



BEACON

BEACH EROSION AUTHORITY FOR
CLEAN OCEANS AND
NOURISHMENT

TODAY



2100



**“Vitousek, et. al., (2017), J. Geophys. Res. Earth Surf., 122, 782–806*

WHO WE ARE

- California Joint Powers Authority (JPA)
- Addressing coastal erosion of the Ventura/Santa Barbara beaches since 1986

HOW WE DO IT

- Combining efficiencies, expertise, and efforts
- Deliver maximum benefit at the best cost

WHAT WE DO

- Actively working to protect our coastline
- Develop nature-based solutions to sustainably preserve our beaches

WHY IT MATTERS

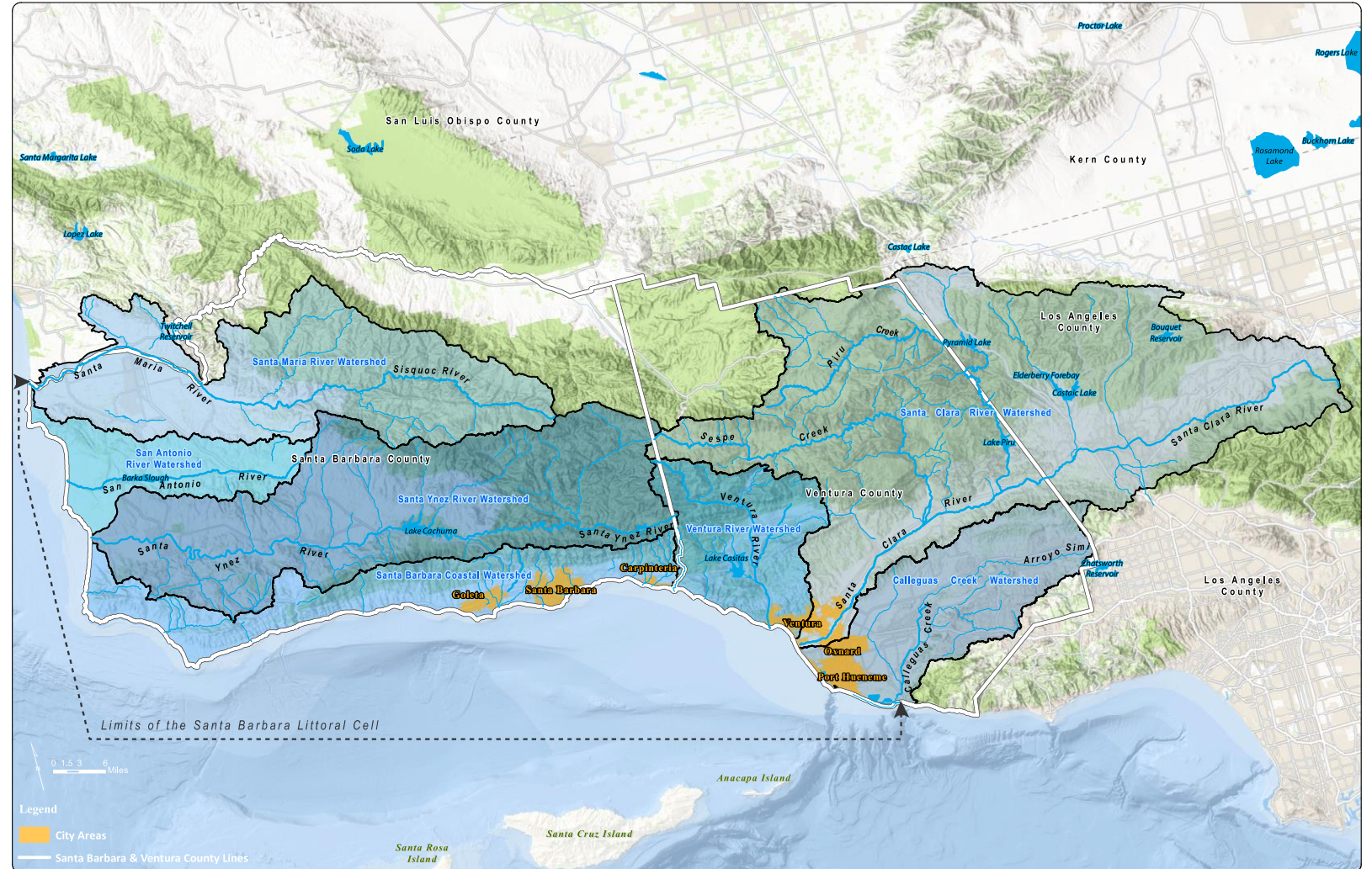
- Coastal beaches are huge economic driver
- \$17B in tourism revenue
- Could lose 1/3 of our beaches by 2100 if we do not take action

