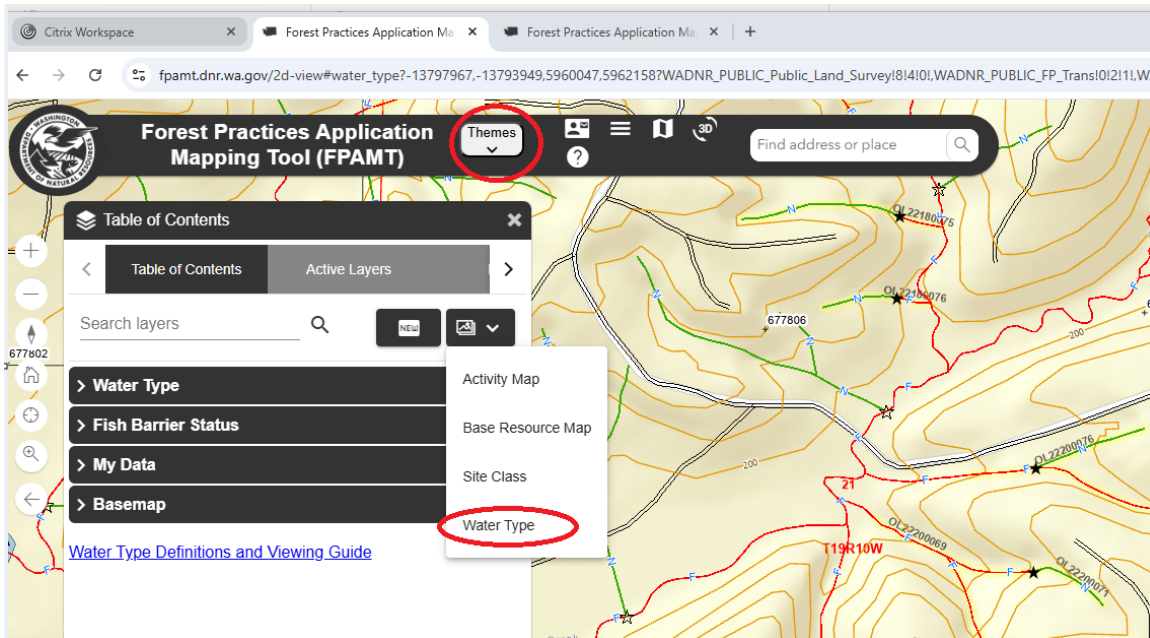


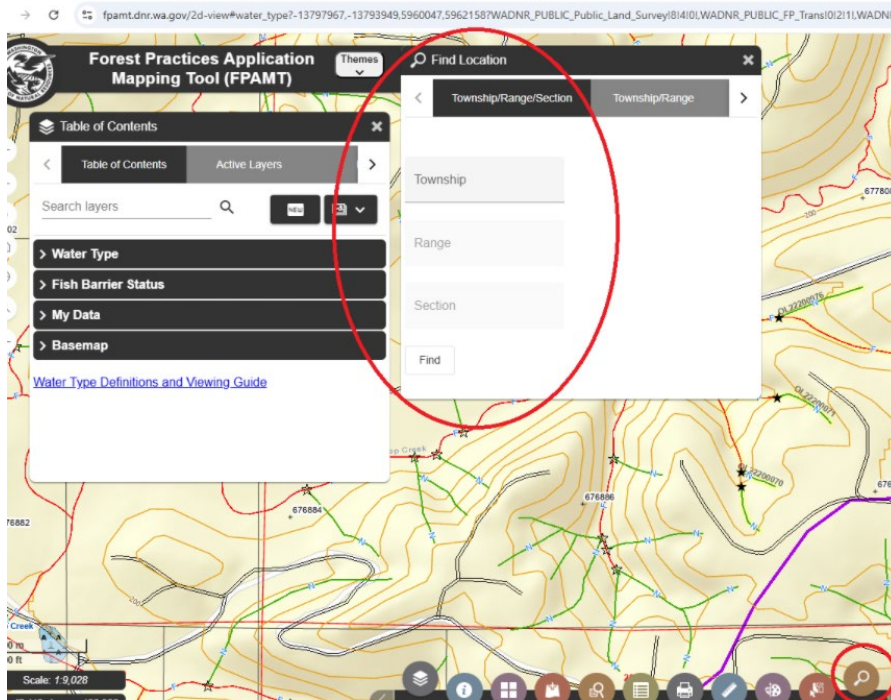
Instructions for Viewing Water Type Modification Forms (WTMF)

March 1, 2026

Open the Forest Practices Application Mapping Tool and go to “Themes” and select “Water Type”
[FPAMT Link](#)



You can use the “Find Location” tool to navigate to the Township/Range/Section of interest



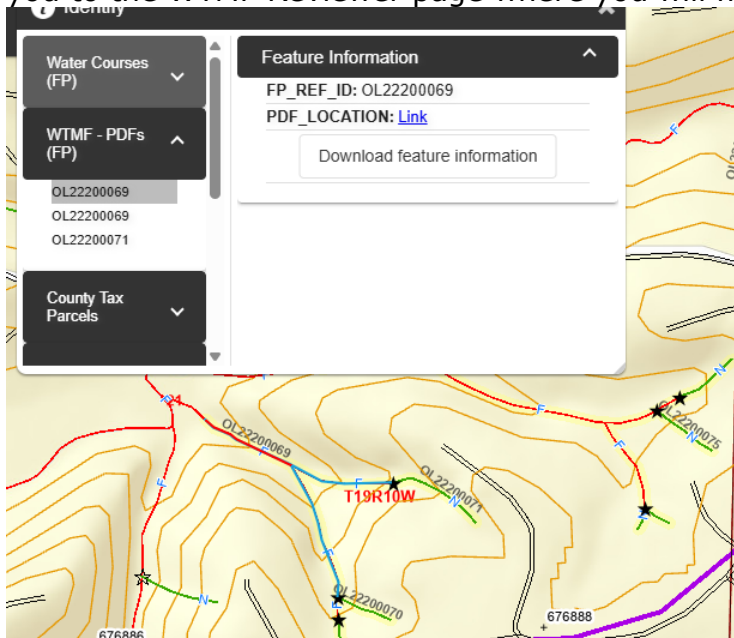
- Locate your stream of interest. If there is a WTMF reference ID label next to it and it is highlighted in Yellow (e.g., 'OL22200069'), a WTMF is available for viewing.



The numbering format for WTMFs prior to 2026 is: Region-WRIA-YEAR-Number (e.g., OL-22-20-0069; this is a WTM in Olympic Region, in WRIA 22, that was submitted in 2020, and 0069 is a sequential number that resets each year).

During 2026 DNR will be moving to a new WTM tracking system in fpOnline and the numbering system will change slightly. Once the switch occurs, the new numbering format will be Region-WTM-Year-Number (e.g., OL-WTM-26-0001). Basically, the WRIA will no longer be part of the number.

- To access the WTMF pdf, click on the segment and then select "WTMF – PDFs (FP)" and a list of WTMFs associated with that segment will appear. Clicking on one of these will bring you to the WTMF Reviewer page where you will find a link to the pdf.



Water Type Modification Form

WTMF

OL-22-20-0069 

Comment Due Date: 10/18/2020

Reviewer	Concur	Partial Concur	Non-concur	No Decision	No Response
BRIGGS, CHRIS					✓
FASANO, CAPRICE					✓
HENRY, CAROL					✓
LEIGH, PORTIA					✓
MACFARLAND, LAUREN					✓
ROMANSKI, TIM					✓

NOTE: If you run into any problems, please contact the FPARS Help Desk at (360) 902-1420 or fpars-admin@dnr.wa.gov.

Water Type Code Quick Reference

Explanation of Field Names and Field Values in the Water Courses Layer

The most important codes are highlighted in yellow with descriptions below. The full data dictionary is in Attachment A.

Click on the Water Courses (FP) layer

The screenshot shows a GIS interface with a layer list on the left and a 'Feature Information' panel on the right. The 'Water Courses (FP)' layer is selected, and the feature ID '350193' is displayed. The 'Feature Information' panel lists the following fields and values:

WC_ID:	350193
WC_LLID_NR:	1239303471175
WC_LN_TYPE_CD:	10
WC_LN_TYPE_LABEL_NM:	Single strm
WC_CART_FTR_CD:	412
WC_CART_FTR_LABEL_NM:	Stream/river
WC_HYDR_FTR_CD:	ST
WC_HYDR_FTR_LABEL_NM:	Streams
WC_FLOW_PATH_CD:	3
WC_FLOW_PATH_LABEL_NM:	Single line
WC_CONTU_CD:	CON
WC_CONTU_LABEL_NM:	Continuous
WC_PERIOD_CD:	UNK
WC_PERIOD_LABEL_NM:	Unknown
WC_GNIS_NM:	--
WC_GNIS_NR:	0
FP_REF_ID:	OL22200069
FP_WTRTY_CD:	F
FP_WTRTY_NM:	Fish
FP_EXP_CD:	F7
FP_WTRTY_EDIT_DT:	10/21/2020
FP_PERIOD_CD:	u
FP_PERIOD_LABEL_NM:	Unknown
FP_VER_CD:	B
FP_VER_LABEL_NM:	Biological
FP_WTRTY_APPR_DT:	10/19/2020
FP_WTRTY_1975_CD:	4
FP_WTRTY_1975_DT:	1/1/1992
FTR_MOD_CD:	UPD
FTR_MOD_LABEL_NM:	Update
FTR_INPUT_CD:	6
FTR_INPUT_LABEL_NM:	Heads-up
FTR_INTRP_CD:	1
FTR_INTRP_LABEL_NM:	Photogram
FTR_SRC_CD:	3

FTR_SRC_LABEL_NM: Aerial photo
FTR_SRC_DT: 1/1/1753
FTR_ORG_CD: WaDNR
FTR_SRCSCALE_CD: 24000
SL_WTRTY_CD: 4
SL_WTRTY_LABEL_NM: Type 4
SL_WTRTY_EDIT_DT: 1/1/1992
DNR_OUTPUT_SCL_CD: 24000
PDF_LOCATION: [Link](#)
FP_WTRTY_SRC_DESC: OVERRIDE
EDIT_NM_CD: ksw490
EDIT_DT: 10/21/2020
WC_SUBTYPE_CD: 1001
WC_SUBTYPE_LABEL_NM: Stream

FP_REF_ID – This is the WTMF number (in the case, OL-22-20-0069).

FP_WTRTY_CD – This is the code for the type of water (in this example “F”).

FP_WTRTY_NM – This is the name of the Water Type (in this example it is Fish water [other possibilities are N (Non Fish), U (Unknown) and X (Non Typed Water)]).

FP_WTRTY_EDIT_DT – This is the date that the latest edits were made.

FP_PERIOD_CD – This is the periodicity of the water. If this was Non Fish Water and it was verified as seasonal the code would be “s”, and if it was perennial Non Fish water it would be “p”. A “u” code describes a Non Fish segment that was never classified with periodicity and is listed as unknown/unclassified.

FP_PERIOD_LABEL_NM – This is the name of the periodicity code (e.g., Unknown/Unclassified, Perennial, Seasonal).

FP_VER_CD – This identifies the water typing survey method used. For Protocol Shocking Surveys this will be “B”. A “P” code references a past WTM where changes were determined with physical characteristics.

FP_VER_LABEL_NM – This is the name of the verification code (B-Biological, P-Physical, N-Not verified by physical or biological criteria, U-water type determination is unknown).

FP_WTRTY_APPR_DT – This is the date that the Water Type Modification was approved.

FTR_SOURCE_DT – This is the date of the field visit that determined the change on new segments added.

PDF_LOCATION – This provides a link to the Water Type Modification Form.

A few notes on these codes:

For streams with FP_WTRTY_APPR_DT prior to 2005, the WTMF should be thoroughly reviewed to ensure that the survey was a protocol electroshocking survey. Some older surveys only considered a stream to be Fish if salmonid species were present. The Forest Practices Rules defining “fish” changed in 2001 to include all species of fish (Osteichthyes and Cephalaspidomorphi). Thus, some older surveys should be scrutinized to ensure all fish species were considered during the survey.

After the implementation of fpOnline, certain information will no longer be recorded. However, the older codes will still be visible on segments already in the database.

Explanation of Field Names and Field Values in the Water Bodies Layer

The full data dictionary is in Attachment B.

Click on the Water Bodies (FP) layer

The screenshot shows a GIS application interface. On the left, there is a layer list with the following items: 'County Boundaries', 'Water Bodies (FP)', 'WAUs', 'WRIA Boundaries', 'Public Land Survey Sections', and 'Public Land Survey Townships'. The 'Water Bodies (FP)' layer is selected and expanded, showing a search bar with the value '1224725468237'. The main panel on the right is titled 'Feature Information' and displays a list of fields and their values. The following fields are highlighted in yellow: 'WB_CART_FTR_LABEL_NM: Lake/pond', 'FP_REF_ID: --', 'FP_WTRTY_CD: S', 'FP_WTRTY_EDIT_DT: 3/1/2005', 'FP_VER_CD: U', 'FP_VER_LABEL_NM: Unknown', 'FP_WTRTY_APPR_DT: --', 'FTR_SRC_DT: 1/1/1753', and 'PDF_LOCATION: --'. At the bottom of the 'Feature Information' panel, there is a button labeled 'Download feature information'.

Field Name	Value
WB_ID	54018
WB_LLID_NR	1224725468237
WB_CART_FTR_CD	421
WB_CART_FTR_LABEL_NM	Lake/pond
WB_HYDR_FTR_LABEL_NM	Lake
WB_GNIS_NM	Clear Lake
WB_GNIS_NR	1517833
FP_REF_ID	--
FP_WTRTY_CD	S
FP_WTRTY_EDIT_DT	3/1/2005
FP_VER_CD	U
FP_VER_LABEL_NM	Unknown
FP_WTRTY_APPR_DT	--
FTR_SRC_DT	1/1/1753
FTR_ORG_CD	WaDNR
FTR_SRCSCALE_CD	24000
SL_WTRTY_CD	1
SL_WTRTY_LABEL_NM	Type 1
SL_WTRTY_EDIT_DT	1/1/1992
DNR_OUTPUT_SCL_CD	100000
PDF_LOCATION	--
EDIT_NM_CD	fpgroup
EDIT_DT	3/1/2005
WB_SUBTYPE_CD	2001
WB_SUBTYPE_LABEL_NM	Lake

WB_CART_FTR_LABEL_NM – This is the feature description of the selected water body.

FP_REF_ID – This is the WTMF number, exactly like the streams code above.

FP_WTRTY_CD – This is the code for the type of water (in this example, “S”). Same as described above.

FP_WTRTY_EDIT_DT – This is the date that the latest edits were made.

FP_VER_CD – This identifies the water typing survey method used. For Protocol Shocking Surveys this will be “B”. A “P” code references a past WTM where changes were determined with physical characteristics.

FP_VER_LABEL_NM – This is the name of the verification code (B-Biological, P-Physical, N-Not verified by physical or biological criteria, U-water type determination is unknown).

FP_WTRTY_APPR_DT – This is the date that the Water Type Modification was approved.

FTR_SOURCE_DT – This is the date of the field visit that determined the change on new segments added.

PDF_LOCATION – This provides a link to the Water Type Modification Form.

