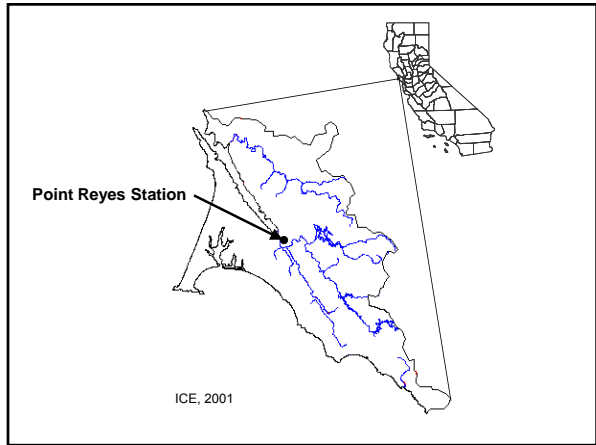


Points to cover

- Tomales Bay Example
 - TMDLs and Conditional Waivers
 - Sites and practices to keep in mind

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Keeping it simple

ANNUAL CERTIFICATION & COMPLIANCE MONITORING DOCUMENTATION (required and must be submitted)

List all future potential water quality planning activities...
 List of assessed parcel numbers (APNs) or stage description (township, Range, Section) for each parcel, pasture, or stage field included in this plan.

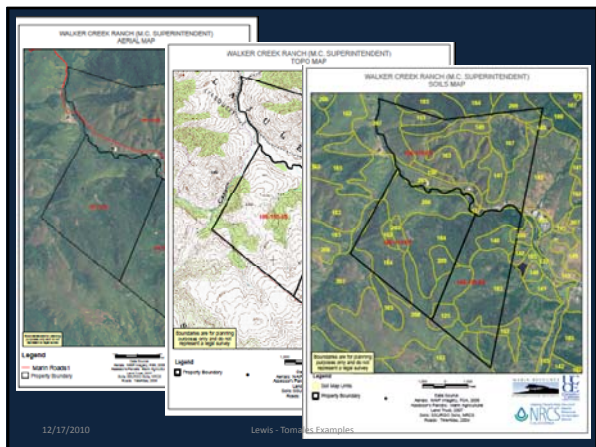
Water Quality Code: **Batch** (check one!)
 A Ranch Water Quality Plan was completed in _____ and will be updated in _____
 The Ranch Water Quality Plan is expected to be renewed by _____

#	Describe	Compliance Monitoring Inspections (list in dates of monitoring inspections were completed)	Implementation Planning
1)	Wet season inspections conducted on:	Date: _____ Month: _____ Year: _____	<input type="checkbox"/> None <input type="checkbox"/> Action Plan
2)	Dry season inspections conducted on:	Date: _____ Month: _____ Year: _____	<input type="checkbox"/> None <input type="checkbox"/> Action Plan
3)	Survey of stream(s) below and above ranch facility completed on:	Date: _____ Month: _____ Year: _____	<input type="checkbox"/> None <input type="checkbox"/> Action Plan
4)	Are further management practices needed to improve water quality? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure	If yes, is it/they in question or for any new potential water quality projects identified during recent or recent inspections and describe planned or implemented best and any maintenance. Use additional pages if needed.	<input type="checkbox"/> None <input type="checkbox"/> Action Plan

Completed by: Landowner: _____ Tenant: _____ Other: _____
 (Print name)

San Francisco Bay RWQCCB
 1515 Clay Street, Suite 4000
 Oakland, CA 94612

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Waiver Requirements

- Ranch Water Quality Plan
- Compliance Monitoring and Reporting
 - Rancher Inspections
 - Annual Certifications

http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/tomalesbay/pathogenstmdl.shtml

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Ranch Water Quality Plan

- Property Information – Page 8
- Ranch/Farm Goals – Page 9
- Field/Pasture Inventory – Page 10
- Pasture/Field Assessment – Page 11

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PASTURE/FIELD ASSESSMENT (required and kept on-site)

The following questions are intended to help assess ranch/farm water quality and potential sources of pollution in the watershed. It is important to note that identified pollution sources may not be caused by current livestock grazing activities. This assessment is intended to be used in conjunction with other data for agriculture production purposes on the ranch/farm. Multiple fields or the entire ranch may be assessed at once. Describe the condition and potential location. Note any excluded problem conditions as caused by Current livestock management (C), a Historic legacy site (H), or Natural causes (N).

