NAME | ITEM DEFINITION |
|------------------------------|-----------------|
| AREA | 8,18,F,5 |
| PERIMETER | 8,18,F,5 |
| HU_BOUNDARY# | 4,5,B |
| (or HU <mmddyy>#)</mmddyy> | |
| HU_BOUNDARY-ID | 4,5,B |
| (or HU <mmddyy>-ID)</mmddyy> | |
| ACRES | 14,14,N,4 |
| HUC_NUM | 16,16,C |
| HUC_TYPE | 8,8,C |
| REGION_NAME | 30,30,C |
| SUBREGION_NAME | 30,30,C |
| BASIN_NAME | 30,30,C |
| SUBBASIN_NAME | 30,30,C |
| WATERSHED_NAME | 80,80,C |
| SUBWAT_NAME | 80,80,C |
| CATCHMENT_NAME | 80,80,C |
| SUBCATCH_NAME | 80,80,C |
| OLD_HUCNUM | 16,16,C |
| STATES | 12,12,C |
| NCONTRIB_DA | 12,12,N,4 |
| DS_HUC5 | 10,10,C |
| DS_HUC6 | 12,12,C |
| HUC_MOD | 80,80,C |
| COMMENTS | 100,100,C |
| REGION* | 2,2,C |
| SUBREGION* | 4,4,C |
| BASIN* | 6,6,C |
| SUBBASIN* | 8,8,C |
| WATERSHED* | 10,10,C |
| SUBWAT* | 12,12,C |
| CATCHMENT* | 14,14,C |
| SUBCATCH* | 16,16,C |
| FIRST_FIELD* | 2,2,C |
| SECOND_FIELD* | 2,2,C |
| THIRD_FIELD* | 2,2,C |
| FOURTH_FIELD* | 2,2,C |
| FIFTH_FIELD* | 2,2,C |
| SIXTH_FIELD* | 2,2,C |
| SEVENTH_FIELD* | 2,2,C |
| EIGHTH_FIELD* | 2,2,C |

^{*} designates a Redefined Item

AREA

Area of the feature in coverage units, value is assigned by the software.

PERIMETER

Perimeter of the feature in coverage units; value is assigned by the software

HU_BOUNDARY# (or **HU<mmddyy>#**)

An internal feature identifier; value is assigned by software.

HU_BOUNDARY-ID (or **HU<mmddyy>-ID**)

Feature identifier assigned by user. This item is not used but must be present for the software.

ACRES

Area of polygon in GIS acres. This item is to be generated from the internal ArcInfo item called "Area."

Example: 34476.917

HUC NUM

Hydrologic Unit Field Code. In order to identify an area, be it 1st through Nth Levels, each is assigned the combination of Levels which comprise it. Starting at the uppermost end of the drainage, the first 7th level hydrologic unit would be assigned the code 01 for the 13th and 14th digits.

Example: 170102150104XXXX

HUC TYPE

Hydrologic Unit Types. This item allows users to query hydrologic units based on composition type. Information is presented as a running string where each individual character of the string represents the composition type of a particular unit (e.g.- character number "1" represents the composition type of a "1st level" unit, character number "2" represents the composition type of a "2nd level" unit, etc). Where a hydrologic unit level has not been delineated or the type has yet to be classified, an "X" serves as a placeholder. This is an optional item that may be populated for 1st through 8th level units where deemed necessary.

Example: Closed Basin

Domain Value: T

Domain Value Definition: True, pure, or "classic" hydrologic units are land areas having all the surface drainage within its boundary converging at a single point.

Domain Value: C

Domain Value Definition:

Composite hydrologic units, or remnant areas are drainage areas typically formed as the residual areas after delineation of classic watersheds. The most common example of a remnant area is the small triangular wedge between the boundaries of adjacent hydrologic units flowing into the same side of another stream.

Domain Value: F

Domain Value Definition: Frontal hydrologic units are areas that include multiple, non-convergent rivers. Frontal units would most likely be related to hydrologic units feeding into the Pacific Ocean or Columbia River.

