

Call for Abstracts

7th Biennial Bay-Delta Science Conference

Ecosystem Reconciliation: Realities Facing the San Francisco Estuary

October 16–18, 2012
Sacramento Convention Center
ABSTRACT DEADLINE: JUNE 8, 2012



The Biennial Bay-Delta Science Conference is a forum for presenting technical analyses and results relevant to the Delta Science Program's mission to provide the best possible, unbiased, science-based information for water and environmental decision-making in the Bay-Delta system. The goal of the conference is to provide new information and syntheses to the broad community of scientists, engineers, resource managers, and stakeholders working on Bay-Delta issues. The organizers of this 7th Science Conference are seeking presentations that support this goal.

The conference program will feature both oral and poster presentations that provide scientific information and ideas relevant to the specific themes listed below, as well as to the broader overall conference theme "Ecosystem Reconciliation: Realities Facing the San Francisco Estuary." The theme refers to the growing realization that the ecosystem of the San Francisco Estuary is vastly changed and is continuing to change as the result of human actions. For it to function in desirable ways, we have to reconcile human use with maintaining desirable natural elements such as native species. And because the new ecosystem is increasingly unlike any previously experienced, we need to develop new ways of reconciling these potentially conflicting goals.

In addition to contributed sessions and poster topics based on the abstracts received, conference participants may propose special oral sessions or poster clusters on topics of particular importance to the Bay-Delta. Instructions for proposing a special session or poster cluster appear after the Conference Themes.

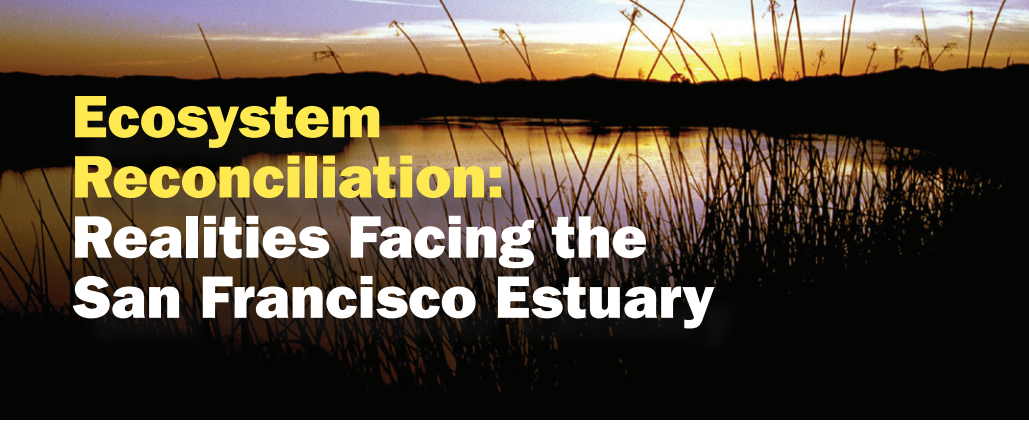
All abstracts must be submitted by June 8, 2012. Proposals for special oral sessions or poster clusters are due June 15, 2012.

If you have questions about the oral presentation part of the program, please contact the Conference Program Co-Chairs Lenny Grimaldo (lgrimaldo@usbr.gov) and Cindy Messer (cmesser@deltacouncil.ca.gov). If you are interested in serving as chair of a contributed session, please contact Lenny or Cindy. Chair assignments will be made when the final list of conference sessions has been determined.

For questions on posters or poster clusters, please contact the Poster Co-Chairs: Darcy Austin (dgaustin@usgs.gov) and Josh Israel (jaisrael@usbr.gov).



Delta Science Program
Delta Stewardship Council



Ecosystem Reconciliation: Realities Facing the San Francisco Estuary

Conference Themes

Fish Biology, Ecology and Protection—

Science that addresses basic life history, behavior and population structure of Bay-Delta fishes and the factors that affect their distribution and abundance. Suggested topics include population dynamics, fishery management, migration and spawning behavior, trophic ecology, physiological responses to key environmental stressors, and science-based management strategies to protect fish populations. Presentations on engineering to support fish protection goals are also invited. Specific topics could include ecosystem restoration activities, the use of fish barriers, fish screening technologies, fish passage facilities, and environmental water management.

Flood Management— Science helping to improve flood management, including the role of levees in ecosystem restoration, and different approaches for protection of habitats, water quality, water supplies, agricultural lands, and infrastructure in a changing environment.

Food Webs— Science providing new insights into ecological and physical processes governing and connecting food webs in the Bay-Delta. Examples of topics include effects of variable and changing water quality from contaminants, sediment, nutrient inputs, species invasions, and climate change effects. Science that explains how one or more of these factors influences Bay-Delta food webs is of particular interest.

