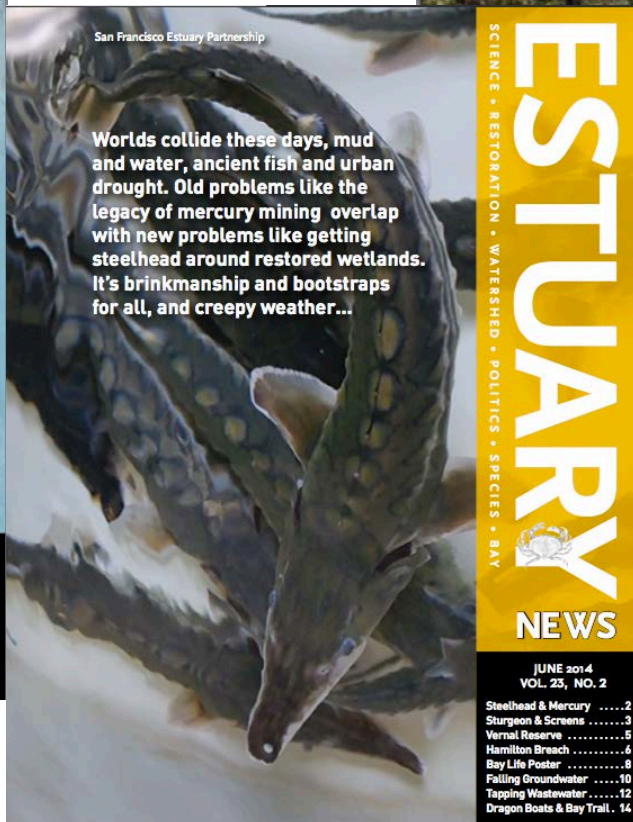
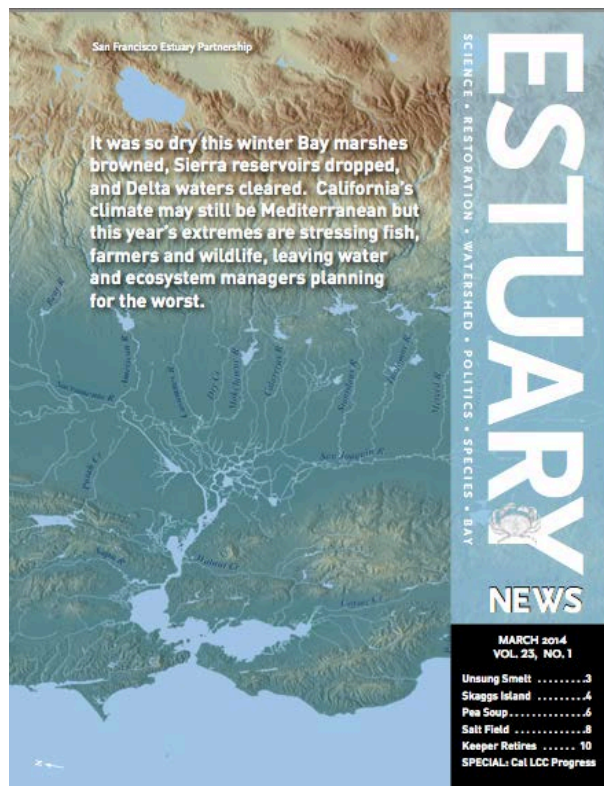


ESTUARY NEWS MAGAZINE

2014 UPDATE

2014 ISSUES



SPECIAL INSERTS

SEASONS OF BAY LIFE

San Francisco Bay, Pacific Coast

MIGRATING SALMON

Four different runs, or populations, of Chinook salmon spawn in the San Francisco Bay watershed, each named for the season when the majority of adults return from the ocean to freshwater streams to breed.

WINTERING WATERBIRDS

More than 700,000 ducks, swans, geese, and other waterfowl have been counted overwintering in San Francisco Bay and Delta. Most travel here for the season along the Pacific Flyway, a transcontinental avian thoroughfare stretching from Alaska's North Slope to Patagonia.

BROWN PELICANS

These majestic birds can be seen swooping around the Bay one behind another in undulating lines. In late fall, they head south for breeding rookeries in Baja, southern California, and Florida.

TRAVELLING PEEPS

Diminutive Western sandpipers depart breeding grounds in Alaska and make the 1,800-mile flight to San Francisco Bay each fall in pursuit of a snow-free winter. They forage for food along mudflats and salt ponds (males use a bristle-shaped tongue to lap up diatom goo).

