8/01/18

MEMORANDUM FOR: Nick Wegner, SWFSC- La Jolla

FROM: Andrew Leising, NOAA-ERD

SUBJECT: Fish metabolism proposal

Dear Nick,

I am very excited about your proposed study, "Understanding ocean warming impacts on shrinking body sizes of California fishes: Linking pattern & mechanism to support future sustainable fisheries."

This will be an important project for many reasons, but of highest priority, is that there is a current lack in actual data on the metabolic response of many important commercial fish species to changes in temperature, thus greatly limiting our ability to model these species, or to couple such models with more realistic physical models (such as ROMS) for making forecasts, examining climate change scenarios, or conducting management strategy evaluations (MSEs). In essence, we are currently crippled in our ability to understand the potential impacts of furture climate warming without the exact kind of measurements you are proposing.

Additionally, the work you propose will also greatly benefit the efforts of NOAA's California Current Integrated Ecosystem Assessment (CCIEA). One of the goals of that program is to use leading indices of potential environmental impacts on fisheries and ecosystems to make assessments of the California Current ecosystem. Your proposed project will likely make it possible for us to develop dynamic habitat maps of sardine for use in the CCIEA.

Lastly, your proposed project falls directly in line with the recently adopted goals of NOAA's Western Regional Action Plan (WRAP-Fisheries Climate Strategy); developing an adequate science-based infrastructure for understanding mechanisms of change, and projecting future conditions.

Thus, your project will greatly advance both general scientific and programtic goals, and I greatly look forward to your results!

Sincerely,

Andrew Leising

Research Oceanographer, ERD-SWFSC-NOAA

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