



San Francisco District



Upper Penitencia Creek Flood Risk Management Study

Community Outreach Meeting

April 1, 2014





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Meeting Agenda

- Meeting Purpose
- Study Timeline
- Study Background
- Potential Project Features
- Q&A
- Poster Session





Progress to Date

- Defined flood hazard and areas at risk
- Quantified potential economic damages
- Mapped the natural resources along the creek
- Identified potential solutions
- Currently formulating alternative plans





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Schedule



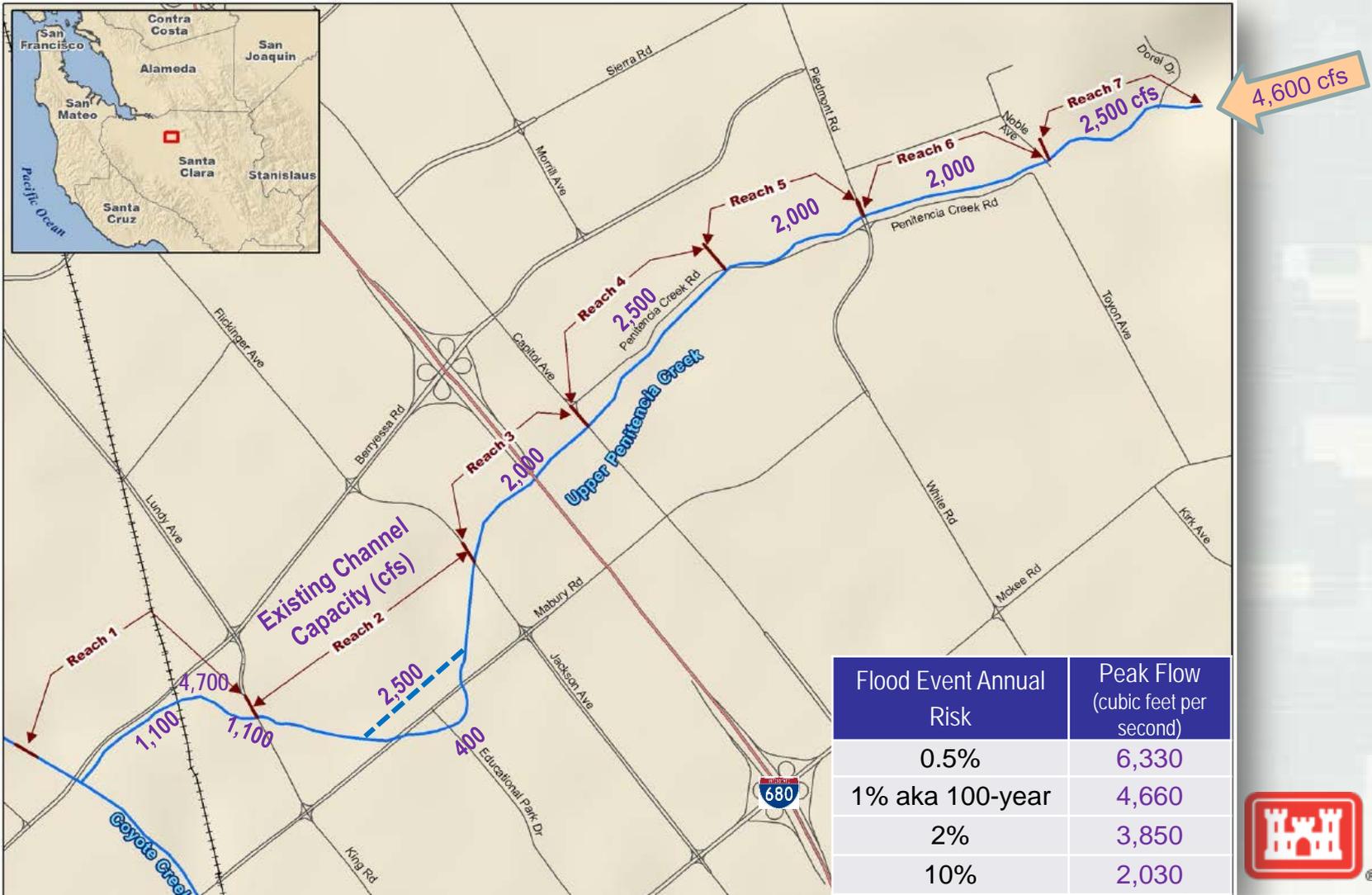
- ◆ Public Meetings
- Public Review (Draft Feasibility Report/Environmental Impact Statement)





