



Instructions for the Water Type Modification Form

The Water Type Modification Form (WTMF) and the Water Type Map are used to propose changes to the Department of Natural Resources (DNR) Water Typing Maps (also known as the DNR hydro layer). Refer to WAC 222-16-0301.

Incomplete forms will be returned to the proponent. The proponent will be notified when a decision has been made.

Submit a separate Water Type Modification Form for each water type change. Only one F/N break may be submitted per form. Modifications must be shown on a Water Type Map.

Mapping Standards

- Proponents may use one (1) map for multiple changes (add, remove, change of location, change of water type, other) to the hydro layer.
- Information must be displayed clearly.
- Proponents who choose to use a map other than the DNR Water Type Map must follow the Alternate Map Standards on page 9.
- Label each modification referring to the accompanying form and identifier.
- If hand-drawn, use blue or black permanent ink.
- Do not use highlighters.

Question 1. Proponent, Surveyor, and Landowner

Proponent Information. The proponent is the person submitting the Water Type Modification Form. Enter the name of the proponent, organization they are affiliated with, mailing address, telephone number, and email address.

Surveyor Information. The surveyor is the person who completed the stream survey. If the surveyor is the same person as the proponent, you can check the "Same as Proponent" box. If not, enter the name of the surveyor, organization they are affiliated with, mailing address, telephone number, and email address.

Landowner Information. The landowner is the person who has legal control of the forest land. If the landowner is the same person as the proponent, you can check the "Same as Proponent" box. If not, enter the name of the landowner, mailing address, telephone number, and email address.

Question 2. Was landowner notified of the proposed modification? Check 'yes' if the landowner was notified of the proposed water type change or if the proponent is the landowner. Check 'no' if the landowner has not been notified of the proposed water type change.

Question 2a. Do reviewers need access to other properties for the purposes of review? Check 'yes' if reviewers need access to properties, other than the property that includes the segment, for the purposes of this review. Check 'no' if reviewers do not need access to other properties for the purposes of this review.

Question 3. Water type modifications include: *(check all that apply)*

- Adding Typed Waters.** Check this box to add typed waters to the map when there is no water feature shown on DNR's mapping system in the location of the proposed segment. Refer to WAC 222-16-030 for information on water typing.
- Removing Typed Waters.** Check this box if typed waters are shown on DNR's mapping system, but do not exist on the ground or if the water feature does not meet a WAC 222-16-030 definition. Water features not meeting the definition criteria may include pipelines, artificially constructed and actively maintained irrigation ditches, or seasonal streams not physically connected by an above ground channel system to Type S, F, or Np waters.
- Changing Location of Typed Waters.** Check this box if typed waters are mapped incorrectly in DNR's mapping system.
- Changing Water Type.** Check this box if you are changing the water type per WAC 222-16-030. Refer to Forest Practices Board Manual Section 23 for more information on fish use determination.
- Verifying Water Type.** Check this box if you are verifying a stream type shown on the DNR hydro layer. Depending on where the stream segment is, other information may be needed, including location of the Anadromous Fish Floor (AFF) or uppermost point of perennial flow (UMPPF). Include any supporting information in Question 25 or attached documentation. Verification of a modeled water type may not be possible without this information for certain situations.
- Other; Describe.** Check this box and briefly describe what type of water type modification you are proposing. For example: Identifying the Np/Ns break. A description must be included when this box is checked. If you need more space to describe, add further details in Question 25.

Question 4. Enter water segment information:

Water Segment Identifier. Enter an **identifier** for each water segment. The identifier should correspond with the identifier used on the map. Do not use 'S', 'F', 'N', or 'X'. For example: A, E, L, or D1).

Name of Water. Enter the official name of the stream or water body. If unknown, enter 'unknown'. Some waters do not have an official name, in which case this field can be left blank, or enter 'N/A'.

Tributary to. Enter the official name of the major stream or water body that the water segment flows into downstream. If not applicable, enter 'N/A'.

Current Water Type. Enter the existing water type shown on the current DNR hydro layer. If the water body does not currently exist on the DNR hydro layer, enter 'N/A'.