Domain Value: X

Domain Value Definition: Unclassified hydrologic units

Domain Value: S

Domain Value Definition:

Domain Value: R

Domain Value Definition

REGION_NAME

1st Field Hydrologic Unit Naming Protocol

Example: PACIFIC NORTHWEST

SUBREGION NAME

2nd Field Hydrologic Unit Naming Protocol **Example: UPPER COLUMBIA**

BASIN NAME

3rd Field Hydrologic Unit Naming Protocol

Example: SPOKANE

SUBBASIN NAME

4th Field Hydrologic Unit Naming Protocol

Example: PRIEST

WATERSHED NAME

5th Field Hydrologic Unit Naming Protocol

Example: COLUMBIA RIVER/LYNCH COULEE

SUBWAT NAME

6th Field Hydrologic Unit Naming Protocol

Example: SOUTH SALMON RIVER

CATCHMENT NAME

7th Field Hydrologic Unit Naming Protocol

SUBCATCH NAME

8th Field Hydrologic Unit Naming Protocol

OLD HUCNUM

Historic Hydrologic Unit Number. Because of the national requirement for sequential downstream numbering of hydrologic units, there may be instances where the new hydrologic unit numbers may not be consistent with some historical hydrologic unit numbers. With the renumbering of the hydrologic units, a link may be needed to assist users in identifying hydrologic units based on the historical hydrologic unit numbers.

Example: 17020010

STATES

State(s) containing HU polygon. This attribute should include the names of all states that a hydrologic unit falls within. Use the two-digit postal code abbreviation and sort the states in alphabetical order with a coma **??or hyphen??** separating each state.

Example: ID

Domain Value: OR

Domain Value Definition: Oregon

Domain Value: CA

Domain Value Definition: California

Domain Value: NV

Domain Value Definition: Nevada

Domain Value: ID

Domain Value Definition: Idaho

Domain Value: WA

Domain Value Definition: Washington

NCONTRIB DA

Drainage areas that do not flow toward the outlet of any hydrologic unit are considered non-contributing areas. Such areas may be due to glaciated plains (potholes), enclosed basins, karst topography, playas, cirques, depression lakes, dry lakebeds, or similar landforms.

Example: 325.9362

DS HUC5

Fifth Level Downstream HUC. This item represents the hydrologic unit code of the 5th level hydrologic unit receiving the majority of the downstream flow. Outlets created by ditching or other artificial drainage are not to be considered.

Example: 1701021502

DS HUC6

Sixth Level Downstream Hydrologic Unit Code. This item represents the hydrologic unit code of the 6th level hydrologic unit receiving the majority of the downstream flow. Outlets created by ditching or other artificial drainage are not to be considered.

Example: 170102150106

HUC MOD

Hydrologic Unit Modifications- This item should contain information about hydrologic unit modifications to natural overland flow (that affect boundary) unique to the 5th or 6th field level unit delineated in an area of interest. This may include information on the type of structure, date of construction or other features that may influence surface water flow. In the attribute field, identify from most significant to least significant modification(s).

Example: SD

Domain Value: SC

Domain Value Definition: Stormwater Canal

Domain Value: BC

Domain Value Definition: Barge Canal

Domain Value: PD

Domain Value Definition: Pipe Diversion

Domain Value: KA

Domain Value Definition: Karst

Domain Value: OC

Domain Value Definition: Overflow Channel

Domain Value: ID

Domain Value Definition: Irrigation Ditch

Domain Value: SD

Domain Value Definition: Stormwater Ditch

Domain Value: CD

Domain Value Definition: Channel Diversion

Domain Value: LE

Domain Value Definition: Levee

Domain Value: OT

Domain Value Definition: Other

Domain Value: IT

Domain Value Definition: Interbasin Transfer

Domain Value: CB

Domain Value Definition: Closed Basin

Domain Value: NC

Domain Value Definition: Non-Contributing

Domain Value: NM

Domain Value Definition: No Modifications

COMMENTS

Any additional information that pertains to the hydrologic unit's history or general characteristics that cannot be adequately described in previous items.

