GOLDEN HOUR

A dynamic, inspiring field-based restoration ecology institute powered by community

THE EXCEPTIONAL RESOURCES OF POINT MOLATE

BACKGROUND

Point Molate is a resource-rich 436-acre area that once served as a Naval Fuels Depot. As an active military site, portions of this land were graded, built-upon, excavated and manipulated in many ways. Although some of this habitat manipulation caused damage, the essential elements of the landscape are still present and, in many cases, thriving. Wetlands dot the landscape next to parking lots and rare grasslands abound even in planted, mowed and impacted slopes. The natural restoration process is giving rise to unique habitats (coastal grasslands, willow woodland) and flora that is nearly extinct in the East Bay.



There is immense pressure to develop this land for profit, meanwhile the local community and its leadership has worked to understand what level of conservation is appropriate, thus creating a development envelop which will provide community benefit while minimizing impacts to the diversity of resources which inhabit this area.

As one observes the Point San Pablo Peninsula, as well as the Point Molate area, it is evident that this finger of habitat is essential to the Bay Area as a preserve for wildlife, views of the Bay, water quality, and climate change impacts. This is an ideal place for humans to experience a natural setting

within a highly developed human landscape.

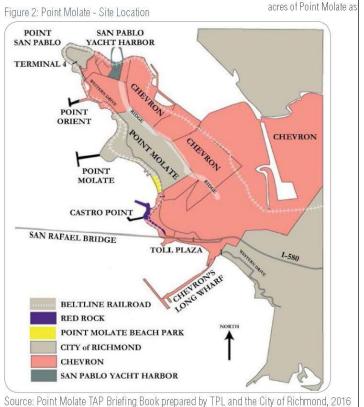
THE HUMAN PARTNERSHIPS

The conservation of Point Molate is supported by numerous, active organizations that volunteer their time in educating the public, raising awareness about this resource, stewarding the site. Many groups are already in an active partnership with the City of Richmond to help maintain and steward this site. We believe that this site will be well stewarded well into the future.

Additionally, we see Chevron as an important long term partner who will benefit from the thoughtful management and conservation of these habitats. We will continually work to engage them in the planning and outreach process.

Notably, there is a new connection of the Bay Trail which will allow for hikers to begin to see the connection of this park with Miller Knox to the south. Additionally, water trails are planned that will connect points in Richmond and along the entire Bay for water travel. Point Molate would serve as a notable location for access.

THE GREATER LANDSCAPE



Point Molate is effectively an island. Geologically it represents bedrock that is more akin to the Marin Headlands. In fact, the water between Point Molate and Marin covers the low-lying bluffs that connect these two areas. Thus, Richmond remarkably has within its city boundary a unique taste of the Marin Headlands. Some refer to this area as the East Bay Headlands, or the Richmond Headlands.

The majority of the land surrounding Point Molate is privately owned (mostly by Chevron). This private ownership enhances the conservation value of this site, allowing for multiple management regimes with multiple goals, likely increasing habitat heterogeneity, habitat condition and wildlife resources. Having this connected landscape that runs from ridge to bay is extremely important for maintaining water quality for arguably the most productive eelgrass bed and herring run on the Western US coast. Not only is this site important for feeding much of the local animals, it also is important as a resource for migratory birds and mammals.

