

**CAMT 2019 Workplan and Budget**

Approved February, 15, 2019

Updated May 23, 2019

<b>CSAMP Priorities and CAMT Workplan Activities</b>	<b>Budget</b>	<b>Committed</b>	<b>Uncommitted</b>
1. Maintain Collaborative Process			
a. Management and Facilitation	\$420,000	\$295,000	\$125,000
b. Sponsored participants	<u>\$200,000</u>	<u>\$200,000</u>	<u>\$0</u>
	<b>\$620,000</b>	<b>\$495,000</b>	<b>\$125,000</b>
2. Complete Current CAMT Investigations and Communicate Findings			
a. OMR Management - Factors Affecting Delta Smelt Entrainment (Grimaldo)	\$82,000	\$82,000	\$0
b. Fall Outflow - Characterizing the Relationships between Fall Outflow and Survival and Abundance of Delta Smelt (Fleishman)	\$60,000	\$60,000	\$0
c. Delta Smelt Science Plan (Reed)	\$15,000	\$15,000	\$0
d. Delta Salmon Rearing Habitat Study (SFEI)	<u>\$173,000</u>	<u>\$173,000</u>	<u>\$0</u>
	<b>\$330,000</b>	<b>\$330,000</b>	<b>\$0</b>
3. Support Implementation of Resiliency Strategies for Delta Smelt and Sacramento Salmonids			
a. CSAMP Structured Decision Making for Delta Smelt Recovery	\$320,000	\$320,000	\$0
b. Assist with coordination of the Suisun Marsh Salinity Control Gates, North Delta Food Web and Flow Augmentation actions	Costs included in Item 1 – Collaborative Process		
c. Assist where projects are stuck or otherwise need guidance, including sorting out potential controversy, providing guidance on monitoring, and communicating status and results.	Costs included in Item 1 – Collaborative Process		
	<u><b>\$320,000</b></u>	<u><b>\$320,000</b></u>	<u><b>\$0</b></u>

<p>4. Support Additional Near-term, No Regrets Salmon Actions</p> <ul style="list-style-type: none"> <li>a. Use available models to evaluate potential actions.</li> <li>b. Identify projects in addition to the resiliency strategy where CSAMP could provide science support, funding and project management recommendations for early recovery actions that benefit both listed and non-listed species upriver and in the Delta.</li> </ul>	<p style="text-align: right;">\$100,000</p> <p>Costs included in Item 1 – Collaborative Process</p> <hr/> <p style="text-align: right;"><b>\$100,000</b></p>	<p style="text-align: right;">\$0</p> <hr/> <p style="text-align: right;"><b>\$0</b></p>	<p style="text-align: right;">\$100,000</p> <hr/> <p style="text-align: right;"><b>\$100,000</b></p>
<p>5. Improve Coordination of Salmonid Research in the Delta and Support Development of an Integrated Central Valley Science Plan for Salmonids</p> <ul style="list-style-type: none"> <li>a. Develop salmon science plan for the Bay-Delta (ESSA)</li> </ul>	<p style="text-align: right;"><u>\$250,000</u></p> <p style="text-align: right;"><b>\$250,000</b></p>	<p style="text-align: right;"><u>\$0</u></p> <p style="text-align: right;"><b>\$250,000</b></p>	<p style="text-align: right;"><u>\$0</u></p> <p style="text-align: right;"><b>\$0</b></p>
<p>6. Initiate Conversation Regarding Oversight, Guidance, and Feedback on Monitoring Schemes Targeting the Delta's Natural Resources</p> <ul style="list-style-type: none"> <li>a. Help establish monitoring designs and protocols necessary to evaluate the effectiveness of adaptive management actions</li> <li>b. Support efforts to identify indicators of the health and integrity of Delta ecosystems and communities</li> <li>c. Discuss CAMT role, if any, in review of long-term fish surveys and sampling schemes to assess status and trends and assess how to maximize the value of dedicated resources.</li> </ul>	<p>Costs included in Item 1 – Collaborative Process</p>		
<p>7. Advance Decision Support Tools</p> <ul style="list-style-type: none"> <li>a. Continue Winter-run Life Cycle Model Workshops</li> <li>a. Continue engagement in the Delta Science Program SDM process for the Delta.</li> </ul>	<p style="text-align: right;">\$80,000</p> <p>Costs included in Item 1 – Collaborative Process</p> <hr/> <p style="text-align: right;"><b>\$80,000</b></p>	<p style="text-align: right;">\$80,000</p> <hr/> <p style="text-align: right;"><b>\$80,000</b></p>	<p style="text-align: right;">\$0</p> <hr/> <p style="text-align: right;"><b>\$0</b></p>
<b>Total</b>	<b>\$1,700,000</b>	<b>\$1,475,000</b>	<b>\$225,000</b>