A few notes on water bodies:

- Water bodies' water typing was initially determined by the definitions of WAC 222-16-030 (2)(a).
- Wet area water bodies are generally wetlands that do not have a wetlands designation as defined by WAC 222-16-035.
- Interior lines within water bodies are for connecting in-flowing and out-flowing streams and do not determine the water body's water type.

Attachment A – Water Courses (FP) Field Definitions

FIELD WC_ID ►

FIELD DESCRIPTION

A unique, persistent number identifying each record.

FIELD WC_LLID_NR ►

FIELD DESCRIPTION

The watercourse longitude/ latitude identifier number (LLID) is a whole stream identifier. The LLID has 13 characters, is unique to each stream from headwaters to confluence. Routes can be built using the LLID. The LLID is based on the position of the downstream point (mouth or confluence) of the watercourse, and is created by concatenating the decimal degree values (to four places of precision) of the coordinates (without the decimal points). There is no valid defaultvalue for this field and it must be populated.

FIELD WC_LN_TYPE_CD ►

FIELD DESCRIPTION

Watercourse line type code. Identifies the primary GIS database function of the watercourse line regardless of the hydrographic feature or hydrologic function it may represent.

LIST OF VALUES

VALUE 5

DESCRIPTION Artificial connector used outside water bodies only. A watercourse line projected for connectivity purposes. For example, a stream not connected by an above-ground channel system to a shoreline or downstream network due to infiltration may be connected to the larger network by segments with WC_LN_TYPE_CD = 5 in order to maintain network connectivity for modeling or future linear referencing purposes. An artificial connector is called a subsurface connector when field information provided on a WTMF specifically describes a stream as being 'subsurface'.

Subsurface connectors shall have WC_LN_TYPE_CD = 5, WC_CONTU_CD = 'sub'.

VALUE 10

DESCRIPTION A single line watercourse segment; A natural, well-defined or not- well defined channel produced wholly or in part by a definite flow of water, continuous or intermittent. May include: pipelines, actively maintained irrigation ditches, seasonal streams not physically connected by an above ground channel system to Forest Practices typed water (S, F, or Np), dry-draws, or swales. May be 'Trust Forestland HCP Water Typing System ' type 5 water. All watercourses represent features that exist on-the-ground

VALUE 20

DESCRIPTION Watercourse interior line within a polygonal water body (lake or reservoir) . An artificial path.

VALUE 21

DESCRIPTION Watercourse interior line within a double-banked polygonal watercourse (for example, the Columbia River), wet area, impounded wet area, double-banked ditch or pipeline. An artificial path.

VALUE 30

DESCRIPTION Watercourse segment coincident with a water body perimeter (for example, when a stream shoreline and wet area boundary share the same line). A defined channel.

Hide Field WC_LN_TYPE_CD ▲

FIELD WC_LN_TYPE_LABEL_NM ►

FIELD DESCRIPTION

Watercourse line type label. Identifies the Primary GIS database function of the watercourse line regardless of the hydrographic feature or hydrologic function it may represent.

LIST OF VALUES

VALUE Artificial

DESCRIPTION Artificial connector. A watercourse line projected for connectivity purposes. For example, a stream not connected by an above-ground channel system to a shoreline or downstream network due to infiltration may be connected to the larger network by segments with WC_LN_TYPE_CD = 5 in order to maintain network connectivity for modeling or future linear referencing purposes. An artificial connector is called a subsurface connector when field information provided on a WTMF specifically describes a stream

as being " subsurface". Subsurface connectors shall have WC_LN_TYPE_CD = 5, WC_CONTU_CD = 'sub'.

VALUE Single strm

DESCRIPTION A single line watercourse segment. A natural, well-defined or not well defined channel produced wholly or in part by a definite flow of water, continuous or intermittent. May include: pipelines, actively maintained irrigation ditches, seasonal streams not physically connected by an above ground channel system to Forest Practices typed water (S, F, or Np), dry-draws, or swales. May be " Trust Forestland HCP Water Typing System " type 5 water. All watercourses represent features that exist on-the-ground.

VALUE Inter lake

DESCRIPTION Watercourse interior line within a polygonal water body (lake or reservoir) . An artificial path.

VALUE Inter stream

DESCRIPTION Watercourse interior line within a double-banked polygonal watercourse (for example, the Columbia River). An artificial path.

VALUE Perim stream

DESCRIPTION Watercourse segment coincident with a water body perimeter (for example, when a stream shoreline and wet area boundary share the same line). A defined channel.

FIELD WC_CART_FTR_CD ►

FIELD DESCRIPTION

Watercourse cartographic feature code. Identifies the surface water feature that the watercourse line represents. These codes developed initially by the USGS.

DESCRIPTION SOURCE

Derived from the USGS digital line graph (DLG) hydrographic classification code. This is the DNR Hydro WTR.BDY.TY code in pre- Conversion Project (2003) DNR HYDRO.

LIST OF VALUES

VALUE 100

DESCRIPTION Alkali flat

VALUE 101

DESCRIPTION Reser voir

VALUE 105

DESCRIPTION (NO LONGER USED) Area subject to inundation. This is the area that would be covered by water if the reservoir or impoundment was filled.

VALUE 106

DESCRIPTION Fish hatchery or farm

VALUE 107

DESCRIPTION Industrial water impoundment

VALUE 109

DESCRIPTION Sewage disposal pond or filtration bed

VALUE 110

DESCRIPTION Tailings pond

VALUE 111

DESCRIPTION Marsh, wet area, swamp, bog. These generally originated as swamps and marshes scanned from the USGS 1: 24, 000 topographic maps. Wet areas are not classified by the WAC 222-16-035 wetland typing system ; they have no regulatory significance.

VALUE 114

DESCRIPTION Cranberry bog. In the dataset these are found only near the southwest Washington coast.

VALUE 400

DESCRIPTION Rapids

VALUE 401

DESCRIPTION Water falls

VALUE 402

DESCRIPTION Gravel pit or quarry filled with water

VALUE 406

DESCRIPTION (NO LONGER USED) Dam or weir

VALUE 407

DESCRIPTION Canal lock or sluice gate

VALUE 408

DESCRIPTION Spillway

VALUE 410

DESCRIPTION Exposed rock

VALUE 412

DESCRIPTION Stream or river

VALUE 414

DESCRIPTION Ditch or canal

VALUE 415

DESCRIPTION Aqueduct

VALUE 417

DESCRIPTION Penstock

VALUE 418

DESCRIPTION Siphon

VALUE 419

DESCRIPTION Channel in water area

VALUE 420

DESCRIPTION Wash or ephemeral drain. These flow water only as a result of storm precipitation.

VALUE 421

DESCRIPTION Lake or pond

VALUE 422

DESCRIPTION (NO LONGER USED) Reef

VALUE 423

DESCRIPTION (NO LONGER USED) Sand or gravel in open water

VALUE 425

DESCRIPTION (NO LONGER USED) Fish ladder

VALUE 466

DESCRIPTION Pier, jetty, breakwater, dock, wharf or causeway

VALUE 902

DESCRIPTION (NO LONGER USED) Island (Code is still used in wbydro)

VALUE 999

DESCRIPTION Unknown/ Unclassified

VALUE 103

DESCRIPTION Glacier or permanent snowfield

VALUE 115

DESCRIPTION (NO LONGER USED) Flats (tidal, mud, sand, gravel)

VALUE 116

DESCRIPTION (NO LONGER USED) Bay, estuary, gulf, ocean or sea

VALUE 117

DESCRIPTION (NO LONGER USED) Shoal

FIELD WC_CART_FTR_LABEL_NM ►

FIELD DESCRIPTION

Watercourse cartographic feature code. Identifies the surface water feature that the watercourse line represents. These codes developed initially by the USGS.

LIST OF VALUES

VALUE Alkali flat

DESCRIPTION Alkali flat

VALUE Reser voir

DESCRIPTION Reser voir

VALUE Inundation

DESCRIPTION (NO LONGER USED) Inundation area

VALUE hatchery

DESCRIPTION Fish hatchery or farm

VALUE Industrial

DESCRIPTION Industrial water impoundment

VALUE Sewage pond

DESCRIPTION Sewage pond or filtration bed

VALUE Tailing pond

DESCRIPTION Tailing pond

VALUE Marsh

DESCRIPTION Marsh, wet area, swamp, bog

VALUE Bog

DESCRIPTION Cranberry bog

VALUE Rapids

DESCRIPTION Rapids

VALUE Falls

DESCRIPTION Water Falls

VALUE Flooded pit

DESCRIPTION Gravel pit or quarry filled with water

VALUE Dam / weir

DESCRIPTION (NO LONGER USED) Dam or weir

VALUE Canal/ locks

DESCRIPTION Canal lock or sluice gate

VALUE Spillway

DESCRIPTION Spillway

VALUE Exposed rock

DESCRIPTION Exposed rock

VALUE Stream / river

DESCRIPTION Stream or river

VALUE Ditch/ canal

DESCRIPTION Ditch or canal

VALUE Aqueduct
DESCRIPTION Aqueduct

VALUE Penstock
DESCRIPTION Penstock

VALUE Siphon
DESCRIPTION Siphon

VALUE Channel
DESCRIPTION Channel in water

VALUE Wash
DESCRIPTION Wash or ephemeral drain

VALUE Lake/ pond
DESCRIPTION Lake or pond

VALUE Reef
DESCRIPTION (NO LONGER USED) Reef

VALUE Sand/ gravel
DESCRIPTION (NO LONGER USED) Sand or gravel in open water

VALUE Fish ladder
DESCRIPTION (NO LONGER USED) Fish ladder

VALUE Pier/ jetty
DESCRIPTION Pier or jetty

VALUE Impoundment
DESCRIPTION Impoundment (non-reservoir)

VALUE Unknown
DESCRIPTION Unknown or Unclassified

VALUE Glacier
DESCRIPTION Glacier or permanent snowfield

VALUE Flats
DESCRIPTION (NO LONGER USED) Flats (tidal, mud, sand, gravel)

VALUE Bay/ estuary
DESCRIPTION (NO LONGER USED) Bay, estuary, gulf, ocean or sea

VALUE Shoal
DESCRIPTION (NO LONGER USED) Shoal

FIELD WC_HYDR_FTR_LABEL_NM ►

FIELD DESCRIPTION

Watercourse hydrographic feature label. Identifies the hydrographic category in which the watercourse line belongs.

LIST OF VALUES

VALUE Ditches
DESCRIPTION Ditches, canals, flumes

VALUE Impoundments
DESCRIPTION Impoundments or areas subject to inundation

VALUE Impound wet
DESCRIPTION Impounded wet areas. In the dataset these are found only near the southwest Washington coast.

VALUE Lakes/ ponds

DESCRIPTION Lakes and ponds

VALUE Pipelines

DESCRIPTION Pipelines and water conveyance structures

VALUE Side channel

DESCRIPTION Side channels to rivers or streams

VALUE Streams

DESCRIPTION Streams and rivers

VALUE Unknown

DESCRIPTION Unknown or Unclassified

VALUE Wet areas

DESCRIPTION Wet Area. These generally originated as swamps and marshes scanned from the USGS 1:24,000 topographic maps. Wet areas are not classified by the WAC 222-16-035 wetland typing system ; they have no regulatory significance.

FIELD WC_GNIS_NM ►

FIELD DESCRIPTION

Watercourse Geographic Names Information System (GNIS) name. The name of the represented feature in the USGS GNIS database (<http://geonames.usgs.gov/domestic/index.html>) . Not all features will have a GNIS name and number, but all features with GNIS names will have GNIS numbers and vice versa. The WC_GNIS_NM applies to the surface water feature, often a whole stream . Each arc composing the named feature will have the same GNIS name and number. Names entered into GNIS have been approved by the US Board on Geographic Names. When the Washington State Board on Geographic Names approves a name, the proposal is forwarded on to the US Board for their review. There are rare cases where the WA and US Board disagree, and in that case, the Washington name is not entered into GNIS. DNR is aware of one such disagreement: Crater Glacier (US Board) vs. Tuluson Glacier (WA Board).

FIELD WC_FLOW_PATH_LABEL_NM ►

FIELD DESCRIPTION

Watercourse flow path label. A classification of the flow pathway within polygonal water body features. Where water body interior lines do not represent defined channels WC_FLOW_PATH_CD = 1 or 2 and WC_LN_TYPE_CD = 20 or 21; these are artificial paths. Where watercourse lines represent defined channels WC_FLOW_PATH_CD = 3 and WC_LN_TYPE_CD = 10 or 30.

LIST OF VALUES

VALUE Primary

DESCRIPTION Primary path of a watercourse centerline that flows through a water body as an interior line and artificial path. Represents the flow of water from the main inlet to the main outlet of a polygonal water body.

VALUE Secondary

DESCRIPTION Secondary path of a watercourse that flows through a water body as an interior line and artificial path. The linear path that represent additional flow paths of water, usually from secondary tributaries entering the water body and connecting to the Primary path. Also called " laterals".

VALUE Single line

DESCRIPTION A single line watercourse segment usually representing a defined channel (WC_LN_TYPE_CD = 10 or 30) . May flow through a water body with WB_HYDR_FTR_CD = WT (wet area), GL (glacier), etc. May also be a single-line water course artificial connector (WC_LN_TYPE_CD = 5).

[Hide Field WC_FLOW_PATH_LABEL_NM ▲](#)

FIELD FP_WTRTY_1975_CD ►

FIELD DESCRIPTION

Forest Practices water type legacy code. The original water type classifications used in conjunction with DNR Forest Practices regulations between 1975 and (1) March 1, 2005 for Western Washington and (2) March 1, 2006 for Eastern Washington. DNR will neither keep the FP_WTRTY_1975_CD current nor synchronized with ongoing changes to the new water typing system. The new system was implemented March 1, 2005 for Western Washington and March 1, 2006 for Eastern Washington. Generally, the FP_WTRTY_1975_CD and FP_WTRTY_1975_DT fields are not edited under the new water typing system. Neither FP_WTRTY_1975_CD nor FP_WTRTY_1975_DT are edited for new system spatial adds or tabular only database changes. For new system spatial updates these fields are edited only to transfer existing values to an arc that is added as part of a spatial update to an existing stream (a realign). Basically, once the new scheme was turned "on" the FP_WTRTY_1975_CD was frozen. Except as noted above, FP_WTRTY_1975_CD will be blank or 0 for any new arc added since the implementation dates. The water typing system was developed solely for the regulation of forest practices (WAC 222).

LIST OF VALUES

VALUE 1

DESCRIPTION All waters, within their ordinary high-water mark, inventoried as "shorelines of the state" under Chapter 90.58 RCW.

VALUE 2

DESCRIPTION Segments of natural waters which are not classified as Type 1 Water and have a high fish, wildlife or human use (for example, campgrounds).

VALUE 3

DESCRIPTION Segments of natural waters which are not classified as Type 1 or Type 2 Waters and have a moderate to slight fish, wildlife, or human use.

VALUE 4

DESCRIPTION All segments of natural waters within the bankfull width of defined channels that are perennial nonfish habitat streams.

VALUE 5

DESCRIPTION All segments of natural waters within the bankfull width of defined channels that are not Type 1, 2, 3, or 4 Waters.

VALUE 9

DESCRIPTION Unclassified water segment.

