



# National Marine Sanctuary West Coast Observing Activities

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PaCOOS Board of Governor Meeting  
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# West Coast Observing Activities

- ✓ IEA Framework Development
- ✓ Serving Biological Data From Existing Observing Projects
- ✓ Serving Five Core Variables From Existing Sanctuary Observing Sties



# IEA Framework Development

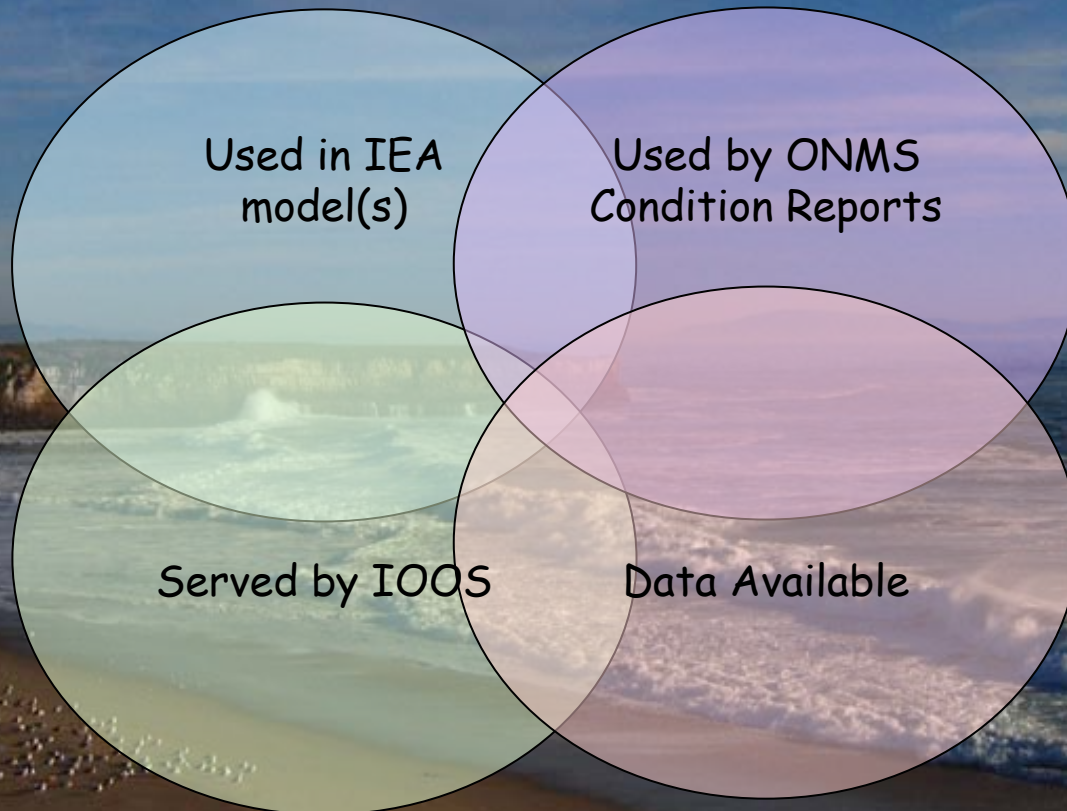
- ✓ Understand how management requirements relate to Integrated Ecosystem Assessments at different scales
- ✓ Investigate how existing IOOS capabilities inform IEA development

## Tasks

- Review relevant spatial scales of existing IEA-type activities
- Apply DPSIR approach to California Current example
- Identify key ecosystem management applications
- Identify supporting data sets and observing gaps

# IEA Framework Development

## Types of Data Identified





# Serving Biological Data From Existing Observing Projects

- ✓ Focus on BeachWatch and BeachCombers
- ✓ Links to other regional data (COASST)
- ✓ Other spatial data of opportunity (kelp, marine mammals)

## Tasks

- Bring Metadata into common format and structure
- Overcome differences in methods and approaches
- Integrate data through NCDDC processing
- Establish access to select data elements

# SIMoN Interactive Maps

## BeachCOMBERS and BeachWatch

Scale 1: 2762519

### NAVIGATION



### SELECTION



### OUTPUT



Map created by National Coastal Data Development Center  
0 73823m  
USNG: Lon: Lat:

Scale - +



- Base Data
- Cities  M
- Beach Segment  M
- County  M
- Sanctuary

### Search Criteria

Time Period - Year  
1997 to 2006

Time Period - Month  
Jan to Apr

Species BRAC

Cause of death All

Refresh Map

Auto Refresh

Help



# Serving Five Core Variables From Existing Sanctuary Observing Sties

- ✓ Data from moorings in four Sanctuaries
- ✓ Buoy data from Cordell Banks
- ✓ SeaKeepers data from R/V Fulmar and other ONMS research vessels

