

Critical Coastal Areas Program



James Fitzgerald Marine Reserve Pilot Watershed Characterization and Assessment Project, Phase I, San Mateo County

June 7, 2006

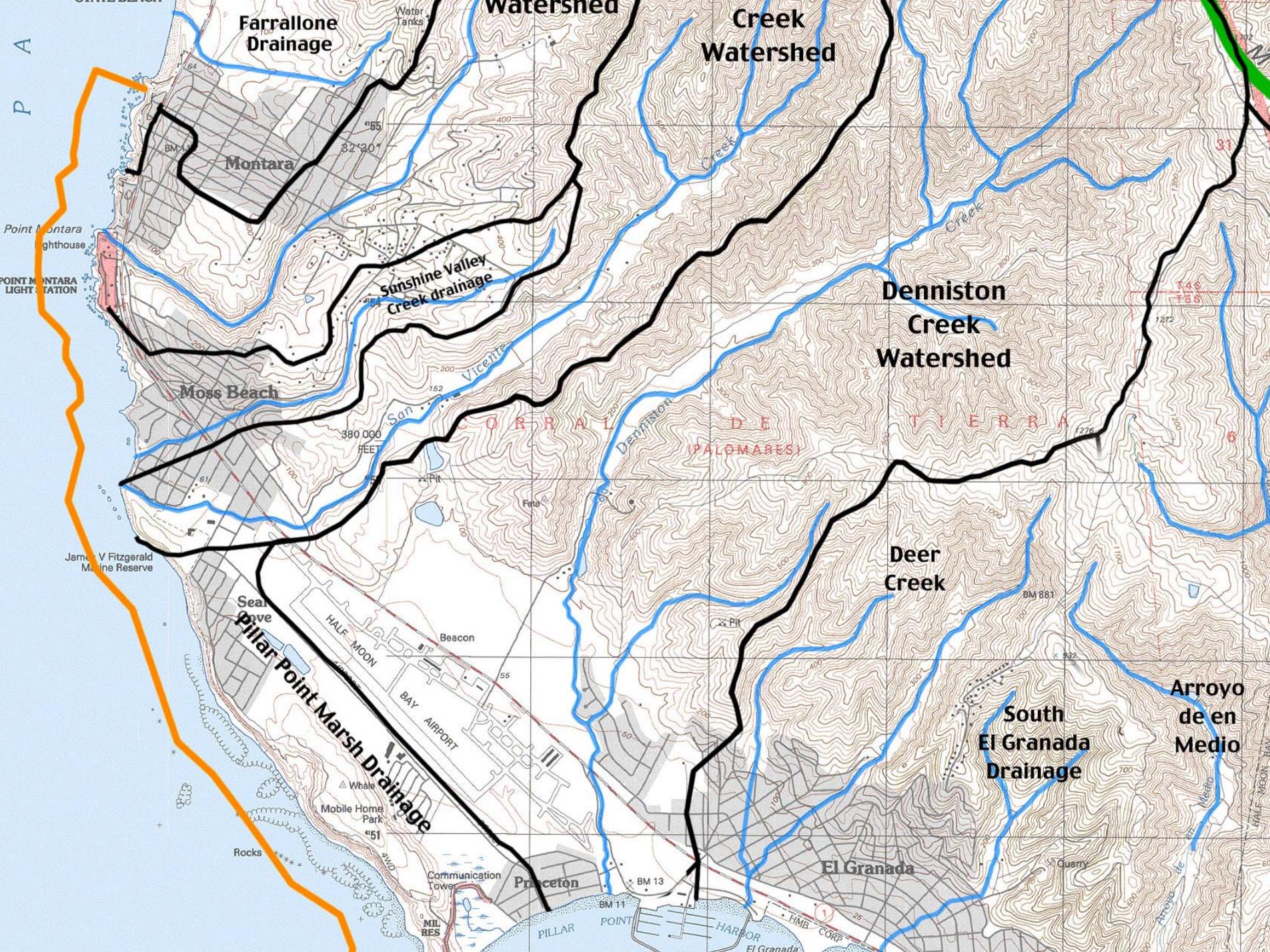
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Before the James Fitzgerald Reserve Pilot CCA Project Pilot Subcommittee

James V. Fitzgerald Marine Reserve Pilot Project

- 5.5 miles of shoreline
- Public open spaces and private ownership of coastal lands
- Land based sources of pollutants reflect land, marine and recreational uses





Project Drivers/Purposes

- These watersheds flow into the 'James V. Fitzgerald Marine Reserve' **State Water Quality Protection Area** (an Area of Special Biological Significance).
- Significant issues associated with coliform bacteria

CCA Program

- The Critical Coastal Areas (CCA) Program is an innovative program to foster collaboration among local stakeholders and government agencies, to better coordinate resources and focus efforts on coastal watersheds in critical need of protection from polluted runoff. A multi-agency statewide CCA Committee has identified an initial list of 101 CCAs along the coast and in San Francisco Bay.

CCA: A non-regulatory tool

- The CCA Program, part of the state's NPS Plan, is a non-regulatory planning tool to coordinate the efforts of multiple agencies and stakeholders, and direct resources to CCAs. The program's goal is to ensure that effective NPS management measures are implemented to protect or restore coastal water quality in CCAs. CCA identification supports the acquisition of grant funding by prioritizing protection efforts.



Project Timeline (5/06-11/07)

- Summer, 2006
 - Area delineation, collection of baseline data, i.d. and obtain key data sources
 - Review of other watershed planning and engineering proposals to coordinate
 - Kick off meetings to help determine watershed hot spots, planning needs
 - Initiate design of GIS watershed/BMP planning tool
- Fall/Winter 2006
 - Survey of local govts to document existing and proposed BMPs
 - Literature review – Impervious surface modeling techniques
 - Follow up meetings to check on progress/redirect where necessary
- Spring 2007
 - Draft watershed model (testing key BMPs) available for comment
 - Survey results available
 - 3rd round of stakeholder meetings
- Summer/Fall 2007
 - Framework for GIS Mapping Tool available for comment
 - Draft project report available for comment/Final project report issued

Existing and New Data Sources

- Matrix – Coastal Comm. and consultant team
- Empirical observations
- Local water quality surveys
- Coastal water quality data
- Plans and project details
- Existing maps
- Customized GIS maps

Useful Tool: Predictive Modeling

- Key aspects:
 - Good baseline data
 - Ground truth maps
 - Fine-grained historical watershed data
 - Factors analysis (not inclusive)
 - Impervious surface
 - Slide prone areas – sediment deposition
 - Flooding control programs
 - Water quality impacts associated with land uses
 - Coastal influences on the watershed

Useful Tool: Interactive GIS for staff and decision makers

- Geographic Information System tool can be designed to handle multiple data layers and policy options, to help document current conditions and predict future conditions and Best Management Practices to suit those conditions.



Site Specific Improvements

- Identifying hot spots in the watersheds
 - Where major remediation is needed
 - Where conditions could change and significantly weaken protections
 - Where work is already underway
 - Where non point source information needs more documentation

Draft and Final Report

- To guide decision makers
- To substantiate public process
- To document citizen contributions
- To chart any follow up actions