Question	Potential Cause	Describe Condition & Location (pasture/field)	Cause (C, H, or N)
SEDIMENT			
RUNOFF AND EROSION/ROAD PAVEMENT			
Bare soil visible throughout the rainy season?	Yes No (N) (C) (H)		
Fit or sheet erosion present?	Yes No (N) (C) (H)		
Gullies, slumps, or headcuts present?	Yes No (N) (C) (H)		
ROADS			
Current erosion present on roads? (fit, gullies, etc.)	Yes No (N) (C) (H)		
Culverts or ditches cause gullies or erosion?	Yes No (N) (C) (H)		
Sediment has average erosion after winter?	Yes No (N) (C) (H)		
NUTRIENTS AND PATHOGENS			
LIVESTOCK DISTRIBUTION			
Significant runoff from pasture adjacent to stream?	Yes No (N) (C) (H)		
Compost used throughout the winter?	Yes No (N) (C) (H)		
Feeding, watering, or watering areas near stream?	Yes No (N) (C) (H)		
Do livestock congregate in the stream?	Yes No (N) (C) (H)		
MANURE MANAGEMENT			
Manure stockpile runoff connects to stream?	Yes No (N) (C) (H)		
Manure applied to pasture less than 2 weeks before a runoff generating rain storm?	Yes No (N) (C) (H)		
Manure applied to pasture is stored (aged) less than six months?	Yes No (N) (C) (H)		
MERCURY (for Walker Creek & Arroyo Seco and Garrison Creek just upstream of the confluence)			
Procedures for testing, testing, or testing?	Yes No (N) (C) (H)		
Other (describe) or (describe) on the property?	Yes No (N) (C) (H)		

- Sediment
- Nutrients and Pathogens
- Mercury

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Ranch Water Quality Plan

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- Stream Assessment – Page 12

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STREAM ASSESSMENT (required and kept on-site)

This assessment is intended for perennial or intermittent streams that provide habitat for fish or frogs or support riparian vegetation. If you do not have streams with riparian vegetation, assess the larger intermittent stream channels for flow during the entire rainy season. Assess each farm stream while standing near the creek. It is important to note the concerns identified may not be caused by current livestock grazing activities. Describe the condition and location. Note any excluded problem conditions as caused by Current livestock management (C), a Historic legacy site (H), or Natural causes (N).

Question	Potential Concern	Describe Condition & Location (pasture/field)	Cause (C, H, or N)
STREAM CHANNEL			
Core soil along banks of stream?	Yes No (N) (C) (H)		
Unstable or eroding stream banks?	Yes No (N) (C) (H)		
Does the stream have the potential to support trees (look for remnant trees/stumps along the channel)?	Yes No (N) (C) (H)		
Are crossings for livestock unstable?	Yes No (N) (C) (H)		
Grazing in riparian areas takes place all season?	Yes No (N) (C) (H)		
STREAM TEMPERATURE			
Is stream exposed to full sun?	Yes No (N) (C) (H)		
Wide and shallow streams?	Yes No (N) (C) (H)		
Does stream flow appear inadequate, given stream channel size?	Yes No (N) (C) (H)		
NUTRIENTS			
Algae growth excessive in stream?	Yes No (N) (C) (H)		

- Stream or Riparian Areas

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Sediment Survey Results

117 Sites from 10 North Coast Ranches

12 Non-inventory Sites	56 Unstable Areas	49 Sediment Delivery Sites
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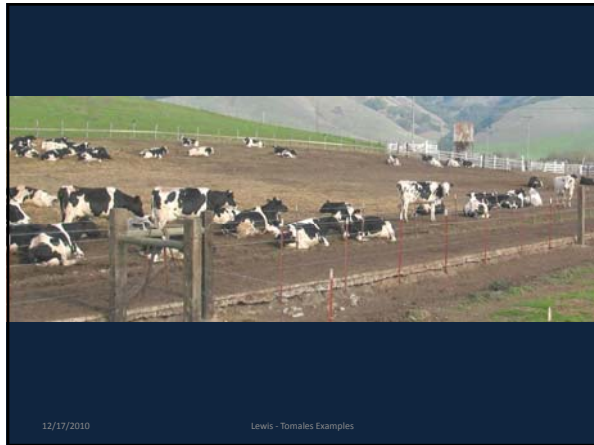
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- Majority of Sediment Delivery Site sediment is associated with roads.



