



San Francisco  
Estuary & Watershed Science:  
A Broad Perspective



## Sixteen Years of San Francisco Estuary and Watershed Science: A Retrospective

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Sixteen years ago, in October 2003, *San Francisco Estuary and Watershed Science* (SFEWS) published its first article. An anniversary like this is a good time to remind ourselves of our history, and to ask if the journal is living up to the goals we set in 2003. And if so, are those goals consistent with today's needs?

In 2001, the now defunct Bay–Delta Science Consortium defined a need to better communicate the body of new scientific information relevant to the Bay–Delta that was growing rapidly under the CALFED Bay–Delta Program. A new journal was conceived to meet this need: SFEWS. Its goals were not only to provide a high-quality, credible, peer-reviewed outlet for the new information, but also to assure readers that this outlet was independent from political influence. Avoiding advocacy and the language of advocacy was paramount. Just as important was the goal to expand access to published scientific information for all interested parties. Outside the universities, many stakeholders and agencies did not (and still do not) have access to many of the scientific journals through which articles on the Bay–Delta water issues are scattered. Lack of access limited the growth of understanding common to all interested parties. The new journal was also expected to differ from the narrow-discipline focus of many traditional journals: SFEWS would include articles across the many disciplines relevant to Bay–Delta science. New knowledge about the Bay–Delta would be expected from each article, in contrast to a focus on new breakthroughs in a discipline. Flexibility of composition was also a criterion: we wanted to accommodate a suite of papers from technical notes to detailed research studies to monographs. Standards would be as high as any traditional journal. These goals required a structure that allowed consistent publication, a well-defined peer-review system, and a standardized process to achieve the highest quality in the final published product.

Thanks to the hard work and creativity of the first Editors-in-Chief (Randy Brown, Fred Nichols, and Jim Quinn) and their Managing Editor (Lauren Muscatine) these goals were all in place when the first issues of SFEWS were published. They remain in place today. An important decision in achieving the original goals

was that the journal should be in an online electronic format and open access. Partnership with the University of California Digital Library (CDL) supported the electronic format. Then, open access was just maturing as a concept. Today it is an established approach to scientific publishing, although what it means and its implications continue to be debated among scientists, policy-makers, and editors. In 2003, there were 1,800 open access journals across the world; today there are 12,000. *SFEWS* published its first article the same year as did *PLOS ONE*. *PLOS ONE* is now the largest multi-discipline peer-reviewed journal in the world (Howard 2019). Evans and Reimer (2009) evaluated the benefits and costs of open access publishing in the international literature; while the data are mixed with regard to some issues, their work provided “clear support” for the ability of open access “to widen the...circle of those who can participate in science and benefit from it.” Clearly, open access was the solution to this important need in the Bay-Delta where so many issues are potentially contentious.

Usually, open access means that authors pay processing charges for each paper submitted, and readers get access to these papers free of charge. This definition did not fit our needs for the Bay-Delta, because this would mean that access to submitting authors from many agencies, institutions, and stakeholder would remain restricted. The problem was solved by making *SFEWS* a “gold” open access journal; access is free to both readers and authors. But someone has to pay for any publication outlet. The costs for *SFEWS* are today supported by partnerships with the UC Digital Library, the John Muir Institute of the Environment at the University of California-Davis, and grants from the Delta Stewardship Council through the Bay-Delta Science Program. The voluntary work of the Associate Editors and reviewers is an essential element in this support. Broadening the base of support remains much discussed—but no solution has yet been found that avoids risks to independence from political influence while still ensuring wide access and high standards.

Today, *SFEWS* remains dedicated to its original goals. But the journal has also evolved. Submission rates have increased, leading to an increase in the number of issues and papers published per year. The mission has expanded to include publication of peer-reviewed special articles and of “themed” issues that focus on particular subjects of interest. For example, the Delta Stewardship Council’s Independent Science Board chose to author the article *Facilitating Adaptive Management*, which was published in June 2017. Fourteen reviews by leading experts were published across three issues in 2017 and 2018 on *The State of Bay-Delta Science* (sponsored by the Bay-Delta Science Program). Many issues now also include an essay: a short communication on a subject of immediate interest and often designed to improve ties between policy and science. In the last 2 years, thousands of readers have accessed essays by experts on drought, water storage, the status of groundwater, and land subsidence. A 2015 essay by Faunt and Sneed on groundwater trends in California was cited on October 15, 2015 by *Wired.com* as “eye-popping,” illustrating the breadth of readership. Electronic searches are much more important to today’s researchers than they were in 2003. The Managing Editor has worked hard to make sure *SFEWS* is searchable via major search

engines. Of particular interest is full inclusion in the strictly-managed Web of Science, for which our application is under review.