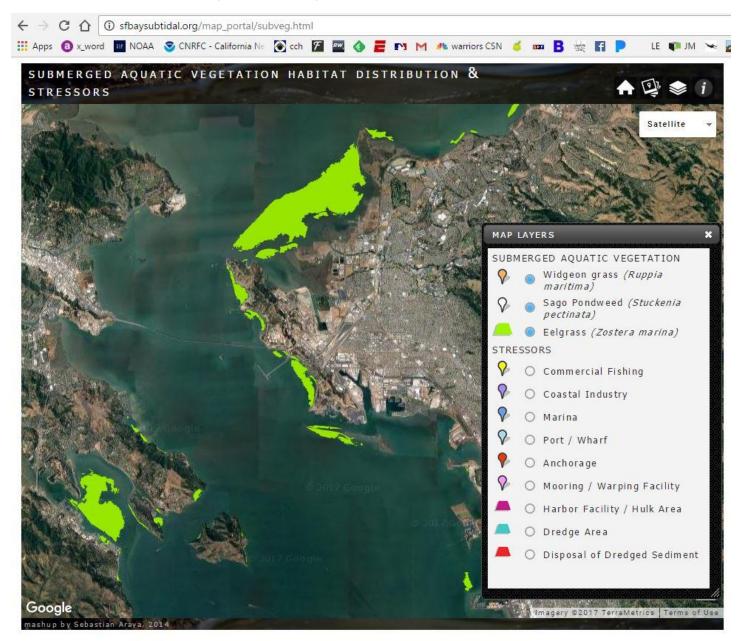


SPECIFIC CONSERVATION LOCATIONS AND SITES OF ECOLOGICAL RESILIENCE

• Areas adjacent to other natural landscapes are exceptionally important for conservation. Nominally, one might think it's best to have a park or landscape managed by one entity, but research has shown that a variety of management scenarios can be beneficial for long term habitat health (as long as it's managed as such, and not as say "housing".) Chevron land serves as a buffer and a complementary stewards. Simply offering wildlife and plants two adjacent management regimes allows for animals and plants to find the most optimal conditions for growth. In particular, the "Molate Beach" creek that runs adjacent to the southern boundary of the Fuels Depot (see map below). This creek is filled with mature, well-established riparian woodland habitat that would be greatly impacted if development was allowed to occur adjacent to this creek.



• **Eelgrass beds are one of the pillars of Bay health**. The San Pablo Peninsula is surrounded by the most expansive and important eelgrass beds in the entire Bay. These beds have been documented to host large scale spawning events that have been noted by NOAA to possibly be the largest on the entire Western US Coast. (See map below from the San Francisco Bay Subtidal Goals plan.

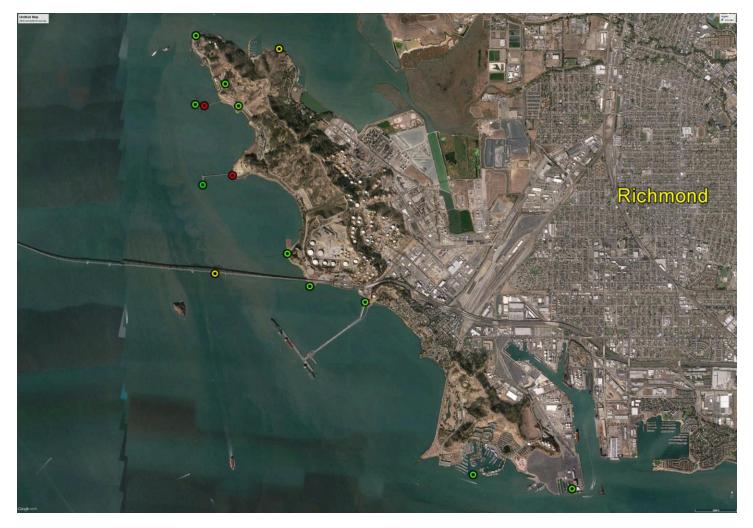


- The eelgrass beds occupy this unique area due to a confluence of ecological factors such as water depth, salinity and currents, but another important factor is the sustainability of the beds is the lack of human development and regular pollution inputs. The eelgrass beds are often buffered by plant communities that elevate the water quality before it enters the bay. This decreases pollutants and often increases clarity which is important for allowing eelgrass beds to persist in a wide range of depths. It has been modeled that the natural vegetation allows for fast water infiltration rates, greatly reduce runoff and protect the eelgrass beds. We are working with scientists to better understand this phenomenon and model it to a great degree of certainty.
- Coastal Prairie grasslands meander through scrub communities here. Coastal prairie grasslands have declined by at least 90% in the US, this is one of five significant sites of bayside coastal prairie habitat in the East Bay. It is arguably the largest remnant prairie in the East Bay.
- Notably, there are additional wetlands at Point Molate that have been located since the last EIR process and we believe that there may be even more hidden in patches of dense scrub. These habitats and all the resources listed above benefit from the fact that many of the watershed lands at Point Molate are protected from ridgeline to bay.

• The Conservation Lands Network (<u>www.bayarealands.org</u>) is a Bay Area scale project that helps predict areas which will be more resistant to climate change using modeling. The greater San Pablo Peninsula area has a unique ability to withstand climate effects and will serve as an important refugia for biodiversity.

WORLD RENOWN OSPREY RECOVERY SITE

Osprey, one of our largest birds in the Bay Area, were almost completely wiped out by DDT at the same time the Bald Eagle was almost eliminated. Now, these important "sea eagles" have begun to successfully colonize many of the available nesting habitats on Point San Pablo. This nesting population represents one of the Southern-most populations on the entire West Coast. The restoration of nesting habitat, along with osprey utilizing and successfully fledging their young from this site speaks to the remarkable nature of this project site. Increased human activity, domestic cats, and increased pesticide use can greatly impact these creatures. The image below shows all the Osprey nests in the area. Green nests had a successful clutch while red did not reproduce. Source: Golden Gate Audubon Society.