Proposed Water Type. Enter the proposed water type— 'F', 'N', 'Np', or 'Ns' (refer to WAC 222-16-030). If the water body does not exist, enter 'remove'. If the water body is not a typed water according to the definitions in WAC 222-16-030 but should remain on the hydro layer because it connects to a typed water (for example: artificially constructed ditches that are actively used for irrigation, cattle ponds, etc.), enter 'X'. Type S waters may not be changed through a WTMF because these waters are not defined by DNR. Refer to WAC 222-16-030 for water type definitions.

Date(s) of Field Assessment. Enter the date(s) that the field assessment or stream survey was conducted. At a minimum, include the month and year.

Question 5. Enter the legal description of your modification request. Enter the legal description of where the water segment exists (for example, Section 8, Township 12 North, Range 5 West). Enter the county or counties in which the water body is located. If the water segment crosses multiple legal descriptions, enter each legal description on a separate line. A list of multiple section numbers may be entered in the same Section box on one line if the Township and Range are the same for all listed sections.

Question 6. Is the proposed modification associated with a Forest Practices Application/Notification? Check 'yes' if this WTMF is associated with a Forest Practices Application or Notification (FPA/N). If this WTMF is not associated with an FPA/N, check 'no'. If yes, enter the Forest Practices Application Number, if known. If this WTMF is not associated with an FPA/N yet but will be in or within 200' of the proposal area for an FPA/N you intend to submit later, please let DNR staff know so that a decision can be prioritized as needed. Refer to the [Water Type Modification Form Review Process](#) and [Forest Practices Water Type Review Team Guidance](#) for more information on how DNR processes WTMF.

Question 7. Did an interdisciplinary (ID) team meeting occur? If this WTMF is submitted after an interdisciplinary (ID) team meeting, check 'yes'. If this WTMF is not associated with an ID team and does not have an associated Informal Conference Note (ICN), check 'no'. Enter the Informal Conference Note (ICN) number, if known.

Question 8. Change is based on the following (check all that apply):

Water type does not meet the definition of WAC 222-16-030. Describe.

Check this box only if there is a water feature that does not meet the definition outlined in WAC 222-16-030. These features may include pipelines, actively maintained irrigation ditches, or seasonal streams not physically connected by an above-ground channel to Type S, F, or Np waters.

Describe how you arrived at this conclusion. Label the location on the Water Type Map.

Fish Habitat Assessment Method (FHAM) with Electrofishing Protocol Survey (*attach survey info*)

Check this box if the Fish Habitat Assessment Method (FHAM) detailed in Board Manual Section 23 part 1 was used to type the water segment. Refer also to WAC 222-16-0301. If FHAM was implemented, Questions 14 through 22 of this form must be answered.

Interdisciplinary (ID) Team.

Check this box if the proposed change is based upon an Interdisciplinary Team meeting and attach the associated Informal Conference Note from DNR.

End of harvest or property boundary (*note: this is not a type break, but rather to note end/extent of survey*)

Check this box if the stream typing ended at a boundary due to access permission change. This is not usually an actual water type break, though it does help DNR staff to confirm later whether a stream type change was verified or artificial based on access limitations of the surveyor.

Uppermost Point of Perennial Flow (UMPPF) (*only for Type N waters*)

The UMPPF is the most upstream point where water flows all year round and is the upper extent of a Type Np water. There may be intermittently dry portions downstream of this point. The UMPPF typically serves as an Np/Ns break when the stream continues above the UMPPF. Include a description about how the UMPPF was determined in Question 25.

Visual Observation.

Check this box if the proposed change is based on visual observations made in the field.

Incremental Measurements.

Check this box if the proposed change is based on incremental measurements taken in the field. Per WAC 222-16-030(5)(f) proponents of water typing changes are expected to provide at least 10 evenly spaced measurements at point along the stream channel over representative sections of at least 500 feet. Document measurements in Question 12.

Fish Found.

Check this box if fish were found. Indicate which species, if known.

Channel is a Public Water Diversion.

Check this box if there is a public water diversion to more than ten residential or camping units or to a public accommodation facility licensed to serve more than ten people from this water body. The diversion must be a valid appropriation of water as determined by DNR. Attach a copy of Department of Ecology water right or indicate the reference number. Indicate the distance from the diversion and whether the proposed change is upstream or downstream of the diversion. Refer to WAC 222-16-030(2)(e) for more information.