## 2019 CAMT Workplan Details

### 1. Maintain Collaborative Process

<b>Description</b>	Provide management and facilitation for CAMT, Policy Group and subcommittees. Support sponsored participants													
<b>Contractors</b>	Bruce DiGennaro (Essex), Kerns and West, Sam Luoma, Rene Henry, and John Ferguson (Anchor QEA)													
<b>2019 Budget</b>	\$620,000 (\$420k for management and facilitation, \$200k for sponsored participants)													
<b>Funding</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"><u>Committed</u></td> <td style="width: 50%;"><u>Unfunded</u></td> </tr> <tr> <td>PWA \$40,000</td> <td>\$125,000</td> </tr> <tr> <td>USBR \$105,000</td> <td></td> </tr> <tr> <td>DWR \$320,000</td> <td></td> </tr> <tr> <td><u>NMFS \$30,000</u></td> <td></td> </tr> <tr> <td style="text-align: right;">\$495,000</td> <td></td> </tr> </table>	<u>Committed</u>	<u>Unfunded</u>	PWA \$40,000	\$125,000	USBR \$105,000		DWR \$320,000		<u>NMFS \$30,000</u>		\$495,000		
<u>Committed</u>	<u>Unfunded</u>													
PWA \$40,000	\$125,000													
USBR \$105,000														
DWR \$320,000														
<u>NMFS \$30,000</u>														
\$495,000														
<b>Comments</b>	Existing facilitation contracts expire on 6/30/19. Funding shortfall is primarily a contracting issue.													

### 2. Complete Current CAMT Investigations and Communicate Findings

#### 2a. OMR Management - Factors Affecting Adult Delta Smelt Entrainment

<b>Description</b>	Studies 1 and 2 have been completed and a draft report has been received for Study 3 (proportional entrainment). Work in 2019 will focus on DSST review of Study 3 and completion of Study 4 (life cycle modeling).					
<b>Contractors</b>	Lenny Grimaldo (ICF), Edward Gross, Josh Korman. Pete Smith, Michael MacWilliams, Will Smith					
<b>2019 Budget</b>	\$82,000					
<b>Funding</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"><u>Committed</u></td> <td style="width: 50%;"><u>Unfunded</u></td> </tr> <tr> <td>PWA \$82,000</td> <td>\$0</td> </tr> </table>	<u>Committed</u>	<u>Unfunded</u>	PWA \$82,000	\$0	
<u>Committed</u>	<u>Unfunded</u>					
PWA \$82,000	\$0					
<b>Comments</b>	Funding for responding to DSST comments, preparing presentation materials for CAMT and Policy Group and publication.					

#### 2b. Fall Outflow - Characterizing the Relationships between Fall Outflow and Survival and Abundance of Delta Smelt

<b>Description</b>	Identify environmental variables that are associated strongly with annual changes in survival during autumn and recruitment of Delta Smelt.					
<b>Contractors</b>	Erica Fleishman– Principal Investigator, Nobel Hendrix, Robin Waples					
<b>2019 Budget</b>	\$60,000					
<b>Funding</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"><u>Committed</u></td> <td style="width: 50%;"><u>Unfunded</u></td> </tr> <tr> <td>PWA \$60,000</td> <td>\$0</td> </tr> </table>	<u>Committed</u>	<u>Unfunded</u>	PWA \$60,000	\$0	
<u>Committed</u>	<u>Unfunded</u>					
PWA \$60,000	\$0					
<b>Comments</b>	Funding to complete modeling responding to DSST comments and preparing presentation materials for CAMT and Policy Group.					

