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Countywide Flood Risk Management Assessment Update

April 2024

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Flood Zone Advisory Committee Meetings



sonomawater.org



Today's Outline

- Motivation, Funding, Expected Outcomes
- Timeline and Participants
- Findings to Date
- Opportunities for Regional Collaboration
- Next Steps



Motivation and Funding

1. **Sonoma County incurs the most recurrent flood damages** of any county in the 11 western states (Corringham 2019).
2. Climate forecasts agree that **flooding will become more extreme in Sonoma County** in the future with increased atmospheric river activity, including more frequent, and longer duration, and higher intensity storms.
3. **Flood risk management (FRM) is highly disaggregated in the County**, spread across multiple agencies and levels of government, meaning there is little coordination or comprehensive planning for countywide flood-risk management among these organizations.

Funded by the **County of Sonoma's Climate Resiliency Fund (PG&E Settlement \$\$)** and leveraged by Sonoma Water and Department of Emergency Management (DEM) labor hours funded by the **Water Security Fund**. Project goals are aligned with the County's Strategic Plan and the Sonoma Water Climate Adaptation Plan.



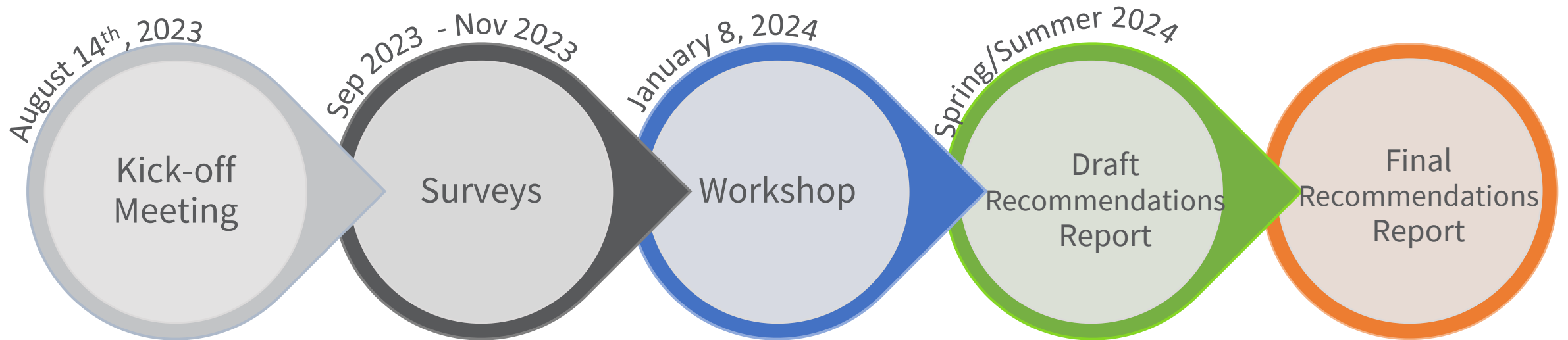
Expected Outcomes

"Identify gaps in flood risk management services across Sonoma County in order pursue a more comprehensive and integrated countywide flood management and adaptation strategy"

- Clarify flood management responsibilities and opportunities,
- Improve interagency and inter-jurisdiction coordination,
- Improve positioning for state and federal funding,
- Reduce risk to life safety and property via enhanced organizational effectiveness,
- Enhance environmental protection.



Project Overview and Timeline



- Introduction to partners
- Initial discussion on flood risk management priorities

- Confirm and supplement Desktop Analysis findings
- Collect GIS data
- Give input on challenges and opportunities for improving flood risk management services

- Review GIS data
- Identify gaps and redundancies in flood risk management services
- Discuss potential strategies to improve flood risk management services

- Review and provide comments on draft recommendations

- Share report with organizational leadership



Participants

- U.S. Army Corps of Engineers
- Permit Sonoma
- Sonoma County Public Infrastructure
- Sonoma County Climate Action and Resiliency Division (CARD)
- Cloverdale
- Cotati
- Healdsburg
- Petaluma
- Rohnert Park
- Santa Rosa
- Sonoma
- Sebastopol
- Windsor
- Dry Creek Rancheria Band of Pomo Indians
- Sonoma RCD
- Gold Ridge RCD
- Community Organizations Active in Disaster (COAD)
- West County Community Services
- Russian River Alliance
- Cafecitos
- Catholic Charities
- Nuestra Comunidad
- Laguna de Santa Rosa Foundation
- Sonoma Ecology Center

