



## **Interagency Ecological Program**



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# **2009 IEP Update and Workshop Series**

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**Department of Fish and Game**

# News and Updates

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- Changes in Species Status
- 2009 Program Details
- New and Expanded Partnerships
- Other Accomplishments

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- 2009 IEP Workshop Series

# Changes in Species Status

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Juvenile longfin smelt



- Regulatory requirements

Adult delta smelt



- Adaptive management of take

- New need = new field program (SLS)

# 2009 Program Details

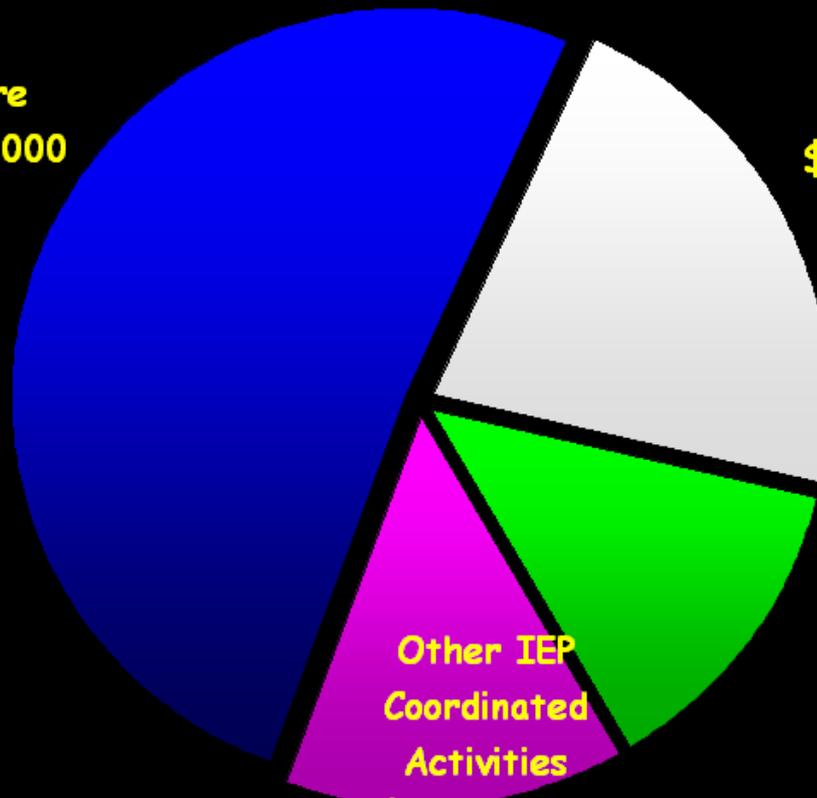
**2009 IEP Total Funding  
\$31,207,000**

**IEP Core  
\$15,982,000**

**IEP POD  
\$6,810,000**

**CALFED POD  
Coordinated  
Activities  
\$4,119,000**

**Other IEP  
Coordinated  
Activities  
\$4,296,000**



# New & Expanded Partnerships

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- California Cooperative Ecosystems Studies Unit (CESU)
- National Center for Ecological Analysis and Synthesis (NCEAS)

STEERING COMMITTEE

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graph TD; SC[STEERING COMMITTEE] --> EAWG[Ecosystem Analysis Working Group]; SC --> CWG[Contaminants Working Group]; SC --> OEIWG[Ocean-Estuary Interactions Working Group];
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Ecosystem  
Analysis  
Working Group

Contaminants  
Working Group

Ocean -Estuary  
Interactions  
Working Group

# Other accomplishments

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Vessel replacement

Publications

IEP website and communications

[www.iep.ca.gov](http://www.iep.ca.gov)



# 2009 IEP Workshop Series

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Save the dates:

- June 25 - Monitoring Update and Food Web Forum
- August ?? - Ammonia Summit
- September 8 & 9 - Ecosystems Analysis Modeling
- October ?? - Monitoring for the 21<sup>st</sup> Century

# 2009 IEP Workshop Series

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## Monitoring Update and Food Web Forum

This EET-style meeting will focus on current upper estuary food web research and provide an update on recent monitoring data.



- Monitoring updates from DWR and DFG
- Feeding patterns of age-0 pelagic fishes
- Microcystis (2)
- Suisun productivity

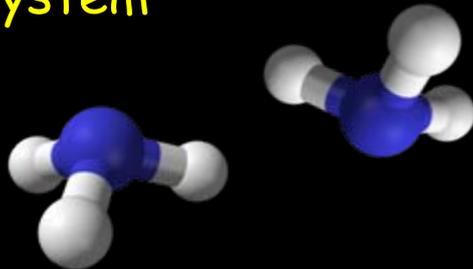
# 2009 IEP Workshop Series

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## Ammonia Summit

The summit is intended to provide a broader and more in-depth forum for presenting findings of current research and gathering information relevant to the role of ammonia and ammonium in the Bay-Delta system



- Sources, concentrations, fate and transport of nutrients
- Food web effects
- Toxicology

# 2009 IEP Workshop Series

## Modeling the Pelagic Organism Decline:

Results from IEP POD-NCEAS  
Systems Ecology Group

This workshop will present and discuss results of various modeling approaches such as changepoint analysis, IBM, multivariate autoregressive models and ECOPATH.

$$(\nabla^2 \phi) = \frac{\partial \psi}{\partial z} \frac{\partial}{\partial x} (\nabla^2 \psi) - \frac{\partial \psi}{\partial x} \frac{\partial}{\partial z} (\nabla^2 \psi) + \nu \nabla^2 (\nabla^2 \psi) + g \alpha \frac{dT}{dx}$$



• Day 1: Non-technical; key hypotheses, assumptions, results and interpretations

• Day 2: Highly technical; data, results, inferences and uncertainties

# 2009 IEP Workshop Series

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## Bay-Delta Monitoring Questions and Tools for the 21st Century

Workshop series synthesis: synthesize questions and information related to Bay-Delta monitoring and assessment from the previous four workshops.



- Day 1: Current and future Bay-Delta monitoring questions and methods
- Day 2: Testing new monitoring technologies