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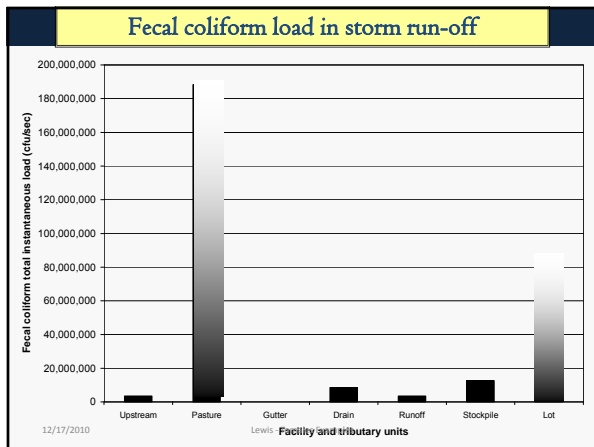
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Pastures

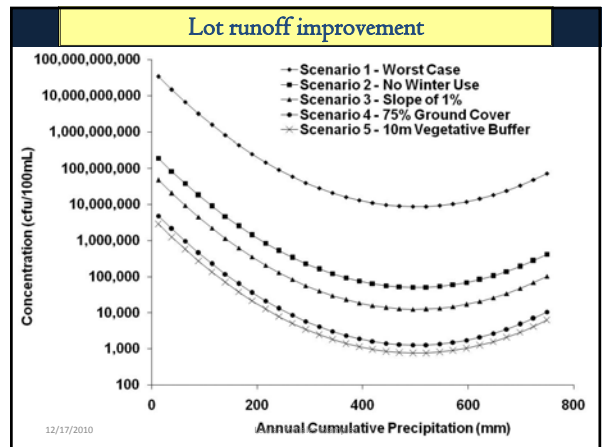
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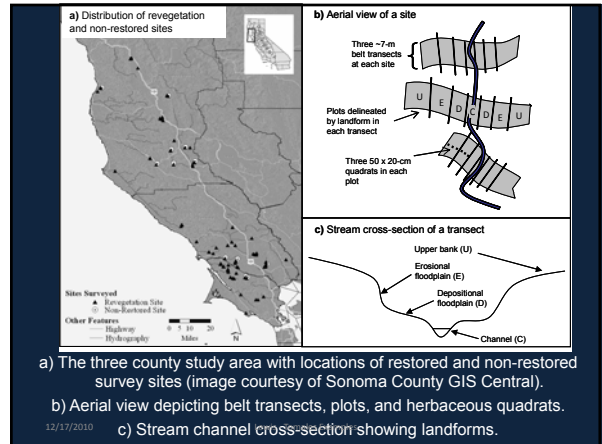
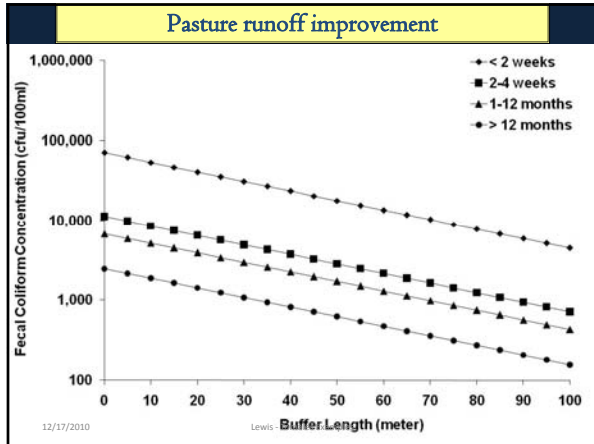


