# ONE BOLINA

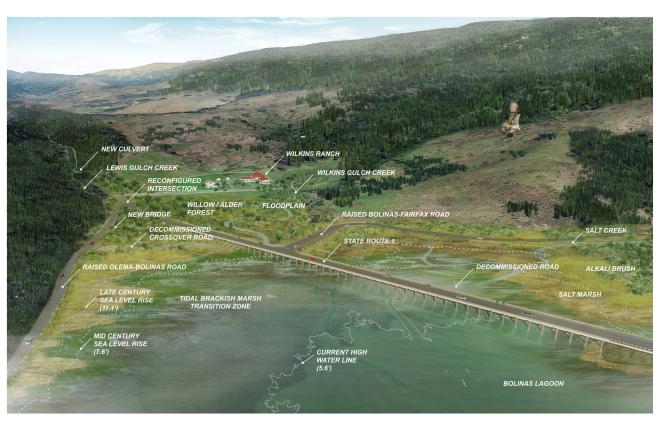
## Bolinas Lagoon: Today and Tomorrow

Bolinas Lagoon is an internationally recognized wild life hot spot and a popular recreational destination. However, past development has dramatically altered its wetlands and streams, as well as the natural processes that sustain them. This has affected many species, including endangered coho salmon, which have not spawned here since 2010.

Now, climate change threatens the lagoon and its surrounding communities as it accelerates sea level rise and brings more intense and more frequent storms. With 3–5 feet of sea level rise predicted over the next century, many of the lagoon'simportanttidalwetlandswill frequently be under water.

The North End Project (see diagram, right) is a part of a much larger, community-led vision to make Bolinas Lagoon healthier and more resilient to climate change. It will improve water and sediment flowandrestorewetlandandstream habitats by reconnecting Lewis and Wilkins Gulch creeks to their floodplains. To do so, portions of State Route 1, Fairfax-Bolinas Road, and Olema-Bolinas Road will need to be elevated, and the Crossover Road between them removed.

This will not only help reduce chronic road flooding and maintenance costs, but will also allow the lagoon and streams to shift and expand and will improve coho salmon and steel head trout habitat.



The Bolinas Lagoon North End Project includes a suite of changes to local roads, wetlands, and streams to reduce flooding and make them more resilient in the face of the additional 3–5 feet of sea level rise expected over the next century.

### AN INTERNATIONAL ICON AND A LOCAL TREASURE

People have long relied on Bolinas Lagoon for their livelihoods, as wellasforrecreation, solace, and inspiration. The lagoon is also widely recognized for its rich wetland habitats, and as a major wintering area and migratory stopover for tens of thousands of birds.

Many fish, amphibians, mammals, and plants also call this place home. These include rare, threatened, and endangered species such as California red-legged frogs, California black rails, California giant salamanders, steelhead trout, and coho salmon.

With regional populations of steelhead and coho having declined over 95 percent in the last fifty years, estuaries like Bolinas Lagoon are particularly critical refuges and nursery areas for these species.

Restoration projects like this one that restore stream flow and reconnectstreamstotheirfloodplainshelpensurethattheyoungfish havetherestingandfeedinghabitatstheyneed.Removingbarriersto upstreammigrationwillalsohelpbreedingadultcohoandsteelhead.



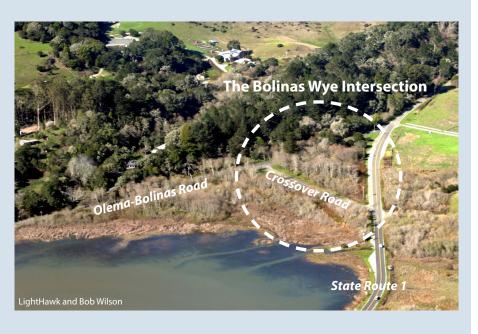
Coho salmon need to be able to migrate to healthy upstream habitats to breed, and their young must feed and takes helter in slow waters that estuaries like Bolinas Lagoon can provide.

### THE BOLINAS WYE WETLANDS PROJECT

An absolutely critical part of the larger North End Project is reconfiguring the "Wye" intersection where State Route 1 and the Olema-Bolinas Road meet. The Wye's roads and culverts currently block fish migration, disconnect water and sediment movement between the wetlands and streams, and prevent the wetlands and the lagoon from moving in land with seal evel rise. If these issues are not addressed, these important habitats as well as parts of these roads will be lost.

The Bolinas Wye Wetlands project will address these barriers to create a functional and resilient ecosystem that will:

- Improve safety and reduce flooding
- Restoreimportantwetlands
- Protect wildlife and their essential habitats
- Create climate change resiliency



### To do this we will...

- Remove the Crossover Road and elevate portions of Olema-Bolinas Road
- $2. \ \ Reconnect Lewis Gulch Creek to its historic flood plain$
- 3. Install a creek crossing along Olema-Bolinas Road to establish a more natural stream channel
- 4. Stabilize Lewis Gulch Creek using natural materials
- 5. Improve fish habitat along Lewis Gulch Creek
- 6. Plant native wetland species
- 7. Reconfigure the State Route 1 and Olema-Bolinas Road intersection

### **BOLINAS LAGOON NEEDS YOU!**



One Tam, Marin County, and the communities of Bolinas and Stinson Beach are poised to address increasing threats from sea level rise head on, but your help is needed.

Major progress is already underway on the Bolinas Wye Wetlands Project,

including securing funding to complete all necessary surveys and project design.

Funding for project implementation is then extpriority. Closing the project's \$4 million funding apwill leverage existing public funding sources to meet the total projected cost of \$8 million.

### DONATE

The North End Project and the future of this vital community depends upon all of us.

Be a part of creating a more resilient future for Bolinas Lagoon today!

Tolearnhowyoucanhelpsupportthis project, please contact Matt Leffert atmleffert@parksconservancy.orgor (415) 561-3069.

# ONE TAM

One Tam is a partnership of the Marin Municipal WaterDistrict, National Park Service, California State Parks, Marin County Parks and Open Space District, and the Golden Gate National Parks Conservancy

### **FUNDERS**





### **PARTNERS**





BOLINAS LAGOON www.marincountyparks.org









