

## **Item 5. Article from *Estuary***

### Moonscape Nestings

If you were an American avocet flying over the Estuary on your usual migration path this fall, you might be surprised to see a once watery landscape turned moonscape. Little rainfall last spring and difficulties with water management, both in Cargill's South Bay ponds and refuge ponds in the North Bay, have transformed many of the Bay's salt ponds into cracked, dry beds. "If you took a satellite image from space," says U.S. Fish & Wildlife's Peter Baye, "You'd see a lot more reflection than usual" [salt pans look white from space]. "But the birds may be the only ones surveying the full scene. "No agency is keeping track of this in terms of the cumulative Bay picture," says Baye.

In the South Bay, the dried ponds offered an unexpected boon for a threatened species. This past spring, shallow ponds normally used by shorebirds and deeper ponds inhabited by ducks suddenly became dry pans covered with nesting snowy plovers. The new, accidental habitat, combined with avian predator enclosures being used on the refuges, helped make this a banner year for the plover, says the S.F. Bay National Wildlife Refuge's Joy Albertson. While final numbers aren't in yet, hatching success was definitely up, especially on the Baumberg Tract, she says. Redwood City ponds normally heavily used by shorebirds were also covered with nesting snowy plovers. Some of the "new" habitat in the South Bay resulted from the way Cargill managed its ponds this year, says Albertson. "They stopped water movement into one of their ponds and it had a domino effect on the other ponds. Once the plovers were nesting there, it was too late to fill the ponds."

The changes to North Bay ponds may not be as benign. Chronic circulation problems were compounded by the lack of late spring rainfall, says Baye. "Some of the ponds are just sitting there evaporating, turning into bittern, which is so heavy it's plugging the pipes. You've basically got constipated brine transfer." Several ponds are becoming hypersaline and acid, which may ultimately raise the stakes and costs of tidal marsh restoration.

For now, the birds seem to be avoiding what looks bad and moving on to other areas, according to Tom Huffman, who manages the North Bay marshes for Cal Fish & Game, although he too, is worried about possible long-term habitat damage. But others say there may be more immediate impacts on the birds using the Pacific Flyway this fall. According to the U.S. Geological Survey's John Takekawa, "At some point, there are going to be impacts on shorebirds and ducks. Without invertebrates [in the dried playas], there's habitat loss. On their fall migration, these birds need lots of resources." While the birds can move to other areas, he adds, many of them prefer salt ponds because they are somewhat private and protected from predators. The other problem, says Takekawa, is that most migration takes place between August and October when there is usually not much rain, and—this year anyway—the ponds are still dry. "The birds are just getting down here, and the habitat isn't very good. It's likely a stress on their populations." Contact: Peter Baye: (707)562-3003  
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