# THE FISH HABITAT PROJECT

BACKGROUND AND RESOURCES FOR COMMUNITY SCIENCE VOLUNTEERS







# The Fish Habitat Project Background and Resources for Community Science Volunteers

#### **Background:**

Many waters that are used by salmon and steelhead (anadromous, or sea-going fish) in Alaska are not included in the State's list of anadromous waterbodies. This is a problem, because that means those streams do not receive state-level conservation measures and as a result, their habitat could be negatively impacted by development in or near the waterways. We are working to update the state's list and can use your help.

YOU can help get Alaska's salmon and steelhead better conservation measures in Alaska if you:

- 1. Go fishing or recreating on public land
- 2. Make observations while you are out
- 3. Document those observations
- 4. Let us know

A little more on WHY this is important and HOW to nominate a waterbody is included below. Thanks in advance!

#### What is the Fish Habitat Project?

The Trout Unlimited Fish Habitat Project ("the Project") is an effort to expand the body of knowledge concerning Southeast Alaska's anadromous fish habitat. The Project is focused on documenting anadromous habitat use in fresh water bodies that are not currently listed as having use by anadromous fish in the Anadromous Waters Catalog (AWC), or water bodies that do not have all species accounted for in the AWC. This list is kept by the Alaska Department of Fish and Game (ADFG).

### What is the AWC and why is it important?

The AWC is a database of all the known water bodies with anadromous habitat use. It is revised and updated annually by the ADFG. The AWC currently lists approximately 8,000 streams, rivers or lakes throughout Southeast Alaska which have been specified as being important for the spawning, rearing or migration of anadromous fish. However, many water bodies with anadromous habitat remain undocumented or are listed incorrectly in the AWC. Until these habitats are inventoried, they will not receive conservation measures under State of Alaska law.

Inclusion in the AWC doesn't put the stream off-limits for development — rather, it creates a system that makes sense for developers and for fish. In some cases, timing windows are used to limit when construction projects can occur so that they are not undertaken during sensitive times for fish, such as during migration or spawning.

Similarly, if development is proposed in an area where ADFG knows anadromous fish are present, the Division of Habitat will survey the area repeatedly to determine if fish rely on the section of stream or river that is proposed for development. If critical areas are identified, they are avoided.

#### How long has the Project been going on, and what has it accomplished?

The Project started in early spring of 2018, when a group of TU staff and volunteers surveyed three water bodies for presence of and habitat use by adult steelhead, resulting in the addition of steelhead to the assemblage of two water bodies in the 2019 AWC.

In 2019, the Project was expanded to include surveys for juvenile salmonid habitat use as well as adult steelhead. The 2019 steelhead field season resulted in nominations for addition of steelhead to the assemblages of three existing AWC water bodies. The juvenile salmonid surveys resulted in nominations for the addition of coho salmon to the existing assemblages of three AWC water bodies, as well as the mapping and nomination of 11 previously undocumented water bodies with coho salmon habitat. The 2019 nominations are undergoing review; if successful, they will be included in the 2020 AWC on June 1.

2020 focused survey and data collection efforts of TU staff include a eulachon presence survey of Juneau-area streams and the continuation of adult steelhead and juvenile salmonid surveys.

#### What can I do to help?

You don't need to be a fish biologist to be a community science volunteer. The easiest way to help with the Project is to make observations while you are out fishing or recreating on the public lands of Southeast Alaska!

#### What kind of observations are helpful?

Anglers can check out their home waters on the <u>AWC Interactive Mapper</u> (link also listed below) to see what species are currently listed. If you catch a species that isn't included on the list, you may be able to add to the assemblage of that stream through the AWC nomination process.

### What we'll need from you:

- 1. Record the geographic coordinates of your observation
- 2. The date and time of the observation
- 3. <u>Take pictures</u> of the fish with species identifying characteristics clearly visible.
- 4. For a successful nomination, you will need to catch and identify <u>two fish of the same species in the same water body.</u>

Check out the link to the ADFG AWC for more information on the requirements of the nomination process.

<u>Find a bridge or culvert blocking fish passage?</u> In addition, many of the roads in Southeast Alaska have Aquatic Organism Passage (AOP) structures (culverts and bridges) that may be impaired – that is, they have limited function or block fish passage outright. Taking pictures and noting the issues with these structures helps in their identification and remediation.

#### I made some observations – what do I do with them?

- <u>Use the RIVERS app</u>: If you collected the data with the <u>RIVERS app</u>, it will automatically upload to the ArcGIS RIVERS observation database.
- <u>Email us:</u> If you have observations of a species not already included in the AWC for your location and would like to get it added to the AWC, we can help guide you through the nomination process. Send us an email and we can help!
   Contact the Project lead at mark.hieronymus@tu.org

# What do you do with this data? Are you going to post information about my favorite fishing hole on the internet?

We understand folks may have some concerns about "giving away secrets" and might be hesitant to share data and observations with us, but it is important to remember that conservation and knowledge are the objectives of the Project. TU will not publicize information you share with us - your observations add to the knowledge and understanding of our shared fish resources, and can help provide basic conservation measures for fish habitat. We have experience with the AWC nomination process and can assist you in nomination preparation including formatting, mapping, and GIS / geospatial products. Remember, it's not our data, it's yours — we're just helping you get it organized.

## Do I need to be a member of Trout Unlimited to help out with the Project?

No, but if you enjoy cold, clean water and habitat conservation aimed at connecting you to more fishing and recreation opportunities, you may want to consider joining TU. More information on who we are and what we do can be found at <u>tu.org</u>, and you can check out our work in Southeast Alaska at <u>AmericanSalmonForest.org</u>.

As we progress with the Project, we will occasionally need the assistance of volunteers to help with our larger habitat surveys and focused data collection efforts. If this sounds like something you might be interested in, be sure to drop us a line and we can add your name to the list!

#### Resources

ADFG AWC Introduction – Information on the AWC, including how to nominate a species or habitat for inclusion.

https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=intro.purpose

ADFG Anadromous Waters Catalog Interactive Mapper – the latest information on documented water bodies and their current species assemblage.

 $\frac{https://adfg.maps.arcgis.com/apps/MapSeries/index.html?appid=a05883caa7ef4f7ba17c99274f2c198f$ 

ADFG Fish Passage Improvement Program — Information on culverts and other fish passage structures.

http://www.adfg.alaska.gov/index.cfm?adfg=fishpassage.main

ADFG Fish Species Information – Good resource for anadromous fish life histories and identification.

http://www.adfg.alaska.gov/index.cfm?adfg=animals.listfish

ADFG Juvenile Salmonid and Small Fish Identification Aid - A handy guide with photos to help with field ID.

https://www.adfg.alaska.gov/static/home/library/pdfs/habitat/adfg\_hr\_id\_cards\_v1.1\_.pdf

Trout Unlimited RIVERS app — An easy way to collect data and observations right on your cellular device.

https://www.tu.org/science/science-engagement/angler-science/rivers/