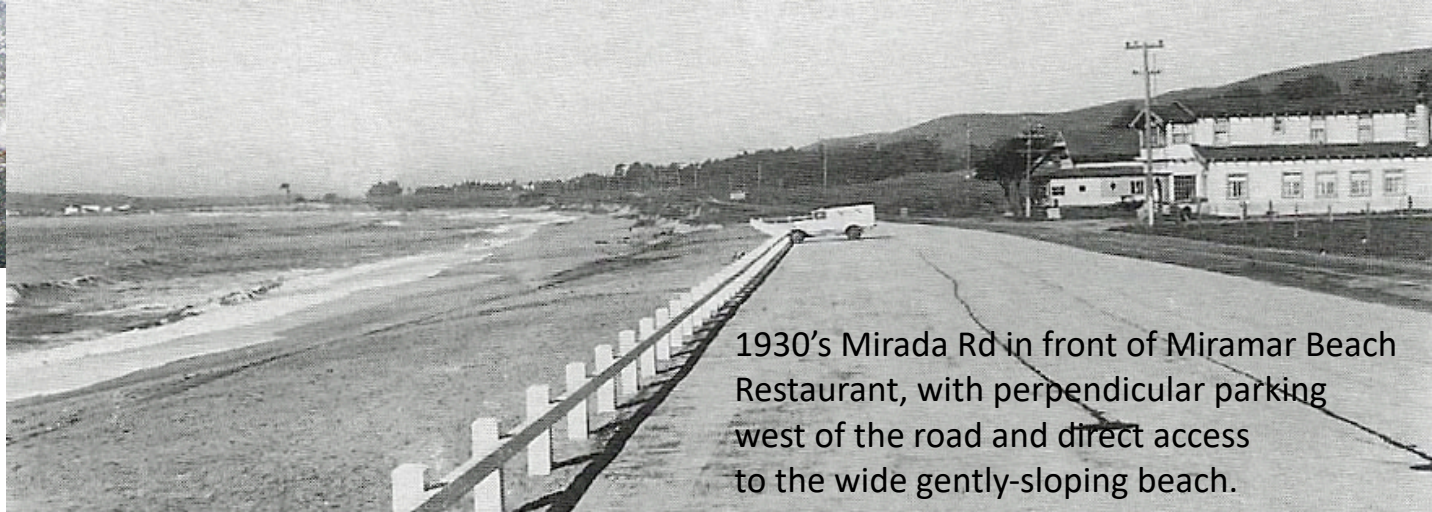


Surfers' Beach & Miramar Shoreline Erosion & Armoring



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Wildbayarea.com

February 2021
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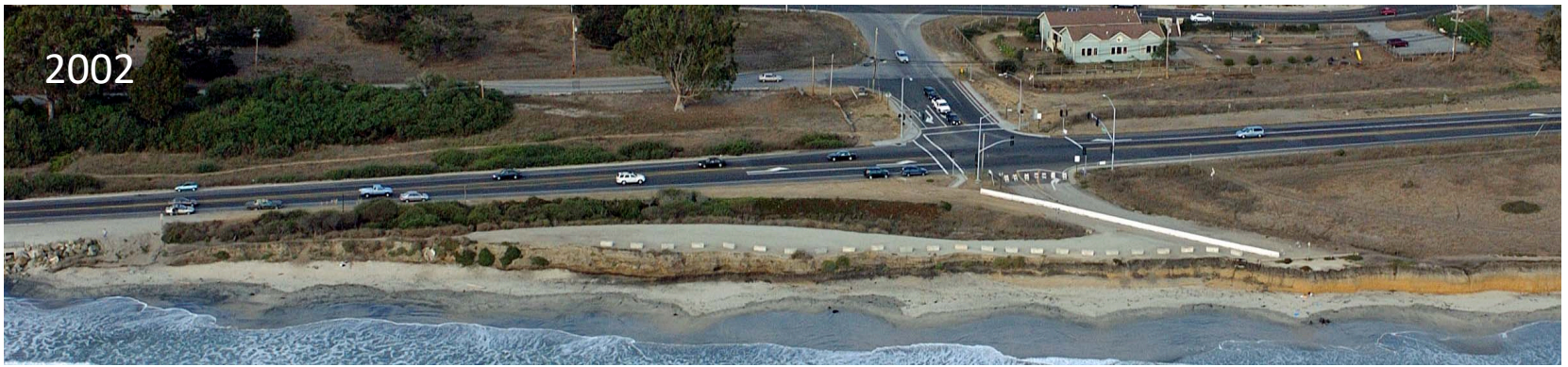


1930's Mirada Rd in front of Miramar Beach Restaurant, with perpendicular parking west of the road and direct access to the wide gently-sloping beach.

