

## Big Lagoon, Small Lagoon, or No Lagoon?

### Will Park Service restore open water, or just re-route creek?

Before 1850 Big Lagoon held 30 acres of open water. Since then, however, due to overgrazing in the Redwood Creek watershed, this downstream area has filled in to form swampy fields. The former meandering creek was shoved against the hillside and held in place with dikes. The view from Highway One as it drops down towards Muir Beach may still be scenic--but to the endangered steelhead trout, coho salmon (among the wildest in California), and red-legged frogs, the change matters a lot.

The Golden Gate National Recreation Area (GGNRA) is studying restoration options for the lagoon and the watershed to address both flooding and habitat problems. Consultant Phil Williams & Associates has created three project alternatives for the lagoon.

\* The Big Big Lagoon would roughly re-create the pre-1850's lagoon through removal of 125,000 cubic yards of fill. This would restore tidal influence to the mostly freshwater lagoon creating an important half-way staging area for salmonids migrating between the ocean and the stream.

\* The Small Lagoon would have about half the original surface area through removal of about 100,000 cubic yards of soil. It would create an estuary system with little or tidal influence but containing some backwater for salmonids struggling against high winter flows.

\* The No Lagoon option would simply re-route Redwood Creek, yielding an estuary system with no tidal influence and few or no refugia for salmonids. It would, at least, provide a distinct channel for salmon migration.

Prior to 1850, the natural rate of sedimentation roughly matched the natural rate of sea level rise, creating a natural lagoon that lasted perhaps several thousand years. But the lifetime of any restored lagoon depends on reducing the excess post-1850 erosion. Without any remediation of upstream sediment sources, the Big Big Lagoon would refill in about 100 years, and the Small Lagoon in about 50. The No Lagoon option would simply allow the creek to continuously flush out the current flow of excess sediment.

A recent Sediment Study, available at:

[www.nps.gov/goga/admin/planning/big\\_lagoon/reports.htm](http://www.nps.gov/goga/admin/planning/big_lagoon/reports.htm)

concludes that the main sediment sources are roads/trails and channel incision. It finds that the roads/trail sources could be remedied for about \$1.4 million, but that remediation of the extensive channel incision is not feasible. It suggests instead restoring upstream floodplains so as to intercept the excess sediment. Additional work is needed, though to determine if these changes could reduce sedimentation to a level that would lead to a sustainable lagoon.

Because of funding constraints, planning for the Big Lagoon Project is scheduled to be complete before planning for watershed remediation.

The Sierra Club believes that the Big Big Lagoon option deserves more study. It is very likely that more watershed work will be accomplished over the next few decades, which would prolong the life of the lagoon and its usefulness for salmon. GGNRA should complete the Sediment Study and incorporate its findings into the Draft Environmental Impact Report on the lagoon options.

WHAT YOU CAN DO:

Write to:  
GGNRA Big Lagoon Planning  
Attn: Jennifer Vick  
Building 201, Fort Mason  
San Francisco, CA 94123  
[Jennifer\\_Vick@nps.gov](mailto:Jennifer_Vick@nps.gov)

Tell GGNRA that you believe that the feasibility of a Big Big Lagoon has not been adequately studied, and urge it to request the necessary funding to complete the additional work called for in the Sediment Study.

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