



#### Port of Long Beach Biological Resources

James Vernon – Assistant Director of Environmental Planning

APP - August 15, 2023

## **POLB/POLA Biological Surveys**

 Used to measure the progress & success of the Port's water quality programs



#### Study Elements

- Physical characteristics (water quality/sediment size);
- Benthic infauna;
- Ichthyoplankton;
- Demersal fish and macroinvertebrates;
- Pelagic and shallow-water fishes;
- Riprap epifauna;
- Kelp and macroalgae;
- Eelgrass;
- Birds;
- Marine mammals;
- Presence of non-native species



# Wildlife

Increased biodiversity with every survey

### Harbor Birds

### **Peregrine Falcon Monitoring**

### Nesting sites on the Gerald Desmond Bridge

#### Marine Mammals

### Fish Trawling

F

### **Survey of Pier Pilings**

Stor 2

### Macroalgae Surveys

### Green Abalone 3 new abalone species!

VIER

91943 - 1943 4 548° C

#### Juvenile Reef-Associated Fish First time observed in the Port Complex

# **2023 Biological Survey**

- Already underway
- Improved diversity Rockfish

  - Large rays
  - Leopard sharks
  - More kelp

