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Countywide Flood Risk Management Assessment Update

April 2024

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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.



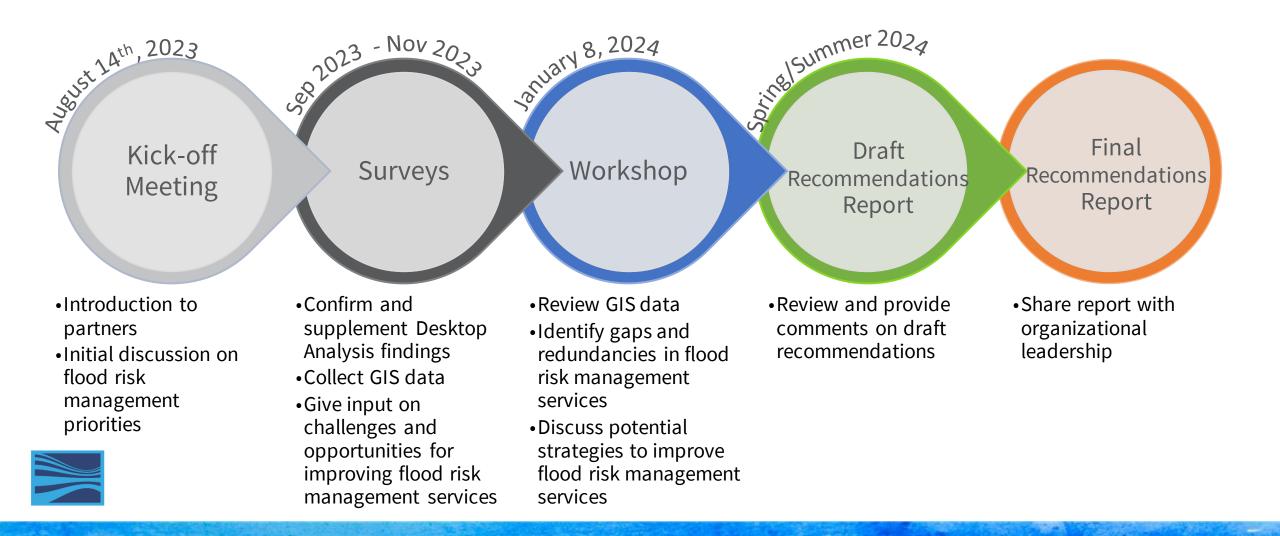
Expected Outcomes

"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



Participants

- U.S. Army Corps of Engineers
- Permit Sonoma
- Sonoma County Public Infrastructure

LED BY:

Sonoma Water

- 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

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Sonoma Ecology Center

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

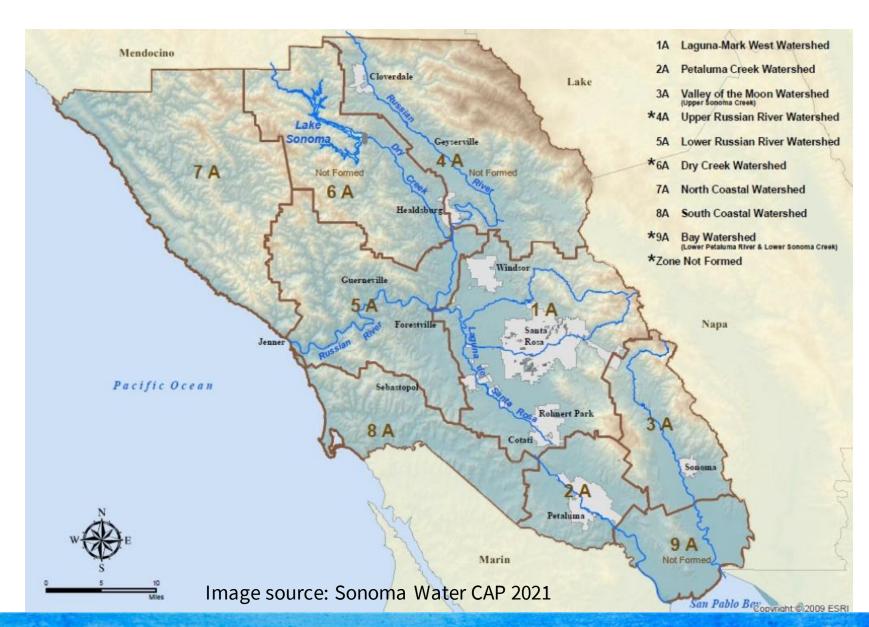
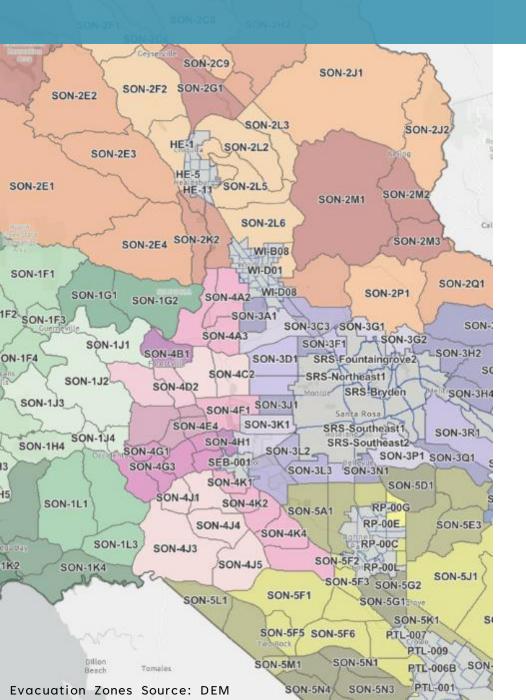