Example: Waldo Lake

REGION

1st Field Hydrologic Unit Code

Example:17

SUBREGION

2nd Field Hydrologic Unit Code

Example:1701

BASIN

3rd Field Hydrologic Unit Code

Example: 170102

SUBASIN

4th Field Hydrologic Unit Code

Example: 17010215

WATERSHED

5th Field Hydrologic Unit Code

Example: 1701021501

SUBWAT

6th Field Hydrologic Unit Code

Example: 170102150104

CATCHMENT

7th Field Hydrologic Unit Code

Example: 170102150104XX

SUBCATCH

8th Field Hydrologic Unit Code

Example: 170102150104XXXX

FIRST FIELD

2-DIGIT IDENTIFIER

Example: 17

SECOND_FIELD

2-DIGIT IDENTIFIER

Example: 01

THIRD FIELD

2-DIGIT IDENTIFIER

Example: 02

FOURTH_FIELD

2-DIGIT IDENTIFIER

Example: 15

FIFTH_FIELD

2-DIGIT IDENTIFIER

Example: 01

SIXTH_FIELD

2-DIGIT IDENTIFIER

Example: 04

SEVENTH_FIELD

2-DIGIT IDENTIFIER

EIGHT_FIELD

2-DIGIT IDENTIFIER

The following box lists the attribute items found in the HU_BOUNDARY.PATHUC1 table. These attributes pertain to region features depicting Level 1 Hydrologic Units. Attribute definitions already included in the HU_BOUNDARY.PAT table have been omitted here and should be referenced in pages 4-7 of this Data Dictionary.

Hydrologic Unit Boundary HUC1 Region Attribute

| ITEM NAME | ITEM DESCRIPTION |
|-------------|------------------|
| AREA | 8,18,F,5 |
| PERIMETER | 8,18,F,5 |
| HUC1# | 4,5,B |
| HUC1-ID | 4,5,B |
| ACRES | 14,14,N,4 |
| REGION | 2, 2,C |
| REGION_NAME | 30,30,C |

HUC1#

An internal region identifier; value is assigned by software.

HUC1-ID

The following box lists the attribute items found in the HU_BOUNDARY.PATHUC2 table. These attributes pertain to region features depicting Level 2 Hydrologic Units. Attribute definitions already included in the HU_BOUNDARY.PAT table have been omitted here and should be referenced in pages 4-7 of this Data Dictionary.

Hydrologic Unit Boundary HUC2 Region Attributes

| ITEM NAME | ITEM DEFINITION |
|----------------|-----------------|
| AREA | 8,18,F,5 |
| PERIMETER | 8,18,F,5 |
| HUC2# | 4,5,B |
| HUC2-ID | 4,5,B |
| ACRES | 14,14,N,4 |
| SUBREGION | 4,4,C |
| SUBREGION_NAME | 30,30,C |

HUC2#

An internal region identifier; value is assigned by software.

HUC2-ID

The following box lists the attribute items found in the HU_BOUNDARY.PATHUC3 table. These attributes pertain to region features depicting Level 3 Hydrologic Units. Attribute definitions already included in the HU_BOUNDARY.PAT table have been omitted here and should be referenced in pages 4-7 of this Data Dictionary.

Hydrologic Unit Boundary HUC3 Region Attributes

| ITEM NAME | ITEM DEFINITION |
|------------|-----------------|
| AREA | 8,18,F,5 |
| PERIMETER | 8,18,F,5 |
| HUC3# | 4,5,B |
| HUC3-ID | 4,5,B |
| ACRES | 14,14,N,4 |
| BASIN | 6,6,C |
| BASIN_NAME | 30,30,C |

HUC3#

An internal region identifier; value is assigned by software.

HUC3-ID

The following box lists the attribute items found in the HU_BOUNDARY.PATHUC4 table. These attributes pertain to region features depicting Level 4 Hydrologic Units. Attribute definitions already included in the HU_BOUNDARY.PAT table have been omitted here and should be referenced in pages 4-7 of this Data Dictionary.

Hydrologic Unit Boundary HUC4 Region Attributes

| ITEM NAME | ITEM DEFINITION |
|---------------|-----------------|
| AREA | 8,18,F,5 |
| PERIMETER | 8,18,F,5 |
| HUC4# | 4,5,B |
| HUC4-ID | 4,5,B |
| ACRES | 14,14,N,4 |
| SUBBASIN | 8,8,C |
| SUBBASIN_NAME | 30,30,C |

HUC4#

An internal region identifier; value is assigned by software.

HUC4-ID

The following box lists the attribute items found in the HU_BOUNDARY.PATHUC5 table. These attributes pertain to region features depicting Level 5 Hydrologic Units. Attribute definitions already included in the HU_BOUNDARY.PAT table have been omitted here and should be referenced in pages 4-7 of this Data Dictionary.

