Toward Building An End-to-End Observing System

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SCCOOS

Data Portal

Background

SCCOOS has dedicated two decades to building infrastructure for ocean observation, focusing on geophysical parameters through surface current measurements, glider-based physical and biogeochemical measurements, nearshore real-time measurements, and operational hydrodynamic forecasts. Through legislative acts and proposals, SCCOOS endeavors to grow regional coastal climate resilience and enhance ecosystem monitoring while reaching out to new partners and the diverse populations of our coastal communities.

MISSION: To produce, integrate, and communicate sustained high-quality, science-based information to promote coastal ocean safety, resilience, and sustainability for all members of society.

Subsystems

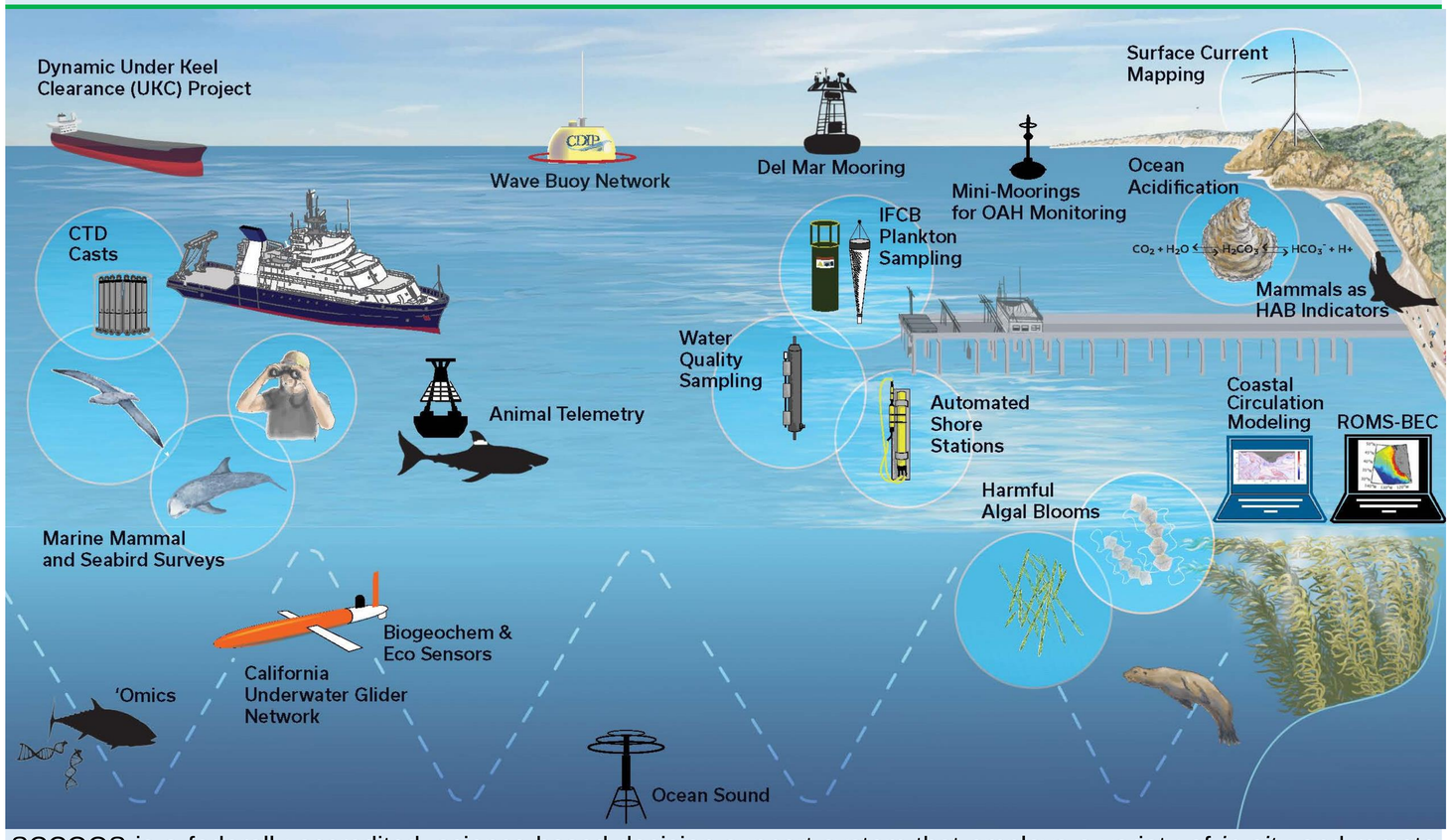
OCEAN OBSERVING
sustains long-term, high-quality observations of the coastal ocean and ecosystems to address SCCOOS regional stakeholder needs.