LED BY:

Sonoma Water

Sonoma County Department of Emergency Management



Pillars and Flood Risk Management Actions

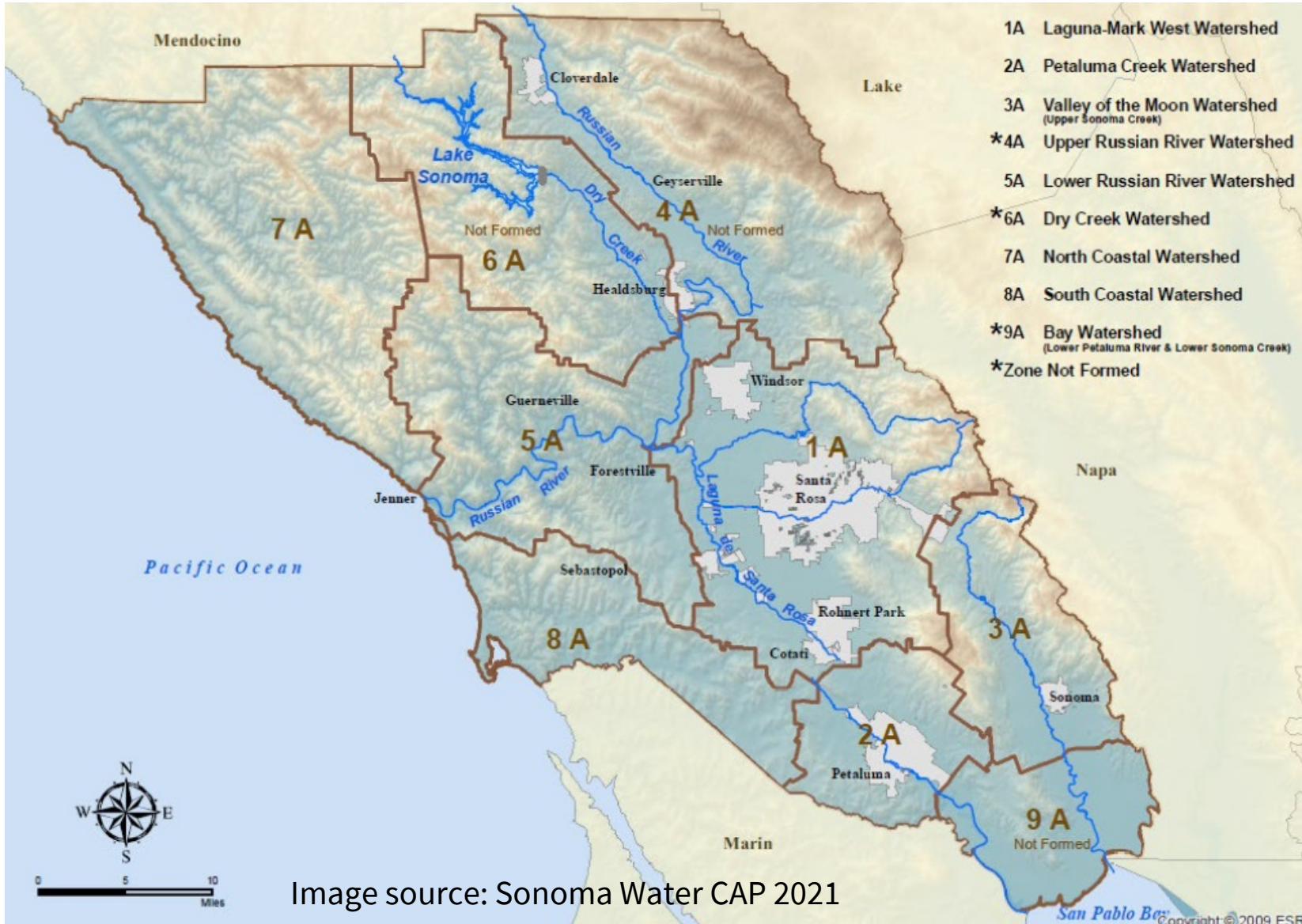
Example: Sonoma Water

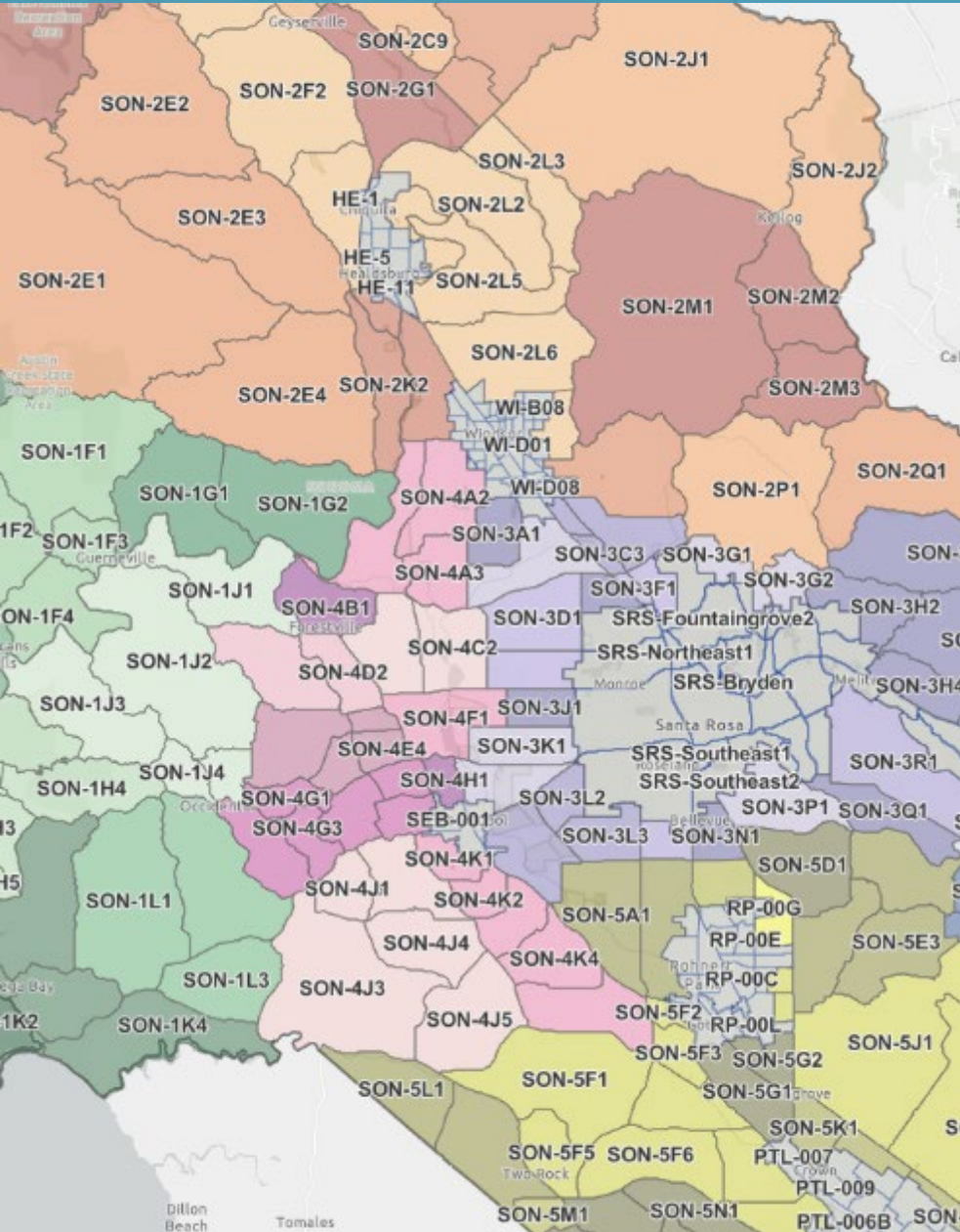
	Prevention	Preparedness	Response	Recovery
Information Development	Conducts surveys, H&H modeling, and studies	Participates in the Advanced Quantitative Precipitation Information (AQPI) system		
Land Management	Provides drainage design review for County projects and projects referred by local agencies			
Capital Projects	e.g., Is the local sponsor of Lake Sonoma, Lake Mendocino			
O&M	Maintains over 80 miles of stream channels		Provides emergency response for its facilities	
Training & Awareness		Participates in annual flood fight training		



