



Floodplain Science & Management Symposium

Wednesday, Thursday and Friday, October 13, 14, and 15, 2021

Objectives

1. Share floodplain science research writ large – including work on flood bypasses and agricultural fields as well as more natural floodplains – to build a joint understanding of floodplain ecological function and its relationship with salmonid and green sturgeon recovery.
2. Identify existing gaps in knowledge related to the role of floodplains in successful recovery for salmonids and green sturgeon in the Sacramento River watershed.
3. Explore lessons learned from existing floodplain habitat projects and recent permitting efforts in the Sacramento watershed, and the tools and methodologies currently used to evaluate benefits and potential risks of management actions to salmonids and green sturgeon; and
4. Inform a management conversation about what additional information and/or metrics for monitoring and evaluation are needed to assess, scale, and adaptively manage more intensively managed floodplain projects to benefit salmonids and green sturgeon at a population scale.

Agenda

Day 1, October 13: State of the Science

Item	Topic	Time	Title	Speaker
	Introductions			
		9:00	Welcome & housekeeping	Facilitator



		9:10	Objectives of the Symposium	Ellen McBride (NMFS), Jacob Katz (CalTrout)
		9:15	Management context for floodplain science research	Maria Rea (NMFS)
	Keynote Presentation	9:25	Central Valley floodplains: accidental models and multipurpose intentions (20 min) + Q&A (10 min)	Jeff Opperman (World Wildlife Fund)
	Hydrologic Function			
		9:45	Lost river-wetland corridors and Central Valley historic context	Brian Cluer (NMFS)
		10:05	Overview and species connection to functional flows (20 min)	Betty Andrews (ESA)
		10:25	Q&A	
	Break	10:35		
	The Adult Experience			
		10:45	Adult natural history	Jon Ambrose (NMFS)
		11:05	Stranding and fish rescues	Mark Beccio (CDFW)
		11:25	Fish passage criteria updates	Jean Castillo (NMFS)



		11:45	Q&A	Panel
	Lunch	12:00		
	The Juvenile Experience			
		1:00	How juvenile salmon are using the valley now	Eric Holmes (UC Davis)
		1:15	Intro to floodplain food webs	Carson Jeffres (UC Davis)
		2:00	Juvenile passage: fish movement onto the floodplain	Dave Smith (USACE)
	Break	2:20		
		2:30	Life history context/diversity: floodplain subsidies to salmon downstream	Anna Sturrock (University of Essex)
		2:45	Survival among juvenile salmon smolts migrating within Yolo Bypass	Adam Pope (USGS)
		3:00	Quantifying the role of floodplain rearing to salmon populations	Rachel Johnson (SWFSC, NMFS)
		3:15	Q&A	



	Closing Remarks	3:40		Facilitator
	ADJOURN	3:45		

Day 2, October 14: Management Discussion: Evaluating Benefits, Risks, and Feasibility of Managed Floodplain Projects

Item	Topic	Time	Title	Speaker
	Welcome & Housekeeping	9:00		
	Closing Science Discussion	9:10	Go with the Flow: Insights into Salmon Science and Management from the Yolo Bypass	Ted Sommer (DWR)
Discussion & Synthesis of Science-focused Presentations				
		9:40	Panel Q&A	All Presenters from Day 1
		10:10	Breakout Sessions	Planning Committee Members, All
	Break	10:40		
Management Context for Floodplain Science				
		10:55	Hoping for a Gamechanger: Role of floodplains in salmon recovery	Brian Ellrott (NMFS)
		11:15	A New Way Forward for the Sacramento Valley	David Guy (NCWA)
		11:35	Regulatory and management considerations: risks, benefits, and tools	Evan Sawyer (NMFS)



		11:55	Insights from salmon life cycle models	Steve Lindley (SWFSC, NMFS)
		12:15	Q&A	All
Managed Floodplain Projects: Case Studies & Tools for Evaluation of Benefits, Risk, and Feasibility				
		12:35	Introduction on the range of available management actions	Maria Rea (NMFS)
	Lunch	12:55		
		1:45	Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project (30 min) and Q&A (20 min)	Josh Israel (USBR)
		2:35	Salmon Benefits Model	Joe Merz (CFS)
		3:00	Implementation of fish passage criteria	Josh Martinez (DWR)
		3:25	Q&A	
	ADJOURN	3:45		

Day 3, October 15: Management Discussion Continued

Item	Topic	Time	Title	Speaker
	Welcome & Housekeeping	9:00		
	Managed Floodplain Projects (continued)	9:05	Nigiri & Knaggs Ranch and Q&A	Jacob Katz (CalTrout)
		9:45	Performance Metrics	Bjarni Serup (CDFW) & Kimberly Clements (NMFS)



	Break	10:15		
Discussion & Synthesis of Management-Focused Presentations				
		10:25	Q&A Panel	All Management Speakers
		11:00	Breakout Groups	All
		11:45	Next Steps	Facilitator
	ADJOURN	12:00		

Symposium Problem Statement

- There is a need to understand how floodplains along the Sacramento can be better managed to benefit listed salmonids and green sturgeon, contributing to population-scale recovery and the native ecosystem more broadly. While there is now abundant science on floodplain ecology broadly, considerable uncertainty remains around the scale at which ecosystem management approaches should be implemented to achieve population-level results.
- Agencies, NGOs, and landowners need an approach to management of floodplain habitat that maximizes the possibility of realizing population-scale benefits to listed salmonids while minimizing negative impacts to vulnerable life stages and other species.
 - Challenges for permitting and prioritizing projects and studies include: lack of access to existing data, no clear consensus on which metrics should be used to evaluate the contribution of managed floodplain projects towards endangered fish recovery, and lack of a common goal across entities with regard to the purpose of managed floodplains within the broader conservation context.

Species Focus

Salmonids will be the primary focus of discussion, with the acknowledgement that the other floodplain species (with a special emphasis on green sturgeon) as well as the broader ecological context must be considered in project planning and permitting.

Target Audience



Decision-makers, managers, scientists, and floodplain project proponents from across state and federal resource agencies, academic institutions, NGOs, and landowning and growing communities on the Sacramento River

Long-term Goal

A framework to adaptively manage floodplains to maximize benefits for ESA-listed salmonids and green sturgeon.

The symposium intends to contribute to the above goal incrementally. While the event will not address this goal in full, it has guided the way the Planning Committee thinks about designing the agenda and discussions.