

# The Middle Harbor Enhancement Area



October 3, 2019



US Army Corps  
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San Francisco District



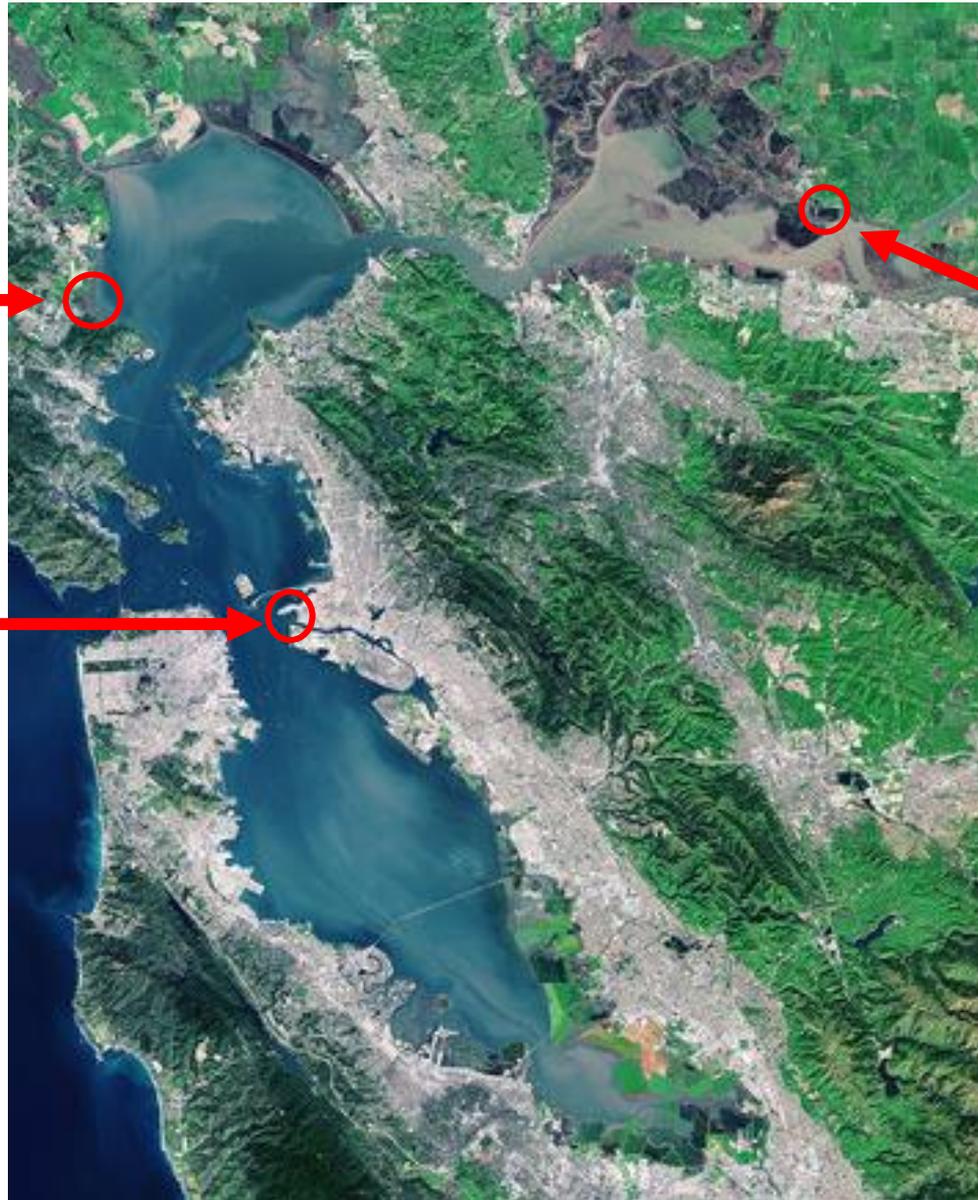
# Restoration Projects Receiving Dredge Material

(millions of cubic yards – mcy)

Hamilton  
Airforce Base  
(5.9 mcy)

Middle  
Harbor  
Enhancement  
Area  
(5.6 mcy)

Montezuma  
(2.8 mcy)





# An Early Experiment

Creating Subtidal  
Habitat in an  
Industrialized Port

# Middle Harbor in the 1990s



# Middle Harbor Enhancement Area Today



MATTER

## *Birds Are Vanishing From North America*

The number of birds in the United States and Canada has declined by 3 billion, or 29 percent, over the past half-century, scientists find.



