From: Cathy Marcinkevage - NOAA Federal <cathy.marcinkevage@noaa.gov>

Sent: Wednesday, May 22, 2019 9:58 PM **To:** Garwin Yip; Howard Brown; Maria Rea

Cc: Evan Sawyer - NOAA Affiliate **Subject:** Fwd: TDM for 2012-2018

SWFSC sent info on TDM hindcasting to support our performance metrics.

Looks like our 2% for Tier 1 years is pretty good (mean and median TDM was <2% for 2012, 2016, and 2017) and the 12 % for Tier 2/3 years isn't so far off, either (the mean for 2013 was 17.5, median was 12.3).

Knowledge is power.

----- Forwarded message -----

From: Eric Danner - NOAA Federal <eric.danner@noaa.gov>

Date: Wed, May 22, 2019 at 9:24 PM Subject: Fwd: TDM for 2012-2018

To: Cathy Marcinkevage - NOAA Federal < Cathy. Marcinkevage@noaa.gov >, Evan Sawyer - NOAA Affiliate

<evan.sawyer@noaa.gov>

Cc: Miles Daniels - NOAA Affiliate < miles.daniels@noaa.gov >

Cathy and Evan,

Here are the TDM calculations. Let me know if you have any questions.

Eric

----- Forwarded message -----

From: Miles Daniels - NOAA Affiliate <miles.daniels@noaa.gov>

Date: Wed, May 22, 2019 at 5:02 PM

Subject: TDM for 2012-2018

To: Eric Danner - NOAA Federal <eric.danner@noaa.gov>

Hi Eric,

Attached are two excel files that have estimates of temperature-dependent egg mortality.

One file ('TDM_2012_2018') is using year specific redd distributions to calculate mortality (i.e. only distributions for year 2016 are used to estimate mortality in 2016). The other file ('TDM_2012_2018_ALL_REDDS') is using redd distributions for years 2012-2017 for mortality estimates of each year.

I ran both of these because we currently do not have 2018 redd distributions, but looking at the attached plot, there does not seem to be large differences in either approach. Therefore, we could potentially use the 2012-2017 redd distributions to estimate 2018 for the short term.

-Miles

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