VALUE 0

DESCRIPTION Water segment added after implementation of the new habitat-based Water Type codes on March 1, 2005 for Western Washington and March 1, 2006 for Eastern Washington.

Hide Field FP_WTRTY_1975_CD ▲

FIELD WC_CONTU_LABEL_NM ►

FIELD DESCRIPTION

Watercourse continuity label. This is the classification of stream flow in relation to its expression at the earth's surface. The most common condition is that a stream is continuous. An example of using WC_CONTU_CD with WC_PERIOD_CD: If areas of perennial, intermittent or ephemeral flow exist along a stream reach they are not separated out; the hydrologist chooses the dominant periodicity and calls the continuity "interrupted". If the reach is not continuously perennial or intermittent it is described as "interrupted". This attribute describes the physical characteristics of a stream. The scale at which the data are captured or displayed may also be a factor to consider.

LIST OF VALUES

VALUE Continuous

DESCRIPTION Continuous. A channel with no interruptions in space.

VALUE Interrupted

DESCRIPTION Interrupted. A perennial flow with intervening intermittent or ephemeral segments or intermittent flow with intervening ephemeral segments

VALUE Sub-surface

DESCRIPTION Sub-surface. Watercourse reach that represents a sub-surface flow.

VALUE Unknown
DESCRIPTION Unknown or Unclassified

[Hide Field WC_CONTU_LABEL_NM ▲](#)

FIELD FP_WTRTY_1975_DT ►

FIELD DESCRIPTION

Forest Practices water type legacy date. The most recent date between 1992 and 11 January 2007 that a water type classification of a stream segment was officially approved by DNR, Forest Practices. DNR will neither keep the FP_WTRTY_1975_DT current nor synchronized with ongoing changes to the new water typing system. The new system was implemented March 1, 2005 for Western Washington and March 1, 2006 for Eastern Washington. Generally, the FP_WTRTY_1975_CD and FP_WTRTY_1975_DT fields are not edited under the new water typing system. Neither FP_WTRTY_1975_CD nor FP_WTRTY_1975_DT are edited for new system spatial adds or tabular only database changes. For new system spatial updates these fields are edited ONLY to transfer existing values to an arc that is added as part of a spatial update to an existing stream (a realign). Basically, once the new scheme was turned 'on' the FP_WTRTY_1975_DT was frozen. Except as noted above, FP_WTRTY_1975_DT will be blank or 0 for any new arc added since the implementation dates. The water typing system was developed solely for the regulation of forest practices (WAC 222).

FIELD WC_PERIOD_LABEL_NM ►

FIELD DESCRIPTION

Watercourse periodicity code. This is a classification for watercourses in terms of the seasonal behavior of the feature or in terms of its surface flow.

LIST OF VALUES

VALUE Ephemeral

DESCRIPTION Ephemeral. Watercourse that exist only as a result of storm precipitation.

VALUE Intermittent

DESCRIPTION Intermittent or seasonal. Watercourse that is dry during certain times of the year.

VALUE Perennial

DESCRIPTION Perennial. Watercourse that essentially exist year round

VALUE Unknown

DESCRIPTION Unknown or unclassified. Used when condition information is unknown or unclassified

FIELD FP_WTRTY_EDIT_DT ►

FIELD DESCRIPTION

Forest Practices water type edit date. The date the Forest Practices water type was last edited. Used only in conjunction with the water typing system implemented 3/ 1/ 2005 western and 3/ 1/ 2006 eastern Washington. These are the earliest dates possible for this field for western Washington and eastern Washington. This field will be updated whenever a water type modification form is processed, but not for edits outside of the form. (yet to be determined)

FIELD FP_WTRTY_CD ►

FIELD DESCRIPTION

Forest Practices water type code. DNR Forest Practices water type codes as described in WAC 222-16-031, interim water typing system, prior to 3/1/2026. This water typing system was implemented in Western Washington March 1, 2005 and in Eastern Washington March 1, 2006. The water typing system changed to WAC 222-16-030 when 222-16-031 was repealed, effective 3/1/2026. The water type code is based on the Forest Practices Rules, Forest Practices Board Manual Section 13 field surveys (prior to March 1, 2026), Forest Practices Board Manual Section 23 fish habitat assessment methodology field surveys (starting 3/1/2026), and a multi-parameter, field verified geographic information system (GIS) logistic regression model. The water typing model is based on thousands of field surveys of fish presence and fish habitat. Other model parameters are gradient, elevation, basin size and average annual precipitation derived from the US Geological Survey's digital elevation model (DEM) for the state of Washington. Technical considerations required that the model be developed on a 'virtual' stream network system derived from the DEM database. The DEM-based model results were then transferred to the DNR's hydrographic GIS 'map' (WCHYDRO) (also known as the water type map) in order to implement

the new letter water type codes. Qualifying field observations override model results. DNR water types are intended solely for the implementation of the forest practices rules (WAC 222).

LIST OF VALUES

VALUE S

DESCRIPTION Type S water as defined in WAC 222-16-031 (1) , or WAC 222-16-030 (1) as of 3/1/2026.

VALUE F

DESCRIPTION Type F water as defined in WAC 222-16-031 (2) and (3), or WAC 222-16-030 (2) as of 3/1/2026.

VALUE N

DESCRIPTION Type N water as defined in WAC 222-16-031 (4) and (5), or WAC 222-16-030 (4) as of 3/1/2026 . The FP_WTRTY_CD (N) combined with the FP_PERIOD_CD (p or s) make up the 'Np' and 'Ns' water types. Note that the Np / Ns break is determined by on-the-ground observation only. There has been no direct translation of the former type 4 and 5 to the new types Np and Ns. When a forest practice activity is proposed the applicant must identify the perennial (Np) and seasonal (Ns) streams on their Forest Practices Activity Map.

VALUE U

DESCRIPTION Letter 'U' indicates that the Forest Practices water type is unknown. May be one of the following: (1) Unmodeled stream that was formerly untyped/ unknown (former 'type 9') and remains unverified (FP_EXP_CD = U1) . Stream may or may not exist on ground, and water type has not been assigned. (2) Reserved for Conversion Project contractor added connectors that are unverified. Cartographic stream link that connects a typed stream or stream network to a hydrographic source feature. No apparent surface flow; may or may not be a subsurface flow. (FP_EXP_CD = U2). (3) Verified stream addition, or confirm at ion of former untyped/ unknown (former 'type 9') mapped stream . Stream exists on ground, but water type has not been assigned. (FP_EXP_CD = U3). (4) Outside of modeled area. Classified previously as untyped/ unknown (former 'type 9') . (For use in Eastern Washington only; FP_EXP_CD = U4).

VALUE X

DESCRIPTION Letter 'X' indicates that the feature cannot be assigned a Forest Practices water type. 'X' indicates non-typed water per WAC 222-16-031, or 222-16-030 as of 3/1/2026. One of the following: (1) mapped feature (field verified or verified by other means) not meeting the definition of a typed water as set forth in WAC 222-16-031, or 222-16-030 as of 3/1/2026, and, therefore, having no Forest Practices water type designation. These may include seasonal streams that are not physically connected by an above-ground channel system to Forest Practices type S, F, or Np waters; dry draws; swales; ditches and canals designed solely for irrigation purposes (but not portions of channelized natural streams that may be also used for irrigation purposes) (WC_LN_TYPE_CD = 10); or (2) used to indicate stream deleted from the water type map but remaining in the database to maintain network connectivity (WC_LN_TYPE_CD = 5); or (3) verified subsurface connector (WC_LN_TYPE_CD = 5) ; or (4) an artificial connector (WC_LN_TYPE_CD = 5).

FIELD FP_PERIOD_CD ►

FIELD DESCRIPTION

Forest Practices periodicity code. Indicates stream periodicity as defined in WAC 222-16-031 (4) and (5). Used only with the Forest Practices WAC 222-16-031, interim water typing system where FP_WTRTY_CD = N. The FP_WTRTY_CD (N) combined with the FP_PERIOD_CD (p or s) make up the " Np" and " Ns" water types. Note that the Np / Ns break is determined by on-the-ground observation only. There has been no direct translation of the former type 4 and 5 to the new types Np and Ns. When a forest practices activity is proposed the applicant should identify the perennial (Np) and seasonal (Ns) streams on their Forest Practices Activity Map when possible. Np and Ns are shown on the FPARS maps wherever they have been determined. Most FP_PERIOD_CD values are " u" (unknown) because the Np / Ns determination has not been made.

LIST OF VALUES

VALUE p

DESCRIPTION Perennial. Waters that do not go dry during any time of a year of normal rainfall. This value combined with the FP_WTRTY_CD (N) makes up the water type Np. 'p' only shown on the water type map when submitted on a WTMF since the adoption of the letter water type codes. WAC 222-16-031(4) and WAC 222-16-030(3)

VALUE s

DESCRIPTION Seasonal. Waters where surface flow is not present for at least some portion of a normal year of rain. This value combined with the FP_WTRTY_CD (N) make up the water type Ns. 's' only shown on the water type map when submitted on a WTMF since the adoption of the letter water type codes.

VALUE u

DESCRIPTION Unknown or unclassified.

FIELD FP_EXP_CD ►

FIELD DESCRIPTION

Forest Practices water type explanation code. Explains how each stream segment or hydrographic feature within WCHYDRO has been assigned its current water type (FP_WTRTY_CD) value. It is a supplemental Forest Practices Water Type Coding system to be used in conjunction with the FP_WTRTY_CD, providing a more in-depth explanation of the assigned water type code of each stream segment and hydrographic feature.

Historical Background. The Forest Practices water typing system is based on a multi-parameter, field-verified geographic information system (GIS) logistic regression model and allows for water type changes and modifications by water typing surveys as administered by DNR Forest Practices and reviewed by the Timber/ Fish/ Wildlife Agreement cooperators. The interim system became operational for Western Washington on March 1, 2005, and for Eastern Washington on March 1, 2006. This system used WAC 222-16-031's S, F, and N water type codes with two additional water type codes assigned to un-typed/ unknown waters (U) and other non-typed hydrographic features (X). Not all streams and hydrographic features were typed directly as a result of the modeling process, so the FP_EXP_CD was created, in part, to distinguish modeled from non-modeled streams and provide the means to track model performance over time by coding water type changes to modeled streams. It was also created to provide additional information concerning the typing of watercourse features and cartographic elements outside of the model environment. On March 1, 2026, the interim system (WAC 222-16-031) was repealed and replaced with WAC 222-16-030.

LIST OF VALUES

VALUE F0

DESCRIPTION Artificial interior line segment within a double-banked stream, side channel or ditch (WBHYDRO) polygon, connecting a lateral watercourse to a type F centerline. This segment exists for stream network connectivity purposes and will have a WC_FLOW_PATH_CD = 2 and WC_LN_TYP_CD = 21.

VALUE F1

DESCRIPTION Modeled as fish habitat, occurring downstream of a modeled end of fish habitat point.

VALUE F2

DESCRIPTION Un-modeled fish stream. Watercourse existed prior to the "fish model" within the designated model area but match could not be found between this stream segment and DEM-generated stream model. DNR approved field survey data and/ or former water type indicates fish use/ fish habitat.

VALUE F3

DESCRIPTION An artificial interior watercourse segment representing the flow of water through a type F lake, pond or reservoir WBHYDRO polygon. Exists for stream network connectivity purposes and will have a WC_FLOW_PATH_CD = 1 or 2 and WC_LN_TYP_CD = 20.

VALUE F4

DESCRIPTION (NO LONGER IN USE) Mapping anomaly prevented normal model or coding implementation. Former water type indicated 'fish use' or is associated with other fish use/ fish habitat waters. Most common occurrences were in channelized streams (e.g. irrigation ditches, canals) or un-modeled streams with former water typing inconsistencies. No longer needed. Post-model water type updates on these features are to be assigned an FP_EXP_CD of F2.

VALUE F5

DESCRIPTION Fish hatchery, public diversion waters or other former type 2 waters as defined by WAC 222-16-031 (2). May or may not have been modeled as fish habitat.

VALUE F6

DESCRIPTION Fish bearing/ fish habitat stream added after water type model implementation.

VALUE F7

DESCRIPTION Model Override: Approved post 1996 hydro updates from field surveys submitted on Water Type Modification Forms or other approved field survey data place fish-bearing/ fish habitat waters upstream of modeled end of fish habitat point.

VALUE F8

DESCRIPTION (NO LONGER IN USE) Classified previously as having fish use (e. g. former type 3) outside of designated Forest and Fish modeled area in Eastern Washington only. No longer needed. Post-model water type updates on these features are to be assigned an FP_EXP_CD of F2.

VALUE N0

DESCRIPTION Artificial interior line within a double-banked stream, side channel or ditch connecting a lateral watercourse to a type N centerline. Exists for stream connectivity purposes and will have a WC_FLOW_PATH_CD

= 2 and WC_LN_TYP_CD = 21.

VALUE N1

DESCRIPTION Modeled as non- fish habitat, occurring upstream of a modeled end of fish habitat point.

VALUE N2

DESCRIPTION Unmodeled non- fish stream . Watercourse existed prior to the “ fish model” within the designated model area but match could not be found between this stream segment and DEM-generated stream model. DNR approved field survey data and/ or former water type classification indicates non- fish use/ non- fish habitat.

VALUE N3

DESCRIPTION An artificial interior watercourse segment representing the flow of water through a type N lake, pond or reservoir (WBHYDRO) polygon. Exists for stream network connectivity purposes and will have a WC_FLOW_PATH_CD = 1 or 2 and WC_LN_TYP_CD = 20.

VALUE N4

DESCRIPTION (NO LONGER IN USE) Mapping anomaly prevented normal model/ coding implementation. Former water type indicated ‘no fish use’ or is associated with other non- fish waters. Most common occurrences were in channelized streams (e.g. irrigation ditches, canals) or unmodeled streams with former water typing inconsistencies. No longer needed. Post- model water type updates on these features are to be assigned an FP_EXP_CD of N2.

VALUE N5

DESCRIPTION Non- fish bearing/ non- fish habitat stream added after model implementation.

VALUE N6

DESCRIPTION Former untyped/ unknown hydrographic stream feature (former ‘type 9’) occurring upstream of a modeled end point. May or may not have had a matching DEM- modeled stream .

VALUE N7

DESCRIPTION Model Override: Approved post 1996 survey/ hydro update submitted on Water Type Modification Forms or other approved surveys indicate end of fish-bearing/ fish habitat waters downstream of modeled end of habitat point.

VALUE N8

DESCRIPTION (NO LONGER IN USE) Classified previously as having no fish use (former type 4, 5) outside of designated Forest and Fish modeled area in Eastern Washington only. No longer needed. Post- model water type updates on these features are to be assigned an FP_EXP_CD of N2.

VALUE S0

DESCRIPTION Artificial interior line within a double-banked stream , side channel or ditch connecting a lateral watercourse to a type S centerline. Exists for stream network connectivity purposes and will have a WC_FLOW_PATH_CD = 2 and WC_LN_TYP_CD = 21.

VALUE S1

DESCRIPTION Shorelines of the State as designated by the “ Shoreline Management Act” (SMA), Chapter 90.58 RCW.

VALUE S2

DESCRIPTION Shorelines of Statewide Significance (‘S+ ’ Waters) as designated by the Shoreline Management Act (SMA) , Chapter 90. 58 RCW.