Image source: Russian River SWRP 2018





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

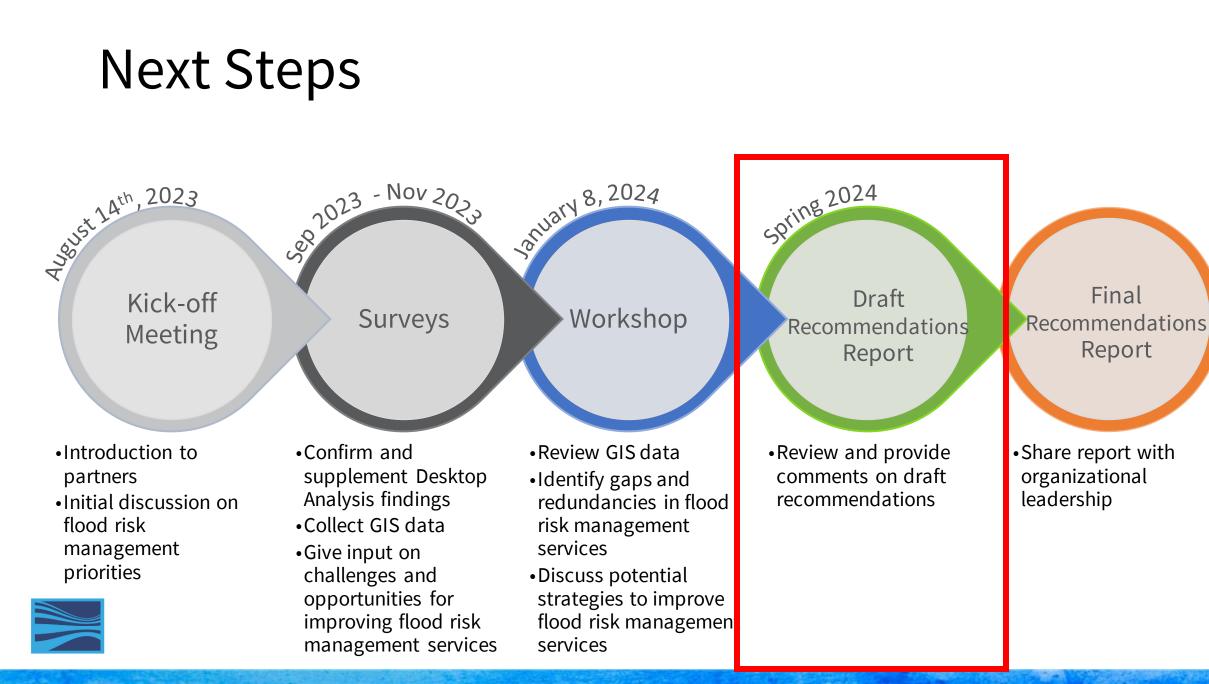
Countywide Flood Risk Management Partnership An interagency working group or partnership to come to agreement and refine specific actions that need to Steering be taken with subcommittees Committee Stream Communication & Floodplain & Channel etc. Drainge Standards Messaging Maintenance

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Assessment of Flood Risk Management Services in Sonoma County Laguna de Santa Rosa / Mark West

Key FRM Facilities	 Central Sonoma Watershed Project Spring Lake Matanzas Creek Detention Reservoir Pine Creek Detention Reservoir Brush Creek Reservoir Levees on Santa Rosa Creek, Abramson Creek, and Peterson Creek 		
Agencies that Provide FRM Services	 City of Cotati ★ City of Rohnert Park City of Santa Rosa ★ City of Sebastopol ★ Town of Windsor ★ 	 Sonoma County (within ★ unincorporated areas) Gold Ridge RCD ★ Sonoma RCD ★ Ag + Open Space Sonoma Water ★ 	



Potential Future Phases

Current Phase

Establish a shared regional understanding of flood risk management needs, challenges, and opportunities

Potential Future Phases

Implement recommendations from Phase 1, which may include new coordination processes, information sharing, governance studies, or other efforts





QUESTIONS

FEEDBACK

WHAT'S MISSING?

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