

Gallinas Watershed Program

COMMUNITY MEETING

April 5, 2016



Gallinas Watershed Program
Department of Public Works
www.marinwatersheds.org

Tonight's Agenda

SCHEDULE OF PRESENTATIONS

- Presentation: Gallinas Watershed Program Overview
- Questions and Answers
- Presentation: Upper Gallinas Restoration Opportunities
- Open House



What is the Watershed Approach?

WATER KNOWS NO BOUNDARIES

- Encourages collaboration across jurisdictions
- Combines flood protection and habitat restoration elements
- Supports cost-effective solutions
- Attractive to state and federal regulatory and funding agencies
- Stakeholder-driven and community-based



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Gallinas Watershed Program

OVERVIEW

- Goals and Objectives
- Program Partners
- Gallinas Watershed Products
- Potential Options
- Community Involvement
- Learn More/Share Your Ideas
- Questions and Answers



Watershed Goals and Objectives

INTEGRATE FLOOD PROTECTION AND ENVIRONMENTAL RESTORATION

- Reduce flood risk to vulnerable communities
- Improve navigational access to lower Gallinas Creek
- Plan for sea level rise
- Evaluate local, beneficial re-use of sediment
- Identify multi-benefit projects for grant funding
- Protect, enhance, and restore sensitive creek and wetland habitats



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Program Partners

COLLABORATION

- Flood Control Zone No. 6
- Flood Control Zone No. 7
- County Service Area No. 6
- Las Gallinas Valley Sanitary District
- City of San Rafael
- Marin County DPW and Parks



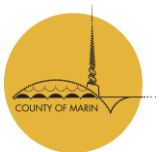
Gallinas Watershed Program Products



Santa Venetia Interior Drainage Study

STORMWATER MANAGEMENT MODEL (SWMM) TO ENHANCE DECISION-MAKING

- GIS inventory of drainage features
- Pump capacity adequate, but need to improve reliability
- Highlighted areas for improvements
- Model available for future uses



Las Gallinas Levee Evaluation

WHAT IS THE STATUS OF THE LEVEES AND HOW CAN WE IMPROVE THEM



- Evaluate levee conditions, hydrology, hydraulics, alternatives, and costs
- Levee improvements are costly
- Section 205 Program not viable
- Levees provide 100-yr protection
- Levees contain high tide of record
- Sea level rise is a concern

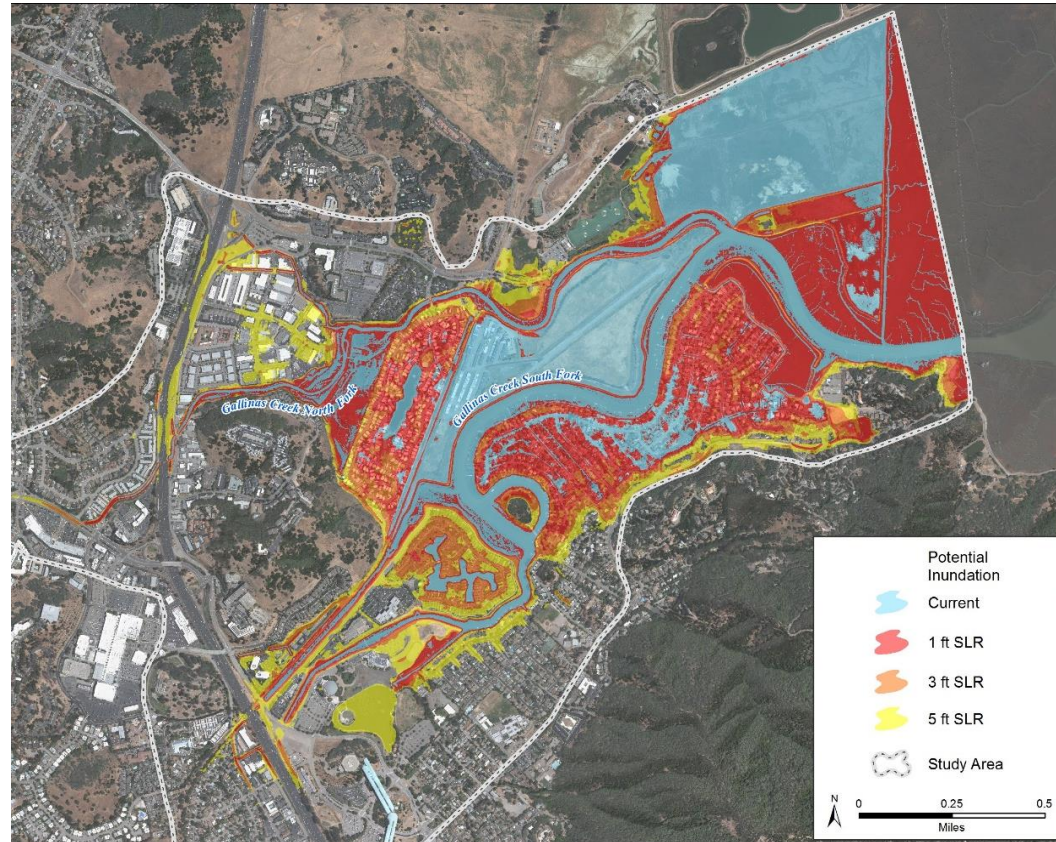


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Sea Level Rise Vulnerability Assessment