LEOPARD SHARKS GIVE BIRTH

Females that have hatched their eggs safely within their own bodies swim into eelgrass beds to give birth to two dozen or so wriggly pups. Births coincide with the most luxuriant growth of eelgrass, making this tidal nursery a safer place for young sharks to hide.

WATERBIRDS NEST ON ALCATRAZ

The Rock — inaccessible to predators and close to seafood-rich waters — is considered a choice residence by ground-nesting Western gulls, three species of cormorants (double-crested, Brandt's, and pelagic), and pigeon guillemots.

HARBOR SEALS PUP

Mothers give birth to spotted, nickel-gray pups at land out sites along mudflats, rocky intertidal zones, islands, and sandy pocket beaches.

HERRING SPAWN

Pacific herring stream through the Golden Gate by the millions and deposit their tiny orange eggs on every available surface, from eelgrass strands to pier pilings — a seafood smorgasbord for gulls, ducks, and sturgeon who slurp up more than 95 percent of each egg batch laid.

AMERICAN AVOCET CHICKS HATCH

These speckled balls of fluff are able to run within a few hours of hatching, and pick through the mud, snapping at food on comically stilt-like legs behind their elegant, rose-tinted parents.

CALIFORNIA LEAST TERNS BREED IN ROOKERIES

Endangered California least terns settle down to raise their chicks on open shoreline such as the abandoned runways of Alameda Naval Air Station. Parents stuff their young with anchovies and smelt.

CLAPPER RAIL BREEDING SEASON

These endangered birds build nests amid the cordgrass of the low marsh, taking advantage of its spring and summer growth spurt to hide their young from predators. Birds race to avoid the ultra-high king tides during the same period, which can swamp eggs.

PHYTOPLANKTON BLOOMS

An influx of nutrients from the ocean, combined with clearer surface waters and more sunlight, causes phytoplankton to multiply in blooms that may cover many square miles. The largest blooms once regularly occurred in spring; recent years have seen blooms nearly year-round.

SUMMER PETALS IN THE MARSH

Longer days trigger gumplants to unfurl bright yellow flowers along many tidal marshes. The flower heads produce a sticky white resin that often varnishes the entire plant.

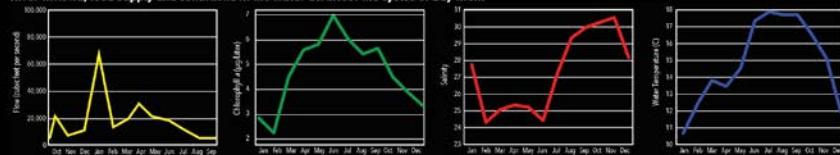
EELGRASS FLOWERS

Warming water temperatures are among several cues that trigger eelgrass to produce flowers within sheaths called spathes. The resulting ripe fruits, which resemble grains of wheat, are most available in July and August.

Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec



River inflows, food supply and conditions in the water all affect the cycles of Bay life...





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Alameda Work Trickles On

by Ariel Rubissow Okamoto




Driving down 680 from San Ramon to Pleasanton — with its prettily paved and groomed burbs — you wouldn't guess that this was once a shallow lake and willow marsh. Indeed little trace is left of the vast freshwater swamp called Tulare Lake, just over the East Bay ridges, which once collected all the runoff from Livermore and San Ramon. This marshy ecosystem filtered the rush of water from winter storms so that by the time it exited into the narrows of Arroyo de la Laguna, mingled with Alameda Creek, and spilled into Niles Canyon, it wasn't an unmanageable torrent. But the development of farms and towns on top of this wet spot dramatically changed the hydrology of the northern reach of a vast watershed draining into San Francisco Bay. "When it rains, Niles Canyon gets crazy, there's so much water, so fast," says Tim Ramirez, natural resources manager for the San Francisco Public Utilities Commission, which owns large areas in the watershed.



Of course the loss of the lake happened more than a century ago, and since then throughout Alameda Creek's 640-square-mile watershed dozens of other wet spots have been drained, dams built, creeks buried, and channels reshaped. "The watershed is huge and complex, and all these changes, compounded over time, have left us with a long and arduous path to getting it to function more naturally again. We're going to need the full cooperation of every partner to reach our goals," says Carol Mahoney, a planner for Zone 7 Water Agency out in Livermore.

