

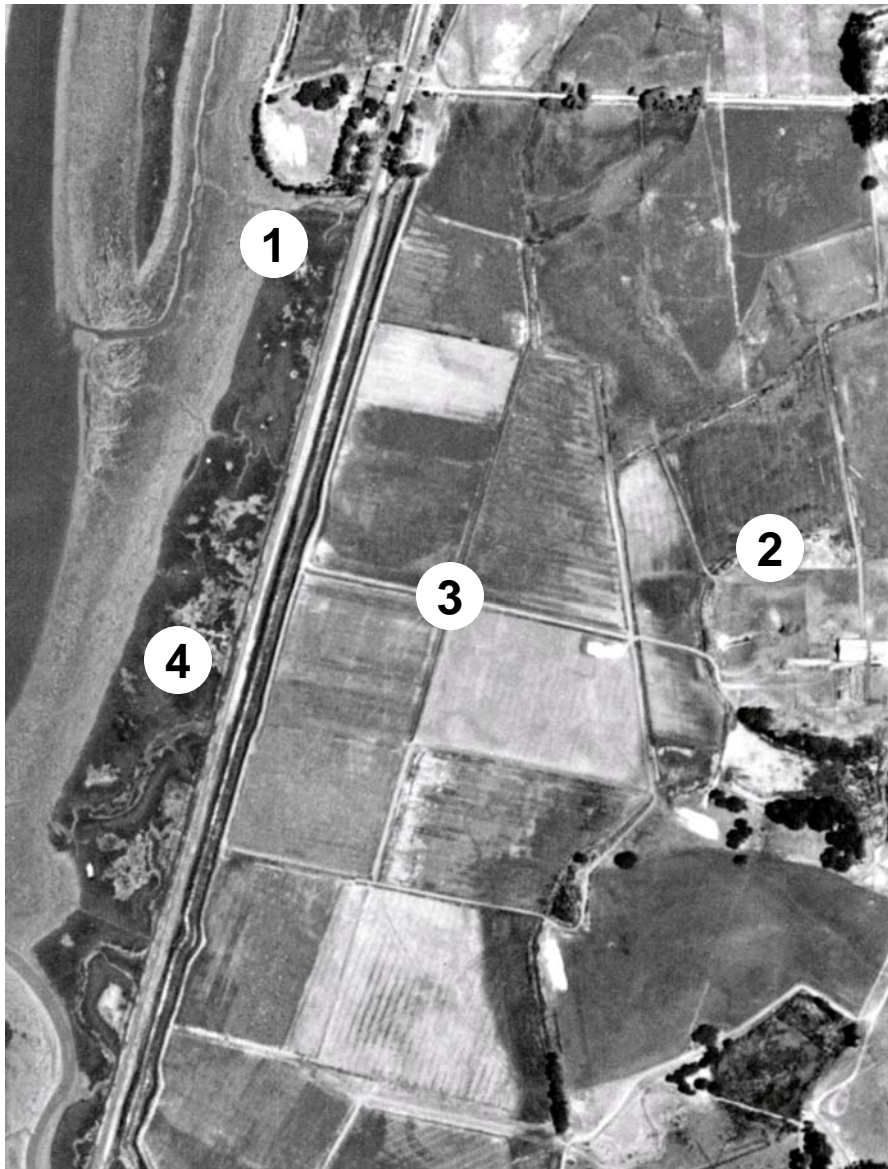
# South Marsh 1931



# South Marsh 1931

1. Hummingbird Island
2. Current site of South Marsh Loop Bridge
3. Dark areas are healthy salt marsh (pickleweed plants)
4. Railroad embankment built in 1872 cut off some tidal creek connections
5. Levees built to impound water for duck hunting converted tidal marsh to freshwater ponds

# South Marsh 1956



# South Marsh 1956

1. Hummingbird Island
2. Current site of South Marsh Loop Bridge
3. Salt marsh and tidal creeks were converted to farmland. The diking and draining of the tidal marsh areas caused the wetland sediments to dry out and compact (subside) by several feet.
4. Salt marsh vegetation is dying (lighter blotches) in undiked areas likely from an increased tidal volume. This was primarily caused by the creation of the Moss Landing Harbor in 1947 which created a deeper opening at the mouth of Elkhorn Slough.