## 2c. Delta Smelt Science Plan

<b>Description</b>	Support implementation of the Delta Smelt Science Plan	
<b>Contractors</b>	Denise Reed	
<b>2019 Budget</b>	\$15,000	
<b>Funding</b>	<u>Committed</u> PWA \$15,000	<u>Unfunded</u> \$0
<b>Comments</b>		

## 2d. Delta Salmon Rearing Habitat Study

<b>Description</b>	Complete Delta Salmon Rearing Habitat Study	
<b>Contractors</b>	San Francisco Estuary Institute (SFEI), Anchor QEA, RMA	
<b>2019 Budget</b>	\$173,000	
<b>Funding</b>	<u>Committed</u> NMFS \$ 50,000 DSP \$100,000 PWA \$ 23,000	<u>Unfunded</u> \$0
<b>Comments</b>	PWA's funding RMA to provide hydrodynamic modeling and expertise. NMFS funding is for Anchor QEA support. DSP funding is going to the Delta Conservancy for SFEI contract. The Conservancy is providing additional funding for SFEI not shown here.	

## 3. Support Implementation of Resiliency Strategies for Delta Smelt and Sacramento Salmonids

### 3a. CSAMP Structured Decision Making for Delta Smelt Recovery

<b>Description</b>	Conduct Structured Decision Making (SDM) for Delta Smelt recovery	
<b>Contractors</b>	Kerns and West and Compass Resources	
<b>2019 Budget</b>	\$320,000	
<b>Funding</b>	<u>Committed</u> PWA \$ 25,000 USBR \$295,000	<u>Unfunded</u> \$0
<b>Comments</b>	PWA's funding Phase 1 (Project Initiation). USBR funding Phase 2. Work will continue into 2020.	

#### 4. Support Additional Near-term, No Regrets Salmon Actions

##### 4a. Use Available Models to Evaluate Potential Near-term Salmon Actions.

<b>Description</b>	Evaluate potential benefits of near-term actions using existing models	
<b>Contractors</b>	TBD	
<b>2019 Budget</b>	\$100,000	
<b>Funding</b>	<u>Committed</u> \$0	<u>Unfunded</u> \$100,000
<b>Comments</b>	Actions to be identified by CAMT	

#### 5. Improve Coordination of Salmonid Research in the Delta and Support Development of an Integrated Central Valley Science Plan for Salmonids

##### 5a. Develop Salmon Science Plan for the Bay-Delta

<b>Description</b>	Develop a Salmon Science Plan for the Bay-Delta	
<b>Contractors</b>	Kerns and West and ESSA	
<b>2019 Budget</b>	\$250,000	
<b>Funding</b>	<u>Committed</u> USBR \$250,000	<u>Unfunded</u> \$0
<b>Comments</b>	Work to continue into 2020	

#### 6. Initiate Conversation Regarding Oversight, Guidance, and Feedback on Monitoring Schemes Targeting the Delta's Natural Resources

<b>Description</b>	<ul style="list-style-type: none"> <li>a. Help establish monitoring designs and protocols necessary to evaluate the effectiveness of adaptive management actions.</li> <li>b. Support efforts to identify indicators of the health and integrity of Delta ecosystems and communities.</li> <li>c. Discuss CAMT role, if any, in review of long-term fish surveys and sampling schemes to assess status and trends and assess how to maximize the value of dedicated resources.</li> </ul>
<b>Contractors</b>	None – To be done by CAMT
<b>2019 Budget</b>	Costs included in Item 1 – Collaborative Process
<b>Funding</b>	NA
<b>Comments</b>	

## 7. Advance Decision Support Tools

<b>Description</b>	Continue Winter-run Life Cycle Model Workshops	
<b>Contractors</b>	SWFSC	
<b>2019 Budget</b>	\$80,000	
<b>Funding</b>	<u>Committed</u> USBR \$80,000	<u>Unfunded</u> \$0
<b>Comments</b>	Included in USBR contract with SWFSC for LCM development. Need to verify budget amount.	