DATA AND CYBERINFRASTRUCTURE
delivers standardized, reliable, and accessible data to the public

MODELING AND ANALYSIS
supports model prediction that address a wide range of user requirements and public needs.

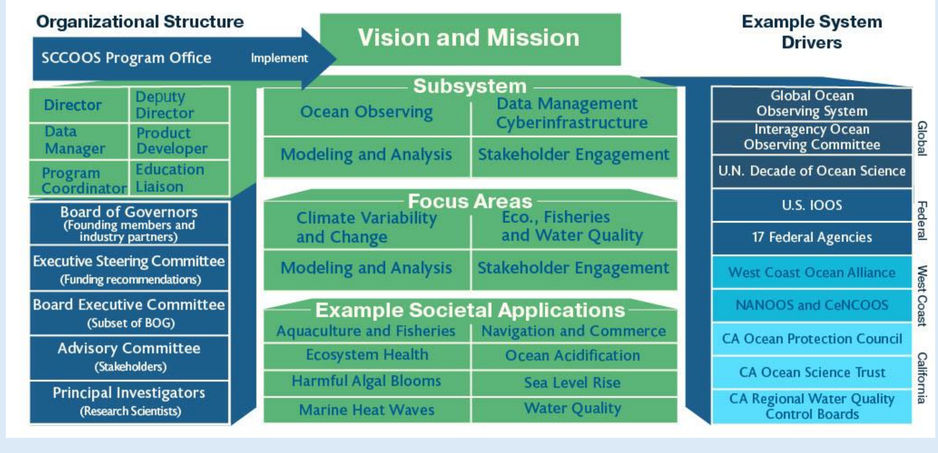
GOVERNANCE AND STAKEHOLDER ENGAGEMENT
increases the reach and efficiency of SCCOOS through partnership and collaborative discourse.

SCCOOS At A Glance



SCCOOS is a federally accredited, science-based decision-support system that employs a variety of *in situ* and remote sensing technologies to measure physical, chemical, biological, and geological parameters and supports ocean models and provides forecasts of future conditions. Above is an illustration of SCCOOS sustained regionally funded FY21-26 core projects (colored icons; Award NA21NOS0120088) and newly funded Inflation Reduction Act and Bipartisan Infrastructure Law projects (black icons; Award NA23NOS0120084 and NA24NOSX012C0029, respectively).

How We Work



New Investments

- Increase coastal observations to measure **total water level** and **improve coastal flood model**
- **BioEco sensors** on 3 **Spray 2 Gliders**
- Add real-time **OAH sensors** on **shore-stations**
- Deploy 5 **Mini-moorings** with **OAH sensors**
- Deploy 9 real-time **acoustic telemetry buoys**
- Support 1 HARP **sound station**
- **HAB sequencing** at HABMAP 2 sites
- Harden **HAB Early Warning System & Event Response**
- Recapitalize **California Surface Current Mapping Network**
- Integrate SCCOOS data into **K-undergrad curriculum**
- Develop **Next-Generation BGC Model**
- Create **Ecosystem Synthesis Products**
- **Next generation CalOOS Data Portal** and **co-design products**

SCCOOS is a highly leveraged network of *42 Principal Investigators* across 18 institutions. The majority of the SCCOOS budget goes toward *Ocean Observing* with an emphasis of maintaining our flagship programs.*

Funding Portfolio