

## **Approval of a Contract with California Sea Grant to Fund Delta Science and Policy Fellows**

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**Requested Action:** Staff is requesting Council approve a new contract in the amount of \$1,996,000 with California Sea Grant.

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### **Recommendation**

Approve a new contract in the amount of \$1,996,000 with California Sea Grant to: 1) support a 2015 Class of Science Fellows to conduct research on high priority topics, and 2) support up to eight policy fellows distributed over two years to assist the Council's Science and Planning divisions.

### **Background**

As identified in the Delta Reform Act, the mission of the Council's Delta Science Program is "to provide the best possible scientific information for water and environmental decision making in the Bay-Delta system." It fulfills this mission in part by funding research that adds to the body of best available science.

Since 2003, the Delta Science Program has partnered with California Sea Grant, one of 33 state programs funded by the National Sea Grant College Program and part of the National Oceanic and Atmospheric Administration (NOAA). Matching funds come from state agencies (such as the Council) and private sources. California Sea Grant is administered by Scripps Institution of Oceanography at the University of California, San Diego (UCSD).

The Council's partnership with Sea Grant is used to fund two kinds of early-career scientists:

- 1) Policy Fellows will work in the Science and Planning divisions on a limited term basis (usually 12 months) to support the Council's high priority tasks. Policy Fellows are recent post-graduates that would like to explore a career path in the public sector at the science-policy interface. The new contract with UCSD contains \$496,000 to fund four Policy Fellows per year for two years.
- 2) The Science Fellows Program is designed to attract a minimum of six doctoral students or postdoctoral early-career scientists to conduct research projects on high priority issues identified in the Delta Plan, the Delta Science Plan, by the Delta Plan Interagency Implementation Committee (DPIIC), and other stakeholders over a period of two years (a total of \$1.5 million).

The Policy Fellows tend to work with a staff mentor at the Council on defined projects, such as assisting the Delta Independent Science Board in one of their reviews,

becoming part of an information synthesis team on an issue that has been identified as a priority work plan element by the Council, assisting senior staff with information compilation and analysis, or organizing symposia, workshops, or conferences.

The Delta Science Fellows Program pairs the next generation of Delta scientists with community and academic mentors to conduct research targeting high-priority Delta issues. To date we have invested more than \$9 million in 13 classes of graduate and postdoctoral research fellows who have worked on 68 Delta-related projects. This research often complements and enhances other research projects supported by the Council and other agencies and institutions and has become an integral part of implementing the “high impact science actions” based upon the interim Science Action Agenda and endorsed by the DPIIC in May 2015.

Previous research undertaken by Delta Science Fellows and funded by the Council includes:

- Work on the endangered Delta smelt that will: 1) inform managers about sensitive locations and life stages under multiple climate change scenarios, and 2) provide new information about temperature tolerances that will be incorporated into an updated Delta Smelt life cycle model;
- Additional information on food webs addressing the potential benefits of restoring shallow water ecosystems;
- Identifying appropriate management goals and strategies for the control and eradication of pepperweed, an invasive plant species, in tidal marshes of the Bay-Delta Estuary; and
- Advancing emerging surveillance and remote sensing technologies into the application stage to assess levee fragility and improve assessments of failure risks under various flood and seismicity scenarios.

### **Overall FY15-16 Funding for Science Investigations and Science Fellowships**

The Science Fellows are a key mechanism for implementing several actions identified in the Delta Science Plan (Actions 4.1; 4.2, 4.4, and 4.5). All of the “high-impact science actions”, endorsed by the DPIIC and to be further developed by a Delta agency science workgroup this summer, will be addressed through a competitive solicitation process, with resulting proposals undergoing the Delta Science Program’s rigorous review and selection process administered by Sea Grant.

Of the \$4.0 million General Fund resources made available for FY 2015/16, \$1 million is dedicated to the Science Fellows Program. An additional \$500,000 comes from remaining re-appropriated Proposition 50 funds. The rationale for allocating 25% of the budget for science investigations for this program is that at this time, the DPIIC directed the Science Program to focus on projects that have the potential of having a high impact on current management challenges, and Science Fellows can begin narrowing critical information gaps as soon as early 2016. Examples of projects that can be undertaken very cost-effectively by Science Fellows are: synthesizing and investigating the effectiveness and implications of habitat restoration projects, drought-induced flow

changes on native fish survival and migration patterns, testing innovations in monitoring and tracking distribution of fish in space and time, and economic impact assessments of invasive aquatic vegetation on boating, recreation, operations, and water management.

**Contract with UCSD California Sea Grant**

Staff is seeking approval to enter into a new contract for \$1.996 million that will allow funding of about six new Science Fellows with each fellowship lasting for two years. At the request of the DPIIC, Council staff has been working with a Delta agency science workgroup to refine research topics (based on approval of the high priority research topics identified by the DPIIC at the May 11, 2015 meeting) that would be included in the 2015 fellows solicitation. It is anticipated that other agencies will contribute to this effort by funding qualifying proposals in addition to those funded by the Council.

Approval of this request will also allow the Council to host up to eight state policy fellows, with each fellowship lasting one calendar year, separated into two groups of four fellows over two years to assist the work undertaken in the Council's Science and Planning divisions.

The term of the contract will be approximately August 1, 2015 through June 30, 2018. More information on the Delta Science Fellows program is available on the Council's website at:

<http://deltacouncil.ca.gov/science-program/delta-science-fellows-program>.

**Fiscal Information**

Funding for a new Delta Science Fellows agreement will be provided from a combination of Proposition 50 and General Funds (Attachment 1).

**List of Attachments**

Attachment 1: Budget

**Contact**

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