



# County of Santa Barbara

## Goleta Beach Coastal Development Permit No. 4-14-0687 Amendment

AUGUST 22, 2017

# Recommendation to the Board

- ▶ Authorize CSD staff to submit an application to the California Coastal Commission (CCC) to amend CDP No. 4-14-0687 for the Goleta Beach Project to retain the 948-foot emergency rock revetments, inclusive of a 75-foot pier revetment reinforcement, pier repairs and additional rock revetment in front of Goleta Sanitary District's (GSD) sewer vault and outfall; or
- ▶ Provide other direction to staff.

# Goleta Beach Emergency Costs

## Since 2015

- ▶ \$2 million
  - ▶ \$950,000 expended in 2017

## From 1995 to 2014

- ▶ \$10 Million spent from 1995-2014
  - ▶ 6 million beach nourishment
  - ▶ 3 million protection and repairs
  - ▶ 1 million on management plans

# Recent Park Investments & Revenue

\$5 million in recent park improvements

- ▶ New access bridge (under construction)
  - ▶ New bus stop
  - ▶ Re-routed bike path
- ▶ Renovated restrooms
- ▶ Re-built group BBQ/picnic areas
  - ▶ Accommodates up to 200 visitors each
- ▶ Lift station rehabilitation

Annual revenue from Goleta Beach

- ▶ \$250,000

# Goleta Beach Permit History (to 2017)

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- ▶ **2002 & 2005 – Emergency Permits**  
(Installed a total of 1,200 lineal feet of rock riprap at west end)
- ▶ **2008 – Goleta Beach Permeable Pier**  
(Denied by Coastal Commission)
- ▶ **2015 – CDP No. 4-14-0687**  
(Permitted to retained the 1,200 lineal feet of 2002 & 2005 emergency rock riprap w/special conditions, e.g., Monitoring and Adaptive Management Plan (AMP))
- ▶ **2017 – ECDP Nos. 4-17-0013 & 4-17-0015**  
(Installed a total of 948 lineal feet of emergency rock revetment; 837 feet at central area of park and 75 feet at base of pier, along with repairs to the pier base)

# Previous Coastal Protection Actions

County has explored and/or implemented multiple “soft” protective measures that were found to be ineffective or infeasible

- Permeable Pier
  - Intended to retain sand
  - Denied by Coastal Commission in 2008
- Sand Berms
  - Expensive, erode rapidly and are dependent upon local sand supply
- Cobble Filled Base Geotextile Cells
  - Destroyed by major storms within one year of installation

# 2017 Emergency Permit Summary

## 1. Emergency Permit (Feb 14)

- Rock Revetment in front of Restroom and Parking Lot 3

## 2. Goleta Sanitary District (GSD) Emergency Permit (Feb 15)

- Rock Revetment for major sewer vault and outfall

## 3. Emergency Permit (Feb 22)

- Rock Revetment for Geotextile and Pier Base Area
  - Included additional rock protection at GSD major sewer vault and outfall to protect parkland