Flood Control Zones and Watersheds

Image source: Russian River SWRP 2018





Evacuation Zones Source: DEM

CHALLENGES

- *What flood risk management challenges does your agency have that could be better addressed through coordinated regional action?*
- Understanding organizational roles and responsibilities
- Differing standards and policies across jurisdictions
- Downstream sedimentation and flooding/bank failures
- Information on areas affected by forecasts and warnings
- Potential for multiple EOCs to be concurrently flooded
- Extents of local H&H models
- Local disaster recovery funding
- Inequities in risk communication and disaster recovery
- Information sharing

Opportunity Areas for Regional Collaboration

- Floodplain management standards
- Sediment and water management
- Stream channel maintenance
- Forecasting and event modeling
- Coordinated messaging and communication
- Evacuation routes and emergency operations centers (EOCs)
- Local disaster recovery assistance
- Climate change data and future conditions modeling



Top ideas from workshop

Watershed coordination on floodplain management standards (floodplain management standards)

Collaboration on funding (all, but especially Local Disaster Recovery Assistance and Evacuation Routes and EOCs)

Forming an interagency working group to develop consistent messaging (coordinated messaging and communication)

Increased resources for stream maintenance (stream channel maintenance)

Sediment monitoring and management program (sediment and water management)

Collaboration on permitting (sediment and water management; stream channel maintenance)

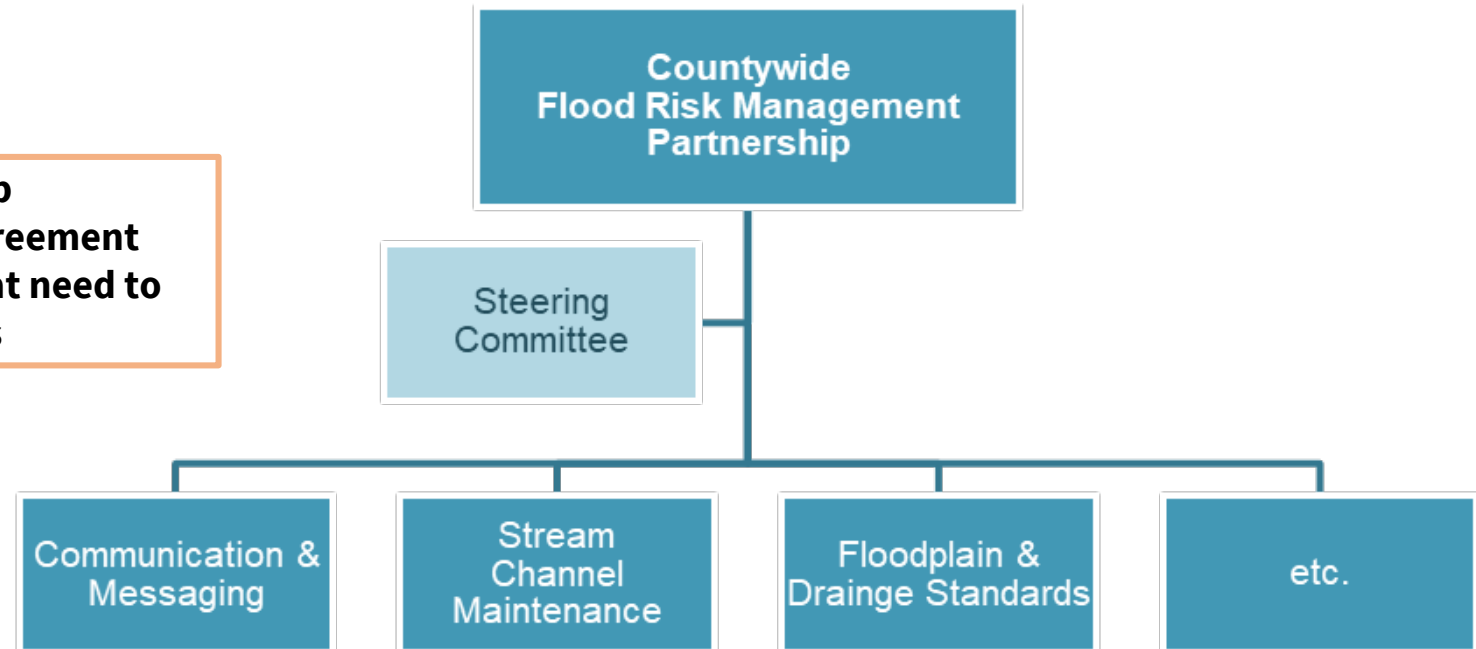
New gaging and forecasting tools (forecasting and event modeling)

Coordinated risk communication (climate change data and future conditions modeling)