Channel is a Fish Hatchery Diversion.

Check this box if water is diverted from this channel to a fish hatchery. Enter the name of the hatchery. Indicate the

distance from the hatchery and whether the proposed change is upstream or downstream from the hatchery diversion. Refer to WAC 222-16-030(2)(f) for more information.

Channel is within a campground with more than 10 camping units.

Check this box if water is within a campground with more than 10 camping units and the water body comes within 100 feet of a camping unit, trail, or other park improvement. Enter the name of the campground. Refer to WAC 222-16-030(2)(g) for more information.

Question 9. Was the stream segment previously the subject of a protocol survey resulting in a field reviewed and concurred F/N break?

Check 'no' if there is NOT a prior concurred WTMF for this stream segment. Check 'yes' if there is a prior concurred WTMF for this stream segment. If yes, provide prior concurred WTMF reference number. This question is an avenue to update water typing of a stream segment when fish are found upstream of a prior concurred F/N break.

a. Is this modification proposing a change to a previously concurred WTMF due to observed in-field conditions, including observations of fish?

Check 'no' if fish were not observed. Check 'yes' if fish were observed.

Provide the field date(s) and other information about the fish observation(s):

Enter field date(s) and fish observation details. This may include fish species, if known, input from other field personnel, fish habitat characteristic changes, hydrologic changes, etc.

Question 10. Water levels in the survey area were: Using the boxes provided, check whether flows were 'above normal', 'normal', or 'below normal' at the time of the survey. Refer to Board Manual Section 23 parts 1.5.4 and 1.5.5 for resources with data on stream flows and forecasting.

Question 11. Was there a drought declaration issued per RCW 43.83B? Check 'yes' if a drought declaration was issued under the authority of RCW 43.83B. Typically such drought declarations are issued by Department of Ecology. If a drought declaration was not issued, check 'no'.

Describe how stream flows and fish determinations were unaffected by drought conditions. Attach pictures and other relevant information. Drought conditions may alter how species occupy the habitat or fish access into the habitat. Per Board Manual Section 23 part 1.5.5, proponents must document how factors, such as drought, did not affect fish distribution in the stream system. If a drought declaration was issued, or if local drought conditions were present, provide information demonstrating how stream flows and fish use determination were unaffected by drought conditions. Attach any necessary additional information or supporting documentation, including pictures documenting water levels at the time of survey.

Question 12. Use the table below to describe the channel characteristics: Per WAC 222-16-030(5)(f) proponents of water typing changes are expected to provide at least 10 evenly spaced measurements at point along the stream channel over representative sections of at least 500 feet.

Water Segment Identifier. Use Stream Name of Alphabetical Identifier Excluding F,S,N make sure these identifiers are labeled on the map.

Number of Bankfull Width Measurements. Provide the number of measurements you took on the stream segment in this box.

Average Bankfull Width. This number is calculated by dividing the sum of the bankfull width measurements by number of width measurements. This number must be greater than zero.

Average Gradient. This number is calculated by dividing the sum of the gradient measurements by number of gradient measurements.

Average Wetted Width. This number is calculated by dividing the sum of the wetted area measurements by number of wetted area measurements.

Any Ponds or Impoundments greater than or equal to 0.5 Acres? (Y or N). Answer 'yes' (Y) if a pond or impoundment at least 0.5 acre in size is located upstream of the stream segment, even if it is not on the property in question. Answer 'no' (N) if there is no pond or impoundment located above the stream segment, or if all ponds or impoundments upstream are less than 0.5 acre in size.

Example completed Question 12:

Water Segment Identifier	Number of Bankfull Width Measurements	Average Bankfull Width (feet)	Average Gradient (%)	Average Wetted Width (feet)	Any Ponds or Impoundments ≥ 0.5 Acres? (Y or N)
A1	12	6	14	4	N

Question 13. Does the proposed modification include an F/N break? Box 1 no: mark this box if not changing the F/N break of the segment

Check 'no' if you are not proposing an F/N break location for the segment. For example: the entire stream segment is Type F, or you are proposing an Np/Ns break. Check 'yes' if you are proposing an F/N break for the segment.