OTHER UNIQUE ASPECTS INCLUDE:

- Distinct patches/mosaics of coastal scrub rich with birds
- Summit trees immense, mature Toyon's occurring in stands – a distinct and rare vegetation type for this area
- Large winding willow riparian habitat filled with pipevine swallowtail butterflies
- Coastal strand and rock outcrops
- Bare beach soils for nesting shorebirds (e.g. Least terns)
- State-listed and locally rare plants (e.g. sea bluff lettuce (*Dudleya farinosa*), California ponysfoot (*Dichondra donielliana*), marsh aster (*Symphyotrichium lentum*) and Alaska piperia (*Piperia unalascensis*), to name a few.



• A unique host of birds which have been documented by the Audubon Society including Osprey, White-tailed kites, and notable shorebirds.



Image showing potential resources at Point Molate from the SF Bay Subtidal Habitat Goals Project

AREAS OF GENERALLY LOWER VALUE

While not all of Point Molate is pristine high quality habitat, there are many areas where habitat is resilient and native species are persisting. We believe that much of the site is "restorable" at a reasonable cost with a realistic chance of success. Meanwhile, there are other areas that will likely be extremely expensive to restore with a reduced chance of restoring critical processes and habitats. Those areas of lowest priority habitat are as follows. These areas are listed from lowest conservation value to moderately-low value.

- Large graded sites under pavement where heavy grading has occurred and fill material is present in the subsurface.
- Eucalyptus stands with 80% cover of more. These are areas of very low restoration potential.
- Areas adjacent to roads and traffic which are likely locations with heavy impacts
- Areas infested with dense stands of weeds with long term, establish seed banks
- Actively eroding areas are lower priority, although erosion is a natural process and often can be remediated.
- Areas with cracked pavement and native soils underneath which may still provide a seed bank for native plants.

CEQA-Protected Rare and Unusual Plants

of Pt. Molate – Notable plants list by Lech Naumovich based on EBCNPS (Lake et al. 2016) work December, 2016

Rank

in East

Bay	Species	Common Name	Habitat
A2	Ambrosia chamissonis	beach-bur	Coastal Strand; Sand or Sandstone
A1	Atriplex leucophylla	beach saltbush	Coastal Strand; Sand or Sandstone
A2	Carex nebrascensis	Nebraska sedge	Misc. Wetlands
A1	Carex obnupta	slough sedge	Misc. Wetlands
A1	Centunculus minimus	chaffweed	Vernal Pools; Misc. Wetlands
A2	Cirsium quercetorum	brownie thistle	Grassland; Woodland
A1	Cirsium remotifolium	remote-leaved thistle	Forest; Grassland; Serpentine; Woodland
A1	Dichelostemma multiflorum	many-flowered brodiaea	Grassland; Scrub; Woodland
A1	Dichondra donnelliana	dichondra	Misc. habitats
A1	Dudleya farinosa	powdery dudleya	Rock, Tallus or Scree
A2	Elymus elymoides ssp. elymoides	squirreltail	Grassland
A1	Elymus glaucus ssp. jepsonii (ssp. glaucus is more common)	blue wildrye	Grassland
A2	Eriophyllum staechadifolium	seaside woolly-sunflower; lizard-tail	Coastal Bluff; Scrub
A2	Gnaphalium bicolor	Bioletti's cudweed	Dry Open Slopes; Sand or Sandstone
A2	Gnaphalium canescens ssp. microcephalum	white everlasting	Chaparral; Dry Open Slopes
A1	Grindelia stricta var. platyphylla (var. angustifolia is more common)	Pacific grindelia	Coastal Bluff
A1	Lupinus affinis	lupine	Misc. habitats
A2	Piperia transversa	transverse piperia	Dry Open Slopes; Forest; Scrub; Woodland
A1	Piperia unalascensis	Alaska piperia	Forest; Scrub; Woodland
A2	Rumex maritimus	golden dock	Brackish Marsh; Salt Marsh
A1	Rumex salicifolius var. crassus	willow dock	Coastal Bluff; Coastal Strand; Misc. Wetlands
A2	Spergularia macrotheca var. leucantha	large-flowered sand spurry	Alkali areas; Vernal Pools
A2	Spergularia macrotheca var. macrotheca	large-flowered sand spurry	Alkali areas; Coastal Bluff; Rock, Tallus or Scree; Misc. Wetlands

EXPLANATION OF RANKS

<u>*A1 and *A2</u>: Species in Alameda and Contra Costa counties listed as rare, threatened or endangered statewide by federal or state agencies or by the state level of CNPS.

<u>A1x</u>: Species previously known from Alameda or Contra Costa Counties, but now believed to have been extirpated, and no longer occurring here.

Al: Species currently known from 2 or less regions in Alameda and Contra Costa Counties.

A2: Species currently known from 3 to 5 regions in the two counties, or, if more, meeting other important criteria such as small populations, stressed or declining populations, small geographical range, limited or threatened habitat, et