Watershed Boundary HUC5 Region Attributes

| ITEM NAME | ITEM DESCRIPTION |
|----------------|------------------|
| AREA | 8,18,F,5 |
| PERIMETER | 8,18,F,5 |
| HUC5# | 4,5,B |
| HUC5-ID | 4,5,B |
| ACRES | 14,14,N,4 |
| WATERSHED | 10,10,C |
| WATERSHED_NAME | 80,80,C |
| DS_HUC5 | 10,10,C |

HUC5#

An internal region identifier; value is assigned by software.

HUC5-ID

The following box lists the attribute items found in the HU_BOUNDARY.PATHUC6 table. These attributes pertain to region features depicting Level 6 Hydrologic Units. Attribute definitions already included in the HU_BOUNDARY.PAT table have been omitted here and should be referenced in pages 4-7 of this Data Dictionary.

Hydrologic Unit Boundary HUC6 Region Attributes

| ITEM NAME | ITEM DEFINITION |
|-------------|-----------------|
| AREA | 8,18,F,5 |
| PERIMETER | 8,18,F,5 |
| HUC6# | 4,5,B |
| HUC6-ID | 4,5,B |
| ACRES | 14,14,N,4 |
| SUBWAT | 12,12,C |
| SUBWAT_NAME | 80,80,C |
| DS_HUC6 | 12,12,C |

HUC6#

An internal region identifier; value is assigned by software.

HUC6-ID

The following box lists the attribute items found in the HU_BOUNDARY.PATHUC7 table. These attributes pertain to region features depicting Level 7 Hydrologic Units. Attribute definitions already included in the HU_BOUNDARY.PAT table have been omitted here and should be referenced in pages 4-7 of this Data Dictionary.

Hydrologic Unit Boundary HUC7 Region Attributes

| ITEM NAME | ITEM DEFINITION |
|----------------|-----------------|
| AREA | 8,18, F, 5 |
| PERIMETER | 8,18,F,5 |
| HUC7# | 4,5,B |
| HUC7-ID | 4,5,B |
| ACRES | 14,14,N,4 |
| CATCHMENT | 14,14,C |
| CATCHMENT_NAME | 80,80,C |

HUC7#

An internal region identifier; value is assigned by software.

HUC7-ID

The following box lists the attribute items found in the HU_BOUNDARY.PATHUC8 table. These attributes pertain to region features depicting Level 8 Hydrologic Units. Attribute definitions already included in the HU_BOUNDARY.PAT table have been omitted here and should be referenced in pages 4-7 of this Data Dictionary.

Watershed Boundary HUC8 Region Attributes

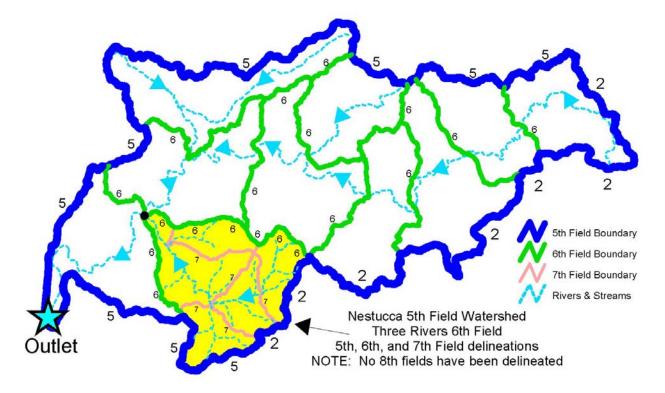
| ITEM NAME | <u>ITEM NAME</u> |
|---------------|------------------|
| AREA | 8,18,F,5 |
| PERIMETER | 8,18,F,5 |
| REOHUC_V13# | 4,5,B |
| REOHUC_V13-ID | 4,5,B |
| ACRES | 14,14,N,4 |
| SUBCATCH | 16,16,C |
| SUBCATCH_NAME | 80,80,C |

HUC8#

An internal region identifier; value is assigned by software.

HUC8-ID

Arc Lines Description



Example Explanation: In the example above, line segments that are only coded with the largest hydrologic unit line classification. In cases where a line segment is simultaneously shared between a 2nd level and a 5th level units, the line is coded with a "2." Where a line segment is shared between a 5th, 6th, and 7th level units, the line is given the code of "5", and so on. When 8th level units are eventually delineated, the same process described above should be applied.

