

Delta Science Plan

One Delta, One Science

Delta Stewardship Council
June 27, 2013



Delta Science Program
Delta Stewardship Council

Why a Delta Science Plan?

“Currently, science efforts related to the Delta are performed by multiple entities with multiple agendas and without an overarching plan for coordinating data management and information sharing among entities” – Delta Plan

“only a synthetic, integrated, analytical approach to understanding the effects of suites of environmental factors (stressors) on the ecosystem and its components is likely to provide important insights that can lead to enhancement of the Delta and its species” – National Research Council 2012

Delta Plan Direction, GR1

- 🌊 The Delta Science Plan should address:
 - Collaborative institutional and organizational structure for science
 - Communication of likely responses
 - Data management, synthesis and communication of scientific knowledge
 - Uncertainties and conflicting science information
 - Prioritization of research
 - Shared computer models
 - Shared body of knowledge
 - Recommendations on an integrated monitoring approach

Overcoming the *Status Quo*

-  Synthesis **and** communication: Implications for management
-  Scientific uncertainties are not excuses for inaction
-  Common understanding and broadly agreed-upon priorities to address uncertainties
-  Clear understanding of tradeoffs

The Delta Science Plan

Vision

'One Delta, One Science' – An open Delta science community that works together to build a shared body of scientific knowledge.

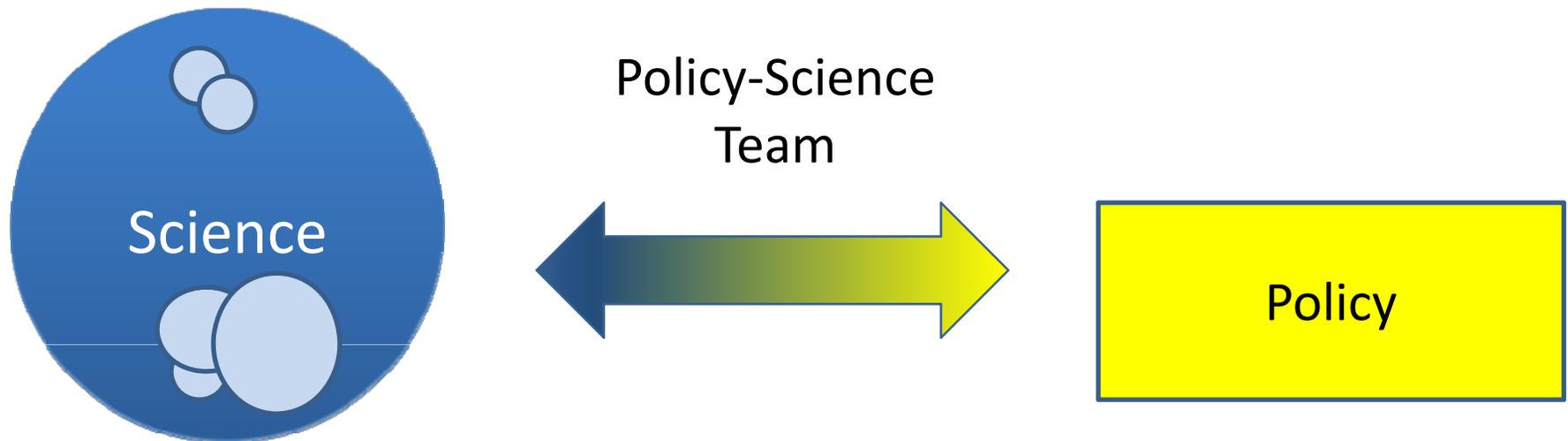
The Delta Science Plan

- Connect decision-makers and science leaders
- Establish a common body of knowledge – best available science
- Build the infrastructure for delivering relevant science in a timely manner
- Develop the next generation of science leaders

Transforming the Science-Policy Interface

“A collaborative effort is needed, where scientists and governance professionals work together as a single team, rather than have two separate entities.”

