

From: [McCulloch, Mike FOR:EX](#)
To: [Clare Atkinson](#)
Cc: [Katrina Connors](#); [Eric Hertz](#)
Subject: RE: PSF steelhead project update
Date: October 27, 2022 11:50:21 AM
Attachments: [image001.png](#)
[Englishman River adult steelhead - PSF Summary 2022.xlsx](#)
[adi_RB_BiomassPU_Tukey.pdf](#)
[adi_RB_FPU_Tukey.pdf](#)
[adi_RB_FPU_year.pdf](#)
[adi_RB_FPU_year_bar.pdf](#)
[adi_RB0_BPU_year_bar.pdf](#)
[Englishman st-ef data for R.xlsx](#)
[Englishman st-ef data for R_BAtrial.xlsx](#)
[log_adi_RB_FPU_Tukey.pdf](#)
[RB_0_Adi_FPU.pdf](#)
[RB_0_means.csv](#)
[RB_all_FL_Year.pdf](#)
[RB_FL.pdf](#)
[RB0_allen_plot.pdf](#)
[RB0_bpu_summary_stats.csv](#)
[RB0_summary_stats.csv](#)
[Summary_FPU.csv](#)
[Heber SR 1975-2022 PSF 2022.xls](#)

Clare,

I have attached a slightly messy version of the “always in progress” Englishman River steelhead population estimator (Englishman River adult steelhead – PSG Summary 2022.xls). The column to focus on is highlighted in red and is the area-under-curve population estimation. I have also included the annual Heber River (and Upper Gold) steelhead swim count. These counts are unadjusted but are comprehensive in scope and likely reflect a reasonable approximation of the SUMMER STEELHEAD population.

Prior to 1999 both the “Peak counts” and “population estimation” have been estimated when surveys were not conducted during known peak times and/or surveys were not comprehensive in scope. Surveys since about 1999 surveys have been both comprehensive in scope and typically bracket peak abundance periods and therefore reflect a pretty good approximation of true abundance.

I have included the suite of steelhead fry analysis completed in R and the XLS data base.

Of course there are more data but the above represents the typical classes of data we have.

All the best,

MPM

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Mike McCulloch

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