Delta Independent Science Board Open Forum Upcoming Food-webs Workshop

June 14, 2023 10:20 am to 12:00 PM See Meeting Notice for details

Overall objective of the open forum:

The Delta ISB is conducting a review that will explore how upper-trophic level food web interactions in the Delta may influence the effects of environmental changes and management actions on species' abundances (see <u>draft prospectus</u>). To help inform this review, the Delta ISB will host a two-day workshop later in the year. The Delta ISB will gather perspectives from people in academia, NGOs, government agencies, and other stakeholder and rightsholder groups with an interest in food web issues.

On June 14, 2023, the Delta ISB will hold an open forum for the public to provide feedback to help inform the scope and purpose of the upcoming food-webs workshop. To participate, members of the public will be called on at the meeting to provide a 10-minute response to a series of questions of their choice to inform the workshop (see below). Members of the public can also provide written comments before the meeting, which will be distributed to the Delta ISB. If you plan to participate in the open forum, please indicate this on your Zoom registration or by emailing disb@deltacouncil.ca.gov.

The purpose of the open forum is to tailor the workshop with themes of particular relevance in the Delta. The initial set of potential management questions (see prospectus) and the speaker list, structure, and content of the workshop will be refined by obtaining local knowledge through the open forum and targeted group discussions.

Invited Panelists during the Open Forum

- Ben King, Pacific Gold Agriculture, LLC
- Tim Mussen, Sacramento Area Sewer District & Sacramento Regional County Sanitation District
- David Ostrach, Ostrach Consulting
- Lynda Smith, Metropolitan Water District of Southern California

Discussion Questions:

As part of your 10-minute response, please give a short introduction on yourself, any group(s) you represent, and your interests in food web interactions. Please use the questions below to guide your response. You do not have to provide a response to every question.

- 1) What are your (top 3, or highest priority) core research, management, or other goals that you/your group have/has regarding food webs?
- 2) What are the important food web interactions affecting predictions of how restoration, climate change, and changes to system management (e.g., flow rates or other environmental drivers) impact the abundances of key native species?
 - a) How could a quantitative understanding of food web interactions improve the design of performance metrics used for upper trophic levels in the Delta?
 - b) How will changes in food resources at lower trophic levels (e.g., phytoplankton and zooplankton) increase food resources for species of interest?
 - c) Can one predict how current or future non-native species may impact native fish abundances or survival?
- 3) What do you think the critical inputs and outputs to a food web model are that could help improve the understanding of species interactions in the Delta?
 - a) What level of complexity does a Delta food web model need to have (e.g., What temporal and spatial scales are important for understanding how the ecosystem functions)?
 - b) What could food web models reveal about the indirect effects of management choices on endangered species living in the Delta?
- 4) Do you think food web modeling in the Delta would be useful for species management and the understanding of Delta system ecology?
 - a) If so, how?
 - b) Are there any barriers to using food web modeling? If so, what are those barriers?
- 5) What themes/products/questions in a workshop would be of most value to you and/or to the Delta?
 - a) What are some suggestions for folks to invite to participate in the workshop?