## Task

- "End-to-End" Data Management

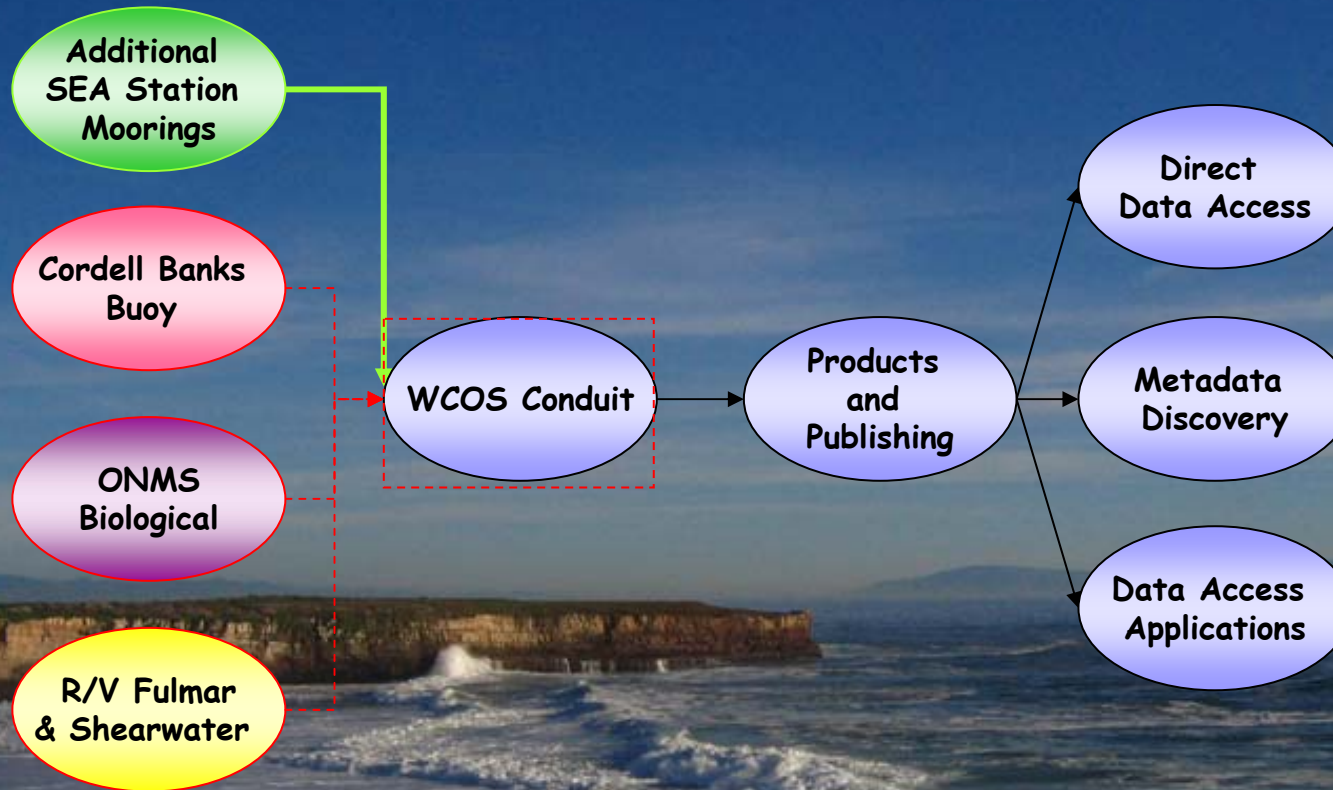
# What is “End-to-end” Data Management

- ✓ Managing data from collection to archival
- ✓ Goal: Result of process is that Data should be easy to find, understand, obtain and use
  - Documented and discoverable
  - Accessible - Multiple points of access
  - Interoperable - Support data and metadata standards
  - Archived - For perpetuity