VALUE S3

DESCRIPTION An artificial interior watercourse segment representing the flow of water through a type S lake, pond or reservoir (WBHYDRO) polygon. Exists for stream network connectivity purposes and will have a WC_FLOW_PATH_CD = 2 and WC_LN_TYP_CD = 20.

VALUE U1

DESCRIPTION Non-modeled or unmodeled stream that was formerly untyped/ unknown and remains unverified (former ‘type 9’) . Stream may or may not exist on the ground and water type has not been assigned.

VALUE U2

DESCRIPTION Cartographic stream link that connects a typed stream or stream network to a hydrographic source feature. Reserved for vendor-added (sewall) surface connectors that remain unverified. May or may not exist on the ground or be a subsurface flow.

VALUE U3

DESCRIPTION Verified stream addition or confirmation of former untyped/ unknown mapped stream (former 'type 9') . Stream exists on ground, but water type has not been assigned.

VALUE U4

DESCRIPTION Classified previously as untyped/ unknown (former 'type 9') outside of designated Forest and Fish modeled area in Eastern Washington only. Stream may or may not exist on the ground and water type has not been assigned. No longer needed. Post- model water type updates on these features are to be assigned an FP_EXP_CD of N2.

VALUE X1

DESCRIPTION Non- typed water per WAC 222-16-031, or 222-16-030 as of 3/1/2026. A mapped feature (field verified or verified by other means) that does not meet the definition of a typed water as set forth in WAC 222-16-031, or 222-16-030 as of 3/1/2026, and, therefore, has no Forest Practices water type designation. These include: 1) seasonal streams that are not located downstream of Np waters and are not physically connected by an above-ground channel system to Forest Practices type S, F, or Np waters. (WC_LN_TYP_CD = 10, 30); 2) dry draws, swales or other ephemeral drains (WC_LN_TYP_CD = 10, 30); Manmade water conveyances not associated with fish use such as pipelines, ditches and canals used for irrigation purposes. (WC_LN_TYP_CD = 10, 21); artificial interior segment within industrial, sewage and tailings pond impoundments (WC_LN_TYP_CD = 20).

VALUE X2

DESCRIPTION An artificial connector existing on the map to maintain stream connectivity for the following reasons: 1) A previously mapped portion of a watercourse " deleted" from the water type map where no channel is found by surveyors in a limited survey area, but is retained in the database to maintain network connectivity between upstream and downstream watercourses; 2) a link connecting seasonal (e. g. X1 streams) to typed waters downstream , representing flow where no channel is detected by surveyors on the ground where the surface channel ends within ½ mile from typed waters.

VALUE X3

DESCRIPTION Non- typed water per WAC 222-16-031, or 222-16-030 as of 3/1/2026. A verified subsurface connector (WC_LN_TYPE_CD = 5, WC_FLOW_PATH_CD = 3).

FIELD FP_VER_CD ►

FIELD DESCRIPTION

Forest Practices verification code. Identifies the water typing survey method used when assigning a water type to a stream segment. All such surveys are documented by an approved water type modification form (WTMF). For use only with the Forest Practices water typing system . See FP_WTRTY_SRC_DESC for source of water types not assigned by a survey method. FP_VER_CD codes 'B', 'P', or 'N' only apply to streams surveyed since 3/ 1/ 2005.

LIST OF VALUES

VALUE P

DESCRIPTION Water type based upon physical criteria only. This means only the physical characteristics specifically listed in WAC 222-16-031 (3) (b), or WAC 222-16-030 (2) (d) (i) as of 3/1/2026. Waters meeting these listed characteristics are presumed to have fish use. FP_VER_CD codes 'B', 'P', or 'N' only apply to streams surveyed since 3/1/2005.

VALUE B

DESCRIPTION Water type based upon biological assessment. This may be one or more of the following: 1. fish observed, 2. the survey followed the Guidelines for Determining Fish Use (Board Manual, Section 13, Part 4), i.e. " protocol", 3. the survey followed the Guidelines for Determining Fish Use (Board Manual, Section 13, Part 6), i.e. an " alternative protocol" that was documented prior to the survey was used, 4. as part of an ID Team , a WDFW or tribal biologist Agreement with the proposal is documented, 5. If the stream does not meet the minimum pool requirements for a protocol survey (Board Manual, Section 13, Part 4), and this is documented, then the survey is following protocol and is considered a " biological assessment," 6. the survey followed the Guidelines for Field Protocol to Locate Mapped Divisions between Stream Types and Perennial Stream Identification (Board Manual, Section 23), i.e. "FHAM". FP_VER_CD codes 'B', 'P', or 'N' only apply to streams surveyed since 3/ 1/ 2005.

VALUE N

DESCRIPTION Water type not verified by either physical criteria or biological assessment. FP_VER_CD codes 'B', 'P', or 'N' only apply to streams surveyed since 3/ 1/ 2005.

VALUE U

DESCRIPTION Method of water type determination is unknown.

FIELD SL_WTRTY_CD ►

FIELD DESCRIPTION

State Lands water type code. A classification code used to support the DNR State Trust Lands Habitat Conservation Plan (HCP), effective September 1997. See <http://www.dnr.wa.gov/hcp/index.html>. Used in conjunction with the SL_WTRTY_EDIT_DT.

LIST OF VALUES

VALUE 1

DESCRIPTION Shorelines of the state. Type 1 water as defined by the DNR State Lands HCP. All waters, within their ordinary high- water mark, as inventoried as " shorelines of the state" under chapter 90.58 RCW.

VALUE 2

DESCRIPTION Waters with high fish, wildlife, or human use. Type 2 water as defined by the DNR State Lands HCP. Segments of natural waters which are not classified as Type 1 Water and have a high fish, wildlife or human use.

VALUE 3

DESCRIPTION Waters with moderate fish, wildlife, or human use. Type 3 water as defined by the DNR State Lands HCP. Segments of natural waters which are not classified as Type 1 or Type 2 Waters and have a moderate to slight fish, wildlife, or human use.

VALUE 4

DESCRIPTION Perennial non- fish habitat stream . Type 4 water as defined by the DNR State Lands HCP. All segments of natural waters within the bankfull width of defined channels that are perennial nonfish habitat streams.

VALUE 5

DESCRIPTION Seasonal non- fish habitat stream . Type 5 water as defined by the DNR State Lands HCP. All segments of natural waters within the bankfull width of defined channels that are not Type 1, 2, 3, or 4 Waters.

VALUE 9

DESCRIPTION Unclassified water feature.

FIELD SL_WTRTY_EDIT_DT ►

FIELD DESCRIPTION

State Lands water type edit date. The date the State Trust Lands Habitat Conservation Plan (HCP) Water Type was last edited. Used in conjunction with the SL_WTRTY_CD.

FIELD FP_PERIOD_LABEL_NM ►

FIELD DESCRIPTION

Forest Practices periodicity label. Indicates stream periodicity as defined in WAC 222-16-031 (4) and (5). Used only with the Forest Practices WAC 222-16-031, interim water typing system where FP_WTRTY_CD = N. The FP_WTRTY_CD (N) combined with the FP_PERIOD_CD (p or s) make up the " Np" and " Ns" water types. Note that the Np / Ns break is determined by on-the-ground observation only. There has been no direct translation of the former type 4 and 5 to the new types Np and Ns. When a forest practice activity is proposed the applicant must identify the perennial (Np) and seasonal (Ns) streams on their Forest Practices Activity Map. Np and Ns are shown on the FPARS maps wherever they have been determined. Most FP_PERIOD_CD values are " u" (unknown) because the Np / Ns determination has not been made.

LIST OF VALUES

VALUE Perennial

DESCRIPTION Perennial. Waters that do not go dry during any time of a year of normal rainfall. This value combined with the FP_WTRTY_CD (N) makes up the water type Np. 'p' only shown on the water type map when submitted on a WTMF since the adoption of the letter water type codes. WAC 222-16-031(4) and WAC 222-16-030(3)

VALUE Seasonal

DESCRIPTION Seasonal. Waters where surface flow is not present for at least some portion of a normal year of rain. This value combined with the FP_WTRTY_CD (N) make up the water type Ns. 's' only shown on the water type map when submitted on a WTMF since the adoption of the letter water type codes.

VALUE Unknown

DESCRIPTION Unknown or unclassified.

FIELD FP_WTRTY_APPR_DT ►

- * ALIAS FP_WTRTY_APPR_DT
- * DATA TYPE Date
- * WIDTH 36
- * PRECISION 0
- * SCALE 0

FIELD DESCRIPTION

Forest Practices approval date. The date of Forest Practices approval of the Water Type Modification Form associated with the stream segment. Water Type Modification Forms are the means by which changes to the database are proposed.

FIELD FP_VER_LABEL_NM ►

FIELD DESCRIPTION

Forest Practices verification label. Identifies the water typing survey method used when assigning a water type to a stream segment. All such surveys are documented by an approved water type modification form (WTMF). For use only with the Forest Practices water typing system . See FP_WTRTY_SRC_DESC for source of water types not assigned by a survey method. FP_VER_CD codes 'B', 'P', or 'N' only apply to streams surveyed since 3/ 1/ 2005.

LIST OF VALUES

VALUE Physical

DESCRIPTION Water type based upon physical criteria only. This means only the physical characteristics specifically listed in WAC 222-16-031 (3) (b), or WAC 222-16-030 (2) (d) (i) as of 3/1/2026. Waters meeting these listed characteristics are presumed to have fish use. FP_VER_CD codes 'B', 'P', or 'N' only apply to streams surveyed since 3/1/2005.

VALUE Biological

DESCRIPTION Water type based upon biological assessment. This may be one or more of the following: 1. fish observed, 2. the survey followed the Guidelines for Determining Fish Use (Board Manual, Section 13, Part 4), i.e. " protocol", 3. the survey followed the Guidelines for Determining Fish Use (Board Manual, Section 13, Part 6), i.e. an " alternative protocol" that was documented prior to the survey was used, 4. as part of an ID Team , a WDFW or tribal biologist Agreement with the proposal is documented, 5. If the stream does not meet the minimum pool requirements for a protocol survey (Board Manual, Section 13, Part 4), and this is documented, then the survey is following protocol and is considered a " biological assessment," 6. the survey followed the Guidelines for Field Protocol to Locate Mapped Divisions between Stream Types and Perennial Stream Identification (Board Manual, Section 23), i.e. "FHAM". FP_VER_CD codes 'B', 'P', or 'N' only apply to streams surveyed since 3/ 1/ 2005.

VALUE Not Verified

DESCRIPTION Water type not verified by either physical criteria or biological assessment. FP_VER_CD codes 'B', 'P', or 'N' only apply to streams surveyed since 3/ 1/ 2005.

VALUE Unknown

DESCRIPTION Method of water type determination is unknown.

FIELD WC_HYDR_FTR_CD ►

FIELD DESCRIPTION

Watercourse hydrographic feature code. Identifies the hydrographic category in which the watercourse line belongs.

LIST OF VALUES

VALUE DC

DESCRIPTION Ditches, canals, flumes

VALUE IM

DESCRIPTION Impoundments or areas subject to inundation

VALUE IW

DESCRIPTION Impounded wet areas. In the dataset these are found only near the southwest Washington coast.

VALUE LA

DESCRIPTION Lak es and ponds

VALUE PP

DESCRIPTION Pipelines and water conveyance structures

VALUE SC
DESCRIPTION Side channels to rivers or streams

VALUE ST
DESCRIPTION Streams and rivers

VALUE UN
DESCRIPTION Unknown or Unclassified

VALUE WT
DESCRIPTION Wet Area. These generally originated as swamps and marshes scanned from the USGS 1: 24,000 topographic maps. Wet areas are not classified by the WAC 222-16-035 wetland typing system ; they have no regulatory significance.

Hide Field WC_HYDR_FTR_CD ▲

FIELD WC_FLOW_PATH_CD ►

FIELD DESCRIPTION

Watercourse flow path code. Used to define the flow pathways of streams and artificial connectors.

LIST OF VALUES

VALUE 1

DESCRIPTION Primary path of a watercourse centerline that flows through a water body as an interior line and artificial path. Represents the flow of water from the main inlet to the main outlet of a polygonal water body.

VALUE 2

DESCRIPTION Secondary path of a watercourse that flows through a water body as an interior line and artificial path. The linear path that represent additional flow paths of water, usually from secondary tributaries entering the water body and connecting to the Primary path. Also called " laterals".

VALUE 3

DESCRIPTION A single line watercourse segment usually representing a defined channel (WC_LN_TYPE_CD = 10 or 30) . May flow through a water body with WB_HYDR_FTR_CD = WT (wet area), GL (glacier), etc. May also be a single- line water course artificial connector (WC_LN_TYPE_CD = 5).

FIELD WC_GNIS_NR ►

FIELD DESCRIPTION

Watercourse Geographic Names Information System (GNIS) number. The identifier number assigned to each named feature in the USGS GNIS database ([http://geonames.usgs.gov/ domestic/ index.html](http://geonames.usgs.gov/domestic/index.html)) . This number is used to insert and/ or update water body names stored in the framework hydrography database. Not all features will have a GNIS name and number, but all features with GNIS names will have GNIS numbers and vice versa. WC_GNIS_NR are unique to each named surface water feature, not to each individual line segment.

FIELD WC_CONTU_CD ►

FIELD DESCRIPTION

Watercourse continuity code. This is the classification of stream flow in relation to its expression at the earth's surface. The most common condition is that a stream is continuous. An example of using WC_CONTU_CD with WC_PERIOD_CD: If areas of perennial, intermittent or ephemeral flow exist along a stream reach they are not separated out; the hydrologist chooses the dominant periodicity and calls the continuity " interrupted". If the reach is not continuously perennial or intermittent it is described as " interrupted". This attribute describes the physical characteristics of a stream . The scale at which the data are captured or displayed may also be a factor to consider.

LIST OF VALUES

VALUE CON

DESCRIPTION Continuous. A channel with no interruptions in space.

VALUE INT

DESCRIPTION Interrupted. A watercourse with a perennial flow with intervening intermittent or ephemeral segments or intermittent flow with intervening ephemeral segments.

VALUE SUB

DESCRIPTION Sub- surface. Watercourse reach that represents a sub- surface flow.

VALUE UNK

DESCRIPTION Unknown or unclassified

FIELD FTR_MOD_LABEL_NM ►

FIELD DESCRIPTION

Feature modification label. Identifies the type of change that occurred to the hydrography water shoreline feature. Tracks the type of modification performed on the database.

Intended to distinguish those features that would be updated in the Framework dataset during a transaction if an update process was in place.

LIST OF VALUES

VALUE Addition

DESCRIPTION Addition of spatial feature

VALUE Deletion

DESCRIPTION Deletion of existing spatial feature. Documents the historical ID, which maybe referenced in an orphaned event row that will have no matching spatial record. (Code value only valid with PNW Hydrography Framework Data Model in ESRI Dynamic Segmentation format)

VALUE Update

DESCRIPTION Update of existing spatial feature

FIELD WC_PERIOD_CD ►

FIELD DESCRIPTION

Watercourse periodicity code. This is a classification for watercourses in terms of the seasonal behavior of the feature or in terms of its surface flow.

