Proposal to Establish an Environmental Flows Workgroup



Eric Stein Southern California Coastal Water Research Project











University of **California** Agriculture and Natural Resources



Recap of Previous Discussions

- Proposal to create Environmental Flows workgroup presented to Council – May 2017
 - Asked to return with additional details on goals and justification that this within Council's scope
- Focused meetings with staff of relevant agencies
- Updated proposal presented to Council August 2017
 - General support, but request to brief agency undersecretaires
- Briefings with undersecretaries of Resources and CalEPA November 2017

Undersecretary Briefings

- Discuss details of workgroup's goals
- Seek guidance on structure and approach
- Strategies for fully engaging CNRA and CalEPA

Feedback

- Workgroups goals are consistent with Council's mission of improving coordination and access to data
- Supportive of moving forward
- Suggested additional outreach to additional agencies and tribes

Goals for Today

• Review goals and objectives of the environmental flows workgroup

- Obtain Council approval for bringing the existing workgroup under the auspices of the Council
 - Expand the workgroup to include additional interested parties/agencies

What are Environmental Flows?

The magnitude, timing, duration, rate of change, and frequency of flows and associated water levels necessary to sustain the biological composition, ecological function, and habitat processes within a water body and its margins

Environmental flows are not necessarily "natural flows". They allow for some degree of hydrologic alteration due to other uses. However, environmental flows are intended to mimic the patterns and ecological outcomes of the natural flow regime

What are Environmental Flows?

The magnitude, timing, duration, rate of change, and frequency of flows and associated water levels necessary to sustain the biological composition, ecological function, and habitat processes within a water body and its margins



Statewide Needs for Environmental Flows

- Set instream flow standards to protect biological communities
 - Process for selecting appropriate ecological endpoints
- Assess vulnerability of streams to future changes in flow conditions
 - Prioritize areas for restoration/management
- Evaluate/inform management actions

e.g., reservoir operations, water withdrawals

Statewide Environmental Flows Framework



Site specific e-flows where necessary

Data sharing (open data) + information dissemination to the public

Need for Coordination



Workgroup's Objectives

- Create forum to consolidate environmental flows science and improve communication of the science to inform agency decisions
 - Facilitate coordination between various agencies and programs involved with development and implementation of environmental flows efforts
- Provide recommendations for a consistent and defensible statewide framework for assessing environmental flows
- Create a "clearinghouse" for tools, data, example applications
 Connect to existing web-based sources of protocols, data, and resources
- Establish and maintain a "portal" to answer basic questions related to environmental flows
- Assess statewide status of environmental flows

Initial Tasks

- Convene interagency workgroup
- Review draft tiered environmental flows framework
 - developed with SWRCB, Division of Water Rights
- Conduct data gaps analysis
 - inform future workgroup priorities
- Establish Environmental Flows portal

- Ongoing outreach and coordination
- Local agencies
- Tribes
- NGOs
- Add tools and refine environmental flows framework based on lessons learned from implementation and agency needs
 - Building on current SWRCB scope
 - Incorporate additional agency needs
- Conduct statewide environmental flows status and trends assessment

Relationship with Current SWRB Project

	SWRCB Scope	Additional Tasks
Statewide classification		
Develop functional flow metrics		
Develop initial ecological endpoints		
Statewide characterization of "impaired flows"		
Develop and populate web page/portal		
Refine ecological endpoints (multi-taxa, multi-objectives)		
Assess status and trends based on Env. Flow metrics		
Develop process for model selection		
Case studies		
Develop monitoring recommendations		
Produce statewide guidance document		



Tier 1

Environmental Flows Portal





California Water Quality Monitoring Council
My Water Quality

Search Q

10

A COLLABORATION BETWEEN THE CALIFORNIA ENVIRONMENTAL PROTECTION AND NATURAL RESOURCES AGENCIE

Â	Portals	About Us	Work Groups
1		11	
These web portals, supported by a wide variety of public and private organizations, present California water quality			
and aquatic ecosystem monitoring data and assessment information		ation	

- How "healthy" is the hydrology of streams in my area?
- What would "natural flows" be in my stream?
- What are the main "stressors" affecting hydrologic condition?
- How has drought affected the flow conditions of streams?
- What are the risks to future hydrologic alteration?
- What organisms may be most affected by hydrologic alteration?
- Has there been any environmental flows work done in my area?
- What tools or approaches are available? Appropriate?
 - How do I choose which tool to use?
 - What data is already available?

Topics for Discussion

• Is there support for the adoption of the Environmental Flows Workgroup?

- Is the scope of the proposed Environmental Flows Workgroup appropriate?
- Does the Council agree on the proposed initial tasks?

Questions

Eric Stein erics@sccwrp.org www.sccwrp.org