This coverage is in a regions (ESRI) format; therefore, this coverage simultaneously holds boundary lines ranging from 1st through 8th level hydrologic units, many boundary lines are shared between different hydrologic unit classifications.

Arc Attribute Table: Hydrologic Unit Polygons

Name: HU_BOUNDARY.AAT (Distribution Coverage Name)

HUMM/DD/YY.AAT Example: HU082203.AAT (Maintenance Coverage Name)

Arc Attribute Table:

| ITEM NAME | ITEM DEFINITION |
|------------------------------|-----------------|
| FNODE# | 4,5,B |
| TNODE# | 4,5,B |
| LPOLY# | 4,5,B |
| RPOLY# | 4,5,B |
| LENGTH | 8,18,F |
| HU_BOUNDARY# | 4,5,B |
| (or HU <mmddyy>#)</mmddyy> | |
| HU_BOUNDARY -ID | 4,5,B |
| (or HU <mmddyy>-ID)</mmddyy> | |
| HUC_LEVEL | 1,1,I |
| LINESOURCE | 20,20,C |
| LINEVER | 1,1,C |
| LINEDATE | 10,10,C |
| LINEORG | 10,10,C |
| METADATA_ID | 1,1,1 |
| COMMENTS | 100,100,C |

FNODE#

An internal node identifier; value is assigned by software.

TNODE#

An internal node identifier; value is assigned by software.

LPOLY#

An internal polygon identifier; value is assigned by software.

RPOLY#

An internal polygon identifier; value is assigned by software.

LENGTH

Length of feature in coverage units; value is assigned by software.

Example: 1 meter

HU_BOUNDARY# (or **HU<mmddyy>#**)

An internal arc identifier; value is assigned by software.

HU_BOUNDARY-ID (or **HU<mmddyy>-ID**)

HUC LEVEL

This item is used to identify the hydrologic unit groupings a given line segment belongs to. This item is used to identify the hydrologic unit groupings a given line segment belongs to. Primary order is always given to the largest hydrologic unit classification of any shared line segment (e.g. when a hydrologic unit boundary line is shared between a 5th level unit and a 6th level unit, the line receives a code of 5).

Example: 5

Domain Value: 1

Domain Value Definition: 1st Level Unit Boundary

Domain Value: 2

Domain Value Definition: 2nd Level Unit Boundary, NOT Shared with a 1st Level Unit

Boundary

Domain Value: 3

Domain Value Definition: 3rd Level Unit Boundary, NOT Shared with 1st or 2nd Level

Unit Boundary **Domain Value: 4**

Domain Value Definition: 4th Level Unit Boundary, NOT Shared with 1st - 3rd Level Unit

Boundary

Domain Value: 5

Domain Value Definition: 5th Level Unit Boundary, NOT Shared with 1st - 4th Level Unit

Boundary

Domain Value: 6

Domain Value Definition: 6th Level Unit Boundary, NOT Shared with 1st - 5th Level Unit

Boundary

Domain Value: 7

Domain Value Definition: 7th Level Unit Boundary, NOT Shared with 1st - 6th Level Unit

Boundary

Domain Value: 8

Domain Value Definition: 8th Level Unit Boundary, NOT Shared with 1st - 7th Level Unit

Boundary

LINESOURCE

Information related to the original spatial data source from which the boundary line was derived. This item captures information related to the original spatial data source from which the boundary line was derived. In determining which code to use, preference should be given to the primary source employed to determine the boundary lines position. All line segments should be broken with a node where line sources change. The linesource domain value is case sensitive and must be entered in lowercase.

Example: drg24

Domain Value: drg24

Domain Value Definition: USGS 1:24,000 Digital Raster Graphics (DRG)

Domain Value: tvc23

Domain Value Definition: USGS 1:24,000 Tagged Vector Contours (TVC)

Domain Value: dem10

Domain Value Definition: Derived from 10 Meter Digital Elevation Model (Surface modeling)

Domain Value: dem30

Domain Value Definition: Derived from 30 Meter Digital Elevation Model (Surface modeling)

Domain Value: dlg

Domain Value Definition: USGS Digital Line Graph

Domain Value: ortho

Domain Value Definition: orthophotography

Domain Value: unk

Domain Value Definition: Unknown

LINEVER

Line Edit Verification. Indicates which level in a series of quality control checks the hydrologic boundary has undergone prior to being accepted as part of the finalized dataset. * Only verification levels of 4 and 5 are included in the regional dataset. This item may be used in local offices to track the progress of edits as organizations delineate new hydrologic units and move toward regional and national certification of those units.