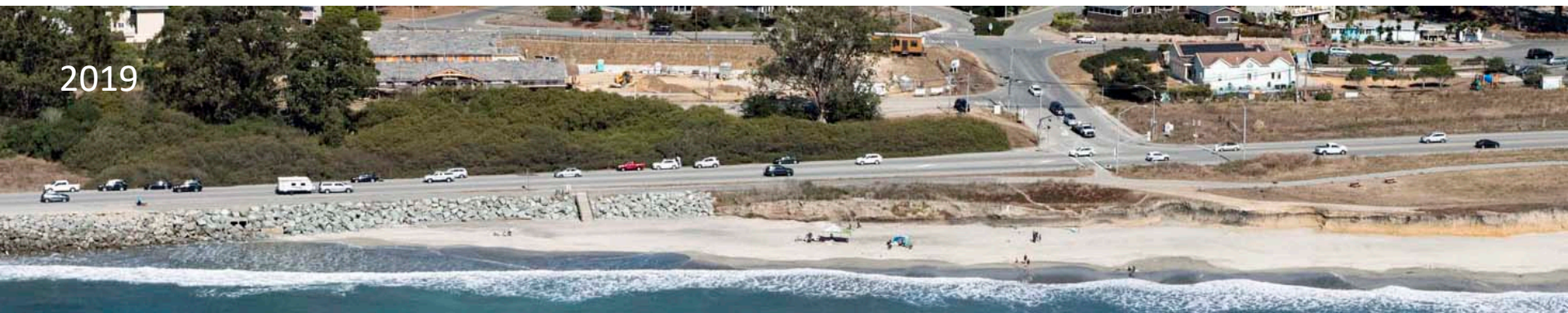




Surfers' Beach 1972



2002

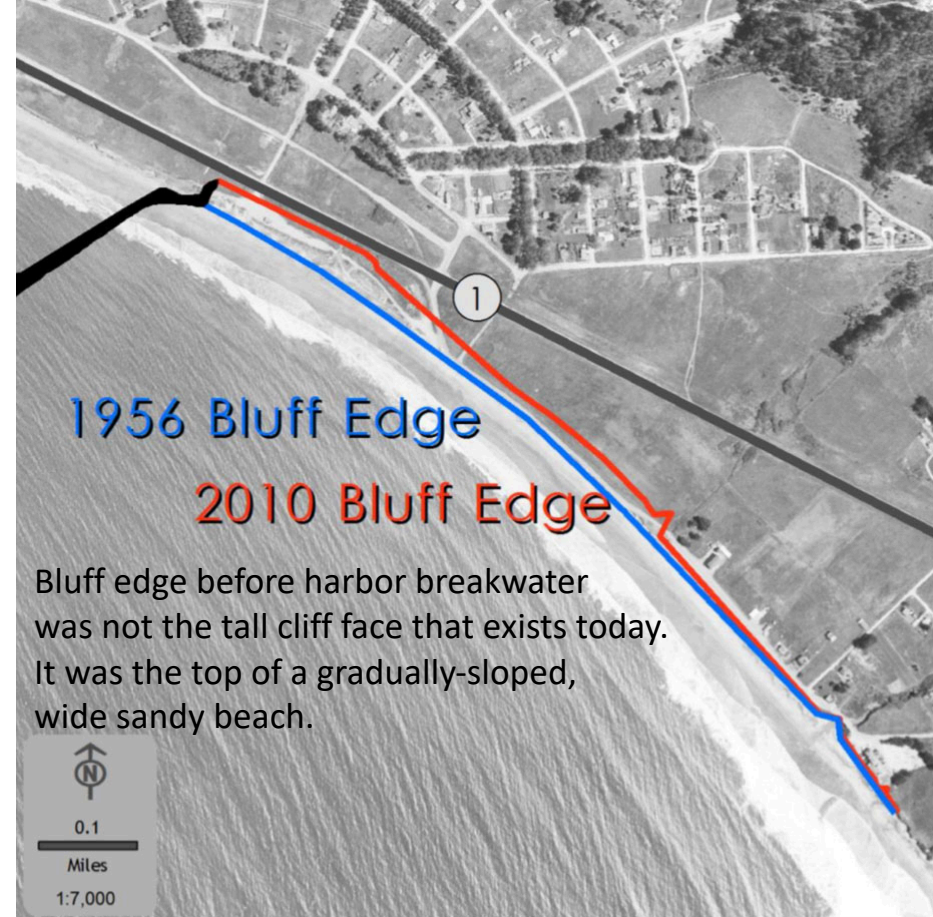


2019

Surfers' Beach Reports & Projects

US Army Corps of Engineers:

- 2009 report determined that **construction of the harbor breakwater 1959-61 dramatically increased the rate of erosion south of the jetty to Medio Creek.**
- 2016 report determined the preferred alternative to address the issue was to move 150,000 cy of harbor dredge material to Surfers' Beach and southward to the Miramar revetment, however no federally-funded Army Corps project was recommended due to inadequate cost/benefit ratio.



Caltrans:

- 2016 project: 10-yr interim (renewable) permit amendment for 175-ft armoring extension & beach-access stairway to allow time to implement a long-term solution, such as moving this section of highway inland.

SMC Harbor District:

- 2015 initiated Surfers' Beach Pilot Restoration Project: transfer 75,000 cy harbor dredge material to beach south of jetty; construction expected 2021. If the follow-up 2-year monitoring program finds that the project is effective and does not cause unacceptable environmental impacts, then a larger beach nourishment project would be pursued in the future.

More info: <http://www.midcoastcommunitycouncil.org/surfers-beach/>

Shoreline Armoring Permits

Permit Jurisdiction


The 1976 Coastal Act requires a Coastal Development Permit (CDP) for shoreline armoring of existing development. Local governments can issue the CDP under their Local Coastal Program (LCP), which is appealable to the Coastal Commission (CCC).

CCC has direct permit jurisdiction if the armoring is placed below mean high tide, or on appeal, which is the case for all existing armoring permits along Surfers' Beach & Miramar.