If no, Questions 21 through 23 of this form do not need to be answered. If yes, Questions 21 through 23 of this form must be answered.

Question 14. How was the Anadromous Fish Floor (AFF) determined? (Check all that apply)

Known anadromous fish data (presumed or documented categories of SWIFD or other sources)

A list of resources for finding known anadromous fish data can be found in Appendix B of Board Manual Section 23.

Physical stream characteristics of biological significance to anadromous fish

Check this box if these conditions are present. Consultation with WDFW, local tribes, or DNR may be useful if you need assistance.

Consultation with DNR, WDFW, Tribes

Check this box if you consulted with at least one of these entities.

Other / not delineated (Justification must be described below when this box is checked)

Check this box if you did not use known anadromous fish data, physical stream characteristics, or consultation to determine the AFF, or if you did not identify the upstream extent of AFF.

a: Describe how these tools were used in the box below. Enter your justification in the text box.

b: Provide the location in decimal degrees for the end of the AFF, if determined. Latitude and longitude can be found with a mapping application or a GPS unit. (Example coordinates: 47.193195, -122.824915)

Question 15. How was the survey initiation point determined?

Upstream extent of Anadromous Fish Floor

Check this box if the survey began at the upstream extent of the Anadromous Fish Floor as determined in Question 14.

Potential Habitat Break upstream of known anadromous fish floor

Check this box if the survey began at a Potential Habitat Break upstream of the Anadromous Fish Floor as determined in Question 14. Refer to WAC 222-16-0301(2) or Board Manual Section 23 part 1.3 for more information.

Potential Habitat Break upstream of known fish presence location which is upstream of the AFF

Check this box if the survey began at a Potential Habitat Break upstream of a point of known fish presence which is above the Anadromous Fish Floor as determined in Question 14. Refer to WAC 222-16-0301(2) or Board Manual Section 23 part 1.3 for more information.

Other:

Check this box if other information was used to determine the survey initiation point (for example: consultation with WDFW or local tribal biologists) and add a description.

Question 16. Are there any artificial fish passage barriers downstream of the surveyed stream segment(s)? (if a fish passage barrier was removed prior to the survey please describe below when and where removal occurred)

Check 'no' if no artificial (includes manmade) barriers are downstream of the stream segment, make sure to check road crossing locations on the stream for undersized culverts. Check 'yes' if there is an artificial (includes manmade) barrier

below the survey area. Refer to Appendix D. of Board Manual Section 23 for more information.

If ‘Yes’, were WDFW, Ecology, or affected tribes consulted prior to surveying above artificial barrier?

Check ‘no’ if none of the listed entities were consulted. Consulting with WDFW, Ecology, and tribes is recommended. Check ‘yes’ if at least one of the listed entities was consulted. Above artificial barriers, physical stream characteristics are used to determine the presumption of fish use unless otherwise approved by DNR following a site-specific consultation with WDFW, Ecology, and affected tribes. Refer to Board Manual Section 23 part 1.5.7 for more information.

Describe consultation and removal information regarding artificial fish passage barriers: Enter a description of any consultation or removal information for artificial fish passage barriers.

Question 17. Are there any natural fish passage barriers downstream of the surveyed stream segment(s)?

Check ‘no’ if barriers are present on stream segment. Check ‘yes’ if at least one barrier is present. If yes, also check a box for type (falls, cascades, bedrock chutes, or other and describe) and enter measurement information. Refer to Board Manual Section 23 for more information about natural barriers and permanent natural obstacles.

Question 18. Were fish observed above the barrier?

Check ‘no’ if fish were not observed above the barrier. Check ‘yes’ if fish were observed above the barrier. This question does not need to be answered if Question 16 and Question 17 were both answered ‘no’.

Question 19. How were fish barriers identified?

Maps. Specify: Check this box if maps or mapping tools were used to identify fish barriers. This may include topographic contour lines or bare earth hillshade layers. Enter information used to identify barriers from map(s).

Field Observations. Check this box if fish barriers were identified by direct observation in the field.

Question 19 does not need to be answered if Question 16 and Question 17 were both answered ‘no’.