Niles Canyon. Photo by Brian Sak.



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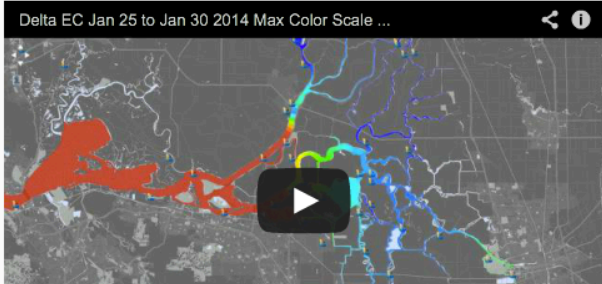
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Keeping the Salt Field at Bay

by Ariel Rubissow Okamoto

As the dry, warm days went on and on and on this winter, two guys intimate with California's Sacramento San Joaquin River delta shifted gears. One reassigned staff from flood to drought response, and the other lay awake at night imagining barriers across various slough openings. By early February, some Sierra reservoirs were so low, and so close to "dead pool" level, that the water projects stopped pumping and delivering. Farmers had to retrench, communities realized they might only have enough drinking water for the next six weeks, and any salmon that succeeded in spawning upstream had no water to carry them down. Things got scary. The water projects asked state regulators to let them off the hook in meeting various water quality standards, and the governor's state of emergency put the Endangered Species Act on stand-by.

While the pundits focused on skin deep polarizations — in which economy, food supply and farmers trump endangered fish — those with a deeper understanding of California water supply issues were worrying about something else altogether: keeping the salt field at bay. "Salinity is the central management challenge during a drought," says Jon Burau, a senior hydrologist with the U.S. Geological Survey. "People don't realize how much water we 'spend' repelling salinity intrusion to maintain water deliveries." (Red zone in visualization below is salt field in late January from www.baydeltaalive.com/salinity.)



EXTENDED CONTENT ON WEB

Nitty Gritty

- MAILING & EMAIL DISTRIBUTION

- 1700 Snail Mail

- 500 Bulk Delivery Agency Offices

- 600 PDF

- MAGAZINE MOST POPULAR PAGE ON SFEP WEB SITE

- 16% ALL VISITS

- Web Page Sessions MARCH 14-NOV 16

- 11,214 visits

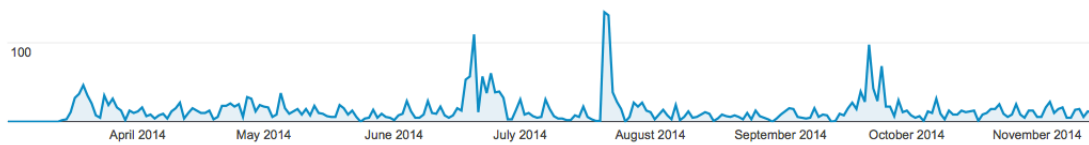
- *67% were new visitors and 32% were returning visitors*