Study Area

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Flood Event Annual Risk	Peak Flow (cubic feet per second)
0.5%	6,330
1% aka 100-year	4,660
2%	3,850
10%	2,030





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Study Area

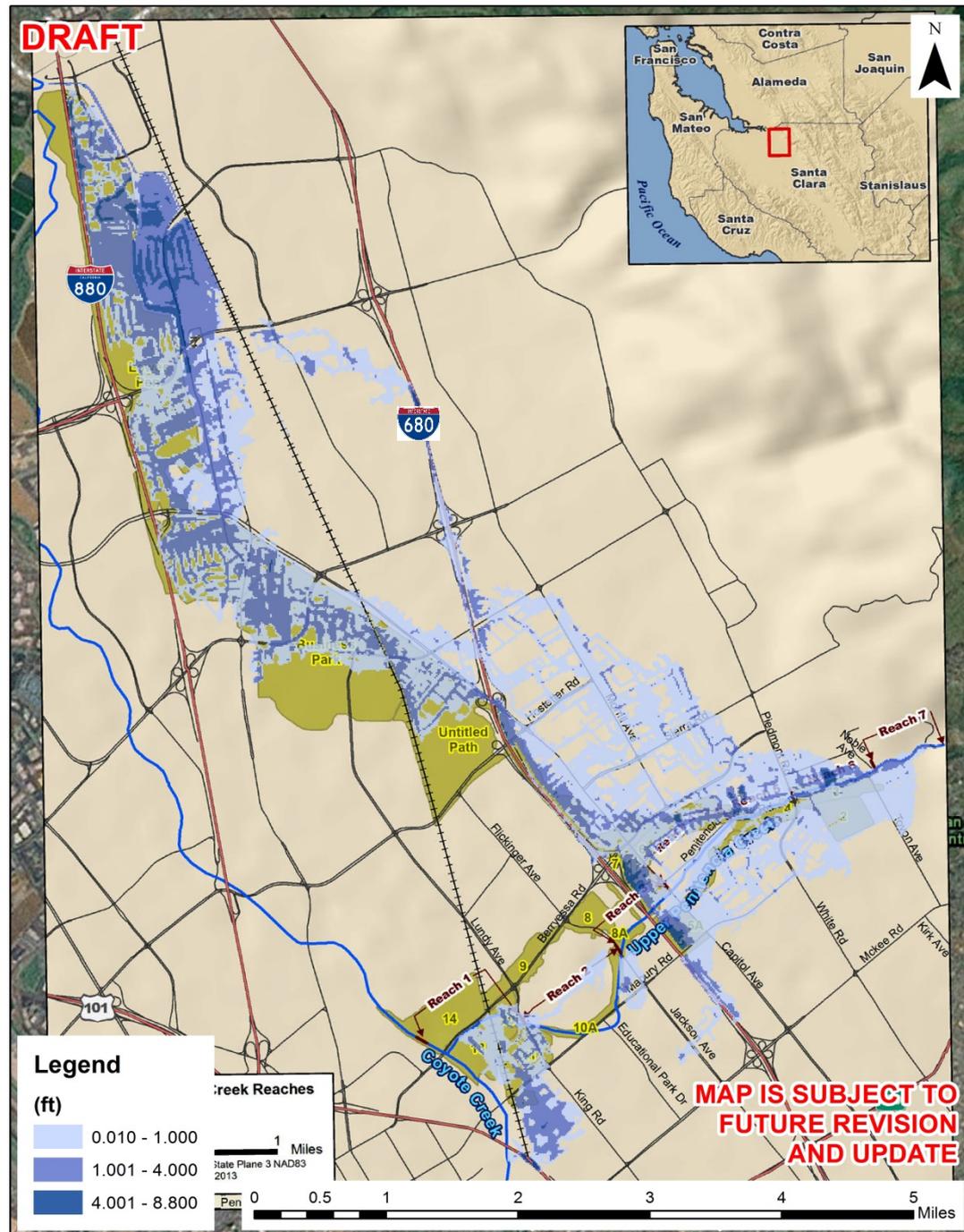
Upper Penitencia Creek Study Area





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Flood Risk in the Study Area





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Purpose of the Study

- Address Flood Related Risks:
 1. Public health and safety
 2. Economic and environmental damages





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Purpose of the Study (cont.)