LIST OF VALUES

VALUE EPH

DESCRIPTION Ephemeral. Watercourse that exist only as a result of storm precipitation.

VALUE INT

DESCRIPTION Intermittent or seasonal. Watercourse that is dry during certain times of the year.

VALUE PER

DESCRIPTION Perennial. Watercourse that essentially exist year round

VALUE UNK

DESCRIPTION Unknown or Unclassified. Used when condition information is unknown or unclassified

FIELD FTR_INPUT_LABEL_NM ►

FIELD DESCRIPTION

Feature input label. The manner in which the hydrography watercourse data is entered or updated in the spatial database. These codes can be found in the associated lookup table.

LIST OF VALUES

VALUE Automatic

DESCRIPTION Automatic via computer software

VALUE Scan

DESCRIPTION Scanning

VALUE Digitize

DESCRIPTION Tablet digitizing

VALUE Coord File

DESCRIPTION Digital spatial or coordinate file

VALUE Auto

DESCRIPTION Automatic line tracing

VALUE Heads- up

DESCRIPTION Heads- up (on- screen) digitizing

VALUE Unknown

DESCRIPTION Unknown or unspecified map feature input method

Hide Field FTR_INPUT_LABEL_NM ▲

FIELD FTR_INPUT_CD ►

FIELD DESCRIPTION

Feature input code. The manner in which the hydrography watercourse data is entered or updated in the spatial database. These codes can be found in the associated lookup table.

LIST OF VALUES

VALUE 1

DESCRIPTION Automatic via computer software

VALUE 2

DESCRIPTION Scanning

VALUE 3

DESCRIPTION Tablet digitizing

VALUE 4

DESCRIPTION Digital spatial or coordinate file

VALUE 5

DESCRIPTION Automatic line tracing

VALUE 6

DESCRIPTION Heads- up (on- screen) digitizing

VALUE 99

DESCRIPTION Unknown or unspecified map feature input method

FIELD FTR_INTRP_LABEL_NM ►

FIELD DESCRIPTION

Feature interpretation label. The methodology used to compose the hydrography watercourse information and how it was derived prior to data entry into the spatial coverage

LIST OF VALUES

VALUE Photogram

DESCRIPTION Photogrammetric interpretation

VALUE GPS

DESCRIPTION Global Position System (GPS)

VALUE Photos

DESCRIPTION Photointerpretation

VALUE Crenulation

DESCRIPTION Interpretation of streams from contour crenulation

VALUE Modeling

DESCRIPTION Surface flow modeling

VALUE Transect

DESCRIPTION Transect along a stream channel

VALUE Source map

DESCRIPTION Existing line work on source map

VALUE Best guess

DESCRIPTION Stream not directly observable so stream location is estimated

VALUE Combination

DESCRIPTION Combination of 3,4, 5 and sometimes 8

VALUE Unspecified
DESCRIPTION Unspecified/ Unknown

FIELD FTR_INTRP_CD ►

FIELD DESCRIPTION

Feature interpretation code. The methodology used to compose the hydrography watercourse information and how it was derived prior to data entry into the spatial coverage

LIST OF VALUES

VALUE 1

DESCRIPTION Photogrammetric interpretation

VALUE 2

DESCRIPTION Global Position System (GPS)

VALUE 3

DESCRIPTION Photo- interpretation

VALUE 4

DESCRIPTION Interpretation of streams from contour crenulation

VALUE 5

DESCRIPTION Surface flow modeling

VALUE 6

DESCRIPTION Transect along a stream channel

VALUE 7

DESCRIPTION Existing line work on source map

VALUE 8

DESCRIPTION Stream not directly observable so stream location is estimated

VALUE 99

DESCRIPTION Unknown or Unclassified

VALUE 9

DESCRIPTION Combination of 3, 4, 5, and sometimes 8.

FIELD FTR_SRC_LABEL_NM ►

FIELD DESCRIPTION

Feature source label. The compilation map or image source used when adding or updating hydrography data.

LIST OF VALUES

VALUE USGS Map

DESCRIPTION USGS Topographic Map

VALUE Orthophoto

DESCRIPTION Orthophotography

VALUE Aerial photo

DESCRIPTION Aerial Photograph

VALUE MSS Imagery

DESCRIPTION Multi- Spectral Satellite Imagery

VALUE Field Survey

DESCRIPTION Field Survey of on the ground observation

VALUE Count y/ Cit y

DESCRIPTION County or City Planning Map

VALUE Field Map

DESCRIPTION Field Map

VALUE DEM

DESCRIPTION Digital Elevation Model (DEM)

VALUE Radar Image
DESCRIPTION Radar Imagery

VALUE Laser Image
DESCRIPTION Laser Imagery

VALUE CFF
DESCRIPTION Cartographic Feature File (CFF)

VALUE NWI Map
DESCRIPTION National Wetlands Inventory (NWI) Map

VALUE Imagery
DESCRIPTION Imagery - Unspecified Source

VALUE Combination
DESCRIPTION Combination of Lidar and Photo

VALUE NED/ Photo
DESCRIPTION NED/ Photo

VALUE Interpret
DESCRIPTION Intuitive Interpretation

VALUE Unknown
DESCRIPTION Unknown or Unclassified

FIELD FTR_SRC_CD ►

FIELD DESCRIPTION

Feature source code. The compilation map or image source used when adding or updating hydrography data.

LIST OF VALUES

VALUE 1
DESCRIPTION USGS Topographic Map

VALUE 2
DESCRIPTION Orthophotography

VALUE 3
DESCRIPTION Aerial Photograph

VALUE 4
DESCRIPTION Multi- Spectral Satellite Imagery

VALUE 5
DESCRIPTION Field survey or on-the-ground observation

VALUE 6
DESCRIPTION Planning Map

VALUE 7
DESCRIPTION Field Map, Forest Practices Water Type Map

VALUE 8
DESCRIPTION Digital Elevation Model (DEM) , NED

VALUE 9
DESCRIPTION Radar Imagery

VALUE 10
DESCRIPTION Laser Imagery, LiDAR

VALUE 11
DESCRIPTION Cartographic Feature File (CFF)

VALUE 12
DESCRIPTION National Wetlands Inventory (NWI) Map

VALUE 13
DESCRIPTION Imagery - Unspecified

VALUE 99
DESCRIPTION Unknown or Unclassified

VALUE 15
DESCRIPTION Combination of LiDAR and orthophoto

VALUE 16
DESCRIPTION Combination of NED and orthophoto

VALUE 17
DESCRIPTION Intuitive interpretation

Hide Field FTR_SRC_CD ▲

FIELD FTR_SRC_DT ►

FIELD DESCRIPTION

Feature source date. The date of the compilation map or image source used when adding or updating hydrography data. January 1, 1753 is used when source date is unknown or unavailable. If the source year is known, but month and date are unknown then January 1 is used as a default.

FIELD FTR_SRCSCALE_CD ►

FIELD DESCRIPTION

Feature source scale code.

LIST OF VALUES

VALUE 0
DESCRIPTION Scale of data source is unknown

VALUE 4800
DESCRIPTION Scale of data source is 1: 4,800

VALUE 12000
DESCRIPTION Scale of data source is 1: 12, 000

VALUE 24000
DESCRIPTION Scale of data source is 1: 24, 000

FIELD FTR_ORG_CD ►

FIELD DESCRIPTION

Feature organization code. The organization that compiled, entered, updated or deleted the hydrography watercourse data. This list will grow as new organizations begin to add or update information and are certified by the clearinghouse. Contact the Clearinghouse Manager will maintain a list of organizations. All additions or corrections should be submitted to the Clearinghouse Manager.

LIST OF VALUES

VALUE BCMELP
DESCRIPTION British Columbia Ministry of Environment, Lands and Parks

VALUE CoClrkWa
DESCRIPTION Clark County, WA

VALUE CoKingWa
DESCRIPTION King County, WA

VALUE CoPierWa
DESCRIPTION Pierce County, WA

VALUE CoSnohWa

DESCRIPTION Snohomish County, WA

VALUE CoSpok Wa

DESCRIPTION Spokane County, WA

VALUE CoThur sWa

DESCRIPTION Thurston County, WA

VALUE CoYak Wa

DESCRIPTION Yakima County, WA

VALUE Cty SeaWa

DESCRIPTION City of Seattle, WA

VALUE Cty Oly Wa

DESCRIPTION City of Olympia, WA

VALUE Cty VanWa

DESCRIPTION City of Vancouver, WA

VALUE IRICC

DESCRIPTION Intergovernmental Resource Information Coordinating Council

VALUE Lvw Fbr

DESCRIPTION Longview Fiber Company

VALUE NMFS

DESCRIPTION National Marine Fisheries Service

VALUE NRCS

DESCRIPTION Natural Resources Conservation Service

VALUE NWIFC

DESCRIPTION Northwest Indian Fisheries Commission

VALUE Or DEQ

DESCRIPTION OR Dept. of Environmental Quality

VALUE PSRC

DESCRIPTION Puget Sound Regional Council

VALUE Raynr

DESCRIPTION Rayonier Timber Company

VALUE Smpsn

DESCRIPTION Simpson Timber Company

VALUE USACE

DESCRIPTION U.S. Army Corps of Engineers

VALUE USBLM

DESCRIPTION U.S. Bureau of Land Management

VALUE USBOR

DESCRIPTION U.S. Bureau of Reclamation

VALUE USBPA

DESCRIPTION U.S. Bonneville Power Administration

VALUE USEPA

DESCRIPTION U.S. Environmental Protection Agency

VALUE USEPA- r 10

DESCRIPTION U.S. Environmental Protection Agency - Region 10

VALUE USFS
DESCRIPTION U.S. Forest Service

VALUE USFS- Oly
DESCRIPTION U.S. Forest Service - Olympic

VALUE USFWS
DESCRIPTION U.S. Fish and Wildlife Service

VALUE USGS
DESCRIPTION U.S. Geological Survey

VALUE USGS- NMD
DESCRIPTION U.S. Geological Survey - National Mapping Division

VALUE USNPS
DESCRIPTION U.S. National Park Service

VALUE WaDFW
DESCRIPTION Washington Department of Fish and Wildlife

VALUE WaDNR
DESCRIPTION Washington State Department of Natural Resources

VALUE WaDOT
DESCRIPTION Washington Department of Transportation

VALUE WaECY
DESCRIPTION Washington Department of Ecology

VALUE Weyhsr
DESCRIPTION Weyerhaeuser Company

VALUE Sewall
DESCRIPTION James W. Sewall Company, Old Town, ME. Sewall is the conversion project vendor (2003-2004).

VALUE CoClalWa
DESCRIPTION Clallam County, Washington

VALUE WildFishCons
DESCRIPTION Wild Fish Conservancy

VALUE CtySpokWa
DESCRIPTION City of Spokane

FIELD SL_WTRTY_LABEL_NM ►

FIELD DESCRIPTION

State Lands water type label. A classification code used to support the DNR State Trust Lands Habitat Conservation Plan (HCP), effective September 1997. See <http://www.dnr.wa.gov/hcp/index.html>. Used in conjunction with the SL_WTRTY_EDIT_DT.

LIST OF VALUES

VALUE Type 1

DESCRIPTION Shorelines of the state. Type 1 water as defined by the DNR State Lands HCP. All waters, within their ordinary high- water mark, as inventoried as " shorelines of the state" under chapter 90.58 RCW.

VALUE Type 2

DESCRIPTION Waters with high fish, wildlife, or human use. Type 2 water as defined by the DNR State Lands HCP. Segments of natural waters which are not classified as Type 1 Water and have a high fish, wildlife or human use.

VALUE Type 3

DESCRIPTION Waters with moderate fish, wildlife, or human use. Type 3 water as defined by the DNR State Lands HCP. Segments of natural waters which are not classified as Type 1 or Type 2 Waters and have a moderate to slight fish, wildlife, or human use.

VALUE Type 4

DESCRIPTION Perennial non- fish habitat stream . Type 4 water as defined by the DNR State Lands HCP. All segments of natural waters within the bankfull width of defined channels that are perennial nonfish habitat streams.

VALUE Type 5

DESCRIPTION Seasonal non- fish habitat stream . Type 5 water as defined by the DNR State Lands HCP. All segments of natural waters within the bankfull width of defined channels that are not Type 1, 2, 3, or 4 Waters.

VALUE Type 9

DESCRIPTION Unclassified water feature.

FIELD FP_REF_ID ►

FIELD DESCRIPTION

Forest Practices Reference Identification number. Jurisdiction Reference Number. Used as the water type modification form (WTMF) document number. This is the tracking number used to uniquely identify WTMF entered into the database since the Fall of 2000. WTMF are the means by which changes to the DNR HYDRO GIS database (also known as the water type map) are proposed. There has been an approved water type modification form (WTMF) if FP_REF_ID has a value in one of the following three formats: FP_REF_ID = '0000WW1234' where 0000 is a placeholder in the database, WW is two-digit WRIA# , and 1234 is sequential number. This format used Fall 2000 to Spring 2008. (2) FP_REF_ID = 'RRWWYY1234' where RR is two-let ter Jurisdiction abbreviation, WW is two-digit WRIA# , YY is two digit year, and 1234 is sequential number (starting at 0001 at start of each year). This is the Jurisdiction Reference Number which is assigned to all WTMF beginning Spring 2008. (3) If FP_REF_ID is in format '0000WW0000' or there is no value, then there is no WTMF and there has been no water typing survey or hydro update unless FP_WTRTY_1975_DT is greater than 1992.

Hide Field FP_REF_ID ▲

FIELD FP_WTRTY_SRC_DESC ►

FIELD DESCRIPTION

Forest Practices water type source description. Programmatically derived identification of the source of the Forest Practices water type code (FP_WTRTY_CD) . See " binary enclosures" below for trigger code. Code applied on transfer to ROPA.

LIST OF VALUES

VALUE WTMF

DESCRIPTION Water typing survey. A Water Type Modification Form (WTMF) has been entered into the database since 1/ 1/ 1997. For a finer classification of surveys since March 1, 2005 (western Washington) and/ or March 1, 2006 (eastern Washington) see FP_VER_CD. If a surveyed stream segment is associated with a model override, then the segment will show OVERRIDE rather than WTMF. If there is a FP_REF_ID on the segment, then the segment was surveyed.

VALUE MODEL

DESCRIPTION The water type was assigned by the Fish Habitat Water Typing Model; there has been no water typing survey recorded in the database since 1/ 1/ 1997.

VALUE OVERRIDE

DESCRIPTION The model assigned type was overridden by a qualifying water typing survey. This falls into two categories: (1) Either modeled N was overridden to become F because waters downstream of a known fish location are assumed to have fish use (Board Manual Section 13, Part 4), or (2) a modeled F was overridden to become N because a survey established the F/ N break downstream . If a record has an FP_REF_ID, then the override is due to the survey. If there is no FP_REF_ID, then the override is up or downstream of the survey. For this reason there will be surveyed stream segments with OVERRIDE rather than WTMF.

VALUE LEGACY

DESCRIPTION Streams not modeled inherited their water type from the water typing system prior to the model - either from an older water typing survey or from the Water Type Map prior to the creation of the GIS database. For older water typing surveys: A survey may have been conducted, using protocols in place at the time, between 1992 and Fall 2000 if the following are true: 1. FP_WTRTY_SRC_DESC = " LEGACY", and 2. FP_WTRTY_1975_DT greater than 1/ 1/ 1992 and less than approximately 11/ 1/ 2000, and 3. FP_WTRTY_1975_CD not equal to 9.

