SANTA BARBARA COUNTY FLOOD CONTROL DISTRICT

Emergency Beach Operations



BEACON MEETING MARCH 17, 2023



JANUARY 2023 Intense Storms: resulted in 15+ inches of rainfall in the foothills



Edison Trail

GOBERNADOR BASIN



Pre January 2023 storms





SANTA MONICA BASIN

Pre January 2023 storms

Santa Monica Basin

SANTA MONICA BASIN

Post January 2023 storms

Santa Monica Basin

SANTA MONICA BASIN





During January 2023 storms



EMERGENCY BEACH OPERATIONS





- Goleta Beach (SB County Parks) and Ash Ave Beach (City of Carpinteria)
- Sediment samples at source-locations
 - Grain size
 - Chemical constituents
- Sediment sorting at source-location
 - Remove logs, boulders, incompatible material



ENVIRONMENTAL CONTROLS

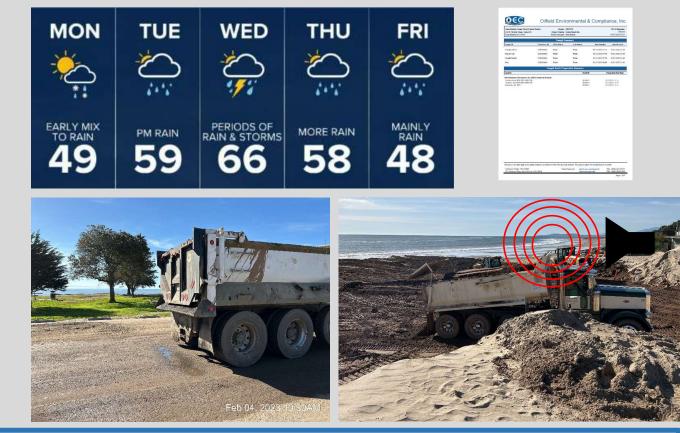
- Onsite beach-monitoring
- Truck inspectors at source and destination
- Beach composite sediment samples
 - Grain size lab
 - Chemical constituents lab
 - VOC (volatile organic compounds) at beach
- Beach water quality samples
 - Bacteria, Ammonia
- Wildlife (including grunion) surveys





CHALLENGES

- Emergency urgency
- Pending storms
- Lab delays
- Public outreach
- Neighborhood impacts
- Street cleanliness
- Beach access
- Work hours
- Truck tracking



There is always potential for flooding even when basins and creeks are fully maintained.

CARPINTERIA BEACH (ASH AVE)





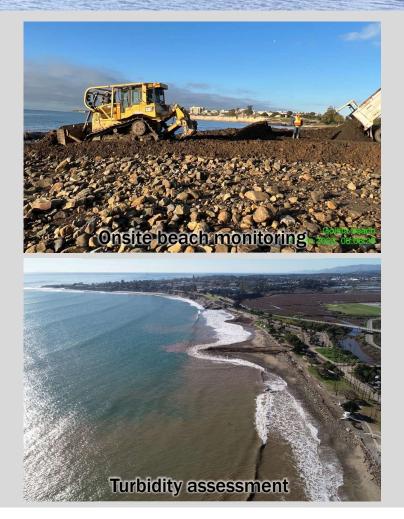




GOLETA BEACH







TURBIDITY MONITORING





Carpinteria Post-Project

Goleta Post-Project

CARPINTERIA BEACH (ASH AVE)