*Note: It might also be useful to show historic photographs of cows grazing in South Marsh.*

# South Marsh 2003



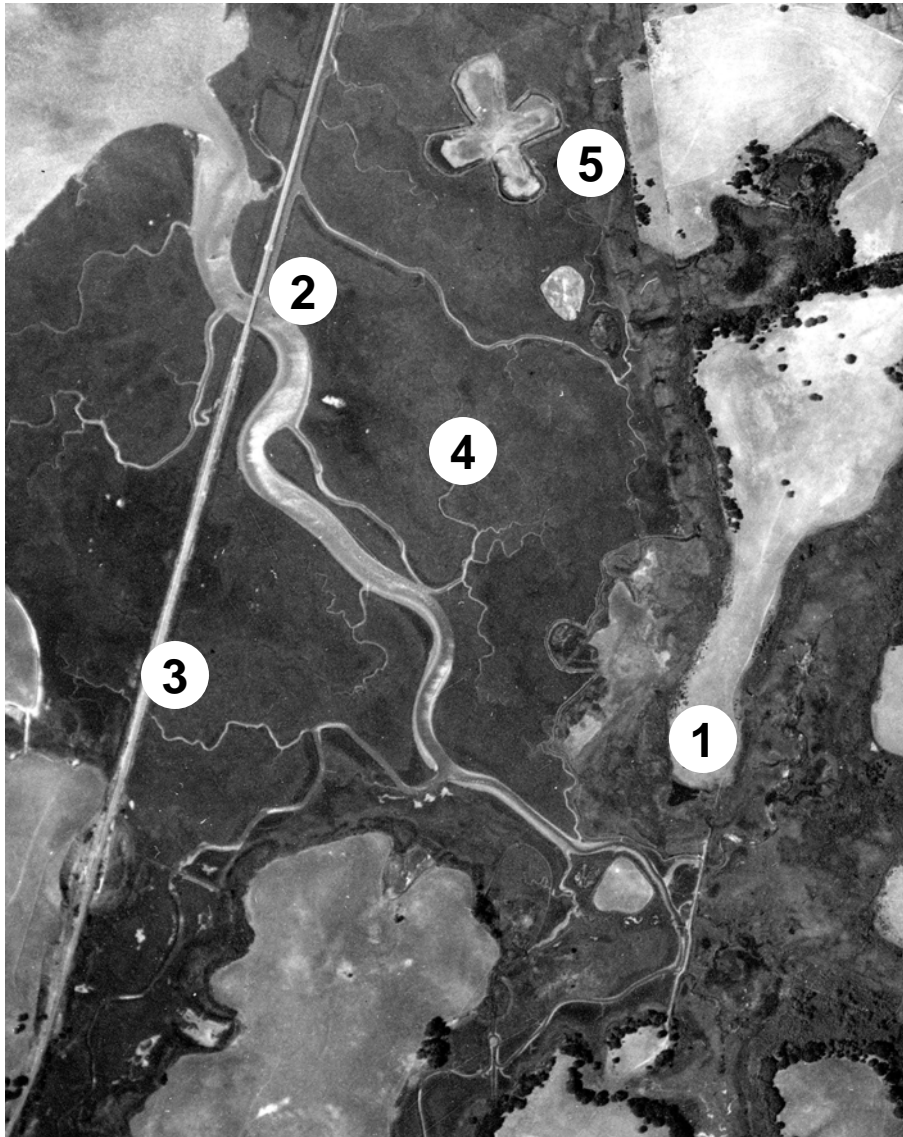
# South Marsh 2003

1. Hummingbird Island

2. South Marsh Loop Bridge

3. In the 1980s, the Elkhorn Slough Reserve implemented a wetland enhancement project to turn the farmland back into tidal habitat. Tidal channels were excavated, habitat islands were created, and a levee was breached to restore tidal exchange to this area. *Note: It might also be useful to show historic photographs of the islands being created in South Marsh.* Due to the former diking of this area and compaction of sediments, most of this area is 3 to 5 feet below what could support marsh vegetation. In recent years, the habitat islands have been decreasing in size due to bank erosion from increased tidal volume and velocities.