- Sessions Via Social Referral March 14-Nov 16

- 219 from Maven's Notebook

- 88 from Waterboards

- 7 Facebook & 2 Twitter all year

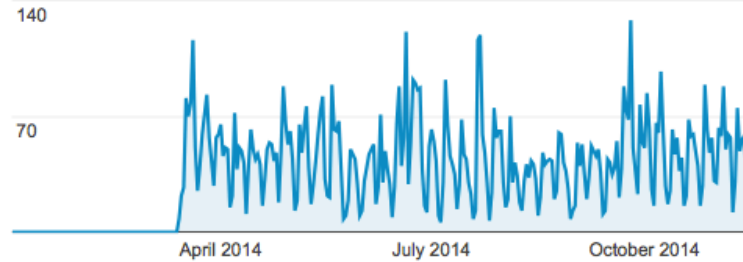


GOOGLE ANALYTICS

Page path level 2	Pageviews	Unique Pageviews	Avg. Time on Page
	3,770 % of Total: 16.49% (22,860)	2,818 % of Total: 15.89% (17,733)	00:02:01 Site Avg: 00:02:12 (-8.12%)
1. /	1,828 (48.49%)	1,205 (42.76%)	00:01:56
2. /newsletter-archive/	328 (8.70%)	193 (6.85%)	00:01:44
3. /subscribe-donate/	296 (7.85%)	266 (9.44%)	00:01:53
4. /the-laid-back-levee/	148 (3.93%)	132 (4.68%)	00:06:09
5. /back-to-the-future/	91 (2.41%)	78 (2.77%)	00:04:04
6. /interceptingtrash/	87 (2.31%)	77 (2.73%)	00:03:30
7. /wet-feet-for-silicon-valley/	76 (2.02%)	63 (2.24%)	00:01:55
8. /flood-resistant/	66 (1.75%)	55 (1.95%)	00:02:26
9. /shifts-on-the-pollution-front/	62 (1.64%)	56 (1.99%)	00:00:48
10. /managed-retreat/	59 (1.56%)	55 (1.95%)	00:03:41
11. /engineering-the-delta-marshes/	55 (1.46%)	48 (1.70%)	00:02:37
12. /how-wild-should-drakes-estero-be/	49 (1.30%)	46 (1.63%)	00:03:27
13. /building-resilience/	45 (1.19%)	34 (1.21%)	00:01:55
14. /clams-muddle-delta-restoration/	45 (1.19%)	44 (1.56%)	00:03:37
15. /from-bay-mud-to-building-material-from-lockdown-to-smooth-sailing/	45 (1.19%)	42 (1.49%)	00:05:05
16. /baylandsremodels/	36 (0.95%)	30 (1.06%)	00:04:28

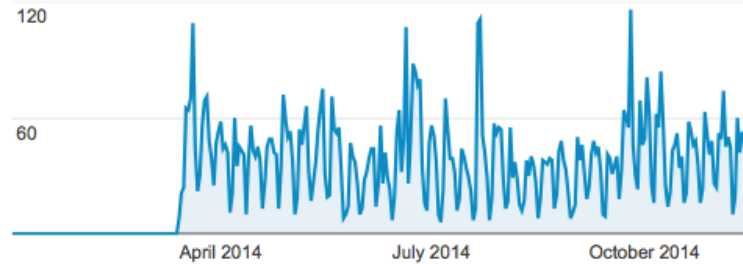
Visits

Sessions

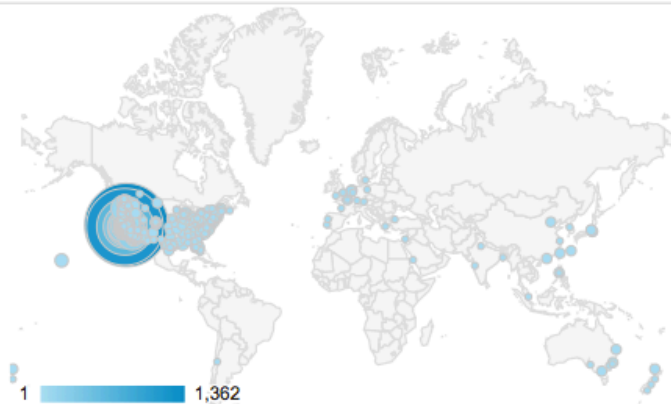


Unique Visitors

Users



Visits by City



/our-projects/

671

/our-projects/water-quality-improvement/trashcapture/

572

/our-projects/water-quality-improvement/

527

/about-us/implementation-committee/

525

Visits and % New Visits by Visitor Type

User Type	Sessions	% New Sessions
New Visitor	7,565	100.00%
Returning Visitor	3,649	0.00%

Visits and % New Visits by City

City	Sessions	% New Sessions
Sacramento	1,362	43.61%
San Francisco	1,176	67.43%
Oakland	642	69.47%
Berkeley	360	69.44%
San Jose	278	77.70%
San Rafael	223	65.02%
Richmond	192	57.29%
Los Angeles	181	74.03%
Davis	171	66.67%
Arden-Arcade	129	52.71%

FUNDING EXPENSES OVERVIEW



Estuary News 2014 Per Issue Cost					
Issue	# Pages	Writing/Editing Okamoto	Printing JT Litho	Mailing/Postage City Print	Total
March	20 pgs & insert	\$ 11,700.00	\$ 3,030.00	\$ 1,078.12	\$ 15,808.12
June	16 pges	\$ 13,630.00	\$ 2,700.00	\$ 1,086.04	\$ 17,416.04
September	12 pges	\$ 14,450.00	\$ 2,088.00	\$ 1,085.59	\$ 17,623.59
Total		\$ 39,780.00	\$ 7,818.00	\$ 3,249.75	\$ 50,847.75

2014 PROJECTED BUDGET \$70K preferred 2015 \$95K