Global Perspectives— Science that highlights connections or discrepancies between regional and larger-scale processes and their joint effects on the Bay-Delta ecosystem and management. Of particular interest is research that compares Bay-Delta systems and processes to those in other areas of the globe.

Human Consequences— New perspectives on the potential social, economic, and public health effects of actions and solution strategies implemented in the Bay-Delta system. Specific topics include water resource economics, local partnerships, conflict resolution strategies, watershed

groups, and environmental law in the Bay-Delta and its watersheds.

Integrative Applied Science— Science that translates understanding of ecological functions and processes into effective science-based management strategies for the Bay-Delta system. Specific strategies include science-based decision-support tools, collaborative approaches, effective communication strategies, use of conceptual models, and adaptive management.

Modeling— Science that employs numeric models to address complex resource management questions. Specific examples include studies that couple hydrodynamic, sediment, particle tracking, and water quality models with ecosystem models such as those for native species and Bay-Delta and riverine food web dynamics. Modeling applications might also include determining flow requirements needed to protect aquatic species, understanding nutrient and contaminant sources, transport and fate, and assessing potential outcomes of water and fish management alternatives.

Physical Processes— Science improving understanding of how physical processes such as climate change, hydrodynamics, sediment transport, and geomorphology may affect future actions within the Bay-Delta system.

Species and Communities— Science that advances the utility of monitoring programs, understanding and management of key species and their ecological functions and requirements in the Bay-Delta and its watershed. Key species include species of special concern, numerically dominant species, and nonnative invasive species.

Sustainable Habitats and Ecosystems— Science providing new insights into the ecological and physical processes governing and connecting habitats in the Bay-Delta and its watershed. Lessons learned regarding more effective ecosystem restoration, protection, management and sustainability of riparian habitat, river channels, floodplains, flooded and in-channel islands, levees, wetlands, and terrestrial habitats. Topics could describe aquatic, terrestrial, or human ecosystem sustainability and

the kinds of landscape characteristics that can be restored to re-introduce appropriate processes at the scales needed to sustain habitats.

Water and Sediment Quality— Science that advances understanding and management of key environmental and drinking water quality constituents and associated biogeochemical processes, and their ecological and public health effects in the Bay-Delta and its watersheds. Key water and sediment quality constituents include inorganic contaminants, organic contaminants, organic matter, salinity, sediment, nutrients, and dissolved oxygen.

Water Supplies and Instream Flows— Science advancing water supply management strategies to improve water supply and stream flow reliability. Management strategies may involve operation of water conveyance facilities, groundwater, water use efficiency, water demand predictions, water transfers, and water storage options.

Watersheds— New perspectives on evaluating, planning, restoring, and organizing land and other resource use within a watershed to restore ecological health and improve water management by working with the community at a watershed level.

Oral Presentations

The oral presentations are expected to advance our state of knowledge by focusing on new findings, models, and syntheses of past and ongoing studies that are relevant to the management or scientific understanding of the Bay-Delta rather than on project or program descriptions and summaries, or on planned studies. Because we anticipate that requests for oral presentations will exceed the available time slots, the Program Committee will assign oral presentations based on technical merits of the abstract, including relevance of the topic, presentation of results, and importance of the findings. For that reason, abstracts should provide a clear description of the contribution, including their relevance to Bay-Delta management, as described above. Use of such phrases as “results will be discussed” is discouraged.

Special Oral Sessions

There will be a limited number of special sessions devoted to topics of particular interest to the Bay-Delta community. Proposals for special oral sessions must be submitted by June 15, 2012, but abstracts for individual talks in the special sessions must be submitted by the abstract submission deadline (June 8, 2012). These proposals are to be submitted using a separate form available on the conference website and require a session title, the name of the

The Brown-Nichols Science Award

This award recognizes the contributions of scientists for their significant research and active involvement in facilitating the use of science for managing the San Francisco Estuary and watershed. The award recipient will be recognized during the plenary session at the 2012 Bay-Delta Science Conference. The deadline for nominations is August 10, 2012. Additional information, including nomination requirements can be found at: <http://scienceconf.deltacouncil.ca.gov>

session chair(s), a short (<200 words) description of the session topics (including relevance to Bay-Delta management) and a list of proposed presentation titles and authors. Each presentation proposed in the special oral session must have submitted an abstract by the abstract deadline.