# Goleta Sanitary District (GSD) Emergency Permit



Wave erosion exposed Goleta Sanitary sewer outfall vault



Rock protection for Goleta Sanitary sewer outfall vault installed by GSD

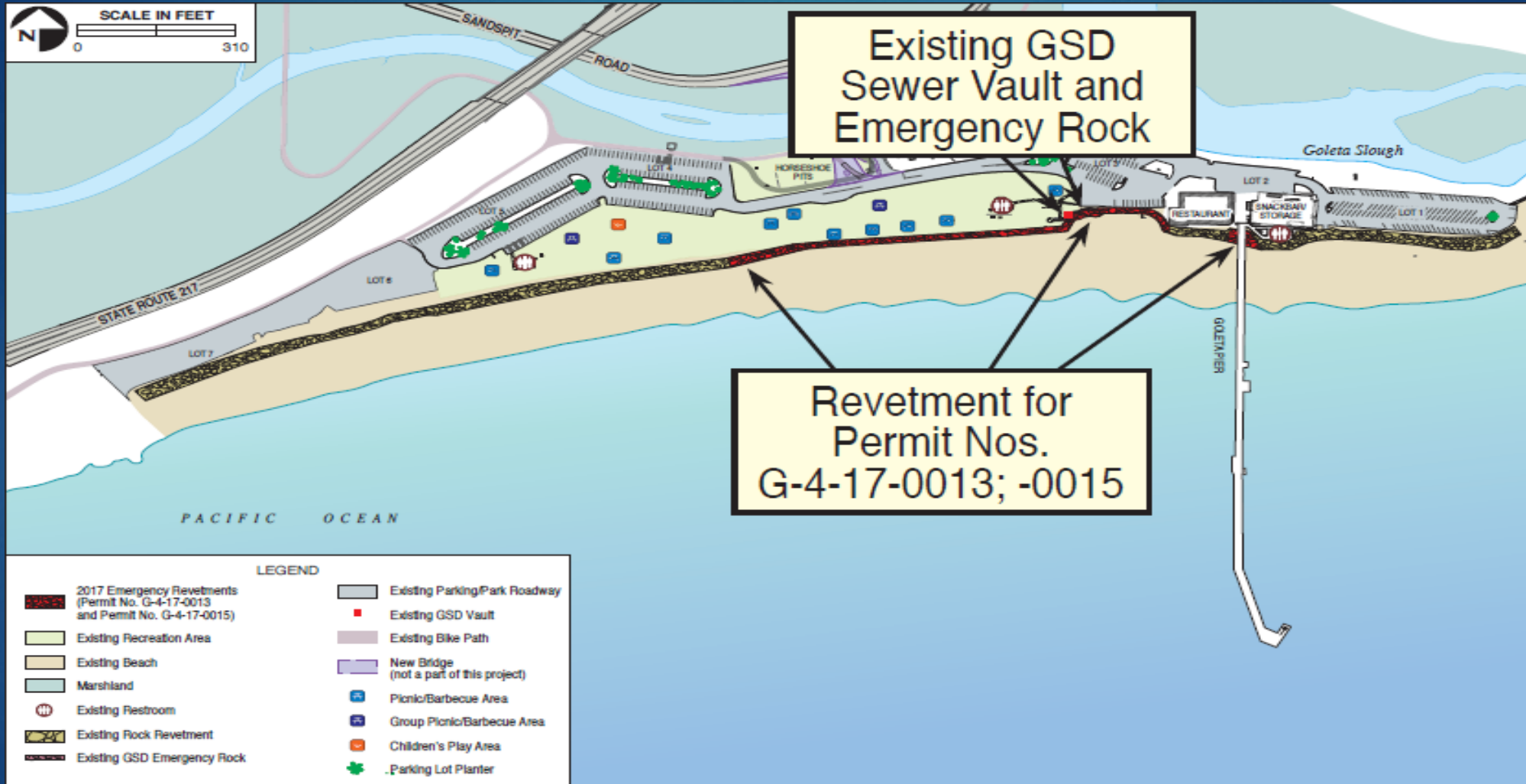


# 2017 Emergency Rock Revetment Central Park Area



873 foot of emergency revetment installed at central park location

# 2017 Emergency Rock Revetment



948 foot emergency revetment installed, inclusive of pier base revetment reinforcement

# Proactive Environmental Measures

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- ▶ Pre-construction biological surveys
  - ▶ Delay work if sensitive species present
- ▶ Full-time construction and environmental monitoring
- ▶ Coastal engineer on-site to monitor revetment placement
- ▶ Use of geotextile filter fabric below emergency rock to prevent backland erosion
- ▶ Relocation of beach wrack
- ▶ Removal of trash and debris
- ▶ Operate on beach during low tides only

# Special Park Commission Meeting

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Public meeting held on July 13, 2017

- ▶ Informational presentation on recent emergency actions
- ▶ 50-60 people in attendance
- ▶ Public comment

# Alternatives Considered

- ▶ **Alternatives were found to be ineffective due to inability to protect the Park from major storm events**
  - ▶ Remove Existing 873-Foot Long Emergency Revetment and Retain 75-Foot Long Pier Revetment Reinforcement and Pier Base Repairs
  - ▶ Reduce Height of 873-Foot Revetment
  - ▶ Remove Existing 873-Foot Long Emergency Revetment and Replace with Cobble Berm
  - ▶ Remove a 200-Foot Section of the Emergency Revetment and Replace with Cobble Berm

# Emergency Revetment Removal or Reduction in Height Alternatives

- ▶ Park susceptible to erosion and severe damage or destruction of facilities during major storms
- ▶ Continual emergency protections and post storm repair of Park facilities required
- ▶ Major ongoing county budget expense
- ▶ Immediate Costs: Up to \$850,000
  - ▶ Permit Application Costs: \$150,000
  - ▶ Rock Removal (873 feet)(location of storage TBD): \$700,000
- ▶ Future Emergency Costs: \$500,000 to \$1,000,000 per event

# Cobble Berm Alternative

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- ▶ Cobble berm is not considered a feasible option for Goleta Beach
  - ▶ Amount of cobble unnatural to beach Rock revetment is as well; however, beach will be changed to a rocky beach as opposed to a sandy one
    - ▶ Potential negative impacts to beach habitat
  - ▶ Lateral and vertical beach access impacts due to cobble
  - ▶ Movement of cobble would cause erosion of parkland
  - ▶ Immediate Costs: \$2.2 million
  - ▶ Ongoing cost to maintain cobble / rebuild parkland

# Cobble Berm

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Ventura, California



# Board Direction

Retaining the 948 foot emergency rock revetment will require the County to:

- ▶ Submit an application to the CCC to amend CDP No. 4-14-0687
  - ▶ Application to include a proposed amended Adaptive Management Plan (AMP) to address future managed retreat
- ▶ Staff will return to Board at a future hearing to consider the CCC's permit conditions

# Proposed Amended AMP Elements

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- ▶ Include new revetment section in long term beach and revetment monitoring for a minimum of ten years
- ▶ Modify existing Special Conditions regarding revetment coverage and beach access
- ▶ Implement a phased managed retreat plan if metrics indicate revetment directly affects public coastal access, beach habitats and downcoast sand supply

# Proposed Amended AMP Elements – (cont'd)

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## ▶ Phased Managed Retreat Plan

- ▶ If after long term monitoring revetment metrics are triggered:
  - ▶ 1<sup>st</sup> Managed Retreat: Removal of a portion of parking lot 7 & relocation of revetment landward
- ▶ If after another course of long term monitoring revetment metrics are triggered:
  - ▶ 2<sup>nd</sup> Managed Retreat: Removal of parking lot 6, relocation of revetment landward & relocation of utilities

# Revetment Retention Costs

## One-Time Cost:

- \$150,000: Permit application (budgeted)

## On-Going Annual Costs:

- \$60,000 - \$160,000: Monitoring (budgeted)

## Potential Amended AMP Phased Managed Retreat\*:

- Phase 1: \$2 million
- Phase 2: \$5 million

\*Does not include costs to utility companies . The cost for the utility companies to relocate their respective lines is assumed to be paid solely by the respective companies

# Next Steps

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## ▶ September 30

- Submittal of permit application to Coastal Commission staff

## ▶ Spring 2018

- Anticipated Coastal Commission Hearing