Example: 2

Domain Value: 1

Domain Value Definition: Initial Draft Line

Domain Value: 2

Domain Value Definition: Line accuracy certified by local hydrologist

Domain Value: 3

Domain Value Definition: Line accuracy certified by ALL local participating organizations

Domain Value: 4

Domain Value Definition: Line accuracy certified by Pacific Northwest stewards

Domain Value: 5

Domain Value Definition: Line accuracy certified by National stewards

LINEDATE

Date that the last line edit was performed. This item is used to record the last date a spatial edit was performed to a given line segment. The format should be in: YYYY/MM/DD.

Example: 2002/11/15

LINEORG

The organization who performed the last spatial edit to a given line segment. This item designates the organization who performed the last spatial edit to a given line segment. Depending on the variety of sources used, every line segment within a single hydrologic unit may have a different organization code. The codes are to be applied to individual line segments, not hydrologic unit polygons. The Lineorg domain value is case sensitive and must be entered in lowercase.

Example: usblm-eug

Domain Value: bcmelp

Domain Value Definition: British Columbia Ministry of Environment Lands and Parks

Domain Value: caspam

Domain Value Definition: California Sierra Province Area Management

Domain Value: calwater

Domain Value Definition: The California Interagency Watershed Mapping Committee

Domain Value: clams

Domain Value Definition: Coastal Landscape Analysis and Modeling Study

Domain Value: coclrkwa

Domain Value Definition: Clark County WA

Domain Value: cokingwa

Domain Value Definition: King County WA

Domain Value: copierwa

Domain Value Definition: Pierce County WA

Domain Value: cosnohwa

Domain Value Definition: Snohomish County WA

Domain Value: cospokwa

Domain Value Definition: Spokane County WA

Domain Value: cothurswa

Domain Value Definition: Thurston County WA

Domain Value: coyakwa

Domain Value Definition: Yakima County WA

Domain Value: ctyolywa

Domain Value Definition: City of Olympia WA

Domain Value: ctyseawa

Domain Value Definition: City of Seattle WA

Domain Value: ctyvanwa

Domain Value Definition: City of Vancouver WA

Domain Value: id

Domain Value Definition: Idaho

Domain Value: Ivwfbr

Domain Value Definition: Longview Fiber Company

Domain Value: nwifc

Domain Value Definition: Northwest Indian Fisheries Commission

Domain Value: ordeg

Domain Value Definition: OR Dept. of Environmental Quality

Domain Value: ordf

Domain Value Definition: Oregon Dept. of Forestry

Domain Value: ordwr

Domain Value Definition: Oregon Dept. of Water Resources

Domain Value: orit

Domain Value Definition: Oregon Institute of Technology

Domain Value: psrc

Domain Value Definition: Puget Sound Regional Council

Domain Value: raynr

Domain Value Definition: ITT Rayonier

Domain Value: reo

Domain Value Definition: HUC 5 lines used as a starting basis

Domain Value: smpsn

Domain Value Definition: Simpson Timber Company

Domain Value: titan

Domain Value Definition: Titan Geospatial

Domain Value: unknown

Domain Value Definition: Unknown or unclassified input organization

Domain Value: usace

Domain Value Definition: U.S. Army Corps of Engineers

Domain Value: usblm

Domain Value Definition: U.S. Bureau of Land Management

Domain Value: usblm-bns

Domain Value Definition: U.S. Bureau of Land Management - Burns District

Domain Value: usblm-cby

Domain Value Definition: U.S. Bureau of Land Management - Coos Bay District

Domain Value: usblm-eug

Domain Value Definition: U.S. Bureau of Land Management - Eugene District

Domain Value: usblm-lak

Domain Value Definition: U.S. Bureau of Land Management - Lakeview District

Domain Value: usblm-med

Domain Value Definition: U.S. Bureau of Land Management - Medford District

Domain Value: usblm-oso

Domain Value Definition: U.S. Bureau of Land Management - Oregon State Office

Domain Value: usblm-pri