The special session presentations should be well integrated and representative of the current body of research on the topic. The Program Co-Chairs may also work with the Special Session Organizer (the person submitting the proposal) to develop the final configuration, including the possible addition of related talks from the pool of general submissions. Sessions will be scheduled as two morning and two afternoon blocks with five 20-minute talks in each block, and may include a panel discussion in place of one or more talks. Proposals including discussion panels should include the length of the discussion period (must be in 20-minute intervals). The length of the proposed special session can range from ¼ of a day to a full day (1–4 session blocks). In case a special session proposal cannot be accepted, submitted abstracts will be considered for inclusion in other conference sessions.

Presentations on “ecosystem reconciliation” related to the session topic are encouraged, but not required. Examples of topics from past Bay-Delta Science Conferences include:

Pelagic Organism Decline; The Natural Delta; Suisun Marsh; Cache Slough Complex; South Bay Salt Pond Restoration; Bay-Delta Phytoplankton Trends and Drivers; Microcystis; Carbon Sequestration and Gas Fluxes in the Bay Delta; Multi-dimensional Modeling of the Bay-Delta; Addressing Climate Change in Delta Planning and Management; Sediment Transport Modeling and Observation in the Sacramento-San Joaquin Delta; and Technical Approaches to Suggest Delta Flow Standards.

Poster Presentations

The poster session is a very important part of the Science Conference. Posters will be displayed throughout the conference, and will be featured during social sessions on the evenings of the first and second days of the conference to encourage open discussion between the presenters and conference attendees. A major component of the poster session will be presentations of results from projects funded by the Delta Stewardship Council Delta Science Program and the Ecosystem Restoration Program. Posters may also include project/program summaries relevant to Bay-Delta issues, as well as reports of work planned or in

progress. Presenters should indicate the theme most pertinent to the subject of the poster from the list on the abstract submittal form, as the posters will be arranged by theme. Inclusion of a statement in the text of the abstract and poster on the relevance of the study’s findings to Bay-Delta management is strongly encouraged.

Poster Clusters

Similar to special oral sessions, there is the opportunity to organize groups of posters on a particular topic and to have those posters grouped together. Poster clusters require a chairperson to organize the cluster and to prepare an overview poster that synthesizes information from the individual posters to provide larger-scale conclusions or applications of results. The posters should be well-integrated and complementary as a cluster. Including a diversity of perspectives is encouraged. Proposals for poster clusters must be submitted by June 15, 2012, but abstracts for individual posters in the cluster must be submitted by the abstract submission deadline (June 8, 2012). Proposals are submitted using a separate form available on the conference website and require the cluster title, the name of the cluster chair(s), a brief paragraph (<200 words) describing the content and focus of the cluster including the relevance of this topic to Bay-Delta management, as well as a list of poster titles and authors. Each presentation proposed in the poster cluster must have submitted an abstract by the abstract deadline.

Student Awards

Awards will be given for the best student oral and poster presentations during the conference. Please indicate student status on the abstract form. To qualify for a student award, you must have carried out the presented work while you were a registered student, and you must make the presentation yourself.

Abstract Requirements

All presenters (oral and poster) must submit an abstract using the on-line form accessible through the conference website address provided below. There is a 300-word limit on the abstract text. Please fill in all of the blanks on the form, including selection of the appropriate theme or special session, any special projection equipment needs, and your preference for an oral or poster presentation. Depending on the number and content of abstracts submitted, the Program Chairs may move some of the requested oral

presentations into the poster session and vice versa. Incomplete or poorly written abstracts and those that are not relevant to Bay-Delta issues will not be accepted.

Abstract content. A complete abstract should include the following four components:

- **Problem statement:** What problem are you trying to solve?
- **Approach:** How did you go about solving or making progress on the problem?
- **Results:** What are your main findings?
- **Conclusions/Relevance:** What are the scientific and management implications of your findings, including the relevance of your findings to Bay-Delta management? What insights do your findings provide towards ecosystem sustainability in the near and long term futures? Authors are strongly encouraged to include this relevance statement in the abstract.

Questions?

Questions about the technical program or the abstract submittal process should be directed to the Program Co-Chairs, Lenny Grimaldo (lgrimaldo@usbr.gov) and Cindy Messer (cmesser@deltacouncil.ca.gov)

Questions on posters or poster clusters should be directed to the Poster Co-Chairs: Darcy Austin (dgaustin@usgs.gov) and Josh Israel (jaisrael@usbr.gov).

Questions about other aspects of the conference should be directed to the Conference Co-Chairs: Brian Pellerin (bpeller@usgs.gov) and Peter Moyle (pbmoyle@ucdavis.edu)

ABSOLUTE ABSTRACT DEADLINE: Friday, JUNE 8, 2012

The form for on-line abstract submittal is located at the following website address:

<http://scienceconf.deltacouncil.ca.gov/>

Information on the Delta Science Program:
<http://www.deltacouncil.ca.gov/science-program>