- Maintain or Enhance:
 1. Riparian forests and aquatic habitat
 2. Public access and recreational opportunities



Upper Penitencia Creek Reach 5
(Downstream from Piedmont Road)





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Planning Objectives

- Reduce potential flood economic damages, while maintaining or improving habitat conditions.
- Reduce flood risk to public health, human life and safety, and the environment.



Upper Penitencia Creek Reach 4





Planning Constraints

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- Regulatory requirements
- Health of fish and wildlife populations and habitat
- Existing critical infrastructure (I-680, BART, water supply)
- Existing and planned recreational features
- Planned development in Reach 1





Potential Solutions

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- Nonstructural Measures

- Examples:

- ▶ Flood Insurance
- ▶ Floodproofing
- ▶ Raising of Structures
- ▶ Flood Warning
- ▶ Relocation of Movable Damageable Property



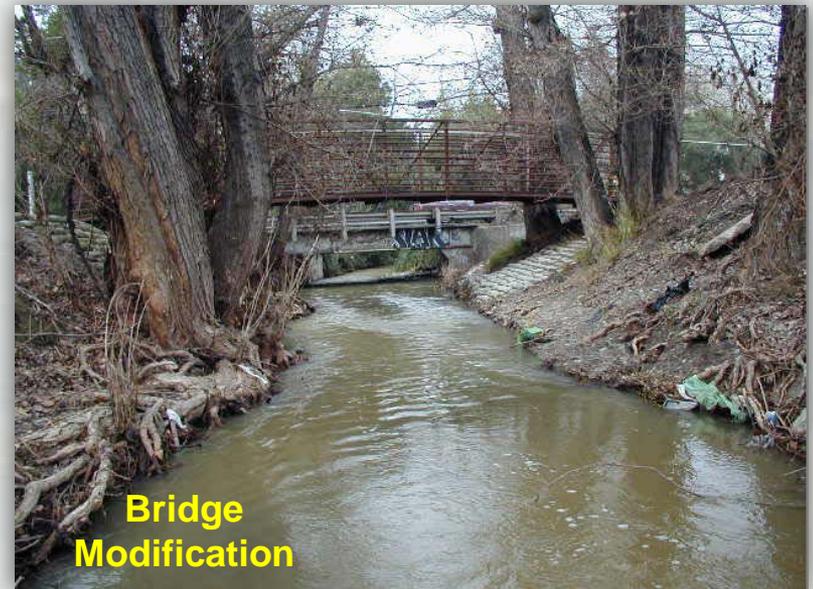


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Potential Solutions(cont.)

- Structural Measures

- Examples:
 - ▶ Levee
 - ▶ Floodwall
 - ▶ Excavation
 - ▶ Bridge/culvert modification