WHO WE ARE

8 Member Agencies:

- County of Santa Barbara
- County of Ventura
- City of Carpinteria
- City of Goleta
- City of Oxnard
- City of Port Hueneme
- City of Santa Barbara
- City of Ventura

The BEACON Coast



HOW WE ARE ORGANIZED

- **BEACON Board**
 - Two Supervisors from each county
 - One council person from each city
 - Total of ten members within the Member agencies
- **Executive Committee**
 - Provides the Board advice and recommendations on programs and policy
- **Science Advisory Committee**
 - Professional technical science advice to support decision making

WHAT WE DO



Surfer's Point, Ventura

- **Develop scientific and resilient solutions** that preserve our beaches and our coast
- **BEACON** uses resources that nature already provides (sediment and sand) to enhance natural conditions and protect man-made infrastructure
- We **create truly resilient and sustainable shorelines** through:
 - Beach nourishment projects
 - Beach and dune restoration projects
 - Living shorelines projects

WHAT WE DO

BEACON's long-term, comprehensive restoration projects include:

- Goleta Beach Nourishment
- Goleta Bay Kelp Anchor Demonstration
- Carpinteria Beach Nourishment
- Surfer's Point
- Mondo's Cove Beach Access Stairway
- Hueneme Beach Nourishment



Surfer's Point Project Rendering, Ventura

HOW WE DO IT

- **Regional planning and cooperation** within the 8 Member agencies
- Combining **efficiencies, expertise, and effort** to solve mutual problems
- Allows us to **look at our coastal policies as a whole**
 - Understanding what is happening in one area and **how that affects the other**
 - Scientific committee **gathers data** and shares with the Board
 - Allows the Board to make **shared decisions** and implement innovative projects based on science
- Regional cooperation has yielded **grants and funding** while increasing the visibility of BEACON

WHY IT MATTERS

- Beaches have no boundaries!
- BEACON taking **PROACTIVE** steps to ensure the viability of our coastline
- BEACON is preparing our coastline for sea-level rise, not just **for humans, but also for habitat and wildlife**
- The coastal region is a **huge economic driver** from ports to tourism
- **The BEACON Coast belongs to us ALL**



BEACON Coast

BEACON'S IMPACT

- **BEACON's greatest impact:** regional planning and cooperation
- With emphasis on sea-level rise, state government wants regional cooperation
 - **BEACON is a unique program using regional cooperation** to solve mutual problems on the BEACON Coast
- **If not for BEACON,** how do we solve the problem of losing 2/3 of our beaches by 2100?

EVERY MOUNTAIN WANTS TO BECOME A BEACH

- There are many man-made impediments (highways and other development) that have stopped the natural flow of sediment.
- BEACON is currently working on several projects that address these impediments.



PROJECTS: GOLETA BEACH NOURISHMENT

- Goleta Beach has lost its sandy beach over the last 30 years
- One of the most visited beaches on the south coast, especially by underserved communities
- Identified as one of the most important beach access points in the region
- BEACON is supporting long-term solutions to solve the ongoing problem



PROJECTS: GOLETA BAY KELP ANCHOR DEMONSTRATION

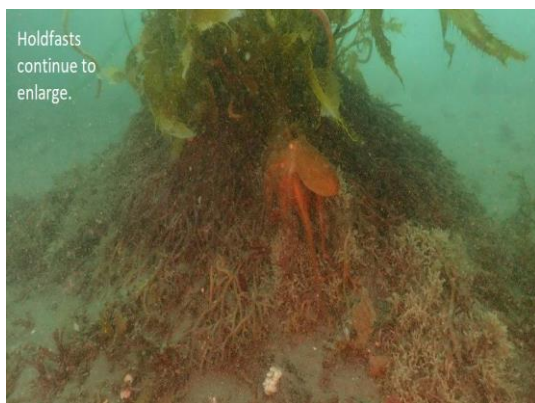
- California is losing its historic kelp forests
- Kelp is essential to aquatic species & is needed for a healthy ocean ecology



Typical juvenile kelp establishing on worm tube.



