The Challenge
DredgeFest California is an event about the future design of sediments and earthworks in California’s Bay-Delta.

Sediment is critical to the present and future health of this estuary. It is the physical infrastructure that underlies its many ecologies and economies. As the 2015 State of the Estuary report notes, “Like fresh water, sediment is a precious resource that is essential for keeping the Estuary healthy”.

But the Bay-Delta currently has a shortage of this land making resource. Upriver dams have trapped sediment, while levees, bank armoring, and river straightening have cut off wetlands and floodplains while accelerating the movement of the remaining sediment, preventing it from building substrate. The Bay’s coastal wetlands, which are critical to sea-level rise adaptation, face an unprecedented deficit of sediment. Some of the Delta’s levees are now protecting “islands” so deeply subsided that they are much lower than adjacent waterways, stressing the levees—and with them local communities, ecologies, and the role of the Delta as conduit for southern California’s water supply. Sediment, including dredged material, is the primary material available to meet these challenges.

The Scenarios
Over five days, local stakeholders, experts (from academia, industry, and government), and students will come together to envision and respond to future sedimentary scenarios for the Bay-Delta.

We are seeking faculty, practicing designers, scientists, industry professionals, policymakers, regulators, junior scholars, advanced students, and other interested parties to join us.

The scenarios we work with will be:

- **constructed** through a participatory scenario planning process, which evaluates factors driving change in the Bay-Delta in order to consider multiple future possibilities, generating creative dialogue and discussion
- **evaluated** through spatial modeling — the use of transdisciplinary design to test the consequences of scenarios, focusing on spatial outcomes while bridging between technical concerns and political, cultural, and social consequences
- **used** to inform design responses that propose innovative alternatives for sediment supply, transport, and placement, as well as the future configuration of earthworks
The Format
The workshops will be divided into three tracks:

Bay Sediments
The Bay team will focus on design scenarios for bay and coastal management of sediment in the context of adaptation to accelerated sea-level rise, wetland restoration, maritime economies, the cultural landscape heritage of the Bay, and public waterfront access. It will demonstrate that sediment projects have the potential to not only satisfy immediate economic needs, like the provision of navigation through channel dredging, but also to create additional long-term value for the cultural, ecological, and economic contexts that they are embedded in.

Delta Earthworks
This team will propose innovative strategies for future earthworks and infrastructural retrofits in the Delta, informed by a set of scenarios described and spatially modeled by members of the Dredge Research Collaborative. Proposals will respond to the myriad uncertainties facing the Delta's infrastructure, including water exports, climate change, regional urbanization, rapid ecological change, potentially disastrous earthquakes, and flood protection needs.

Regional Choreography
The choreography team will construct a set of scenarios that probe potential relationships between sediment sources and sediment deficits across the entire estuary watershed, while considering the potential effects of external drivers such as shifting regional weather patterns, long-term technological innovation, and state and national policy climates. Its work will both be informed by the Bay and Delta tracks and provide broader context for them.

Each track will work as one multi-disciplinary team, facilitated by the DRC and augmented by regional experts.

Workshop products will be highly visual in nature, applying the graphic expertise of participating designers. Drawings and diagrams will be designed to allow a broad range of stakeholders and members of the public to participate in discussions on sediment design and management. Outcomes will be communicated through publications and an exhibition at UC-Berkeley.
Call for Workshop Participants

DredgeFest California
June 13-17, 2016

The Schedule
• Pre-event: Workshop participants will receive An Atlas of Bay-Delta Scenarios by the end of May 2016, which will be a brief, condensed packet of information about the geography, local issues, and relevant trends. Participants should review the packet before the workshops begin.
• Event: The workshops will begin on Monday, June 13 and culminate with public presentations and an exhibition on Friday, June 17. Public tours of the Bay and Delta will be held on the 18th and 19th; these tours are ticketed separately from the workshops, but
• Post-event: The DRC will compile the work produced in the workshop into a publication for public distribution.

The Logistics
Registration for the five days of DFCA workshops is $200. This fee helps to cover workshop expenses, including supplies and materials, facility fees, and transportation (the workshops will include a ½ day field trip). Discounted public tour tickets will be available to workshop participants.

Limited travel funding may be available. Please contact us with any requests for financial support.

Call for Participants
We are seeking faculty, practicing designers, scientists, industry professionals, policymakers, regulators, junior scholars, advanced students, and other interested parties to join the DredgeFest California workshops.

To be considered, please submit:
1) A brief (1-2 paragraphs) statement of background and interest; if you have track preferences, indicate them in this statement
2) A copy of your CV/resume

Designers and design students should also:
3) include 5-7 selected images of your work, in PDF or JPG format (max 5 mb total file size)
4) indicate level of expertise in digital design software (ArcGIS, Rhino, Grasshopper, 3ds Max, Adobe CS, etc.)

These materials should be submitted to workshops@dredgeresearchcollaborative.org.

Application Timeline
Applications are due March 15, 2016. We will contact participants to notify them of acceptance by April 1, 2016.

dredgeresearchcollaborative.org