# Parsons Slough 1931



# Parsons Slough 1931

1. Current site of Parsons Slough  
Overlook
2. Parsons Slough mouth (railroad  
bridge)
3. Railroad embankment built in  
1872 cut off some tidal creek  
connections
4. Dark areas are healthy salt  
marsh (pickleweed plants)
5. Levee built to impound water  
for duck hunting converted  
tidal marsh to freshwater ponds

# Parsons Slough 1956

# Parsons Slough 1956



1. Current site of Parsons Slough  
Overlook

2. Parsons Slough mouth (railroad  
bridge). The levee at the mouth of  
Parsons Slough removed tidal exchange  
causing marsh vegetation to dry out and  
die (bright white blotches). Diking and  
draining also caused the wetland  
sediments to dry out and compact  
(subside) by several feet.

3. Levee converts marsh to farmland.

# Parsons Slough 2003



# Parsons Slough 2003

1. Parsons Slough Overlook
2. Parsons Slough mouth (railroad bridge)
3. Tidal creeks are widening in undiked areas due to an increased tidal volume and velocities.
4. During the winter of 1982-1983, the levee at the mouth of Parsons Slough breached (unintentionally) during a storm event allowing tidal waters into Parsons Slough.
5. Due to the former diking of this area and compaction of sediments, most of this area is 3 to 5 feet below what could support marsh vegetation. It now supports degraded mudflat habitat because of the harder, compacted sediments.

## Elkhorn Slough mouth 1931



## Elkhorn Slough mouth 1931

1. Elkhorn Slough mouth entering Monterey Bay
2. Current site of Jetty Road
3. Current site of Moss Landing Harbor entrance and Elkhorn Slough mouth
4. Road bridge over Elkhorn Slough

## Elkhorn Slough mouth 1949



## Elkhorn Slough mouth 1949

1. Where the Elkhorn Slough mouth used to enter Monterey Bay
2. Jetty Road
3. Moss Landing Harbor entrance and current Elkhorn Slough mouth
4. Highway 1 Bridge over Elkhorn Slough



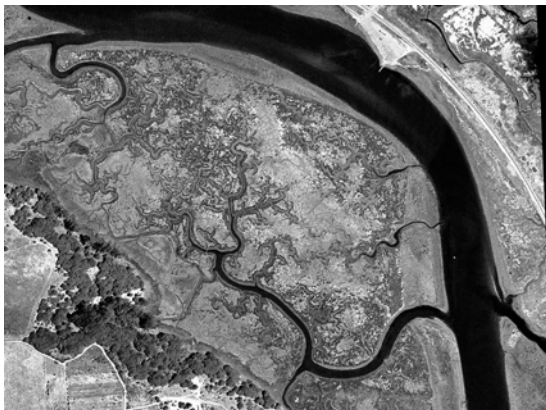
## Elkhorn Slough Marsh Loss 1931-2003



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## Elkhorn Slough Marsh Loss

1. 1931 - Dark area is healthy salt marsh (pickleweed plants).
2. 1956 - White blotches are where salt marsh vegetation is dying from an increased tidal volume when the Moss Landing Harbor was created in 1947.
3. 2003 - Almost all of the salt marsh vegetation is gone in this area (lighter area is mudflat).

Note: This marsh area is across the channel from Kirby Park. Almost half the salt marsh in Elkhorn Slough has been lost since 1931.