### Goleta Beach Emergency Actions & Cost Analysis Fiscal Years 2015-2017



Community Services Department Parks Division April 11, 2017



### Introduction

- Goleta Beach Park welcomes 1.5 million visitors annually
- Amenities include:
  - Picnic Areas and Group Areas w/BBQ's
  - Public Restrooms
  - Restaurant
  - Kayak and Paddleboard Rentals
  - Pier w/Boat Launching Facility and Tackle Shop
  - Fishing
  - Bird Watching Platform
  - Horseshoes
  - Free Parking (520 spaces)



## Goleta Beach Park - 2003





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## Goleta Beach Park - 2007



#### October 2007 Storm Event



## Goleta Beach Park - 2011



Looking West From Pier



Looking East Towards Pier



## Storms

Major storm events occurred between 2014 to 2017 removing more than 100,000 cubic yards of sand from Goleta Beach, eroding 53,000 square feet of parkland and damaging park facilities



March 2014 - 25 year storm event



# <u>2015-16 El Niño</u>: "One of the Most Powerful Climate Events of the Past 145 Years..."

 "New research conducted by U.S. Geological Survey (USGS) scientists and their colleagues at UC Santa Barbara and six other institutions found that during the 2015-16 El Niño winter beach erosion on the Pacific coast was 76 percent above normal, and that most beaches in California eroded beyond historical extremes" (UCSB The Current 2017).





#### December 11, 2015 – El Niño





#### February 2016 - El Niño





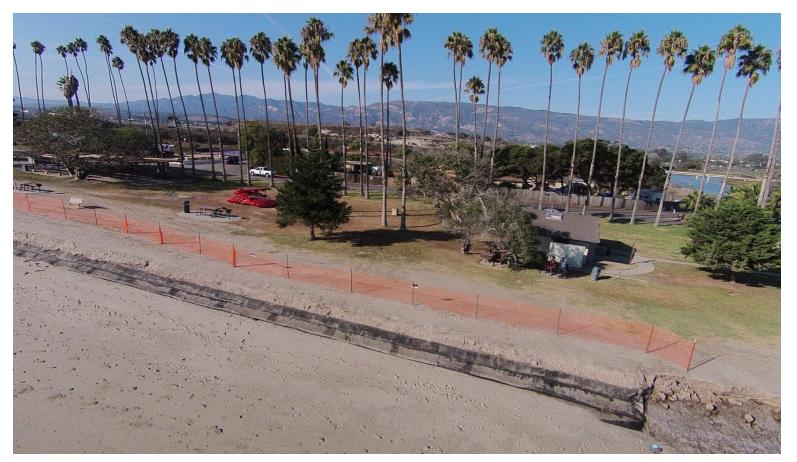
#### Installation of Geotextile April 2016 Cost \$350,000





May 2016





Geotextile Exposed From High Swells November 25, 2016





#### February 2017 Geotextile Damage



## Storms – 2017: Sewer Vault Exposed



Goleta Sanitary District 4 Million Gallons Daily of Secondary Treated Wastewater Sewer Vault Exposed – February 2017