- National Research Council Committee on Sustainable Water and Environmental Management in the California Bay-Delta (2012)

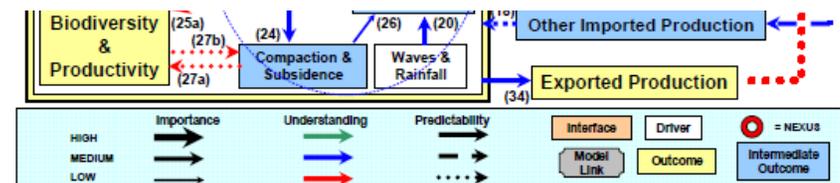


The Delta Science Plan

- Prioritization of science needs
- Common Peer Review Standards
- System understanding for coequal goals

Tools change how we interact with one another, how we behave and therefore how we think.

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Delta Science Strategy

DELTA SCIENCE PLAN

- ✓ Prioritization Processes
 - Research
 - Synthesis
 - Infrastructure
- ✓ Science Infrastructure Summits
- ✓ Common Peer Review Process
- ✓ Integrative Adaptive Management at System Level
- ✓ Teams to develop common understanding
 - Policy-Science Team and Science Synthesis Team

SCIENCE ACTION AGENDA

- ✓ Common prioritized science actions
 - Directed Research
 - Competitive Research
 - Science Fellows
 - Emerging technologies
 - Infrastructure

STATE OF BAY-DELTA SCIENCE

- ✓ Summary of the state of scientific knowledge, including summary of funded projects

Revised Science Management Structure

These two new teams meet around issues:

Policy-Science Team

Science Synthesis Team

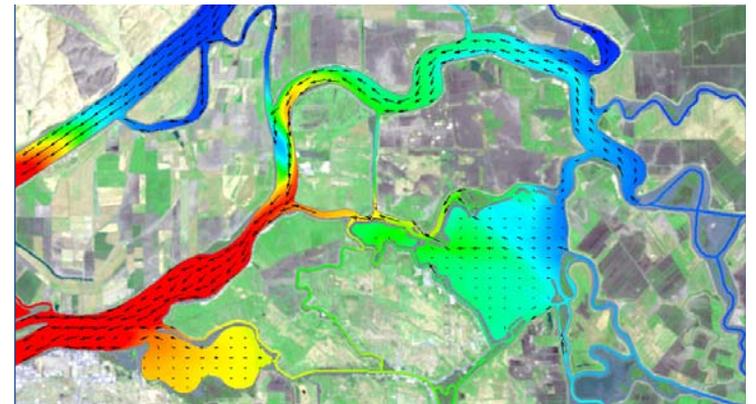


Science Summits

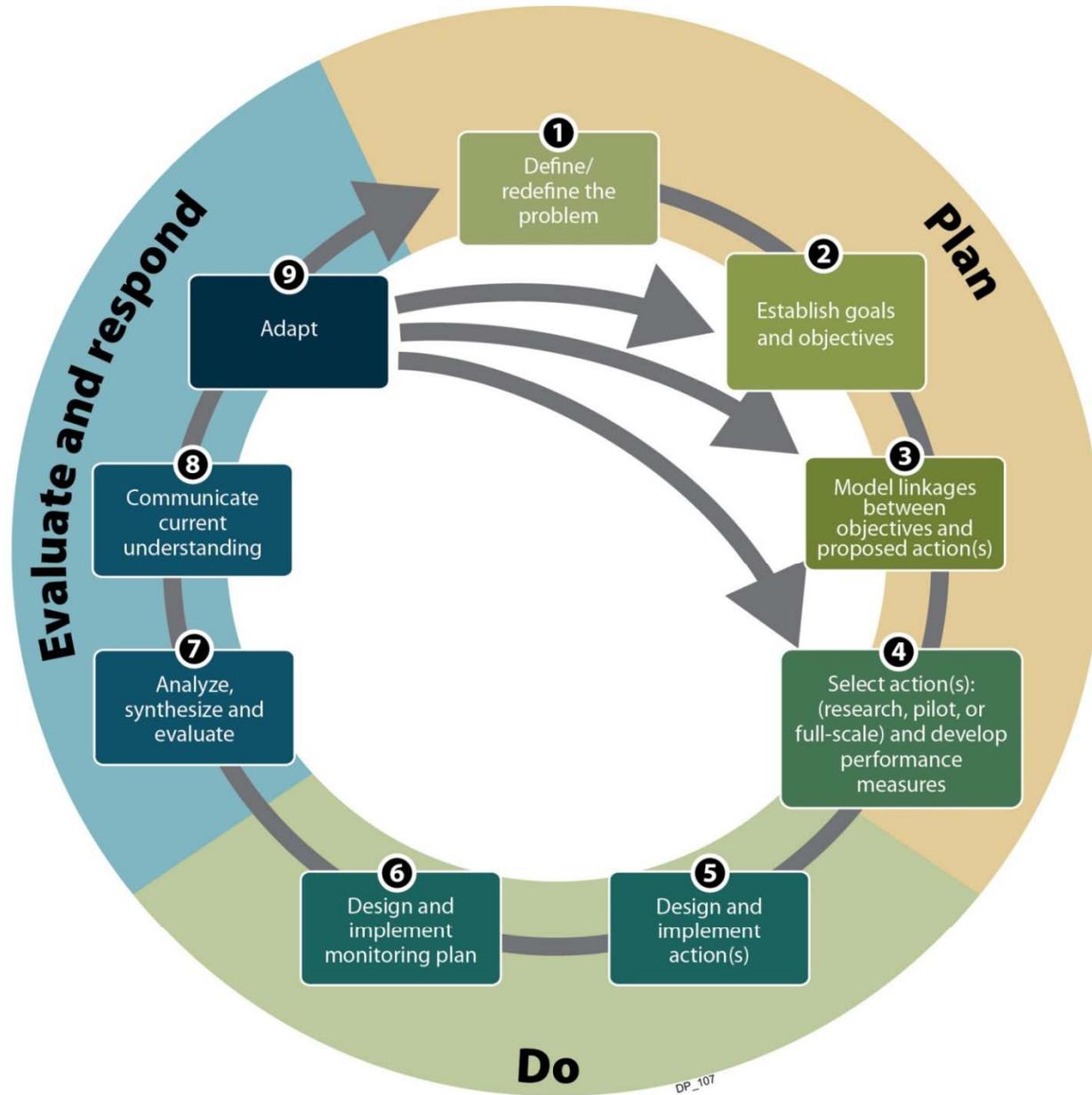
Building, sustaining innovations and emerging initiatives

- ✓ Data Management – interoperability, web services
- ✓ Community Modeling
- ✓ Adaptive Management

- ✓ *Assessment of monitoring*



Adaptive Management Framework



Adaptive Management Actions

-  Restoration and Water Management Frameworks
 - *Regional and System-wide focus*
 - *Historical ecology, conceptual models and decision support tools (DRERIP evaluation)*
 - *Utilize Delta Restoration Network to implement*
-  Shared tracking of AM projects to assess cumulative effects and support AM for plans

DSP Adaptive Management Liaisons

Proposed covered actions

- *Early consultation on BAS and AM for proposed covered actions (GP1)*
- *AM guidelines (Appendix 3)*
- *Explore voluntary certification*

Other efforts

- *Exempt actions - Water operations*
- *Participate on and advise AM teams such as:
BiOps CAMT, BDCP AMT, Suisun Marsh AMAT*

The Future of Delta Science

- Independent
- Leadership – role of staff and lead scientist
- Balancing '*Feast or Famine*' cycles
- Concept of 'rotators' – community of science
- 'Delta Center for Analysis and Synthesis'

The Future for Agency/Local Government Scientists

- Enabling the next generation of scientists
- Career-track scientists
- Access to basic tools – journals
- Time for Synthesis/Innovation



Thank You for Your Attention

We welcome your input

Preliminary Schedule:

- June 2013: First Draft Delta Science Plan
- August 2013: Second Draft Delta Science Plan
- September 2013: Final Delta Science Plan

Submitting Public Comment:

- Submit written comments to science@deltacouncil.ca.gov.
- For public comment on the First Draft Delta Science Plan to be considered for incorporation in the Second Draft Delta Science Plan, comments must be received no later than Thursday, July 18, 2013.