Numerous juvenile kelp fish and rock fish residing among kelp fronds.



Holdfasts continue to enlarge.



Newly-installed clay pipe octo-cylinder. Had resident octopus inside the next day!

- Redevelop our kelp resources through alternative technology. Demonstration and proof of concept project.

PROJECTS: REGIONAL MONITORING PILOT

- Coordinating with City of Santa Barbara seeking funding for a pilot climate & sea level rise regional monitoring program
- Assisting the City in project management, stakeholder outreach, and technical & scientific review



PROJECTS: CARPINTERIA BEACH NOURISHMENT

- Carpinteria Beach is severely eroded
- Demonstrates regional beach erosion
- BEACON is embracing nature-based solutions and reestablishing the water sheds.



Beach Nourishment



After Beach Nourishment

PROJECTS: COASTAL REGIONAL SEDIMENT MANAGEMENT PLAN



- Sediment plan is outdated
- Need updated science, especially on sea-level rise and climate change
- Working on updating the plan with more current data

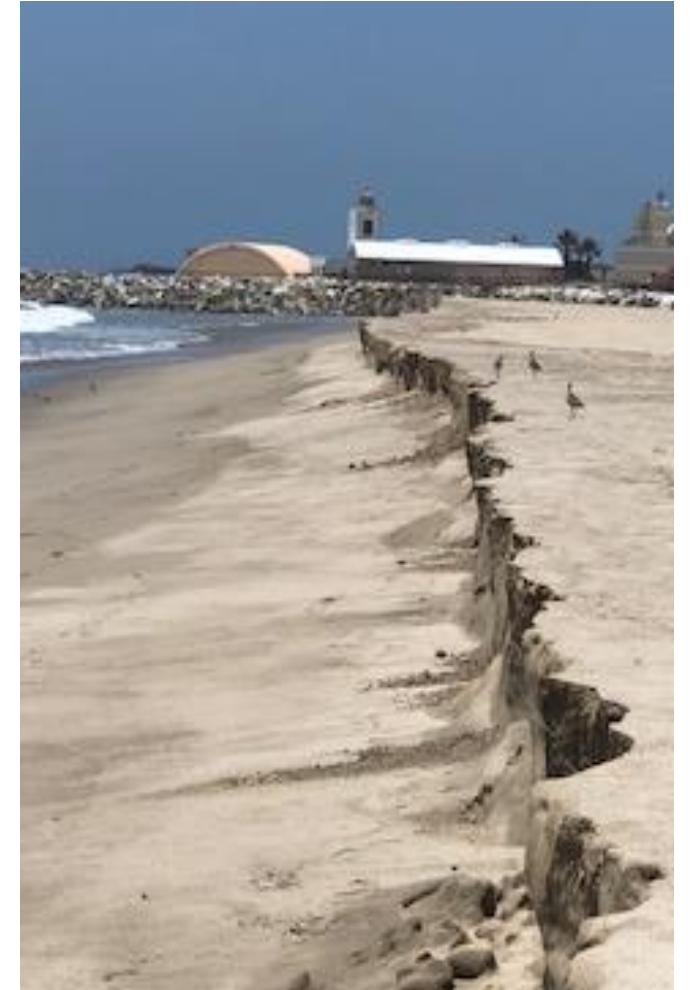
BEACON: FINANCIALS

LEVERAGING FINANCIAL RESOURCES

- Between 2018 and 2021, BEACON staff raised \$944,646.

GROWING FINANCIAL RESOURCES

- BEACON regularly supports funding for important partner projects addressing local and regional needs.



THANK YOU

- **Supervisor Gregg Hart**
 - Chair, BEACON Board
 - County of Santa Barbara
 - Contact: ghart@countyofsb.org

- **Marc Beyeler**
 - Executive Director, BEACON
 - Contact: beyeler@beacon.ca.gov