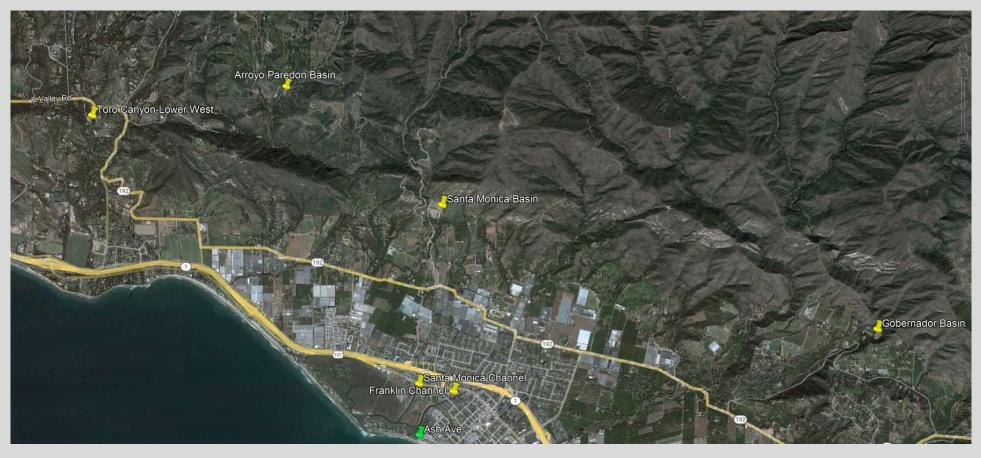
Sediment Source Locations and Volumes

Source	Sediment Volume (Cubic Yards)
Arroyo Paredon Basin	4,104
Franklin Channel	6,311
Gobernador Basin	6,764
Toro Canyon-Lower West	3,501
Romero Basin	90
Santa Monica Basin	25,541
Santa Monica Channel	356

TOTAL 46,667 Cubic Yards

CARPINTERIA BEACH (ASH AVE)

Sediment Source Locations (1/4 to 4 miles)



GOLETA BEACH

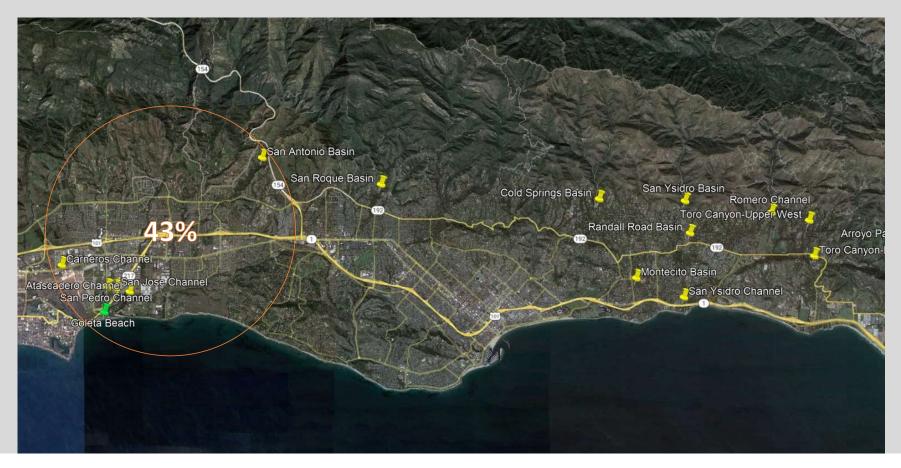
Sediment Source Locations and Volumes

Source	Sediment Volume (Cubic Yards)		Source	Sediment Volume (Cubic Yards)
Arroyo Paredon Basin	18		San Jose Channel	21,213
Atascadero Channel	4,626		San Pedro Channel	15,767
Carneros Channel	1,145		San Roque Basin	13,756
Cold Springs Basin	16,457		San Ysidro Basin	5,058
Montecito Basin	3,267		San Ysidro Channel	3,816
Randall Road Basin	15,291		Santa Monica Basin	117
Romero Channel	1,773		Toro Canyon-Lower West	4,005
San Antonio Basin	6,462		Toro Canyon-Upper West	657

TOTAL 113,427 Cubic Yards

GOLETA BEACH

Sediment Source Locations (1/4 to 10 miles)



WORKING DAYS

Carpinteria Beach

- Hauling: Jan 17 Mar 5
- Total hauling days: 37
- Final cleanup estimated 3/17/23
- Total: 59 days

Goleta Beach

- Hauling: Jan 11 Mar 9
- Total hauling days: 38
- Final cleanup estimated 3/20/23
- Total: 68 days

ALTERNATE LOCATION?

- Tajiguas Landfill
 - Equipped for municipal waste and recycling, not sediment
 - Sediment from January 2023 storms = approximately 160,000 cubic yards
 - 40% of the annual landfill capacity
 - Truck traffic, emissions, haul time
 - 18 34 miles vs 1/4 to 10 miles

FUTURE

- Spring beach grooming
- Living shoreline
- Receiver beach sediment samples and monitoring
- Biological monitoring transects
- Permit updates
- Continue annual Flood Control maintenance



- Programmatic sediment delivery
- There will always be emergency events
- Preparedness through annual routine maintenance and as-needed maintenance

www.countyofsb.org/emergencybeachops