Top Cross-cutting Action

An interagency working group or partnership to come to agreement and refine specific actions that need to be taken with subcommittees



Assessment of Flood Risk Management Services in Sonoma County

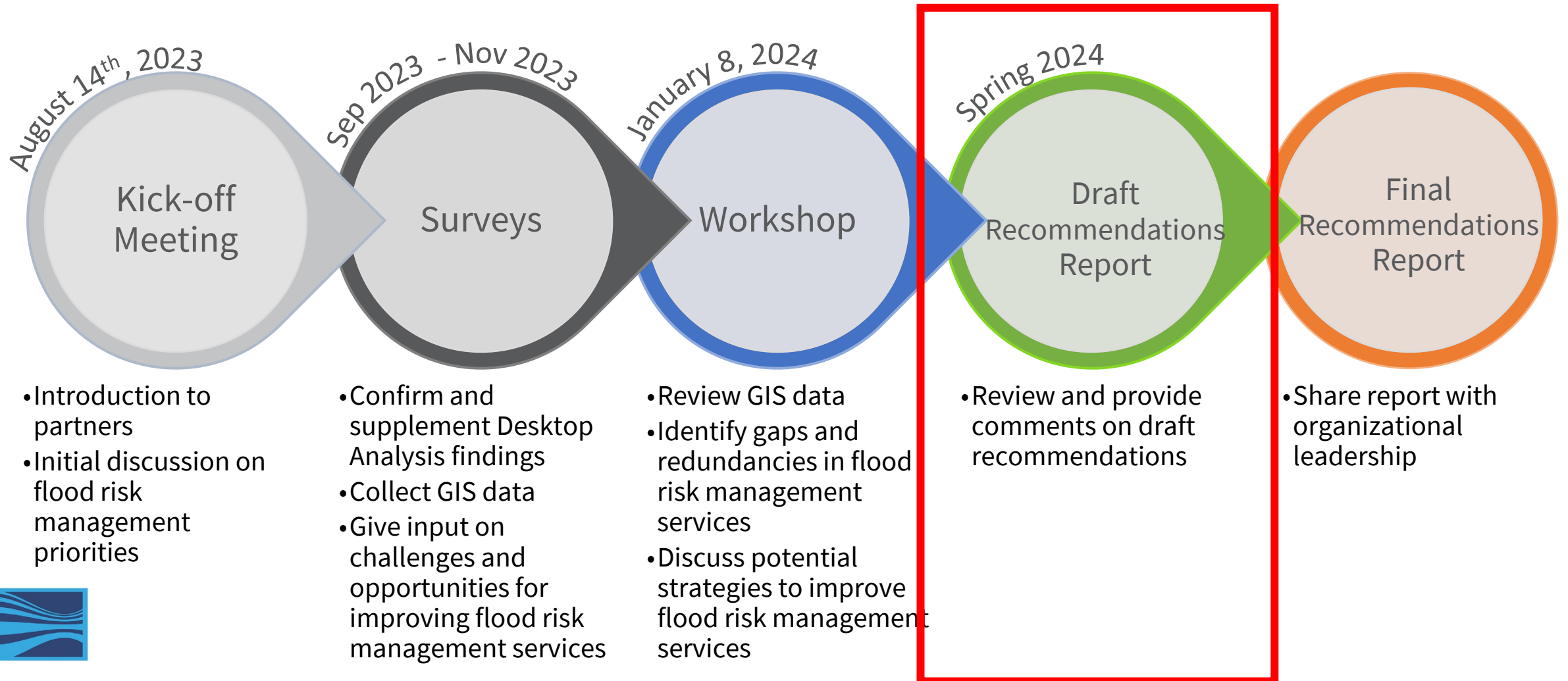
Petaluma River

Key FRM Facilities	<ul style="list-style-type: none">• Petaluma River Main Channel and Flood Control Project• Petaluma River-Denman Reach Project• Engineered and modified flood control channels• Privately-owned levees
Agencies that Provide FRM Services	<ul style="list-style-type: none">• City of Petaluma ★• USACE ★• Sonoma County (within unincorporated areas) ★• Sonoma RCD ★• Ag + Open Space• Sonoma Water ★• Private Landowners / LMAs



★ INTERVIEWED/SURVEYED

Next Steps



Potential Future Phases



THANK YOU



QUESTIONS



FEEDBACK



WHAT'S MISSING?

