SFGate.com

# Restoration offers more questions than answers

John King
Tuesday, October 21, 2008



In his essay "Loma Prieta, Part Two," author
James D. Houston writes movingly of how, in this ever-growing corner of the world, it's essential that our remaining "natural blessings ... should be revered and attended to."

Standing on a pockmarked levee near the low arc of the Dumbarton Bridge, I see how complex the act of reverence can be.

To the east is a soft slope of pickleweed and then water, the southern reaches of the bay that defines our region. To the west, encrusted formations of salt rise from the shallows made red by the presence of algae.

But this mottled terrain - identified prosaically as SF2 on maps in the know - is where the largest and potentially most inspirational development in Bay Area history will begin next year: the restoration of 13,500 acres of what once was tidal marsh.

Except that restoration isn't really the right word.

"The big question is: What will nature do in response to what *we* do out here?" mused Steven Ritchie. "This is a large-scale experiment."

Ritchie's my affable tour guide; he also manages the South Bay Salt Pond Restoration Project, an effort begun in 2003, when state and federal agencies spent $100 million to purchase vast tracts of former bay from Cargill Inc.

The conversion of shallow bay into salt flats began in the 1850s. As miners sought gold in the Sierra foothills, fortune seekers of a different sort fashioned a clumsy grid of ponds separated by levees. Water was shifted from pond to pond until it all evaporated, leaving lucrative salt in its wake.

This is a big reason the bay lost 85 percent of its natural tidal marshes in the century after the Gold Rush; on the other hand, such uses also prevented the sort of development that now lies inland, industrial parks and multilane expressways. Salt ponds also are popular with migratory waterfowl,

such as grebes, that aren't as keen on shrubby marshes.

"The whole concept 'nature abhors a vacuum' plays out in spades here," Ritchie said. "New species of birds moved in."

### Opening the space

Cargill still "mines" salt on 8,000 acres in Newark. It retains 1,400 acres of Redwood City shoreline where it wants to develop half the site while converting the rest to parks and wetlands. But all other South Bay salt ponds today are in public hands.

Now comes the hard part.

Pond SF2 and its 240 acres offers a sense of what lies ahead. The first thing you'll see from the Dumbarton Bridge will be bulldozers churning up mud, forming an outer berm while shaping 30 artificial islands within. Half will be hairbrush-shaped, the other half squarish.

Once the new landscape is in place, new culverts will be opened - partly - to let bay tides pass through. Sediment will gather. Tidal plants such as native cordgrass will settle in.

Scientists will watch which species of birds prefer which islands, and which ones build nests. Researchers also will monitor the newcomers' impact on the western half of SF2 - an arid-looking plateau that is favored by the western snowy plover, a threatened species.

Multiply this by the 52 other ponds in the Cargill purchase.

This is beyond any sort of ecological restoration before attempted in an urban region, so much so that planners don't even pretend to know how things will go. The environmental impact report prepared by consultants, including the planning firm EDAW and hydrologist Philip Williams and Associates, lays out an "adaptive management" strategy that aims for a final balance of 90 percent tidal marsh and 10 percent "managed ponds" (a.k.a. open water). But the plan is flexible enough that once the mix is 50-50, the future can be reassessed if, say, the number of American avocets plunges.

"If we keep 10 percent as managed ponds and do it *just right*, that should be enough to maintain the needed habitat," Ritchie explained. "One school of thought is that a lot of these birds really like salt ponds. Another school of thought says they'll prefer mud flats if there's an option."

### Billion-dollar project

The restoration effort is expected to take at least 30 years, with a price tag of - wait for it - $1 billion. And when it's done, don't expect Crissy Field-like panoramas. It will be more like the view east of Benicia from Interstate 680, dull pickleweed and natural tidal channels, with a trail here

and there.

After five years and $37 million of planning, environmental maintenance and such demonstration projects as the restoration of three small ponds near Milpitas, Ritchie had hoped work would begin last summer; instead, he's waiting on green lights and legal OKs that always take more work and time than expected.

"Besides going to hearings and conferences, my life is consumed by getting permits," Ritchie said.

What worries me is whether, in the long run, the push for methodical restoration and its benefits will survive funding shortages and political in-fighting.

Some groups want extensive public access, while others would keep humans away from all habitat. Pragmatists willing to allow isolated trade-offs to hasten restoration elsewhere, such as the Cargill proposal in Redwood City, are opposed by purists who view the sacrifice of any potential acre of bay as a crime again nature.

For his part, Ritchie avoids politics: "I was trained as an engineer." He's confident the money will come - from bonds, from flood-control funds, perhaps someday from the San Francisco Bay Restoration Authority authorized this month by Gov. Schwarzenegger. Created after lobbying by such groups as Save the Bay, it would have to authority to propose taxes or fees.

Any other ideas?

"Corporate sponsorship?" Ritchie suggested with a smile. "If we could just get marsh vegetation to grow into the Google logo - *that* would be something to sell."

**To learn more** about the salt pond restoration project, go to *www.southbayrestoration.org*.

Place appears on Tuesdays. E-mail John King at jking@sfchronicle.com.

http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2008/10/21/DDG113JJAJ.DTL

This article appeared on page **E - 1** of the San Francisco Chronicle