From: Brett Harvey <u>Brett.Harvey@water.ca.gov</u>

Sent: Friday, May 12, 2023, 12:29 PM **To:** <u>deltacouncilISB@deltacouncil.ca.gov</u>

Subject: DISB's Draft Prospectus on Food Webs

Hi,

Here are some suggestions regarding literature on upper trophic level interactions and potential workshop speakers/participants.

Modeling & Studies: the CVPIA Science Integration Team (SIT) has been working to incorporate interactions of salmon and their predators at "predator contact points" into our salmon life cycle models. Key model developers are Jim Peterson and Adam Duarte (USGS extension at Oregon State University jt.peterson@oregonstate.edu; adam.duarte@usda.gov). To support this, the CVPIA has funded Cyril Michel (Cyril.Michel@noaa.gov) at the NOAA SWFSC to conduct several studies to examine the influence of habitat structure on predation risk/intensity, including field studies to examine influence of lights, pumping and drain structure, and submerged aquatic vegetation. Most of these studies are recently completed with results soon to be published. Cyril also participated in modeling influence of seasonal water temperature increase on juvenile salmon predation risk during migration through the Delta, published as Nobriga et al. 2022. This is a critical synthesis study and its findings have already been incorporated into the SIT LCMs described above.

New Studies: Dave Ayers (usgs, currently getting PhD at UCD deayers@ucdavis.edu) is conducting experiments to examine the interaction of tides and bathymetry on predation risk/intensity in tidal marsh channels. This is seminal work with direct implications for understanding how intertidal habitat structure and hydrology interact to influence predation risk.

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