

Penobscot Habitat Blueprint

GLOSSARY & METRIC DESCRIPTIONS

This glossary was developed to support the interpretation of the Penobscot Habitat Blueprint web map & tool

Tiered Results (5% bins)

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- Analysis results grouped into 20 bins where each bin has 5% of the dams in the analysis area.
- These are the results that should be used for dam assessments

Sequential Rank



- The sequential list of dams produced by the analysis.
- This list should be used with extreme caution: the precision with which GIS can calculate metrics and rank dams is not necessarily indicative of ecological differences
- The Tiered Results (5% bins) should be used to assess dams for their potential ecological benefit

Upstream Functional Network Length

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- Category: Connectivity Improvement
- Length of the functional network upstream of a barrier. The functional network is defined by those sections of river that a fish could theoretically access from any other point within that functional network. Its terminal ends are barriers, headwaters, and/or the river mouth.

• Unit: meters

Sort Order: Descending

Other barriers

Upstream Functional Network

Target Dam

Downstream Functional Network

Downstream Barrier Count

- Category: Connectivity Status
- The number of barriers downstream of a given barrier
- Includes natural waterfalls, which are included in network generation
- Does not include barriers excluded from network generation
- Unit: #
- Sort Order: Ascending

Absolute Gain



- Category: Connectivity Improvement
- This metric is the minimum of the two <u>functional</u> <u>networks</u> of a barrier. For example if the upstream functional network was 10 kilometers and downstream functional network was 5 kilometers, then the Absolute Gain will be 5 kilometers.

• Unit: meters

Sort Order: Descending

Number of Natural Barriers on Downstream Flowpath

Category: Connectivity Status

 Count of natural barriers (e.g. waterfalls) on downstream flowpath of a barrier

• Unit: #

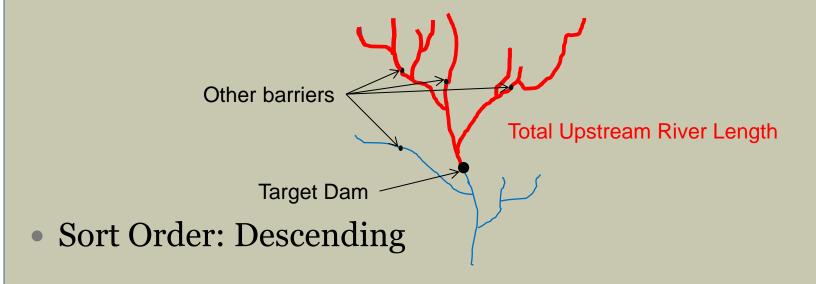
Sort Order: Ascending

One or More of the Next Upstream Barriers is a Natural Barrier

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Total Upstream Network Length

- Category: Connectivity Status
- Total length of river network upstream of a given barrier, regardless of any upstream barriers.
- Unit: meters



River Size Class



- Category: Size or System Type
- River size class based on **NE Aquatic Habitat Classification**.

1a: Headwaters (<3.861 sq.mi.)

1b: Creeks (>= 3.861<38.61 sq.mi.)

2: Small River (>=38.61<200 sq. mi.)

3a: Medium Tributary Rivers (>=200<1000 sq.mi.)

3b: Medium Mainstem Rivers (>=1000<3861 sq.

4: Large Rivers (>=3861 < 9653 sq.mi.)

5: Great Rivers (>=9653 sq.mi.)

(measure = upstream drainage area)

miles of brook trout habitat in US network (medium, high, very high)

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miles of brook trout habitat in US + DS networks (medium, high, very high)

Medium, High, or Very High brook trout habitat upstream OR downstream of barrier

High or Very High quality brook trout habitat upstream OR downstream of barrier

Very High quality brook trout habitat upstream OR downstream of barrier

Heritage Fish Pond Barrier

EBTJV Wild Brook Trout Patch



Smelt spawning sites rank in upstream functional network

Barrier to Sea Run Brook Trout



Upstream acres of alewife ponds



Aquifer OR coarse sediments in U/S or D/S functional networks or both

Calcareous / moderately calcareous geology in U/S or D/S networks or both

Barrier is in a Salmon Critical Habitat HUC10



DMR Salmon Priority (Tier 1, 2, 3) from HUC12



Summed salmon habitat units in US Functional network

25))

Summed salmon parr productivity in US Functional network

Invasive species on one side of a barrier and not the other

Invasive species on one side of a barrier and not the other - Confirmed only

28

of Invasive species that are block - Confirmed only