



# FISH PASSAGE CENTER

847 NE 19<sup>th</sup> Avenue, #250, Portland, OR 97232

Phone: (503) 833-3900 Fax: (503) 232-1259

[www.fpc.org/](http://www.fpc.org/)

e-mail us at [fpcstaff@fpc.org](mailto:fpcstaff@fpc.org)

## MEMORANDUM

TO: FPAC

FROM: FPC STAFF

DATE: May 8, 2018

RE: Use of the Cumulative Passage Index on FPC web page

Given the discussion in FPAC today, we wanted to clarify a few issues regarding the data available and not available on the FPC website.

At the present time the population indices queries are not available on the web site as we are in the process of recalibrating them based on new data from 2018.

We urge caution in use of the passage index data. Estimates of collection and the passage index are not meant to serve as population estimates. The passage index represents the general timing of stocks above a given dam.

The passage index is a relative number and not an absolute number of fish, estimated to be passing the dam. The index uses the number of collected fish, expanded by the proportion of total discharge through the dam that was “unsampled”. The assumption of the index is that fish pass in equal proportions (i.e. 1:1 fish to flow) via each route at the dam. This assumption simplifies calculation of the index and makes it relatively simple to understand, but is likely inaccurate for absolute abundance measures. Nor does collection in a powerhouse represent the total number of fish passing via that route, since an unknown, proportion are unguided and pass via the turbines. So it follows that the index expansion does not represent a population estimate. In other words, while magnitude is not reliable when comparing one year to another, relative magnitude within a single season, under relatively consistent conditions, is more likely reliable, so that day to day changes in numbers can be used to characterize timing.