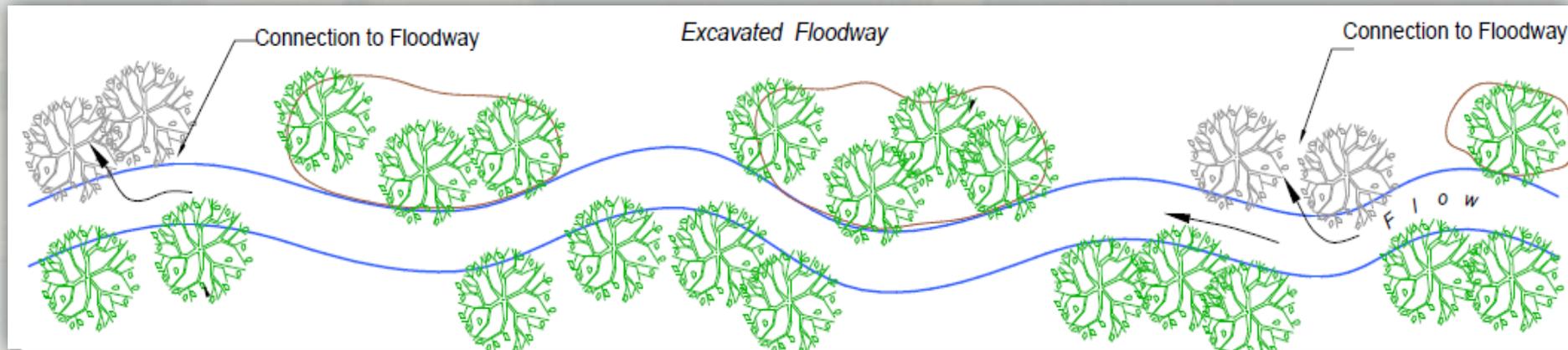
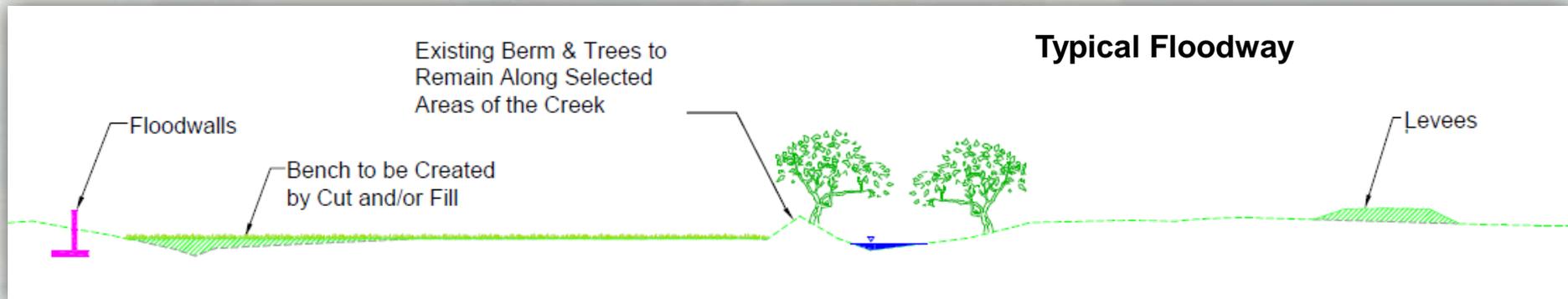




Potential Solutions (cont.)

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- Floodways could be created to accommodate flood flows and preserve the ecosystem function of the creek.



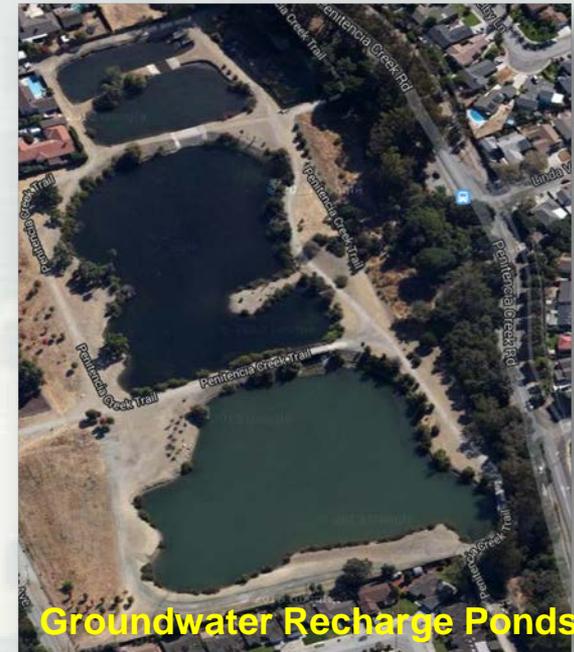


Key Challenges

- Balancing Flood Risk Management & Environmental Quality
- Protecting Existing Vegetation
- Protecting Steelhead Trout
- Preserving Visual Quality
- Maintaining Groundwater Recharge
- Modifying/Replacing Bridges



Sycamore Trees in Reach 7



Groundwater Recharge Ponds



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Q&A





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How to Provide Feedback

- For Additional Information:

<http://www.valleywater.org/Services/UpperPenitenciaCreekProject.aspx>

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Upper Penitencia Creek Flood Risk Management Study

POSTER SESSION

- Station 1 – Study Area & Schedule
- Station 2 – Reaches 1 and 2
 - Coyote Creek to Jackson Avenue
- Station 3 – Reaches 3, 4, and 5
 - Jackson Avenue to Piedmont Avenue
- Station 4 – Reaches 6 and 7
 - Piedmont Avenue to Dorel Drive