The editorial board and publications staff are the backbone of any successful peer-reviewed, high-quality publication. That has certainly been true for *SFEWS*. The process for turning an accepted manuscript into a professional published paper is efficient, effective, timely, and author-friendly; an accomplishment not every journal can claim. We expanded the editorial board more than 10 years ago to represent scientists of high stature across most major disciplines. This year, we revamped the board to make sure the new generation of scientists with interests in the Bay–Delta are included. Finding reviewers and obtaining reviews remains a challenge for all journals in today’s communication-heavy work environment. We would encourage young-career professionals who desire to be involved in *SFEWS* as reviewers to contact us and let us know, in brief, your interests and qualifications.

The relevance of *SFEWS* to regional policy also has grown, as evidenced by citations in the technical literature that supports water management regulations; and in the National Academy of Sciences book, *Sustainable Water and Environmental Management in the California Bay–Delta*. Statistics also show that the interest in the journal as well as its stature are growing. In 2004, CDL’s eScholarship Publishing Group counted an average of 254 requests per month for *SFEWS* online articles. In 2010, that increased to 1,232 requests per month, and in 2014 to 1,764 per month. In the first 10 months of 2019, 4,420 articles were requested per month. Downloads have been consistently 35% to 40% of requests. Taking data from 2014 through 2017, the search engine Scopus’ CiteScore for *SFEWS* increased from 0.32 to 1.64; its rank is 82nd of 203 journals in the Water Science and Technology category for 2018, a remarkable climb from being ranked 120 of 179 in 2014. *SFEWS* is ranked fifth among 53 open access journals in the aquatic sciences, according to the Science Journal Ranking index; and in the top 25% among all 218 aquatic science journals ranked by that index.

Thus, *SFEWS* has grown from an outlet designed to expand access to regional science to a well-respected scientific journal in its own right. Our mission will remain dedicated to the Bay–Delta; where water issues are some of the most complicated in the world. We will continue to help lead the way in open access publishing. Most important, however, *SFEWS* will remain true to its original goals: We will continue to publish research papers, reviews, and essays of a quality equal to that of a demanding scientific journal, to remain an independent outlet for peer-reviewed research, and to expand our reach. Our look back shows that *SFEWS* has probably grown beyond our original expectations in size, influence, and stature. Our readers, authors, reviewers, Associate Editors, and publication staff remain our backbone: we cannot thank you enough. But our continued success also depends upon you and your willingness to participate in peer review and continue to submit your best science, reviews, special issues, and essays to San Francisco Estuary and Watershed Science.

## REFERENCES

- Evans JA, Reimer J. 2009. Open access and global participation in science. *Science*. [accessed 03 Dec 2019];323(5917). <https://doi.org/10.1126/science.1154562>
- Faunt CC, Sneed M. 2015. Water availability and subsidence in California's Central Valley. *San Franc Estuary Watershed Sci*. [accessed 03 Dec 2019];13(3). <https://doi.org/10.15447/sfews.2015v13iss3art4>
- Healey M, Goodwin P, Dettinger M, Norgaard R. 2016. The State of Bay-Delta Science. *San Franc Estuary Watershed Sci*. [accessed 03 Dec 2019];14(2). <https://doi.org/10.15447/sfews.2016v14iss2art5>
- Howard L. 2019. UC Davis-Delta Stewardship Council journal has helped inform California water policies for 15 years. *Research Matters*. January 21, 2019. [accessed 03 Dec 2019]. Davis (CA): Office of Research, University of California-Davis. Available from: <https://research.ucdavis.edu/san-francisco-estuary-and-watershed-science/>
- National Academy of Sciences. 2012. *Sustainable Water and Environmental Management in the California Bay-Delta*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/13394>
- Wiens JA, Zedler JB, Resh VH, Collier TK, Brandt S, Norgaard RB, Lund JR Atwater B, Canuel E, Fernando HJ. 2017. Facilitating adaptive management. *San Franc Estuary Watershed Sci*. [accessed 03 Dec 2019];15(2). <https://doi.org/10.15447/sfews.2017v15iss2art3>