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### Code1

### The R script files in the zip folder contain all the script used to perform the analyses described in the main text of this manuscript.

### Author(s) [of the material provided in Code1.zip]

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### File list (files found within Code1.zip)

AllSpp\_BlockedHabitatSummary\_EcoApp.R

ErrorDist\_check\_allSpp.R

MainAnalysis\_EcoApp.R

OrderStreamProfiles.R

PredictULOLocation.R

**Description**

AllSpp\_BlockedHabitatSummary\_EcoApp.R– This file contains the script to quantify the amount of potential habitat that is currently inaccessible due to anthropogenic barriers (objective iii).

ErrorDist\_check\_allSpp.R – This file contains the script to evaluated three different approaches to predict the ULO location for each stream segment: 1) single-reach approach; 2) neighborhood suitability approach; and 3) upstream suitability approach.

MainAnalysis\_EcoApp.R – This file contains the script to perform the analyses for predicting the range of occurrence for coho salmon, steelhead trout, and chum salmon using multiple probability decision thresholds that represent different levels of risk-tolerance (objective i) and compares the amount and locations of predicted freshwater habitat to the distribution currently used for restoration planning (objective ii). Also included is the script for producing Figure 2 and Figure 3.

OrderStreamProfiles.R – This file contains script for the function that is used in the *MainAnalysis\_EcoApp.R* script to sequentially order all the NHD segments for each stream profile in the downstream to upstream direction.

PredictULOLocation.R – This file contains script for the function used in the *MainAnalysis\_EcoApp.R* script to prediction the ULO location along a stream profile.