VALUE blank

DESCRIPTION No value is assigned to water bodies to reduce map clutter.

FIELD PDF_LOCATION ►

FIELD DESCRIPTION

PDF Location Hyperlink. A hyperlink field with url to the location of the PDF of completed Water Type Modification Form (WTMF). Hyperlinks function within DNR only.

FIELD EDIT_NM_CD ►

FIELD DESCRIPTION

Editor name code. Internal DNR user identification code. Identifies which DNR employee last edited the database spatial and/ or tabular record. For internal DNR use only.

FIELD EDIT_DT ►

FIELD DESCRIPTION

Edit date. The date of the last edit either to the linework, or to the attributes

FIELD WC_SUBTYPE_CD ►

FIELD DESCRIPTION

Water course subtype code. A number representing a category of water features containing a specific set of parameters. For example, all water features of subtype 1001 have a WC_HYDR_FTR_CD = ST, WC_CART_FTR_CD = 412, WC_LN_TYPE_CD = 10, and WC_FLOW_PATH_CD = 3. These categories or subtypes are based on physical characteristics or for GIS representation requirements.

LIST OF VALUES

VALUE 501

DESCRIPTION Artificial stream

VALUE 1001

DESCRIPTION Stream

VALUE 1002

DESCRIPTION Side channel

VALUE 1003

DESCRIPTION Ditch, canal, flume

VALUE 1004

DESCRIPTION Pipeline

VALUE 2001

DESCRIPTION Lake interior line

VALUE 2002

DESCRIPTION Impoundment - int . line

VALUE 2003

DESCRIPTION Fish hatchery int. line

VALUE 2004

DESCRIPTION Alkali flat - int . line

VALUE 2101

DESCRIPTION Double-banked stream interior line

VALUE 2102

DESCRIPTION Double-banked side channel interior line

VALUE 2103

DESCRIPTION Double-banked ditch interior line

VALUE 2104

DESCRIPTION Double-banked pipeline interior line

VALUE 2105
DESCRIPTION Reservoir - interior line

VALUE 2106
DESCRIPTION Wet area interior line

VALUE 2107
DESCRIPTION Impounded wet area interior line

VALUE 3001
DESCRIPTION Perimeter stream

VALUE 3002
DESCRIPTION Perimeter side channel

VALUE 3003
DESCRIPTION Perimeter ditch

VALUE 9001
DESCRIPTION Miscellaneous watercourse

Hide Field WC_SUBTYPE_CD ▲

FIELD WC_SUBTYPE_LABEL_NM ►

FIELD DESCRIPTION

Water course subtype label. A label representing a category of water features containing a specific set of parameters. For example, all water features of subtype 1001 have a WC_HYDR_FTR_CD = ST, WC_CART_FTR_CD = 412, WC_LN_TYPE_CD = 10, and WC_FLOW_PATH_CD = 3. These categories or subtypes are based on physical characteristics or for GIS representation requirements.

LIST OF VALUES

VALUE Artificial
DESCRIPTION Artificial stream

VALUE Stream
DESCRIPTION Stream

VALUE Side channel
DESCRIPTION Side channel

VALUE Ditch/ canal
DESCRIPTION Ditch, canal, flume

VALUE Pipeline
DESCRIPTION Pipeline

VALUE Lake- inter
DESCRIPTION Lake interior line

VALUE Imp- interior
DESCRIPTION Impoundment - int . line

VALUE Hatchery int
DESCRIPTION Fish hatchery int. line

VALUE Alk flt- int
DESCRIPTION Alkali flat - int . line

VALUE Dbl bnk- int
DESCRIPTION Double-banked stream interior line

VALUE Db sc- int
DESCRIPTION Double-banked side channel interior line

VALUE Db dc- int
DESCRIPTION Double-banked ditch interior line

VALUE Db pp- int
DESCRIPTION Double-banked pipeline interior line

VALUE Res- interior
DESCRIPTION Reservoir - interior line

VALUE Wet area- int
DESCRIPTION Wet area interior line

VALUE Imp wt- int
DESCRIPTION Impounded wet area interior line

VALUE Perim stream
DESCRIPTION Perimeter stream

VALUE Per im sc
DESCRIPTION Perimeter side channel

VALUE Per im dc
DESCRIPTION Perimeter ditch

VALUE Misc stream
DESCRIPTION Miscellaneous watercourse

FIELD FTR_MOD_CD ►

FIELD DESCRIPTION

Feature modification code. Identifies the type of change that occurred to the water feature.

LIST OF VALUES

VALUE ADD
DESCRIPTION Addition of spatial feature

VALUE DEL
DESCRIPTION Deletion of existing spatial feature. Documents the historical ID, which maybe referenced in an orphaned event row that will have no matching spatial record. (Code value only valid with PNW Hydrography Framework Data Model in ESRI Dynamic Segmentation format)

VALUE UPD
DESCRIPTION Update of existing spatial feature

Hide Field FTR_MOD_CD ▲

Attachment B – Water Bodies (FP) Field Definitions

FIELD WB_ID ►

FIELD DESCRIPTION

A unique, persistent number identifying each record.

FIELD WB_LLID_NR ►

FIELD DESCRIPTION

The water body longitude/ latitude identifier number (LLID) is a whole water body identifier. The LLID has 13 characters, is unique to each water body. The LLID is based on the position of the center point of the water body and is created by concatenating the decimal degree values (to four places of precision) of the coordinates (without the decimal points). There is no valid default value for this field, and it must be populated.

FIELD WB_CART_FTR_CD ►

FIELD DESCRIPTION

Water body cartographic feature code. Identifies the surface water feature that the water body line represents. These codes developed initially by the USGS.

DESCRIPTION SOURCE

Derived from the USGS digital line graph (DLG) hydrographic classification code. This is the DNR Hydro WTR.BDY.TY code in pre- Conversion Project (2003) DNR HYDRO.

LIST OF VALUES

VALUE 100

DESCRIPTION Alkali flat

VALUE 101

DESCRIPTION Reser voir

VALUE 105

DESCRIPTION Area subject to inundation. This is the area that would be covered by water if the reservoir or impoundment was filled.

VALUE 106

DESCRIPTION Fish hatchery or farm

VALUE 107

DESCRIPTION Industrial water impoundment

VALUE 109

DESCRIPTION Sewage disposal pond or filtration bed

VALUE 110

DESCRIPTION Tailings pond

VALUE 111

DESCRIPTION Marsh, wet area, swamp, bog. These generally originated as swamps and marshes scanned from the USGS 1: 24, 000 topographic maps. Wet areas are not classified by the WAC 222-16-035 wetland typing system; they have no regulatory significance.

VALUE 114

DESCRIPTION Cranberry bog. In the dataset these are found only near the southwest Washington coast.

VALUE 400

DESCRIPTION Rapids

VALUE 401

DESCRIPTION Water falls

VALUE 402

DESCRIPTION Gravel pit or quarry filled with water

VALUE 406
DESCRIPTION Dam or weir

VALUE 407
DESCRIPTION Canal lock or sluice gate

VALUE 408
DESCRIPTION Spillway

VALUE 410
DESCRIPTION Exposed rock

VALUE 412
DESCRIPTION Water body or wide river

VALUE 414
DESCRIPTION Ditch or canal

VALUE 415
DESCRIPTION Aqueduct

VALUE 417
DESCRIPTION Penstock

VALUE 418
DESCRIPTION Siphon

VALUE 419
DESCRIPTION Channel in water area

VALUE 420
DESCRIPTION Wash or ephemeral drain. These flow water only as a result of storm precipitation.

VALUE 421
DESCRIPTION Lake or pond

VALUE 422
DESCRIPTION Reef

VALUE 423
DESCRIPTION Sand or gravel in open water

VALUE 425
DESCRIPTION Fish ladder

VALUE 466
DESCRIPTION Pier, jetty, breakwater, dock, wharf or causeway

VALUE 902
DESCRIPTION Island

VALUE 999
DESCRIPTION Unknown/ Unclassified

VALUE 103
DESCRIPTION Glacier or permanent snowfield

VALUE 115
DESCRIPTION Flats (tidal, mud, sand, gravel)

VALUE 116
DESCRIPTION Bay, estuary, gulf, ocean or sea

VALUE 117
DESCRIPTION Shoal

FIELD WB_CART_FTR_LABEL_NM ►

FIELD DESCRIPTION

Water body cartographic feature code. Identifies the surface water feature that the water body represents. These codes were developed initially by the USGS.

LIST OF VALUES

VALUE Alkali flat

DESCRIPTION Alkali flat

VALUE Reservoir

DESCRIPTION Reservoir

VALUE Inundation

DESCRIPTION Inundation area

VALUE hatchery

DESCRIPTION Fish hatchery or farm

VALUE Industrial

DESCRIPTION Industrial water impoundment

VALUE Sewage pond

DESCRIPTION Sewage pond or filtration bed

VALUE Tailing pond

DESCRIPTION Tailing pond

VALUE Marsh

DESCRIPTION Marsh, wet area, swamp, bog

VALUE Bog

DESCRIPTION Cranberry bog

VALUE Rapids

DESCRIPTION Rapids

VALUE Falls

DESCRIPTION Water Falls

VALUE Flooded pit

DESCRIPTION Gravel pit or quarry filled with water

VALUE Dam / weir

DESCRIPTION Dam or weir

VALUE Canal/ locks

DESCRIPTION Canal lock or sluice gate

VALUE Spillway

DESCRIPTION Spillway

VALUE Exposed rock

DESCRIPTION Exposed rock

VALUE Water body / river

DESCRIPTION Water body or river

VALUE Ditch/ canal

DESCRIPTION Ditch or canal

VALUE Aqueduct

DESCRIPTION Aqueduct

VALUE Penstock

DESCRIPTION Penstock

VALUE Siphon
DESCRIPTION Siphon

VALUE Channel
DESCRIPTION Channel in water

VALUE Wash
DESCRIPTION Wash or ephemeral drain

VALUE Lake/ pond
DESCRIPTION Lake or pond

VALUE Reef
DESCRIPTION Reef

VALUE Sand/ gravel
DESCRIPTION (NO LONGER USED) Sand or gravel in open water

VALUE Fish ladder
DESCRIPTION Fish ladder

VALUE Pier/ jetty
DESCRIPTION Pier or jetty

VALUE Impoundment
DESCRIPTION Impoundment (non-reservoir)

VALUE Unknown
DESCRIPTION Unknown or Unclassified

VALUE Glacier
DESCRIPTION Glacier or permanent snowfield

VALUE Flats
DESCRIPTION Flats (tidal, mud, sand, gravel)

VALUE Bay/ estuary
DESCRIPTION (NO LONGER USED) Bay, estuary, gulf, ocean or sea

VALUE Shoal
DESCRIPTION Shoal

FIELD WB_HYDR_FTR_CD ►

FIELD DESCRIPTION

Water body hydrographic feature code. Identifies the hydrographic category in which the water body line belongs.

LIST OF VALUES

VALUE LA
DESCRIPTION Lakes and ponds

VALUE ST
DESCRIPTION Double banked stream or river

VALUE SC
DESCRIPTION Double banked stream or river side channel

VALUE DC
DESCRIPTION Ditches, canals, flumes

VALUE PP
DESCRIPTION Pipelines

VALUE IM
DESCRIPTION Impoundments or areas subject to inundation

VALUE WT
DESCRIPTION Wet Area. These generally originated as swamps and marshes scanned from USGS 1: 24,000 topographic maps. Wet areas are not classified by the WAC 222-16-035 wetland typing system ; they have no regulatory significance.

VALUE IW
DESCRIPTION Impoundment wet areas.

VALUE GL
DESCRIPTION Glacier or permanent snowfield

VALUE IS
DESCRIPTION Islands

VALUE UN
DESCRIPTION Unknown or Unclassified

VALUE ES
DESCRIPTION Bays and estuaries

FIELD WB_HYDR_FTR_LABEL_NM ►

FIELD DESCRIPTION

Water body hydrographic feature label. Identifies the hydrographic category in which the water body line belongs.

LIST OF VALUES

VALUE Lakes/ ponds
DESCRIPTION Lakes and ponds

VALUE Streams/Rivers
DESCRIPTION Double banked stream or river

VALUE Side channel
DESCRIPTION Double banked stream or river side channel

VALUE Ditches
DESCRIPTION Ditches, canals, flumes

VALUE Pipelines
DESCRIPTION Pipelines and water conveyance structures

VALUE Impoundments
DESCRIPTION Impoundments or areas subject to inundation

VALUE Wet areas
DESCRIPTION Wet Area. These generally originated as swamps and marshes scanned from the USGS 1: 24,000 topographic maps. Wet areas are not classified by the WAC 222-16-035 wetland typing system; they have no regulatory significance.

VALUE Impoundment wet areas
DESCRIPTION Impounded wet areas. In the dataset these are found only near the southwest Washington coast.

VALUE Glaciers
DESCRIPTION Glacier or permanent snowfield

VALUE Islands
DESCRIPTION Islands

VALUE Unknown
DESCRIPTION Unknown or Unclassified

VALUE Estuaries

DESCRIPTION Bays and estuaries

FIELD WB_PERIOD_CD ►

FIELD DESCRIPTION

Water body periodicity code. This is a classification for water bodies in terms of the seasonal behavior of the feature or in terms of its surface flow.

LIST OF VALUES

VALUE EPH

DESCRIPTION Ephemeral. Water body that exists only as a result of storm precipitation.

VALUE INT

DESCRIPTION Intermittent or seasonal. Water body that is dry during certain times of the year.

VALUE PER

DESCRIPTION Perennial. Water body that essentially exists year round

VALUE UNK

DESCRIPTION Unknown or Unclassified. Used when condition information is unknown or unclassified

FIELD WB_GNIS_NM ►

FIELD DESCRIPTION

Water body Geographic Names Information System (GNIS) name. The name of the represented feature in the USGS GNIS database (<http://geonames.usgs.gov/domestic/index.html>). Not all features will have a GNIS name and number, but all features with GNIS names will have GNIS numbers and vice versa. The WB_GNIS_NM applies to the surface water feature, often a whole water body. Each arc composing the named feature will have the same GNIS name and number. Names entered into GNIS have been approved by the US Board on Geographic Names. When the Washington State Board on Geographic Names approves a name, the proposal is forwarded on to the US Board for their review. There are rare cases where the WA and US Board disagree, and in that case, the Washington name is not entered into GNIS. DNR is aware of one such disagreement: Crater Glacier (US Board) vs. Tultuson Glacier (WA Board).

FIELD WB_GNIS_NR ►

FIELD DESCRIPTION

Water body Geographic Names Information System (GNIS) number. The identifier number assigned to each named feature in the USGS GNIS database (<http://geonames.usgs.gov/domestic/index.html>). This number is used to insert and/ or update water body names stored in the framework hydrography database. Not all features will have a GNIS name and number, but all features with GNIS names will have GNIS numbers and vice versa. WB_GNIS_NR are unique to each named surface water feature, not to each individual line segment.

