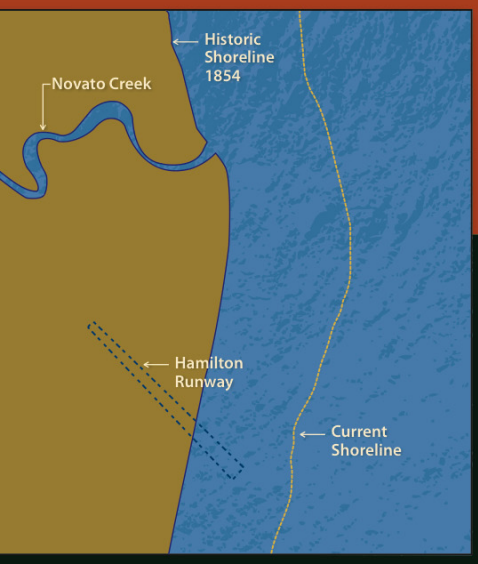
Hamilton Wetlands Restoration Project

You may now see bulldozers and construction out there, but imagine 150 years ago when you would just see lush grass and birds–and know the efforts you see now are working to restore that natural beauty. The land involved in the Hamilton Restoration Project has experienced extensive change over the past 150 years. Originally, wetlands existed from the hills for miles around. These wetlands were separated (or "diked") from the Bay and turned into farms in the late 1800s. In 1930 the U.S. Army developed the site as an Airfield. Today the U.S. Army Corps of Engineers is restoring the area to its original state as tidal wetlands using dredged sediment from the Bay.



Historic Shoreline

"Modern residents would hardly recognize the Bay Area as it was in the days of the Ohlones… Marshes that spread out for thousands of acres fringed the shores of the Bay…The intermingling of grasslands, savannahs, salt- and freshwater marshes, and forests created wildlife habitats of almost unimaginable richness and variety."

"'There is not any country in the world which more abounds in fish and game of every description,' noted the French sea captain, la Perouse. Flocks of geese, ducks, and seabirds were so enormous that when alarmed by a rifle shot they were said to rise 'in a dense cloud with a noise like that of a hurricane.'"

3000 BC–1848

Coastal Miwoks settle and thrive in the Bay Area

3000-2000 BC

San Francisco Bay Conservation and Development Commission

US Army Corps of Engineers

Coastal Conservancy

Farming Development

Farmers reclaimed wetlands in the Bay Area by placing levees along the shoreline, draining the wetlands and using the land to grow crops for a thriving Bay Area market. This effectively separated the Bay from the farmland and allowed growers like the California Packing Corporation to plant peas, sugar beets and grain in the area known as Marin Meadows, or the Pea Patch. This diking produced a chemical reaction called oxidation which caused ground surfaces to shrink and subside below sea level.

Aerial photo showing Hamilton Airfield in 1931, before any construction had taken place. San Francisco Bay is shown just above the letter A. Letters B and C show historic farming plots. Letter D depicts the location of the future, but now historic runway, and letter E represents the location of the main base. The first knoll on the right foreground would become the site of the hospital and the second knoll will hold the officer's club.

Diked farmland

Label from the California Packing company's brand of peas now known as Del Monte.

1849-1930

1849 California gold rush begins

1854 U.S. Coast Survey maps the Hamilton Area

1884 Shorelines build up with sediment

1900 Dikes used for dry land farming

1918 Lt. Hamilton is killed in action

1929 Black Tuesday marks start of the Great Depression

Army Airfield

To draw more revenue to the county in the 1920s, the Marin County Board of Supervisors purchased 928 acres of land from the California Packing Corporation (and adjacent land owner Dr. Bodkin) to give to the War Department for an Air Base. The effort was successful and Hamilton Air Base occupied the area from 1930-1974. Hamilton was ideal for the military since it was strategically located halfway between the Canadian and Mexican borders and enabled a quick dispatch to all Pacific coast points.

Hamilton Air Base

Hamilton Army Air Corps Base in 1934.

Hamilton Air Force Base was named for WWI First Lieutenant Lloyd Andrews Hamilton who won the Distinguished Service Cross in 1918 and was killed in action 13 days later.