Armoring under emergency permit is considered temporary and subject to removal until a regular CDP is approved.

Applicants for existing armoring:

- **Surfers' Beach:** Caltrans (original CDP 1998, as amended 2015)
- **Mirada Rd & replacement bridge:** San Mateo County Public Works
Initial rip-rap installed before Coastal Act when no CDP required.
2016 emergency permits to repair & extend rip-rap – require follow-up regular CDP.
- **2 Mirada & Casa Mira:** private property owner (located within HMB City Limit)

An aerial photograph showing a coastal area. In the foreground, there is a sandy beach with waves breaking onto it. A paved path, the Coastal Trail, runs parallel to the beach. Above the trail is a road with several cars, labeled 'SR-1'. Further inland, there are several large buildings, some with red roofs, and a parking lot. The area is surrounded by green grass and some trees.

Mirada Rd connection
from Coronado to
Magellan is a distant
memory.

Mirada Surf West
County Park
& Coastal Trail

Former farmland was acquired by
the County in 2001 to save it from
development. The Coastal Trail was
developed in 2009.



Mirada Rd was the Coast Highway prior to 1949 construction of the current alignment.

Mirada Rd north of Magellan was abandoned to erosion in 1965.



Mirada Surf 2016



View from north end of Mirada Rd
at Magellan.

Green line indicates route of former
roadway to Coronado in El Granada.

As the natural bluffs at Mirada Surf retreat, new armoring rocks have been placed where Miramar starts to become a peninsula jutting out over the beach.

Mirada Surf bluff & beach meet Miramar revetment where the fixed back beach prevents lateral beach access except at low tide.



2016



Surface runoff erosion works its way inland at Mirada Surf.



