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From: Mussen, Timothy <mussent@sacsewer.com>
Sent: Thursday, June 13, 2024 12:23 PM
To: Delta Council ISB <DeltaCouncilISB@deltacouncil.ca.gov>

Subject: Comments on the draft report: Exploring scientific and management implications of upper trophic level food webs in the Delta

Dear Delta Independent Science Board Members,

Thank you for the opportunity to comment on the draft report “Exploring scientific and management implications of upper trophic level food webs in the Delta.” **After reviewing the document, the Sacramento Area Sewer District agrees that an increased quantitative understanding of food webs in the Delta is necessary to help environmental adaptive management programs achieve their desired goals.** Predicting the expected outcomes of management actions on target species requires an understanding of how the actions could affect species' food sources, competitors, and predators. A deeper understanding of how food web interactions differ with environmental conditions, seasons, life stages, and the environmental conditions occurring in prior years is also needed. It is beneficial for new quantitative food web models to initially focus on a small number of species that comprise the highest proportion of biomass in Delta. Therefore, initial food web models may include many non-native species, such as small-sized fishes, large predatory fishes, freshwater clams, and macrophytes, which have received less research attention in previous studies. After the trends of the dominant aquatic species are determined, food web models can be revised to focus on specific regions of the Delta and include fish species that occur at low abundance but have high management importance. We agree that understanding how energy flows through the Delta’s food web is important to evaluate food-based contamination risks for aquatic species. The importance of detrital energy sources and the role of benthic invertebrates in the food web are also key data gaps for the Delta system.

Thank you for undertaking this important review. It identifies many scientific data gaps and offers a thoughtful path forward to addressing them through increased community collaboration and modeling. We hope your report leads to an increased understanding of the factors regulating the local aquatic food web and greater use of food web knowledge in Sacramento-San Joaquin Delta ecosystem management programs.

Sincerely,

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