1930-1974

1932 U.S. Army Air Corps starts construction on Hamilton Airfield

1935 Construction completed on Hamilton Airfield

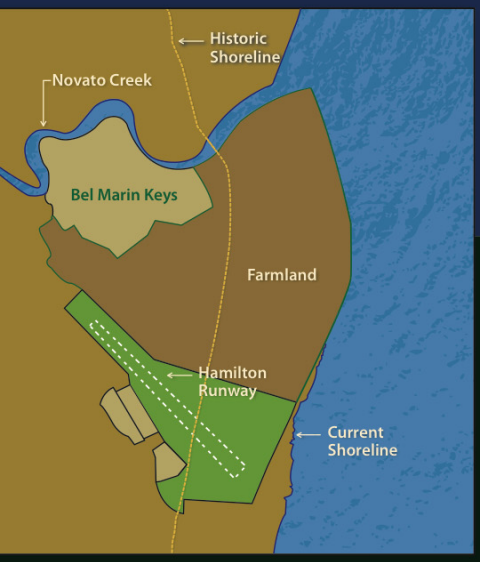
1947 Airfield transferred to U.S. Air Force and renamed Hamilton Air Force Base

1974 U.S. Air Force deactivates Base

Restoration - Phase I

Each year, three to six million cubic yards of sediment must be dredged to maintain safe navigation for cargo ships and in marinas for small boats in and around the San Francisco Bay.

The Hamilton Airfield was officially closed in 1974. One outcome of the base closure was that Federal, State and local agencies identified it as a place where wetlands could be restored utilizing clean dredged materials. Restoration involves raising the land level so that when the existing levee is opened, the soil is able to support tidal wetland plants and animals.



Current phases of Restoration

The goal of the project is to raise the level of the land with clean, dredged materials, and eventually breach (open) the levees in stages until all of the dikes can be removed and the restored wetlands will once again function as part of the Bay.

1975-2007

1975 — Base transferred to U.S. Navy

1988 — Defense Base Realignment and Closure Act passed to restore base to natural conditions.

2001 — Army undertakes cleanup actions and investigations

2003 — Site feature construction begins

2007 — Development of Northern seasonal wetlands begins

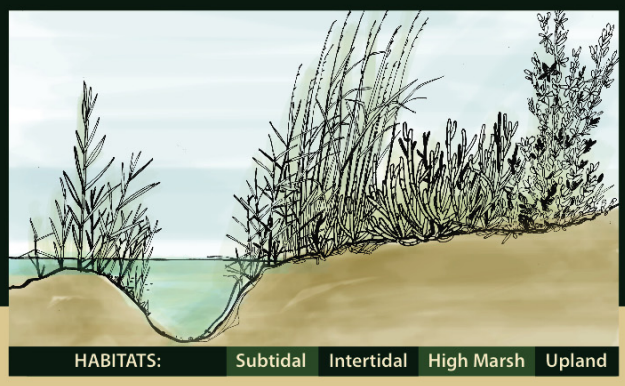
Future Wetlands

Restoration of tidal wetlands provides a rare opportunity to offset historic habitat losses. Through this project, nearly 2600 acres of tidal marsh, seasonal wetlands, and transitional and upland habitat will be restored, reestablishing important ecological functions to the area. Wetlands help to maintain an even climate, purify water, provide erosion and flood control and benefit Bay fisheries.

They trap CO^2 or "sequester carbon" from the atmosphere and therefore help with global warming. The wetlands will also provide some flood protection by absorbing wave energy from storms. Tidal wetlands trap sediments and so are able to grow upward as sea level increases.

Future Restoration

Wetlands are known as "nurseries of life" because they provide an environment for many vibrant and endangered species such as the California clapper rail and the salt marsh harvest mouse, as well as migratory birds and other animals



The completion of the Hamilton Wetlands Restoration Project will enlarge the natural habitats for many of the area's critical or endangered species. The initial project site includes 700 acres of tidal marsh, seasonal wetlands and transitional habitat.

The Future

2010 — Seasonal Wetland development finishes

2014 — Beneficial reuse placement finishes

2015 — Breach of levees

Hamilton area is restored to its natural state

This project has received support of major Bay Area environmental groups, including: Save The Bay, The Bay Institute, Marin Audubon Society, and the Marin Conservation League. The project is carried out in accordance with permits and approvals issued by the following agencies: U. S. Environmental Protection Agency, Bay Conservation and Development Commission, Regional Water Quality Control Board, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, and California Department of Fish and Game

For more information, please visit: **www.hamiltonwetlands.org** and **www.yourwetlands.org**