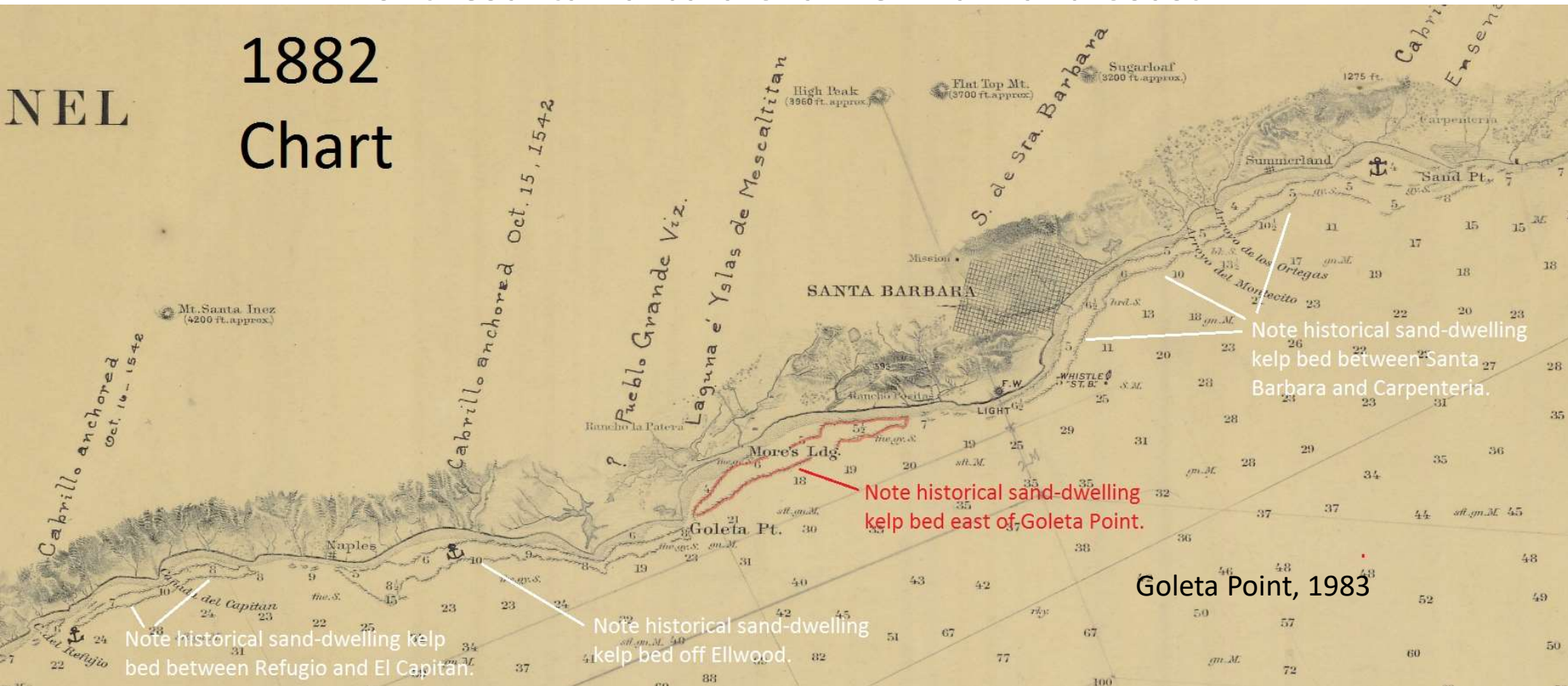




Historic Sand-Dwelling Kelp Forests of the Santa Barbara Channel Mainland Coast

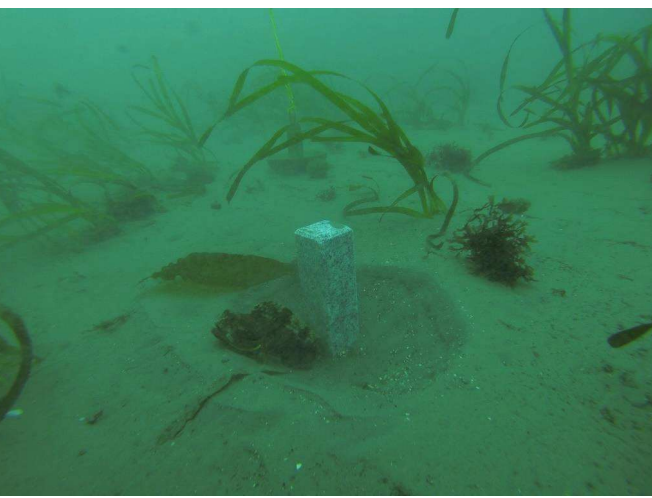
1882
Chart

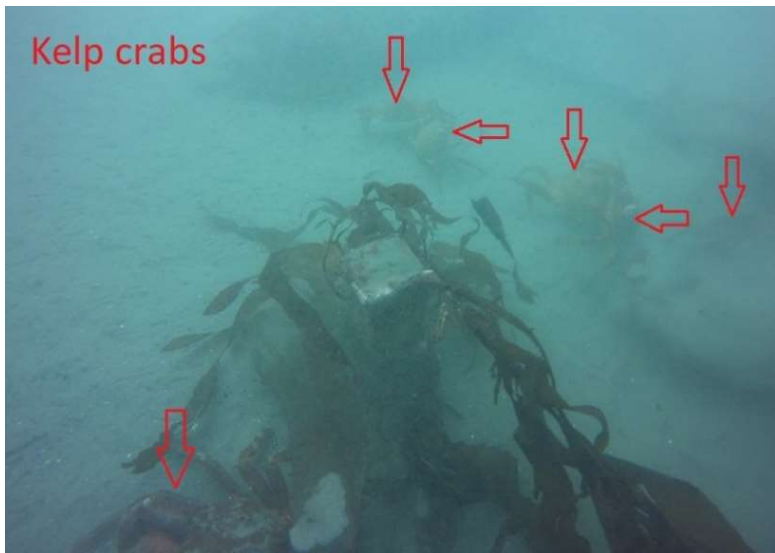


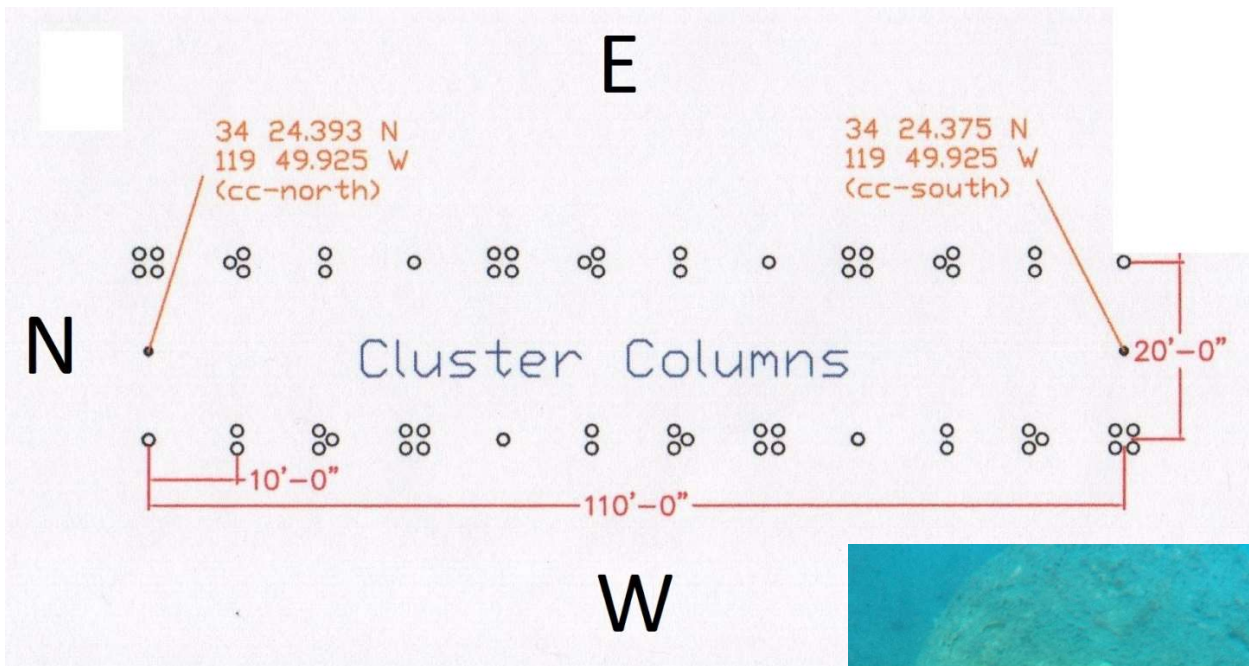
- Unique phenomenon – kelp normally grows on rock substrate
- Provided essential habitat for wildlife
- Coastal Processes were altered due to their high density and massive footprint
- Ravaged during 1982-83 El Niño
- Natural recovery has not occurred to date due to apparent imbalance of ecosystem
- Unlikely to recover without human intervention