1971

Mirada Rd looking south toward Miramar



Miramar
Magellan to Arroyo de en Medio

Mirada Rd & north Miramar

1972



2019



CA Coastal Records Project



Arroyo
de en Medio

1972

CA Coastal Records Project

Pre-Coastal Act 3-story apartments at 2 Mirada were built in 1972 on the same parcel south of Medio Creek where Palace Miramar Hotel/Café was built in 1917, at the base of Amesport Landing, under greatly changed shoreline conditions.



c. 1920

Permitting in process around Arroyo de en Medio

Mirada Rd Coastal Trail Bridge
closed July 2020 --
failed steel bridge on top of
failed concrete bridge
at Arroyo de en Medio Creek

"2 Mirada" -- Armored pre-
Coastal-Act apartments built
on the 1972 shoreline, now on
a peninsula out over the beach.

2019: Coastal Commission
denied Casa Mira proposed
shotcrete sea wall to protect the
Coastal Trail which can be re-
routed inland (under litigation).



2020 County CDP application to CCC
for aluminum replacement bridge
and armoring to wrap both sides
of the mouth of the arroyo and
connect to existing shoreline riprap.

Coastal Commission has open
enforcement action on
unpermitted riprap
along the private parking lot.

2016 emergency rip-rap to protect
2 Mirada from erosion cutting in
behind building.

Additional emergency rip-rap was added in 2016 along the exposed side of the extending peninsula that formed as a result of armoring at the ocean front of the building.

May 2016



July 2016



-- Rip-rap extended southward in 2017 --

Inevitable result of hard armoring the back beach – loss of beach and lateral access except at low tide. To compound the problem for beach-goers, there is no vertical access to the Coastal Trail on the bluff top in this area.



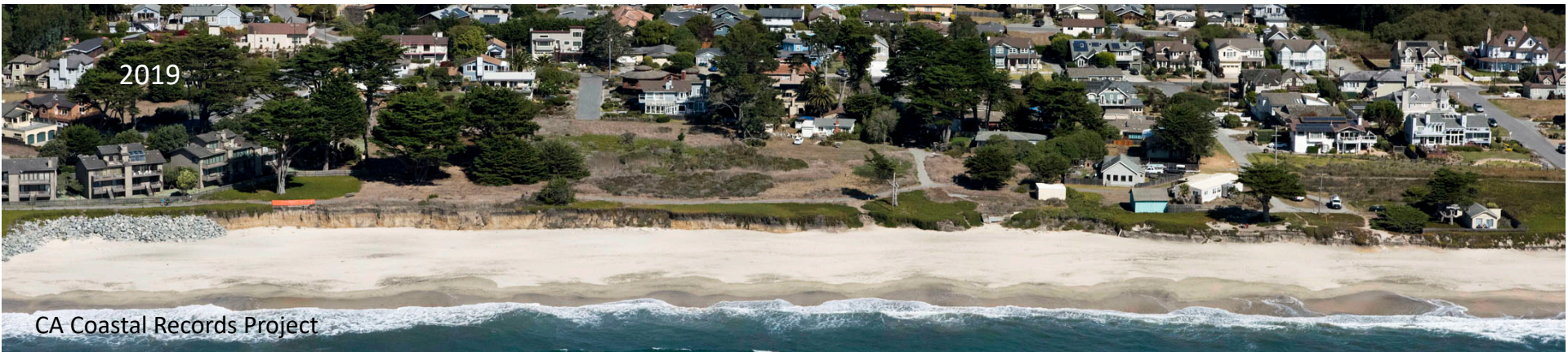
Miramar south of Mirada Rd, City of Half Moon Bay

Half Moon Bay State Beach was established in 1956, preserving 4 miles of beaches, dunes and bluffs, from Kelly Av north to Mirada Rd (except for the parcel developed in 1980's as Casa Mira condominiums).

South Miramar & Half Moon Bay State Beach



Existing residences on State Parks land at Alcatraz & Santa Rosa are used for ranger housing, and moved or demolished (X) when threatened by erosion.



Fronting State Parks property -- No armoring. No loss of beach.
Natural bluff retreat and removal of development when threatened by erosion.