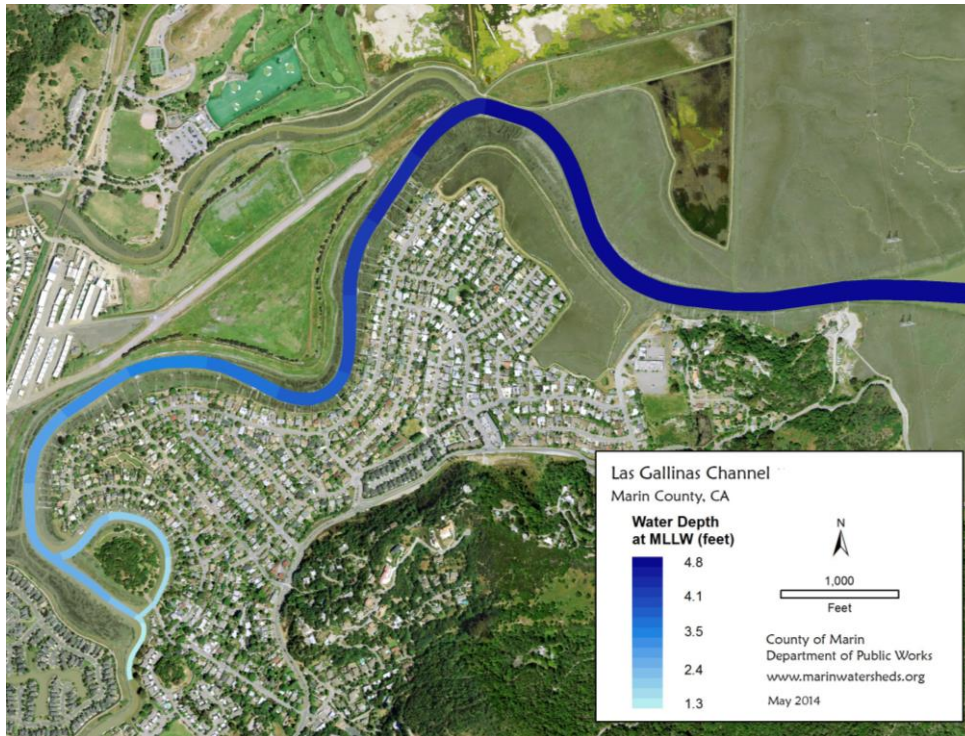
LOWER GALLINAS CREEK BELOW 20 FT ELEVATION

- Existing Conditions and 3 Sea Level Rise scenarios 1ft; 3ft; 5ft
- Residential structures at risk - 420 today to 1,110 at 1 ft; 1,500 at 3 ft.
- Identified low spots
- Adaption approaches



Geomorphic Dredge Assessment

EMPHASIZES NATURAL PROCESSES TO MOVE SEDIMENT



“The channel shape in equilibrium that maintains its width and depth with available daily tidal volume”

- Dredges are expensive and require complex permitting
- Can a geomorphic dredge work, be less expensive, and ease permitting?
- Likely, but narrower and shallower



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McInnis Marsh Restoration Feasibility Study

HABITAT IMPROVEMENT AND PLANNING FOR SEA LEVEL RISE

- Protect Park facilities and habitat for Ridgway's rails and SMHM as sea levels rise
- Improve habitat in Gallinas and Miller Creeks for fish
- Enhance tidal prism



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Upper Gallinas Restoration Opportunities

RESTORING THE CONCRETE CHANNEL IN TERRA LINDA



- Concrete channel is nearing the end of its design life
- Can we restore the channel and add a greenbelt to enhance habitat and people's interaction with the creek?



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Flood Insurance

FEMA COMMUNITY RATING SYSTEM AND OTHER OPTIONS

- Unincorporated County just joined FEMA's CRS Program
- 15% Discount on Flood Insurance



**NATIONAL FLOOD
INSURANCE PROGRAM**

Supervisor Connolly's
community meeting:

Homeowners Flood Insurance Affordability Act of 2014
April 12th 6-8 p.m.; Civic Center Cafe



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Gallinas Watershed Final Report

CONSOLIDATING THE PRODUCTS

- Executive summaries of each product
- Links to full studies
- Watershed descriptions – geography, history, biological resources
- Public draft by end of month



Potential Options

SANTA VENETIA AND GALLINAS WATERSHED

- Santa Venetia levee improvements – replace timber berms
- Santa Venetia drainage improvements – pump stations, bypass pipes, and sediment removal
- Initial phase restoration of concrete channel (~900 ft.)
- Improve navigation
- Use dredge spoils to raise marsh elevations at McInnis
- New boat ramps for kayak and paddleboard access
- Improve habitat and water quality
- Tidal flood protection / adaptation to sea level rise



Community Involvement

SUMMARY OF PUBLIC MEETINGS AND OPPORTUNITIES FOR FEEDBACK

- Updates at public FCZ and CSA meetings
- Updates to SVNA, GWC and HOAs
- E-newsletters and e-mail notifications
- All reports posted to website; public comments accepted
- January 2014 Levee Evaluation Community Meeting
- April 2016 Watershed Program Community Meeting



Learn More and Share Your Ideas

WEBSITE AND NOTIFICATION LIST

- Visit the Gallinas Watershed Program webpage
http://www.marinwatersheds.org/gallinas_creek_flood_protection.html
- Sign up for the email notification list
- Comment Cards
- Contact me: lwilliams@marincounty.org
 - Questions/Comments
 - Request a presentation to your homeowners group or local civic organization





Thank You

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