FIELD FP_WTRTY_EDIT_DT ►

FIELD DESCRIPTION

Forest Practices water type edit date. The date of the Forest Practices water type was last edited. Used only in conjunction with the water typing system implemented 3/1/2005 western and 3/1/2006 eastern Washington. These are the earliest dates possible for this field for western Washington and eastern Washington. This field will be updated whenever a water type modification form is processed, but not for edits outside of the form. (Yet to be determined)

FIELD FP_WTRTY_CD ►

FIELD DESCRIPTION

Forest Practices water type code. DNR Forest Practices water type codes as described in WAC 222-16-031, interim water typing system, prior to 3/1/2026. This water typing system was implemented in Western Washington March 1, 2005, and in Eastern Washington March 1, 2006. The water typing system changed to WAC 222-16-030 when 222-16-031 was repealed, effective 3/1/2026. The water type code is based on the Forest Practices Rules, Forest Practices Board Manual Section 13 field surveys (prior to March 1, 2026), Forest Practices Board Manual Section 23 fish habitat assessment methodology field surveys (starting 3/1/2026), and a multi-parameter, field verified geographic information system (GIS) logistic regression model. The water typing model is based on thousands of field surveys of fish presence and fish habitat. Other model parameters are gradient, elevation, basin size and average annual precipitation derived from the US Geological Survey's digital elevation model (DEM) for the state of Washington. Technical considerations required that the model be developed on a 'virtual' water body

network system derived from the DEM database. The DEM-based model results were then transferred to the DNR's hydrographic GIS 'map' (WBHYDRO) (also known as the water type map) in order to implement the new letter water type codes. Qualifying field observations over-ride model results. DNR water types are intended solely for the implementation of the forest practices rules (WAC 222).

LIST OF VALUES

VALUE S

DESCRIPTION Type S water as defined in WAC 222-16-031 (1), or WAC 222-16-030 (1) as of 3/1/2026.

VALUE F

DESCRIPTION Type F water as defined in WAC 222-16-031 (2) and (3), or WAC 222-16-030 (2) as of 3/1/2026.

VALUE N

DESCRIPTION Type N water as defined in WAC 222-16-031 (4) and (5), or WAC 222-16-030 (4) as of 3/1/2026.

VALUE U

DESCRIPTION Letter 'U' indicates that the Forest Practices water type is unknown. May be one of the following: Un-modeled water body that was formerly untyped/ unknown (former 'type 9') and remains unverified. A water body may or may not exist on ground, and water type has not been assigned.

VALUE X

DESCRIPTION Letter 'X' indicates that the feature cannot be assigned a Forest Practices water type. 'X' indicates non-typed water per WAC 222-16-031, or 222-16-030 as of 3/1/2026. One of the following: (1) mapped feature (field verified or verified by other means) not meeting the definition of a typed water as set forth in WAC 222-16-031, or 222-16-030 as of 3/1/2026, and, therefore, having no Forest Practices water type designation. These may include seasonal streams that are not physically connected by an above-ground channel system to Forest Practices type S, F, or Np waters; dry draws; swales; ditches and canals designed solely for irrigation purposes (but not portions of channelized natural streams that may be also used for irrigation purposes) (WB_LN_TYPE_CD = 10); or (2) used to indicate water body deleted from the water type map but remaining in the database to maintain network connectivity (WB_LN_TYPE_CD = 5); or (3) verified subsurface connector (WB_LN_TYPE_CD = 5) ; or (4) an artificial connector (WB_LN_TYPE_CD = 5).

FIELD FP_PERIOD_CD ►

FIELD DESCRIPTION

Forest Practices periodicity code. Indicates water body periodicity as defined in WAC 222-16-031 (4) and (5). Used only with the Forest Practices WAC 222-16-031, interim water typing system where FP_WTRTY_CD = N. The FP_WTRTY_CD (N) combined with the FP_PERIOD_CD (p or s) make up the " Np" and " Ns" water types. Note that the Np / Ns break is determined by on-the-ground observation only. There has been no direct translation of the former type 4 and 5 to the new types Np and Ns. When a forest practice activity is proposed the applicant should identify the perennial (Np) and seasonal (Ns) water bodies on their Forest Practices Activity Map when possible. Np and Ns are shown on the FPARS maps wherever they have been determined. Most FP_PERIOD_CD values are "u" (unknown) because the Np / Ns determination has not been made.

LIST OF VALUES

VALUE p

DESCRIPTION Perennial. Waters that do not go dry during any time of a year of normal rainfall. This value combined with the FP_WTRTY_CD (N) makes up the water type Np. 'p' only shown on the water type map when submitted on a WTMF since the adoption of the letter water type codes. WAC 222-16-031 (4) and WAC 222-16-030 (3).

VALUE s

DESCRIPTION Seasonal. Waters where surface flow is not present for at least some portion of a normal year of rain. This value combined with the FP_WTRTY_CD (N) make up the water type Ns. 's' only shown on the water type map when submitted on a WTMF since the adoption of the letter water type codes.

VALUE u

DESCRIPTION Unknown or unclassified.

FIELD FP_PERIOD_LABEL_NM ►

FIELD DESCRIPTION

Forest Practices periodicity label. Indicates water body periodicity as defined in WAC 222-16-031 (4) and (5). Used only with the Forest Practices WAC 222-16-031, interim water typing system where FP_WTRTY_CD = N. The FP_WTRTY_CD (N) combined with the FP_PERIOD_CD (p or s) make up the " Np" and " Ns" water types. Note that the Np / Ns break is determined by on-the-ground observation only. There has been no direct translation of the former type 4 and 5 to the new types Np and Ns. When a forest practice activity is proposed the applicant must identify the perennial (Np) and seasonal (Ns) water bodies on their Forest Practices Activity Map. Np and Ns are shown on the FPARS maps wherever

they have been determined. Most FP_PERIOD_CD values are " u" (unknown) because the Np / Ns determination has not been made.

LIST OF VALUES

VALUE Perennial

DESCRIPTION Perennial. Waters that do not go dry during any time of a year of normal rainfall. This value combined with the FP_WTRTY_CD (N) makes up the water type Np. 'p' only shown on the water type map when submitted on a WTMF since the adoption of the letter water type codes. WAC 222-16-031(4) and WAC 222-16-030(3).

VALUE Seasonal

DESCRIPTION Seasonal. Waters where surface flow is not present for at least some portion of a normal year of rain. This value combined with the FP_WTRTY_CD (N) make up the water type Ns. 's' only shown on the water type map when submitted on a WTMF since the adoption of the letter water type codes.

VALUE Unknown

DESCRIPTION Unknown or unclassified.

FIELD FP_VER_CD ►

FIELD DESCRIPTION

Forest Practices verification code. Identifies the water typing survey method used when assigning a water type to a water body segment. All such surveys are documented by an approved water type modification form (WTMF). For use only with the Forest Practices water typing system. See FP_WTRTY_SRC_DESC for source of water types not assigned by a survey method. FP_VER_CD codes 'B', 'P', or 'N' only apply to water bodies surveyed since 3/1/2005.

LIST OF VALUES

VALUE P

DESCRIPTION Water type based upon physical criteria only. This means only the physical characteristics specifically listed in WAC 222-16-031 (3) (b), or WAC 222-16-030 (2) (d) (i) as of 3/1/2026. Waters meeting these listed characteristics are presumed to have fish use. FP_VER_CD codes 'B', 'P', or 'N' only apply to water bodies surveyed since 3/1/2005.

VALUE B

DESCRIPTION Water type based upon biological assessment. This may be one or more of the following: 1. fish observed, 2. the survey followed the Guidelines for Determining Fish Use (Board Manual, Section 13, Part 4), i.e. " protocol", 3. the survey followed the Guidelines for Determining Fish Use (Board Manual, Section 13, Part 6), i.e. an " alternative protocol" that was documented prior to the survey was used, 4. as part of an ID Team , a WDFW or tribal biologist agreement with the proposal is documented, 5. If the water body does not meet the minimum pool requirements for a protocol survey (Board Manual, Section 13, Part 4), and this is documented, then the survey is following protocol and is considered a " biological assessment," 6. the survey followed the Guidelines for Field Protocol to Locate Mapped Divisions between Stream Types and Perennial Stream Identification (Board Manual, Section 23), i.e. "FHAM". FP_VER_CD codes 'B', 'P', or 'N' only apply to water bodies surveyed since 3/1/2005.

VALUE N

DESCRIPTION Water type not verified by either physical criteria or biological assessment. FP_VER_CD codes 'B', 'P', or 'N' only apply to water bodies surveyed since 3/1/2005.

VALUE U

DESCRIPTION Method of water type determination is unknown.

FIELD FP_VER_LABEL_NM ►

FIELD DESCRIPTION

Forest Practices verification label. Identifies the water typing survey method used when assigning a water type to a water body segment. All such surveys are documented by an approved water type modification form (WTMF). For use only with the Forest Practices water typing system. See FP_WTRTY_SRC_DESC for source of water types not assigned by a survey method. FP_VER_CD codes 'B', 'P', or 'N' only apply to water bodies surveyed since 3/1/2005.

LIST OF VALUES

VALUE Physical

DESCRIPTION Water type based upon physical criteria only. This means only the physical characteristics specifically listed in WAC 222-16-031 (3) (b), or WAC 222-16-030 (2) (d) (i) as of 3/1/2026. Waters meeting these listed characteristics are presumed to have fish use. FP_VER_CD codes 'B', 'P', or 'N' only apply to water bodies

surveyed since 3/1/2005.

VALUE Biological

DESCRIPTION Water type based upon biological assessment. This may be one or more of the following: 1. fish observed, 2. the survey followed the Guidelines for Determining Fish Use (Board Manual, Section 13, Part 4), i.e. " protocol", 3. the survey followed the Guidelines for Determining Fish Use (Board Manual, Section 13, Part 6), i.e. an " alternative protocol" that was documented prior to the survey was used, 4. as part of an ID Team , a WDFW or tribal biologist agreement with the proposal is documented, 5. If the water body does not meet the minimum pool requirements for a protocol survey (Board Manual, Section 13, Part 4), and this is documented, then the survey is following protocol and is considered a " biological assessment," 6. the survey followed the Guidelines for Field Protocol to Locate Mapped Divisions between Stream Types and Perennial Stream Identification (Board Manual, Section 23), i.e. "FHAM". FP_VER_CD codes 'B', 'P', or 'N' only apply to water bodies surveyed since 3/1/2005.

VALUE Not Verified

DESCRIPTION Water type not verified by either physical criteria or biological assessment. FP_VER_CD codes 'B', 'P', or 'N' only apply to water bodies surveyed since 3/1/2005.

VALUE Unknown

DESCRIPTION Method of water type determination is unknown.

FIELD SL_WTRTY_CD ►

FIELD DESCRIPTION

State Lands water type code. A classification code used to support the DNR State Trust Lands Habitat Conservation Plan (HCP), effective September 1997. See <http://www.dnr.wa.gov/hcp/index.html>. Used in conjunction with the SL_WTRTY_EDIT_DT.

LIST OF VALUES

VALUE 1

DESCRIPTION Shorelines of the state. Type 1 water as defined by the DNR State Lands HCP. All waters, within their ordinary high- water mark, as inventoried as " shorelines of the state" under chapter 90.58 RCW.

VALUE 2

DESCRIPTION Waters with high fish, wildlife, or human use. Type 2 water as defined by the DNR State Lands HCP. Segments of natural waters which are not classified as Type 1 Water and have a high fish, wildlife or human use.

VALUE 3

DESCRIPTION Waters with moderate fish, wildlife, or human use. Type 3 water as defined by the DNR State Lands HCP. Segments of natural waters which are not classified as Type 1 or Type 2 Waters and have a moderate to slight fish, wildlife, or human use.

VALUE 4

DESCRIPTION Perennial non- fish habitat water body. Type 4 water as defined by the DNR State Lands HCP. All Segments of natural waters within the bankfull width of defined channels that are perennial nonfish habitat water bodies.

VALUE 5

DESCRIPTION Seasonal non- fish habitat water body. Type 5 water as defined by the DNR State Lands HCP. All Segments of natural waters within the bankfull width of defined channels that are not Type 1, 2, 3, or 4 Waters.

VALUE 9

DESCRIPTION Unclassified water feature.

FIELD SL_WTRTY_EDIT_DT ►

FIELD DESCRIPTION

State Lands water type edit date. The date the State Trust Lands Habitat Conservation Plan (HCP) Water Type was last edited. Used in conjunction with the SL_WTRTY_CD.

FIELD FP_WTRTY_APPR_DT ►

* **ALIAS** FP_WTRTY_APPR_DT

* **DATA TYPE** Date

* **WIDTH** 36

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Forest Practices approval date. The date of Forest Practices approval of the Water Type Modification Form associated with the water body segment. Water Type Modification Forms are the means by which changes to the database are proposed.

FIELD FTR_MOD_LABEL_NM ►

FIELD DESCRIPTION

Feature modification label. Identifies the type of change that occurred to the hydrography water shoreline feature. Tracks the type of modification performed on the database.

Intended to distinguish those features that would be updated in the Framework dataset during a transaction if an update process was in place.

LIST OF VALUES

VALUE Addition

DESCRIPTION Addition of spatial feature

VALUE Deletion

DESCRIPTION Deletion of existing spatial features. Documents the historical ID, which maybe referenced in an orphaned event row that will have no matching spatial record. (Code value only valid with PNW Hydrography Framework Data Model in ESRIDynamic Segmentation form at)

VALUE Update

DESCRIPTION Update of existing spatial feature

FIELD FTR_MOD_CD ►

FIELD DESCRIPTION

Feature modification code. Identifies the type of change that occurred to the water feature.

LIST OF VALUES

VALUE ADD

DESCRIPTION Addition of spatial feature

VALUE DEL

DESCRIPTION Deletion of existing spatial features. Documents the historical ID, which maybe referenced in an orphaned event row that will have no matching spatial record. (Code value only valid with PNW Hydrography Framework Data Model in ESRIDynamic Segmentation form at)

VALUE UPD

DESCRIPTION Update of existing spatial feature

FIELD FTR_INPUT_LABEL_NM ►

FIELD DESCRIPTION

Feature input label. The manner in which the hydrography water body data is entered or updated in the spatial database. These codes can be found in the associated lookup table.

LIST OF VALUES

VALUE Automatic

DESCRIPTION Automated via computer software

VALUE Scan

DESCRIPTION Scanning

VALUE Digitize

DESCRIPTION Tablet digitizing

VALUE Coord File

DESCRIPTION Digital spatial or coordinate file

VALUE Auto

DESCRIPTION Automatic line tracing

VALUE Heads- up

DESCRIPTION Heads- up (on- screen) digitizing

VALUE Unknown

DESCRIPTION Unknown or unspecified map feature input method

Hide Field FTR_INPUT_LABEL_NM ▲

FIELD FTR_INPUT_CD ►

FIELD DESCRIPTION

Feature input code. The manner in which the hydrography water body data is entered or updated in the spatial database. These codes can be found in the associated lookup table.