Question 20. Describe habitat and fish population conditions upstream and downstream of the natural or artificial fish passage barrier: Enter information about habitat characteristics and any known or observed fish population conditions upstream and downstream of the barrier. Consultation with WDFW, Ecology, and Tribes may be useful to answer this question. This question does not need to be answered if Question 16 and Question 17 were both answered ‘no’.

Question 21. Which Potential Habitat Break criterion was used to determine the F/N break? (select one criterion)

Refer to Board Manual Section 23 part 1.3.2 for detailed guidance on identifying and measuring the different categories of potential habitat breaks (PHBs).

Gradient- check which was used:

Stream segment gradient increase is equal to or greater than 5%. Check this box if gradient average increases by 5% or higher and this poses a significant biological change for the fish species using the system.

Stream Segment gradient increase is equal to or greater than 10%. Check this box if gradient average increases by 10% or higher and this poses a significant biological change for the fish species using the system.

What was the gradient below the potential habitat break? Enter the gradient upstream of the selected Potential Habitat Break (PHB). This should be measured over a distance equal to 20 times the bankfull width (BFW x 20). This number must be greater than zero.

What was the gradient above the potential habitat break? Enter the gradient upstream of the selected PHB. This should be measured over a distance equal to 20 times the bankfull width (BFW x 20). This number must be greater than zero.

Bankfull width (BFW) - check which was used:

Stream segment BFW of two feet or less. Check this box if BFW is 2 feet or narrower.

At a tributary junction, a downstream to upstream BFW decrease of 20% or more. Check this box if a stream junction is present and the average bankfull width of the stream segment decreases 20% or more. This

should be measured over a distance of 20 times the BFW or the full distance possible if this is less than 20 times bankfull width (BFW x 20). While this PHB may be relied upon without the presence of another PHB, to ensure an accurate and biologically justified PHB determination, the use of the PHB should be considered alongside other site-specific habitat indicators, such as corresponding gradient inflections that may not meet the gradient PHB criteria, substrate changes, pool availability, or notable reductions in flow conditions and bankfull depths.

Permanent Natural Obstacles – check which was used.

A vertical obstacle with height equal to or greater than the BFW, but not less than 3 feet. Check this box if this barrier is present. Measure barrier in vertical height, not slope height.

A vertical obstacle with height of 3 feet or greater. Check this box if this barrier is present. Measure barrier in vertical height, not slope height.

A non-vertical obstacle with a step increase of 20% gradient or more, and an elevation increase equal to or greater than the BFW upstream of the obstacle. Check this box if steps in the stream are present that meet this description.

A non-vertical obstacle with a step of 30% gradient or more, and an elevation increase equal to or greater than two times the BFW upstream of the obstacle. Check this box if the steps in the stream are present meet this description.

- a. **Describe why the PHB selected above is appropriate to use at this location. Provide any other clarifying information here or include on attached field data sheets:** Add your justification in the text box. Include all measurements and stream data to justify the F/N break.

Note: A standard mapping symbol for PHBs is included in the mapping standards on page 8 of these instructions. Mapping every PHB is not required but can be useful to show documentation of characteristics along the stream and provide reviewers with detailed information for their review. A PHB that ends up becoming the proposed F/N break should be mapped using the F/N break symbol rather than the PHB symbol.

Question 22. Did you survey at least 0.25 mile upstream of the proposed F/N break?

Check 'no' if you did not survey at least one quarter of a mile upstream of the potential habitat break (PHB) you are proposing as the F/N break. If 'no', justification of why is required. For example: property line was reached before you could survey the required distance. Check 'yes' if you surveyed at least one quarter of a mile upstream of the PHB you are proposing as the F/N break. Refer to Board Manual Section 23 part 1.3.1 (step 4).

Question 23. Describe how the F/N break was marked in the field. (for example: pink flagging, placard, etc.)

Make sure to mark the break so reviewers can find it. Refer to Board Manual Section 23 part 1.3.1 (step 5) for more information.

- a. **Provide the location in decimal degrees for the F/N break.** Latitude and longitude can be found with a mapping application or with a GPS unit. (Example coordinates: 47.193195, -122.824915)

Question 24. Is there evidence of recent disturbance, such as mass wasting (sediment filling the stream channel) or scouring events?