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### Abstract

Species extinctions have defined the global biodiversity crisis, but extinction begins with loss in abundance of individuals that can result in compositional and functional changes of ecosystems. *Using multiple and independent monitoring networks, we report population losses across much of the North American avifauna over 48 years, including once common species and from most biomes. Integration of range-wide population trajectories and size estimates indicates a net loss approaching 3 billion birds, or 29% of 1970 abundance. A continent-wide weather radar network also reveals a similarly steep decline in biomass passage of migrating birds over a recent 10-year period. This loss of bird abundance signals an urgent need to address threats to avert future avifaunal collapse and associated loss of ecosystem integrity, function and services.*

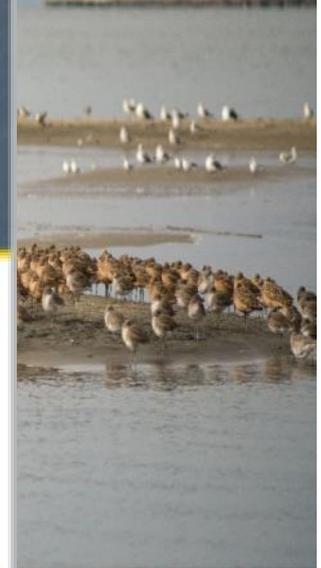
# Avian Habitat is Critical



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# Avian Uses in MHEA





## Golden Gate Birder

Birding News & Inspiration From Golden Gate Audubon

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### Middle Harbor Shoreline: Birding Hotspot August 20, 2014

Posted by GGAS in [Birding](#), [Birding Hotspots](#)



Birding at Middle Harbor / Photo by Sara DeBarr

*By Maureen Cahill*

Come see a really good murrelet. Come see a really good restored mudflat.

From late July to early April, Middle Harbor Shoreline Park in Oakland hosts a wealth of water birds. The exciting arms of the park make it easy to observe the mudflat fairly close up even when the tide is out, though having a spotting scope (or a trip leader who has one) is really helpful.

I've had a number of Bay Area birding firsts at Middle Harbor. The first Eared Grebe I ever saw with his "ears on" was at Middle Harbor, in late March a few years back. Here is where I first saw a Bay Area Peregrine Falcon on the hunt. On a cold and windy winter's morning, the ducks and shorebirds at adjacent Point Arnold all took off at once. Sure enough, a Peregrine soared in over the water from the north, close in and on the hunt.

Owned and operated by the Port of Oakland, Middle Harbor is one of the East Bay's newest parks. If you didn't know it was there, you'd never think to look for it in the middle of the sprawling container ship port.



#### About Golden Gate Audubon Society

Golden Gate Audubon Society engages people to:

- \* Experience the wonder of birds and translate that wonder into action, and
- \* Protect Bay Area native bird populations and their habitats.

Visit our website at [www.goldengateaudubon.org](http://www.goldengateaudubon.org).

Follow Golden Gate Birder by



<https://goldengateaudubon.org/blog-posts/middle-harbor-shoreline-birding-hotspot/>



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# Eelgrass



# Summer 2019 Eelgrass Plantings – 82 Test Plots – 12,300 Plants





## The Takeaway

- Birding Hot Spot (Audubon approved)
- Eelgrass Planting was Successful (Monitoring Period has Begun)
- Well-Functioning Subtidal Habitat, Even if Success Criteria Don't Agree (Yet)

# Goals - Middle Harbor Target Habitats