# WCOS expansion to PaCOOS

*"End-to-end Data Management"*



## Partners:

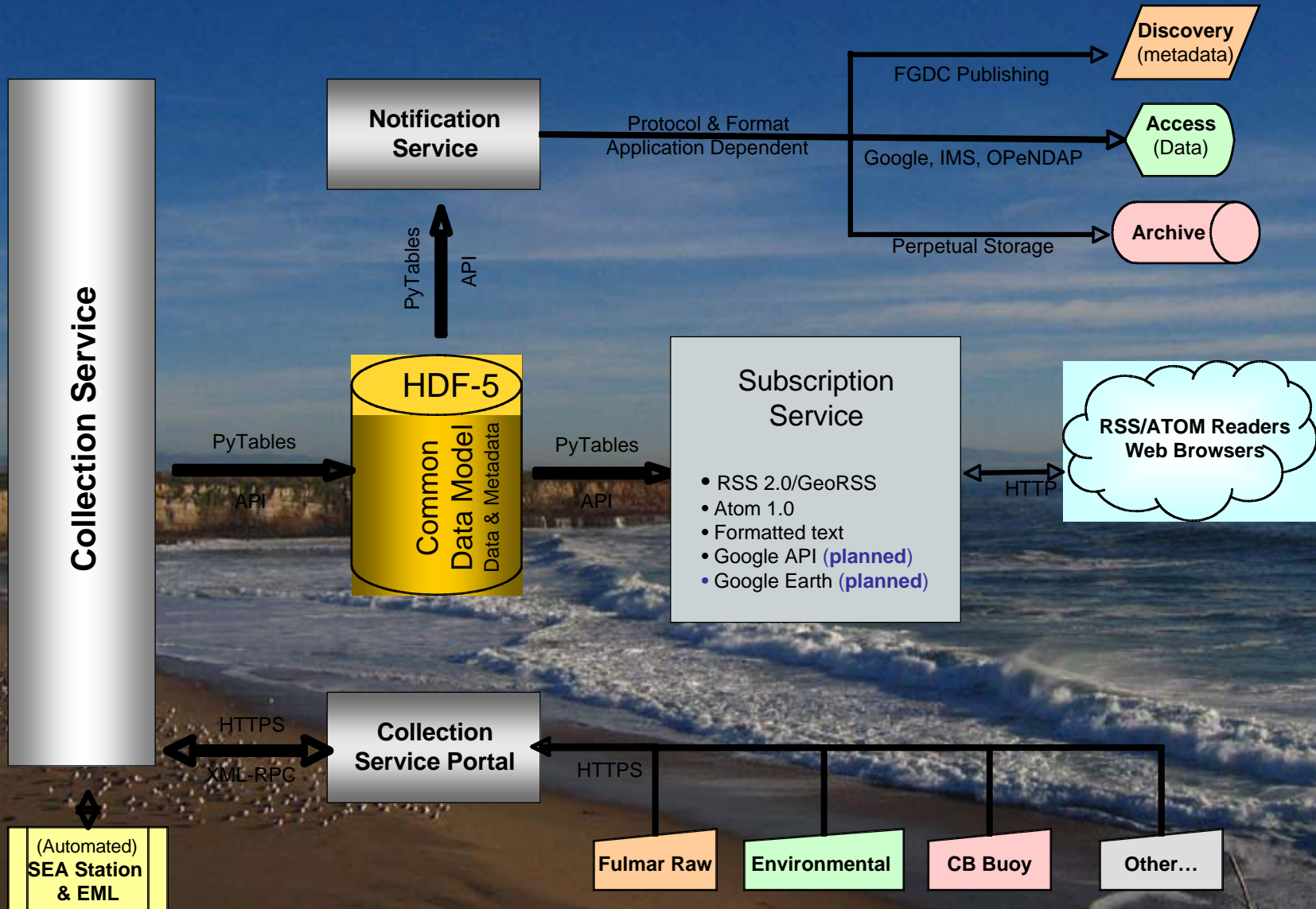
- Five National Marine Sanctuaries
- NWFSC & SWFSC
- Bodega Marine Lab
- PaCOOS

## Additional Capabilities:

- Metadata & Data Discovery: **common resources**
- Data Transport: **secure thick client**
- Data Archive & Access: **vDAC participation**
- Geospatial Enablement: **biological data query**

# NCDDC Collection Service Portal Architecture

Data Flow as Applied to WCOS










# FY08 *"End-to-end Data Management"* status

- **Additional SEA Station Moorings**
  - 831 New Datasets since August 2007, 1569 total
  - 6 new sites with multiple depths
- **SeaKeepers Shipboard Data**
  - Raw data transformation under development
  - Near real time transmittal will be displayed on Google Map
- **Cordell Banks Buoy**
  - Awaiting XML data sample
- **BeachCOMBER data**
  - Series of meetings and data reviews
  - Metadata, transform and access methods under development
  - Spatial Data Viewer Example



### Step 1: Select mooring site(s)

Check a point on the map below OR select from the list of sites. Your selected to query will appear in a list below.

#### Clickable Map of Sites

- zoom in 
- zoom out 
- pan 
- default view 
- select site 

#### Mooring Legend

- unselected 
- selected 



#### List of Sites

(to select multiple shift+click)

- Ano Nuevo (ANO001)
- San Miguel North (BAY)
- Santa Rosa North (BEA)
- Big Creek (BIG001)
- Bodega Head (BOD001)
- Cape Alava 15M (CA015)
- Cape Alava 42M (CA042)
- Cape Alava 65M (CA065)



[Click here](#) to view a static map of all the sites.