## Storms – 2017: Sewer Vault Cover



Sewer Vault Rock Protection Installed by Goleta Sanitary District February 2017

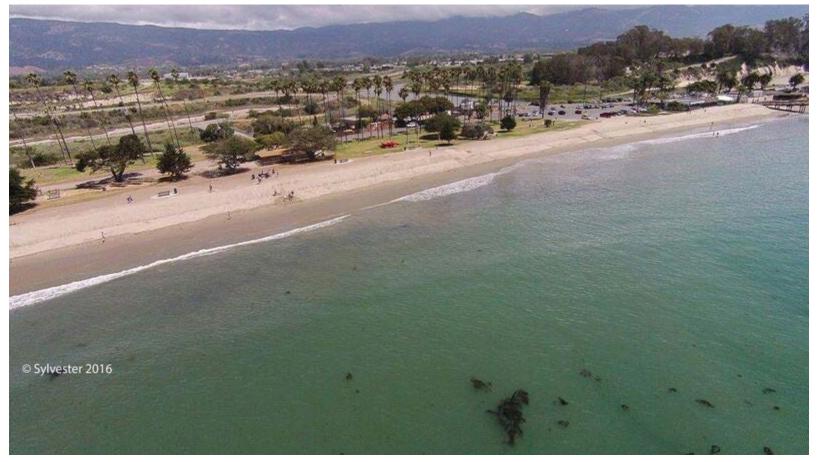




March 6, 2017 \$725,000 approximate cost for rock installation and monitoring



## Goleta Beach Park



May 2016



#### Goleta Beach Park



#### Added 948 foot Revetment March 2017



Goleta Beach Park 3 Emergency Permits 2017

#### 1. Emergency Permit (Jan 27)

- Sand Berm
- \*Cost \$75,000
- 2. Emergency Permit (Feb 14)
  - Rock Revetment in front of Restroom and Parking Lot 3
  - \*Cost \$451,000
- 3. Emergency Permit (Feb 22)
  - Rock Revetment for Geotextile and Pier Base Area
    - Included Goleta Sanitary District major sewer vault and outfall additional rock protection
  - \*Cost \$424,000





# 1. Emergency CDP G-4-17-0004 January 27, 2017 Sand Berm



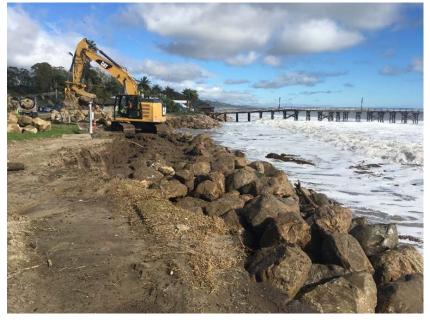


Eroded Central Park - Berm West of Restaurant January 2017 Eroded Central Park – Berm January 2017

Cost \$75,000



## 2. Emergency CDP G-4-17-0013 February 14, 2017 Rock Revetment – Central Park Area





Rock fronting restroom February 2017 Rock protecting Parking Lot 3 Beachside Cafe – February 2017

Cost \$451,000



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## 3. Emergency CDP G-4-17-0015 February 22, 2017 Rock Revetment – Geotextile





Revetment installation in front of Geotextile

Cost \$424,000 (Geotextile & Pier)



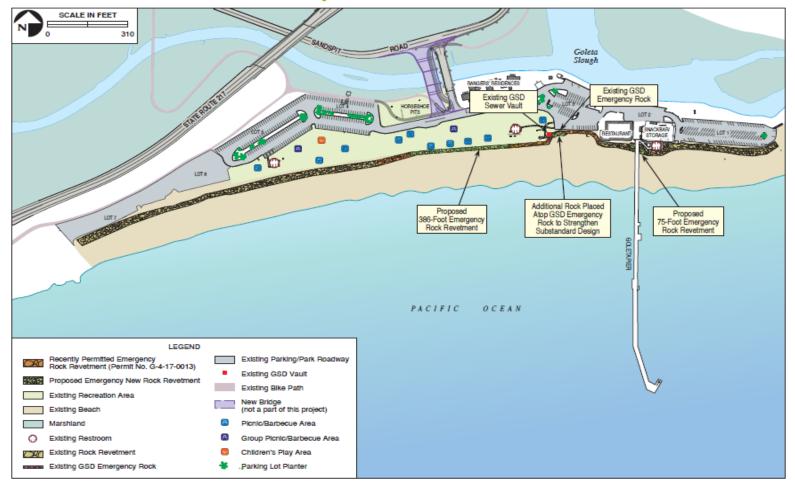
## 3. Emergency CDP G-4-17-0015 February 22, 2017 Rock Revetment – Pier



Cost \$424,000 (Geotextile & Pier)



