



WQS Triennial Review — Issue Paper:

Lower Snake – Asotin Subbasin (HUC 17060101) Salmonid Spawning Use Designation

Introduction

Under section 304(a) of the Clean Water Act, the US Environmental Protection Agency (EPA) is to develop and publish water quality criteria that reflect the latest scientific knowledge on the effects of a constituent concentration on animal and human health. These criteria are published as recommendations to states and authorized tribes for use in setting their water quality standards. While EPA provides scientific recommendations to protect aquatic life and recreation uses, these do not substitute for the Clean Water Act or EPA’s regulations, nor are they regulations themselves. As a practical matter, EPA uses recommended §304(a) criteria as one factor for determining whether to approve a state’s water quality standards. Revisions to Idaho water quality standards must be approved by EPA before they are applicable for Clean Water Act purposes. States must consider adopting new or updated Clean Water Act §304(a) criteria recommendations as part of their triennial review as described under 40 CFR 131.50(a).

In accordance with the National Oceanic and Atmospheric Administration (NOAA) Biological Opinion (NOAA 2019), DEQ is reviewing the available data and considering designating salmonid spawning (SS) beneficial use in the Lower Snake – Asotin subbasin, HUC 17060103, through rulemaking.

The Federal Clean Water Act establishes a national goal that all waters be fishable and swimmable. In Idaho, many water bodies are designated for cold water aquatic life (COLD) and salmonid spawning (SS) uses (IDAPA 58.01.02.110–160). In addition, undesignated waters are protected for COLD and contact recreation (IDAPA 58.01.02.101.01.a). Waters that provide, or could provide, habitat for self-propagating populations of salmonid species are to be protected for SS (IDAPA 58.01.02.100.01.b). SS is considered a more protective subcategory of COLD, and the water quality standards provide specific dissolved oxygen and temperature criteria for waters where SS is a designated or existing use (IDAPA 58.01.02.250.f).

The SS beneficial use adds a seasonal layer of protective temperature and dissolved oxygen criteria in areas used for spawning during the spawning and incubation periods. Depending on when spawning and incubation occurs, the SS criteria may apply during more than one season each year.

Endangered Species Act: Biological Opinion and Incidental Take Statement

In the National Marine Services Biological Opinion on the Hells Canyon site specific temperature criteria, NMFS identified the following term and condition:

2.9.4 Terms and Conditions

1. The following terms and conditions implement RPM 1:

a. Consistent with DEQ’s regulations, integrated reporting methods, and the CWA, DEQ will apply the appropriate salmonid spawning criteria to protect any existing salmonid spawning use when and where the use is attained. In the State’s next triennial review, DEQ will analyze the available data and consider designating salmonid spawning in these segments through rulemaking (NMFS 2019).

In an effort to meet this condition, DEQ is seeking comment on whether or not to consider rulemaking to designate SS for water bodies in the Lower Snake – Asotin subbasin, HUC 17060103.

Current Rules

1.1.1 Surface Water Use Designations (IDAPA 58.01.02.100)

Waterbodies are designated in Idaho to protect water quality for existing or designated uses. The designated use of a waterbody does not imply any rights to access or ability to conduct any activity related to the use designation, nor does it imply that an activity is safe. For example, a designation of primary or secondary contact recreation may occur in areas where it is unsafe to enter the water due to water flows, depth or other hazardous conditions. Another example is that aquatic life uses may be designated in areas that are closed to fishing or access is not allowed by property owners. Wherever attainable, the designated beneficial uses for which the surface waters of the state are to be protected include:

01. Aquatic Life.

- a. Cold water (COLD): water quality appropriate for the protection and maintenance of a viable aquatic life community for cold water species.*
- b. Salmonid spawning (SS): waters which provide or could provide a habitat for active self-propagating populations of salmonid fishes.*

1.1.2 Current Salmon Basin Use Designations

IDAPA 58.01.02.130.02

130. Salmon Basin.

Surface waters found within the Salmon basin total twelve (12) subbasins and are designated as follows: (4-5-00)

