

## POD Highlights

IEP Quarterly Directors Meeting  
Friday, March 13, 2009, Sacramento

### **Fish Status:**

- Fish numbers still low based on fall 2008 monitoring.
- Fish and Game Commission action on longfin smelt and delta smelt.

### **Notable Recent Results:**

#### **Evidence for Delta Smelt “Contingents”:**

- Year-round presence in Cache Slough complex, otolith studies.
- Implications for habitat restoration and species management.

#### **Possible Breakthrough in Striped Bass Investigations:**

- Need to understand why this top POD predator has declined.
- Radical shift in sex ratios of adult striped bass may result in low production of young.
- Striped bass model has been completed, being used to estimate predation effects and evaluate effects of sex ratio changes.

#### **New Insight into Longfin Smelt:**

- Population still responds to higher outflow.
- Shift to saltier and deeper water during POD years.

#### **Splittail Decline**

- Lower than expected reproduction during POD years.

#### **Habitat and Bottom-up (food web) Effects:**

- In 2008, the *Microcystis* bloom developed late, but was widespread in August-September
- In pilot experiments, algae grew well in ammonium-rich Sacramento River water from Freeport, but not from Rio Vista.
- A pilot delta smelt test in 2008 suggests that ammonia concentrations present in the Sacramento River below the SRWTP may not be acutely toxic to 55-day old delta smelt.
- 50-day old delta smelt are about as sensitive to ammonia as salmonids, and >5-fold more sensitive than larval fathead minnow, a common NPDES toxicity test species.
- March 10-11, 2009 CALFED workshop to develop ammonia research framework.

### **2009 POD Workplan:**

- \$7,608,000 (2008: \$5,900,000)
- 55 study components (2008: 58)
- Bond fund freeze has had a major effect on progress – 14 affected elements.
- Emphasis on integration and communication, e.g. modeling, POD book
- Work plan document completion and posting: February 2009
  - [http://www.science.calwater.ca.gov/pod/pod\\_index.html](http://www.science.calwater.ca.gov/pod/pod_index.html)

### **Future Events and Products:**

- Spring 2009: POD MT Progress Report - 2008 Synthesis of Results
- Spring-Fall 2009: IEP Workshops & State of the Estuary Update
- Spring 2010: IEP Asilomar Workshop
- Fall 2010: CALFED Science Conference
- End 2010: POD MT& NCEAS Synthesis Report