LIST OF VALUES

VALUE 1

DESCRIPTION Automatic via computer software

VALUE 2

DESCRIPTION Scanning

VALUE 3

DESCRIPTION Tablet digitizing

VALUE 4

DESCRIPTION Digital spatial or coordinate file

VALUE 5

DESCRIPTION Automatic line tracing

VALUE 6

DESCRIPTION Heads- up (on- screen) digitizing

VALUE 99

DESCRIPTION Unknown or unspecified map feature input method

FIELD FTR_INTRP_LABEL_NM ►

FIELD DESCRIPTION

Feature interpretation label. The methodology used to compose the hydrography water body information and how it was derived prior to data entry into the spatial coverage

LIST OF VALUES

VALUE Photogram

DESCRIPTION Photogrammetric interpretation

VALUE GPS

DESCRIPTION Global Position System (GPS)

VALUE Photos

DESCRIPTION Photo interpretation

VALUE Crenulation

DESCRIPTION Interpretation of water bodies from contour crenulation

VALUE Modeling

DESCRIPTION Surface flow modeling

VALUE Transect

DESCRIPTION Transect along a stream channel

VALUE Source map

DESCRIPTION Existing line work on source map

VALUE Best guess

DESCRIPTION Water body not directly observable so water body location is estimated

VALUE Combination

DESCRIPTION Combination of 3,4, 5 and sometimes 8

VALUE Unspecified

DESCRIPTION Unspecified/ Unknown

FIELD FTR_INTRP_CD ►

FIELD DESCRIPTION

Feature interpretation code. The methodology used to compose the hydrography water body information and how it was derived prior to data entry into the spatial coverage

LIST OF VALUES

VALUE 1

DESCRIPTION Photogrammetric interpretation

VALUE 2

DESCRIPTION Global Position System (GPS)

VALUE 3

DESCRIPTION Photo- interpretation

VALUE 4

DESCRIPTION Interpretation of water bodies from contour crenulation

VALUE 5

DESCRIPTION Surface flow modeling

VALUE 6

DESCRIPTION Transect along a stream channel

VALUE 7

DESCRIPTION Existing line work on source map

VALUE 8

DESCRIPTION Water body not directly observable so water body location is estimated

VALUE 99

DESCRIPTION Unknown or Unclassified

VALUE 9

DESCRIPTION Combination of 3, 4, 5, and sometimes 8.

FIELD FTR_SRC_LABEL_NM ►

FIELD DESCRIPTION

Feature source label. The compilation map or image source used when adding or updating hydrography data.

LIST OF VALUES

VALUE USGS Map

DESCRIPTION USGS Topographic Map

VALUE Orthophoto

DESCRIPTION Orthophotography

VALUE Aerial photo

DESCRIPTION Aerial Photograph

VALUE MSS Imagery

DESCRIPTION Multi- Spectral Satellite Imagery

VALUE Field Survey

DESCRIPTION Field Survey of on the ground observation

VALUE County/ City

DESCRIPTION County or City Planning Map

VALUE Field Map

DESCRIPTION Field Map

VALUE DEM
DESCRIPTION Digital Elevation Model (DEM)

VALUE Radar Image
DESCRIPTION Radar Imagery

VALUE Laser Image
DESCRIPTION Laser Imagery

VALUE CFF
DESCRIPTION Cartographic Feature File (CFF)

VALUE NWI Map
DESCRIPTION National Wetlands Inventory (NWI) Map

VALUE Imagery
DESCRIPTION Imagery - Unspecified Source

VALUE Combination
DESCRIPTION Combination of Lidar and Photo

VALUE NED/ Photo
DESCRIPTION NED/ Photo

VALUE Interpret
DESCRIPTION Intuitive Interpretation

VALUE Unknown
DESCRIPTION Unknown or Unclassified

FIELD FTR_SRC_CD ►

FIELD DESCRIPTION

Feature source code. The compilation map or image source used when adding or updating hydrography data.

LIST OF VALUES

VALUE 1
DESCRIPTION USGS Topographic Map

VALUE 2
DESCRIPTION Orthophotography

VALUE 3
DESCRIPTION Aerial Photograph

VALUE 4
DESCRIPTION Multi- Spectral Satellite Imagery

VALUE 5
DESCRIPTION Field survey or on- the- ground observation

VALUE 6
DESCRIPTION Planning Map

VALUE 7
DESCRIPTION Field Map, Forest Practices Water Type Map

VALUE 8
DESCRIPTION Digital Elevation Model (DEM), NED

VALUE 9
DESCRIPTION Radar Imagery

VALUE 10
DESCRIPTION Laser Imagery, LiDAR

VALUE 11

DESCRIPTION Cartographic Feature File (CFF)

VALUE 12

DESCRIPTION National Wetlands Inventory (NWI) Map

VALUE 13

DESCRIPTION Imagery - Unspecified

VALUE 99

DESCRIPTION Unknown or Unclassified

VALUE 15

DESCRIPTION Combination of LiDAR and orthophoto

VALUE 16

DESCRIPTION Combination of NED and orthophoto

VALUE 17

DESCRIPTION Intuitive interpretation

Hide Field FTR_SRC_CD ▲

FIELD FTR_SRC_DT ►

FIELD DESCRIPTION

Feature source date. The date of the compilation map or image source used when adding or updating hydrography data. January 1, 1753, is used when source date is unknown or unavailable. If the source year is known, but month and date are unknown then January 1 is used as a default.

FIELD FTR_SRCSCALE_CD ►

FIELD DESCRIPTION

Feature source scale code.

LIST OF VALUES

VALUE 0

DESCRIPTION Scale of data source is unknown

VALUE 4800

DESCRIPTION Scale of data source is 1: 4,800

VALUE 12000

DESCRIPTION Scale of data source is 1: 12, 000

VALUE 24000

DESCRIPTION Scale of data source is 1: 24, 000

FIELD FTR_ORG_CD ►

FIELD DESCRIPTION

Feature organization code. The organization that compiled, entered, updated or deleted the hydrography water body data. This list will grow as new organizations begin to add or update information and are certified by the clearinghouse. Contact the Clearinghouse Manager will maintain a list of organizations. All additions or corrections should be submitted to the Clearinghouse Manager.

LIST OF VALUES

VALUE BCMELP

DESCRIPTION British Columbia Ministry of Environment, Lands and Parks

VALUE CoClrkWa

DESCRIPTION Clark County, WA

VALUE CoKingWa

DESCRIPTION King County, WA

VALUE CoPierWa

DESCRIPTION Pierce County, WA

VALUE CoSnohWa
DESCRIPTION Snohomish County, WA

VALUE CoSpokWa
DESCRIPTION Spokane County, WA

VALUE CoThursWa
DESCRIPTION Thurston County, WA

VALUE CoYakWa
DESCRIPTION Yakima County, WA

VALUE CtySeaWa
DESCRIPTION City of Seattle, WA

VALUE CtyOlyWa
DESCRIPTION City of Olympia, WA

VALUE CtyVanWa
DESCRIPTION City of Vancouver, WA

VALUE IRICC
DESCRIPTION Intergovernmental Resource Information Coordinating Council

VALUE LvwFbr
DESCRIPTION Longview Fiber Company

VALUE NMFS
DESCRIPTION National Marine Fisheries Service

VALUE NRCS
DESCRIPTION Natural Resources Conservation Service

VALUE NWIFC
DESCRIPTION Northwest Indian Fisheries Commission

VALUE Or DEQ
DESCRIPTION OR Dept. of Environmental Quality

VALUE PSRC
DESCRIPTION Puget Sound Regional Council

VALUE Ray nr
DESCRIPTION Rayonier Timber Company

VALUE Smpsn
DESCRIPTION Simpson Timber Company

VALUE USACE
DESCRIPTION U.S. Army Corps of Engineers

VALUE USBLM
DESCRIPTION U.S. Bureau of Land Management

VALUE USBOR
DESCRIPTION U.S. Bureau of Reclamation

VALUE USBPA
DESCRIPTION U.S. Bonneville Power Administration

VALUE USEPA
DESCRIPTION U.S. Environmental Protection Agency

VALUE USEPA- r 10
DESCRIPTION U.S. Environmental Protection Agency - Region 10

VALUE USFS
DESCRIPTION U.S. Forest Service

VALUE USFS- Oly
DESCRIPTION U.S. Forest Service - Olympic

VALUE USFWS
DESCRIPTION U.S. Fish and Wildlife Service

VALUE USGS
DESCRIPTION U.S. Geological Survey

VALUE USGS- NMD
DESCRIPTION U.S. Geological Survey - National Mapping Division

VALUE USNPS
DESCRIPTION U.S. National Park Service

VALUE WaDFW
DESCRIPTION Washington Department of Fish and Wildlife

VALUE WaDNR
DESCRIPTION Washington State Department of Natural Resources

VALUE WaDOT
DESCRIPTION Washington Department of Transportation

VALUE WaECY
DESCRIPTION Washington Department of Ecology

VALUE Weyhsr
DESCRIPTION Weyerhaeuser Company

VALUE Sewall
DESCRIPTION James W. Sewall Company, Old Town, ME. Sewall is the conversion project vendor (2003-2004).

VALUE CoClalWa
DESCRIPTION Clallam County, Washington

VALUE WildFishCons
DESCRIPTION Wild Fish Conservancy

VALUE CtySpokWa
DESCRIPTION city of Spokane

FIELD SL_WTRTY_LABEL_NM ►

FIELD DESCRIPTION

State Lands water type label. A classification code used to support the DNR State Trust Lands Habitat Conservation Plan (HCP), effective September 1997. See <http://www.dnr.wa.gov/hcp/index.html>. Used in conjunction with the SL_WTRTY_EDIT_DT.

LIST OF VALUES

VALUE Type 1

DESCRIPTION Shorelines of the state. Type 1 water as defined by the DNR State Lands HCP. All waters, within their ordinary high- water mark, as inventoried as " shorelines of the state" under chapter 90.58 RCW.

VALUE Type 2

DESCRIPTION Waters with high fish, wildlife, or human use. Type 2 water as defined by the DNR State Lands HCP. Segments of natural waters which are not classified as Type 1 Water and have a high fish, wildlife or human use.

VALUE Type 3

DESCRIPTION Waters with moderate fish, wildlife, or human use. Type 3 water as defined by the DNR State Lands HCP. Segments of natural waters which are not classified as Type 1 or Type 2 Waters and have a

moderate to slight fish, wildlife, or human use.

VALUE Type 4

DESCRIPTION Perennial non- fish habitat water body. Type 4 water as defined by the DNR State Lands HCP. All Segments of natural waters within the bankfull width of defined channels that are perennial nonfish habitat water bodies.

VALUE Type 5

DESCRIPTION Seasonal non- fish habitat water body. Type 5 water as defined by the DNR State Lands HCP. All Segments of natural waters within the bankfull width of defined channels that are not Type 1, 2, 3, or 4 Waters.

VALUE Type 9

DESCRIPTION Unclassified water feature.

FIELD FP_REF_ID ►

FIELD DESCRIPTION

Forest Practices Reference Identification number. Jurisdiction Reference Number. Used as the water type modification form (WTMF) document number. This is the tracking number used to uniquely identify WTMF entered into the database since the Fall of 2000. WTMF are the means by which changes to the DNR HYDRO GIS database (also known as the water type map) are proposed. There has been an approved water type modification form (WTMF) if FP_REF_ID has a value in one of the following three formats: FP_REF_ID = '0000WW1234' where 0000 is a placeholder in the database, WW is two-digit WRIA#, and 1234 is sequential number. This form at used Fall 2000 to Spring 2008. (2) FP_REF_ID = 'RRWWYY1234' where RR is two letter Jurisdiction abbreviation, WW is two-digit WRIA# , YY is two digit year, and 1234 is sequential number (starting at 0001 at start of each year). This is the Jurisdiction Reference Number which is assigned to all WTMF beginning Spring 2008. (3) If FP_REF_ID is in form at '0000WW0000' or there is no value, then there is no WTMF and there has been no water typing survey or hydro update unless FP_WTRTY_1975_DT is greater than 1992.

FIELD PDF_LOCATION ►

FIELD DESCRIPTION

PDF Location Hyperlink. A hyperlink field with url to the location of the PDF of completed Water Type Modification Form (WTMF). Hyperlinks function within DNR only.

FIELD EDIT_NM_CD ►

FIELD DESCRIPTION

Editor name code. Internal DNR user identification code. Identifies which DNR employee last edited the database spatial and/ or tabular record. For internal DNR use only.

FIELD EDIT_DT ►

FIELD DESCRIPTION

Edit date. The date of the last edit either to the linework, or to the attributes

FIELD WB_SUBTYPE_CD ►

FIELD DESCRIPTION

Water course subtype code. A number representing a category of water features containing a specific set of parameters. For example, all water features of subtype 1001 have a WB_HYDR_FTR_CD = ST, WB_CART_FTR_CD = 412, WB_LN_TYPE_CD = 10, and WB_FLOW_PATH_CD = 3. These categories or subtypes are based on physical characteristics or for GIS representation requirements.

LIST OF VALUES

VALUE 2001

DESCRIPTION Lake or pond

VALUE 2002

DESCRIPTION Impoundment

VALUE 2003

DESCRIPTION Fish hatchery or farm

VALUE 2004

DESCRIPTION Alkali flat

VALUE 2101

DESCRIPTION Double-banked water body

VALUE 2102

DESCRIPTION Double-banked side channel

VALUE 2103

DESCRIPTION Double-banked ditch

VALUE 2104

DESCRIPTION Double-banked pipeline

VALUE 2105

DESCRIPTION Reservoir

VALUE 2106

DESCRIPTION Wet area

VALUE 2107

DESCRIPTION Impounded wet area

VALUE 4001

DESCRIPTION Inundation area

VALUE 4002

DESCRIPTION Glacier or permanent snowfield

VALUE 4003

DESCRIPTION Island

VALUE 4004

DESCRIPTION Man-made feature

VALUE 5001

DESCRIPTION Bay, Estuary, ocean

VALUE 9001

DESCRIPTION Miscellaneous water body

Hide Field WB_SUBTYPE_CD ▲

FIELD WB_SUBTYPE_LABEL_NM ►

FIELD DESCRIPTION

Water course subtype label. A label representing a category of water features containing a specific set of parameters. For example, all water features of subtype 2001 have a WB_HYDR_FTR_CD = LA, WB_CART_FTR_CD = 412. These categories or subtypes are based on physical characteristics or for GIS representation requirements.

LIST OF VALUES

VALUE Lake

DESCRIPTION Lake or pond

VALUE Impoundment

DESCRIPTION Impoundment

VALUE Fish Hatchery

DESCRIPTION Fish hatchery or farm

VALUE Alkali flat

DESCRIPTION Alkali flat

VALUE Dbl-bnk strm

DESCRIPTION Double-banked stream or river

VALUE Dbl-bnk SC
DESCRIPTION Double-banked side channel

VALUE Dbl-bnk DC
DESCRIPTION Double-banked ditch

VALUE Dbl-bnk PP
DESCRIPTION Double-banked pipeline

VALUE Reservoir
DESCRIPTION Reservoir

VALUE Wet area
DESCRIPTION Wet area

VALUE Imp wet area
DESCRIPTION Impounded wet area

VALUE Inundat area
DESCRIPTION Inundation area

VALUE Glacier
DESCRIPTION Glacier or permanent snowfield

VALUE Island
DESCRIPTION Island

VALUE Man-made feature
DESCRIPTION Man-made feature

VALUE Bay/ocean
DESCRIPTION Bay, Estuary, ocean

VALUE Misc wtrbdy
DESCRIPTION Miscellaneous water body