02. Lower Snake-Asotin Subbasin. *The Lower Snake-Asotin Subbasin, HUC 17060103, is comprised of twenty-eight (28) water body units.*

| <i>Unit</i> | <i>Waters</i> | <i>Aquatic Life</i> | <i>Recreation</i> | <i>Other</i> |
|-------------|---|---------------------|-------------------|--------------|
| <i>S-1</i> | <i>Snake River – Asotin River (Idaho/Oregon border) to Lower Granite Dam pool</i> | <i>COLD</i> | <i>PCR</i> | <i>DWS</i> |
| <i>S-2</i> | <i>Snake River – Captain John Creek to Asotin River</i> | <i>COLD</i> | <i>PCR</i> | <i>DWS</i> |

| | | | | |
|------|--|-------------|------------|------------|
| | <i>(Idaho/Oregon border)</i> | | | |
| S-3 | <i>Snake River – Cottonwood Creek to Captain John Creek</i> | <i>COLD</i> | <i>PCR</i> | <i>DWS</i> |
| S-4 | <i>Snake River – Salmon River to Cottonwood Creek</i> | <i>COLD</i> | <i>PCR</i> | <i>DWS</i> |
| S-5 | <i>Cottonwood Creek – source to mouth</i> | | | |
| S-6 | <i>Cave Gulch – source to mouth</i> | <i>COLD</i> | <i>SCR</i> | |
| S-7 | <i>Corral Creek – source to mouth</i> | | | |
| S-8 | <i>Middle Creek – source to mouth</i> | <i>COLD</i> | <i>SCR</i> | |
| S-9 | <i>Dough Creek – source to mouth</i> | <i>COLD</i> | <i>SCR</i> | |
| S-10 | <i>Billy Creek – source to mouth</i> | | | |
| S-11 | <i>Captain John Creek – source to mouth</i> | | | |
| S-12 | <i>Redbird Creek – source to mouth</i> | <i>COLD</i> | <i>SCR</i> | |
| S-13 | <i>Tenmile Creek – source to mouth</i> | <i>COLD</i> | <i>SCR</i> | |
| S-14 | <i>Tammany Creek – Unnamed Tributary (T34N, R05W, Sec. 24) to mouth</i> | <i>COLD</i> | <i>SCR</i> | |
| S-15 | <i>Unnamed Tributary – source to mouth (T34N, R05W, Sec. 24)</i> | <i>COLD</i> | <i>SCR</i> | |
| S-16 | <i>Tammany Creek – source to Unnamed Tributary (T34N, R05W, Sec. 24)</i> | <i>COLD</i> | <i>SCR</i> | |

1.1.3 Surface Water Quality Criteria for Aquatic Life Use Designations (IDAPA 58.01.02.250)

02. **Cold Water.** Waters designated for cold water aquatic life are not to vary from the following characteristics due to human activities:

...

f. Salmonid Spawning. The Department shall determine spawning periods on a waterbody specific basis taking into account knowledge of local fisheries biologists, published literature, records of the Idaho Department of Fish and Game, and other appropriate records of spawning and incubation, as further described in the current version of the “Water Body Assessment Guidance” published by the Idaho Department of Environmental Quality. Waters designated for salmonid spawning, in areas used for spawning and during the time spawning and incubation occurs, are not to vary from the following characteristics due to human activities:

i. Dissolved Oxygen

(2) Water-Column Dissolved Oxygen.

a. One (1) day minimum of not less than six point zero (6.0) mg/l or ninety percent (90%) of saturation, whichever is greater.

ii. Water temperatures of thirteen (13) degrees C or less with a maximum daily average no greater than nine (9) degrees C.

Discussion

To identify where SS has been attained in the Lower Snake – Asotin subbasin, DEQ would consider using IDFG, Streamnet, and DEQ datasets recording salmonid presence from 1985 to 2018 in conjunction with *Geography and Timing of Salmonid Spawning in Idaho* (Miller et al 2014), which identifies the location and timing of salmonid spawning in Idaho. DEQ will also look for additional data and sources of information to support the location and timing of salmonid spawning, incubation, and rearing for SS beneficial use designation in the Lower Snake – Asotin Subbasin.

References

- DEQ (Idaho Department of Environmental Quality). 2016. *Water Body Assessment Guidance*, 3rd ed. Boise, ID: DEQ. www.deq.idaho.gov/media/60179244/water-body-assessment-guidance.pdf.
- Miller, M., E. Iverson, and D. Essig. 2014. *Geography and Timing of Salmonid Spawning in Idaho*. Boise, ID: BioAnalysts, Anchor QEA, and Idaho Department of Environmental Quality. Prepared for Idaho Department of Environmental Quality.
- National Marine Fisheries Service (NMFS). 2019. Endangered Species Act (ESA) Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response: Snake River Hells Canyon Site Specific Temperature Criterion. NMFS Consultation Number: 2019-00175