Check 'no' if no evidence of recent disturbance as described is present. Check 'yes' if evidence of recent disturbance is present and describe how the event affected the current stream channel conditions, fish distribution in the stream, and how the proposed F/N break encompasses the full extent of potential or recoverable fish habitat. Include potential effects to upstream extent of fish distribution habitat utilization, and ability to detect fish. Refer to Board Manual Section 23 part 1.5.6 for more information.

Question 25. Provide any additional clarifying information and list attachments. (survey cards, photos and descriptions of PHBs, photo of proposed type break locations, field notes expert reports stationing maps data sources used AFF delineation or survey initiation point, UMPPF observations, access map for reviewers etc.)


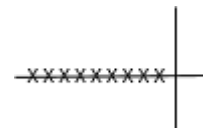









This question is for all additional justifying information to support your water modification. List attachments, if any. Common attachments may include Informal Conference Notes, pictures with scale and descriptions, maps, GIS files, field data sheets, etc. DNR strongly encourages that all relevant field data are included with the WTM package in order to fully explain and justify the proposed changes.

Water Type Modification Form Map Instructions

Water Type Maps are available from the Washington State Department of Natural Resources (DNR) website at <http://www.dnr.wa.gov/forest-practices-water-typing> or any DNR region office. Applicants need to know the legal description (Township, Range, and Section) in order to download or request a map. Please contact the county assessor's office if you need help determining your legal description. DNR will accept DNR's Water Type Maps or company-generated GIS maps (see next page for alternate map standards).

Map may be printed in color or black and white. Color maps are preferred. Use a medium point black or blue pen. Blue ink is easier to read on a black and white map; black ink is easier to read on a color map. Use the following legend to indicate information. While this symbol list is offered to proponents, some items are not required to be included on your submitted map. Refer to earlier instructions for more information. **Include the location of the proposed F/N break**, if applicable.

Note: The symbols below are for inclusion on the map a proponent submits as supportive documentation for the WTMF, but only certain items (F/N break, AFF, stream location updates/removals) will be transferred to the hydro layer once the WTMF is concurred and approved. The submitted map will remain available for viewing through the WTMF layer PDF link.

-  New Stream
-  Stream Removal, incorrect stream location, or does not meet WAC 222-16-030 definitions. Mark clearly the point on the stream where the change occurs.
-  Proposed Water Type. Use one (1) letter per stream segment (F, N, Np, or Ns).
-  Break between water types within the same segment (S, F, N, Np, Ns)
-  Start and end point of the entire surveyed reach
-  Natural fish passage barrier
-  Artificial fish passage barrier (includes manmade)
-  Upstream extent of Anadromous Fish Floor (AFF) (*when precise location determined*)
-  Uppermost known fish presence (*known prior to survey, based on data review and local knowledge*)
-  Potential Habitat Break (PHB) (*not required to be mapped*)
-  Uppermost Point of Perennial Flow (UMPPF) for Type Np waters

Water Type Modification Form Alternate Map Standards

Alternate Maps must include the following:

Scale: 1 inch to 1,000 feet (1:12,000)

Color: Color or black and white. Must be legible. Black ink should be used on hand-drawn color maps; blue ink on hand-drawn black and white maps. Do not use pencil, light colors, or highlighters.

Features: Must contain the following layers and features (1-4 below can be found at <https://dnr.wa.gov/forest-regulation/providing-gis-data-forest-practices-activities-throughout-washington>):

(1) Current DNR hydro layers: water courses (WC) and water bodies (WBWS)

(2) DNR geographic registration tic marks (minimum of 4 tic marks required)

(3) Section, Township, and Range lines and numbers

(4) DNR transportation layers

(5) Contours (maximum of 40-ft interval) generated from 10-meter DEM

(6) North arrow

Paper Size: 8 ½" x 11" (letter), 8 ½" x 14" (legal), or 11" x 17" (tabloid)

Paper Type: Matte finish. Do not use glossy, mylar, plastic, film, or tracing paper.

Edges: Straight edges with square corners

Margins: Minimum of ¼" on all sides