Domain Value Definition: U.S. Bureau of Land Management - Prineville District

Domain Value: usblm-rsb

Domain Value Definition: U.S. Bureau of Land Management - Roseburg District

Domain Value: usblm-slm

Domain Value Definition: U.S. Bureau of Land Management - Salem District

Domain Value: usblm-spo

Domain Value Definition: U.S. Bureau of Land Management - Spokane District

Domain Value: usblm-val

Domain Value Definition: U.S. Bureau of Land Management – Vale District

Domain Value: usbor

Domain Value Definition: U.S. Bureau of Reclamation

Domain Value: usbpa

Domain Value Definition: U.S. Bonneville Power Administration

Domain Value: usepa

Domain Value Definition: U.S. Environmental Protection Agency

Domain Value: usepa-r10

Domain Value Definition: U.S. Environmental Protection Agency - Region 10

Domain Value: usfs

Domain Value Definition: U.S. Forest Service

Domain Value: usfs-col

Domain Value Definition: U.S. Forest Service - Colville NF

Domain Value: usfs-des

Domain Value Definition: U.S. Forest Service - Deschutes NF

Domain Value: usfs-fre

Domain Value Definition: U.S. Forest Service - Freemont NF

Domain Value: usfs-gip

Domain Value Definition: U.S. Forest Service - Gifford Pinchot NF

Domain Value: usfs-kla

Domain Value Definition: U.S. Forest Service - Klamath NF

Domain Value: usfs-mal

Domain Value Definition: U.S. Forest Service - Malheur NF

Domain Value: usfs-mbs

Domain Value Definition: U.S. Forest Service - Mt. Baker-Snoqualmie NF

Domain Value: usfs-mth

Domain Value Definition: U.S. Forest Service - Mt. Hood NF

Domain Value: usfs-oka

Domain Value Definition: U.S. Forest Service - Okanogan NF

Domain Value: usfs-oly

Domain Value Definition: U.S. Forest Service - Olympic NF

Domain Value: usfs-sis

Domain Value Definition: U.S. Forest Service - Siskiyou NF

Domain Value: usfs-siu

Domain Value Definition: U.S. Forest Service - Siuslaw NF

Domain Value: usfs-six

Domain Value Definition: U.S. Forest Service - Six Rivers NF

Domain Value: usfs-uma

Domain Value Definition: U.S. Forest Service - Umatilla NF

Domain Value: usfs-ump

Domain Value Definition: U.S. Forest Service - Umpqua NF

Domain Value: usfs-waw

Domain Value Definition: U.S. Forest Service - Wallowa-Whitman NF

Domain Value: usfs-wen

Domain Value Definition: U.S. Forest Service - Wenatchee NF

Domain Value: usfs-wil

Domain Value Definition: U.S. Forest Service - Willamette NF

Domain Value: usfs-win

Domain Value Definition: U.S. Forest Service - Winema NF

Domain Value: usfws

Domain Value Definition: U.S. Fish and Wildlife Service

Domain Value: usgs

Domain Value Definition: U.S. Geological Survey

Domain Value: usgs-nmd

Domain Value Definition: U.S. Geological Survey - National Mapping Division

Domain Value: usnmfs

Domain Value Definition: U.S.National Marine Fisheries Service

Domain Value: usnps

Domain Value Definition: U.S. National Park Service

Domain Value: usnrcs

Domain Value Definition: Natural Resources Conservation Service

Domain Value: wadfw

Domain Value Definition: Washington Department of Fish and Wildlife

Domain Value: wadnr

Domain Value Definition: Washington State Department of Natural Resources

Domain Value: wadot

Domain Value Definition: Washington Department of Transportation

Domain Value: waecy

Domain Value Definition: Washington Department of Ecology

Domain Value: weyhsr

Domain Value Definition: Weyerhaeuser Company

METADATA ID

Metadata ID is a code that identifies which metadata file applies to the arc. In many cases, there is one metadata file. However, in some cases more than one metadata file may be created to identify different groups and/or procedures used to produce the lines. These separate metadata files may be identified for each separate arc.

Example: Record Sequence Number

COMMENTS

This item may include any additional information that pertains to the hydrologic unit's history or general characteristics that cannot be adequately described in previous items.

Example: STILL NEEDS VERIFICATION