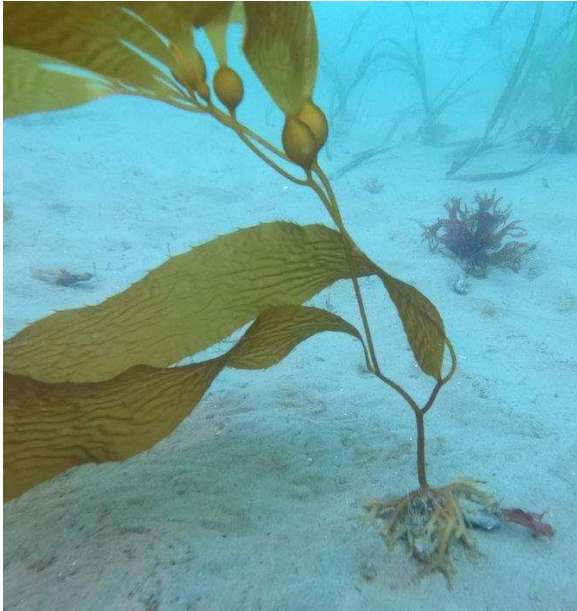








Augmenting Natural Processes to Restore Sand-Dwelling Kelp Forest



Macrocystis kelp establishing
on worm tubes



Kelp habitat on sand barren

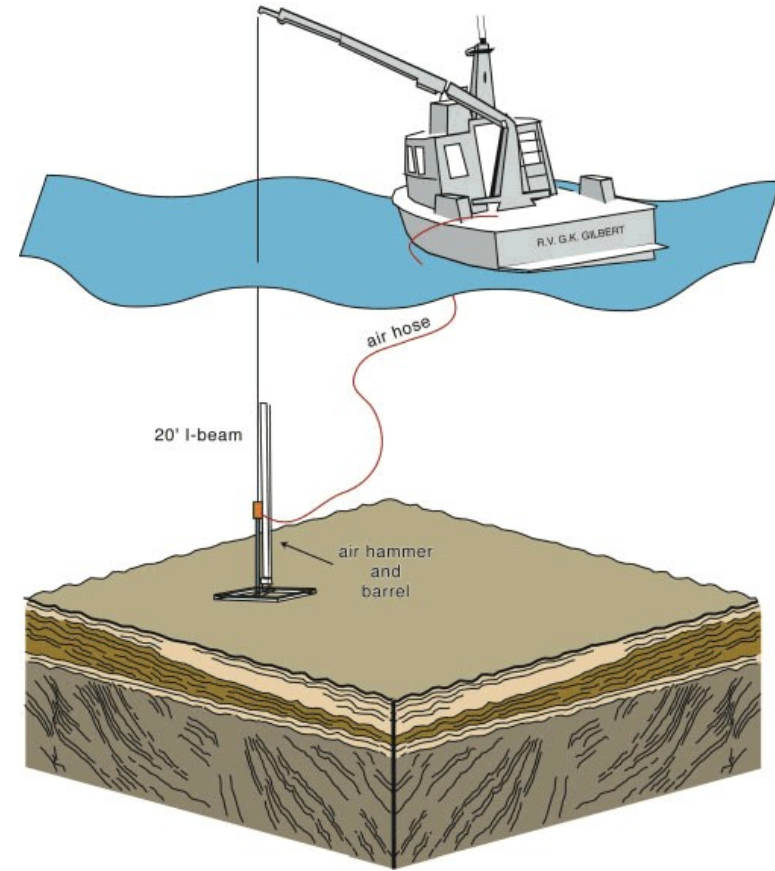


Sand-infused holdfast

Vibratory Embedment – Gravity Marine



Pneumatic Vibracore deployment



Sand-Dwelling Kelp Restoration Project Goals - 2026 and Beyond

