From:	Eric Danner - NOAA Federal <eric.danner@noaa.gov></eric.danner@noaa.gov>
Sent:	Thursday, May 23, 2019 2:52 PM
To:	Cathy Marcinkevage - NOAA Federal; Evan Sawyer - NOAA Affiliate
Cc:	Miles Daniels - NOAA Affiliate
Subject:	Re: TDM for 2012-2018
Attachments:	TDM_1990_2017.xls; TDM_Plot_1990_2017.png

Hi Cathy and Evan,

Here are updated versions for the TDM from 1990-2017.

Eric

On Wed, May 22, 2019 at 9:24 PM Eric Danner - NOAA Federal <<u>eric.danner@noaa.gov</u>> wrote: Cathy and Evan,

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

Eric

----- Forwarded message ------From: **Miles Daniels - NOAA Affiliate** <<u>miles.daniels@noaa.gov</u>> Date: Wed, May 22, 2019 at 5:02 PM Subject: TDM for 2012-2018 To: Eric Danner - NOAA Federal <<u>eric.danner@noaa.gov</u>>

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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