POLLUTION / WATER QUALITY
(ORGANICS, METALS, PESTICIDES, SEDIMENTS)

CLIMATE
(FLOODS, DROUGHT)

INFLOW / OUTFLOW
(UPSTREAM IMPOUNDMENTS, EXPORTS)

SPECIES INTERACTIONS
(INTRODUCED SPECIES)

FOOD PRODUCTION
(PHYTOPLANKTON, ZOOPLANKTON / FORAGE FISH)

FISHING
(HARVEST)

DIVERSESIONS / ENTRAINMENT
(LOSSES)

SALINITY TIDAL INFLUENCE
FLOW

LAND RECLAMATION
(PHYSICAL HABITAT, SLOUGHS, TRIBUTARIES, ESTUARIES)

SAN FRANCISCO BAY-DELTA
AQUATIC ECOSYSTEM
HEALTH & PRODUCTIVITY
OTHER FACTORS
-CUWA Conclusions -

✓ INFLUENCE BAY-DELTA ECOSYSTEM

✓ MUST BE ADDRESSED IN PARALLEL WITH WATER QUALITY STANDARDS

→ Standards alone will not restore ecosystem to desired levels
OTHER FACTORS
-CUWA Conclusions -

• EVIDENCE OF IMPORTANCE:
  1. Results of CUWA’s review
  2. Unexplained variance in X2 vs. Abundance Relationships
  3. Direct correlations of Other Factors with Abundance
  4. Results of other studies/researchers
GENERAL FOCUS OF CUWA WORK PLAN ON OTHER FACTORS -

- COMPILE/REVIEW DATA
- DETERMINE RELATIVE IMPACTS OF OTHER FACTORS (% Contribution)
  - Spatially/Temporally
  - Per Species Basis (if possible)

PRIORITIZE IMPACTS AND DEVELOP APPROPRIATE REMEDIATION PLANS
STATUS AND TRENDS
-CUWA Conclusions -

- LONG-TERM DECLINES IN ABUNDANCE HAVE OCCURRED

- CAUSES FOR DECLINES NEED TO BE ADDRESSED AND REMEDIED

- Water Quality Standards
- Other Factors
STATUS AND TRENDS
-CUWA RECOMMENDATIONS-

- REFINE EXISTING SURVEY PROGRAMS
  ✓ More Accurately Portray Species Abundance

- DEVELOP MONITORING PROGRAMS
  ✓ Evaluate Effectiveness of Recovery Measures

- DEVELOP MULTI-SPECIES ECOSYSTEM MANAGEMENT PROGRAM
  ✓ Address all major problems