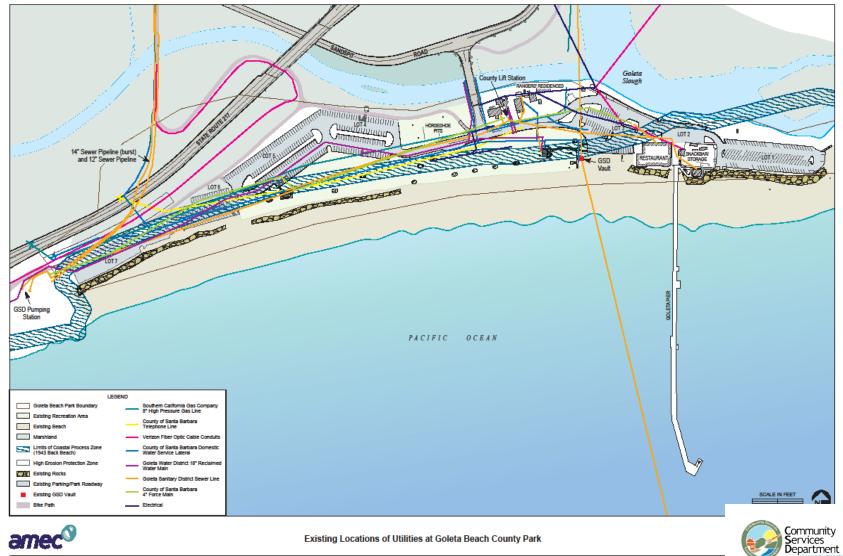
### **Revetment Map**



Shows permanent and new emergency rock March 2017



#### **Utilities Map**



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## Goleta Beach Park



#### Goleta Beach Park - 2011



Added 948 foot Revetment - 2017

Staff to Address Beach Access



## Goleta Beach Costs: Fiscal Years 2015-2017

Costs		Fiscal Year
Emergency	\$ 725,000	2015-2016
Required CDP Work	\$ 377,000	2016-2017
Emergency	\$ 950,000*	2016-2017
TOTAL:	\$ 2,052,000	

\*Funds encumbered January 27-March 2017



# Fiscal Year 2015-2016: Emergency Costs

Description	Cost		Fund Source	
Emergency Sand Berm	\$	230,000	CIAP* Grant	
Emergency Geotextiles	\$	280,000	CIAP Grant	
Revetment Repair	\$	120,000	CIAP Grant	
Consultant & Permit Fees	\$	95,000	CIAP Grant	
TOTAL:	\$	725,000		

\*CIAP – Coastal Impact Assistance Program (Federal)



# Fiscal Year 2016-2017: Permit\* Required Work

Description	Cost	Fund Source
Permit Amendment	\$ 50,000	CIAP Grant
Annual Surveys/Reports	\$ 60,000	Project Funds
State and Federal Agency Permits/Studies	\$ 35,000	Project Funds
Revetment Coverage (Consultants & Permits)	\$ 65,000	Project Funds
Revetment Coverage (6,000cy excavated / 2,000cy hauled / 1,000cy placed)	\$ 127,000	Def Maintenance**
Revetment Sand Haul/Storage (3,000cy – from Santa Barbara Harbor)	\$ 40,000	Def Maintenance**
TOTAL:	\$ 377,000	

\*Coastal Development Permit (CDP) 4-14-0687

\*\*Affects implementation of planned deferred maintenance projects



# Fiscal Year 2016-2017: Emergency Costs

Description		Cost	
Sand Berm / Facility Repairs	\$	65,000	
Emergency Rock Placement	\$	662,000	
Emergency Pier Area Repairs	\$	138,000	
Bio & Construction Monitoring, Engineering & Emergency Permits (for rock revetment and pier area repairs)	\$	85,000	
TOTAL ENCUMBERED**:	\$	950,000	

\*Affects implementation of planned deferred maintenance projects \*\*Potential reimbursement from FEMA (75%) and CalEMA (18.75%): 93.75% (\$890,625)



# Fiscal Year 2016-2017: Emergency Funding Sources

Emergency Funding Source	Cost		
Department (CSD) Deferred Maintenance	\$ 180,000		
Department (CSD) Savings	\$ 120,000		
Department (CSD) Fund Balance	\$ 300,000		
Committed General Fund - Contingencies	\$ 350,000		
TOTAL ENCUMBERED**:	\$ 950,000		

\*Affects implementation of planned deferred maintenance projects \*\*Potential reimbursement from FEMA (75%) and CalEMA (18.75%): 93.75% (\$890,625)



# Possible Additional Cost Fiscal Years 2017-2018

- Park Re-Build (2017 storm)
  - \$600,000 estimate (parking lot 3, turf, irrigation, pier)
    - Unfunded and not included in Emergency Work
- Community engagement workshops
  - \$75,000 estimate
- CDP Amendment (2017 Emergency Permits)
  - \$50,000 estimate
    - Not included in Emergency Work noted in previous slides
- Removal of Emergency Work from Jan/Feb 2017
  - \$500,000 estimate
    - Location of rock disposal unknown



## Next Steps

- Staff seeking a time extension for emergency permits with CCC to September 30, 2017
- Coastal Engineer to review and evaluate
  - Existing data
  - Effects of the emergency revetments on beach width and beach access
- Continue to coordinate efforts with Goleta Sanitary District regarding sewer vault protection emergency permit and possible relocation
- Analyze and evaluate all possible future beach and park adaptive management options
- Coordinate community engagement workshops
- Staff to return to Board August or September to present adaptive management options and seek direction



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