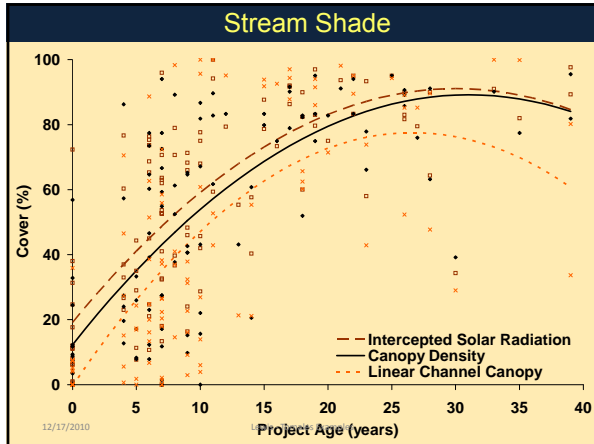
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12/17/2010





Ranch Water Quality Plan

- Property Information – Page 8
- Ranch/Farm Goals – Page 9
- Field/Pasture Inventory – Page 10
- Pasture/Field Assessment – Page 11
- Stream Assessment – Page 12
- Completed Water Quality Projects – Page 13

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COMPLETED WATER QUALITY PROJECTS (optional)

List all past water quality concerns on the ranch/farm and describe the issue. A concern does not indicate that livestock grazing or current management caused it. Describe any previously implemented management practice(s) intended to fix the problem. This includes steps to plan or receive technical/financial assistance, actual implementation or management changes, and the maintenance of projects or ranch infrastructure (clearing culverts, scraping corrals, weed removal, etc.). Evaluate if more work is needed to improve water quality for each listed concern. Attach any old photographs of the concern including work completed if available. Use additional sheets if needed.

Water Quality Concern #	Describe	Location (pasture/field)	Practice(s) Completed	Maintenance Needs	Evaluation (is more work needed?)	Photo Avail.?

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Ranch Water Quality Plan

- Property Information – Page 8
- Ranch/Farm Goals – Page 9
- Field/Pasture Inventory – Page 10
- Pasture/Field Assessment – Page 11
- Stream Assessment – Page 12
- Completed Water Quality Projects – Page 13
- Future Water Quality Projects – Page 14

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FUTURE WATER QUALITY PROJECTS (required and kept on-site)

List all future potential water quality concerns on the ranch/farm with the expected pollutants from each. A concern does not indicate that livestock grazing or current management caused it. This includes locations where your current maintenance prevents problems such as maintaining ranch roads following winter storms. Consider multiple options for fixing water quality concerns such as implementing new practices, and changing management or maintenance routines. Estimate the approximate cost of each option as well as the amount of time needed to conduct maintenance. Give each project a priority, relative to other potential projects, indicating preferred order implementing the project. Assignment of priority recognizes that the availability of financial and technical assistance determines when work is done. List the steps taken to plan for the project including participation in technical & financial assistance programs (ranch visits, meetings, applications, expected contract dates, etc.). Use additional sheets if needed.

Water Quality Concern #	Describe	Location (pasture/field)	Options for Maintenance, Management Changes, or Practice(s) to Implement	Estimate Cost of Each Option	Priority	Implementation Planning

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ANNUAL CERTIFICATION & COMPLIANCE MONITORING DOCUMENTATION

(Required and must be submitted)

This monitoring is in compliance with the Grazing Operations Review Program conditions in the Tomales Bay Watershed, NP-009-004.

Ranch Name: _____ Phone: _____
 Address: _____ City, State and Zip Code: _____
 List of Associated Ranch Numbers (Acre) or single acquisition (ranching, range, sections for sale, pasture, or other land included in this plan): _____

Search Date (month only): _____
 A Ranch Water Quality Plan was completed in _____ (year) and will be updated in _____ (year).
 The Ranch Water Quality Plan is updated as follows: _____ (year)

Compliance Monitoring Inspections (list dates of monitoring inspections were completed):
 1) Wet season inspections conducted on: Date: _____, Month: _____, Year: _____
 2) Dry season inspections conducted on: June: _____, Sept: _____
 3) Survey of stream(s) below and above ranch facility completed on: _____

Are further management practices needed to improve water quality? Yes No Not Sure

If yes is indicated in question 4, list any new potential water quality projects identified during ranch or stream inspections and describe planned or implemented new and any maintenance. Use additional sheets if needed.

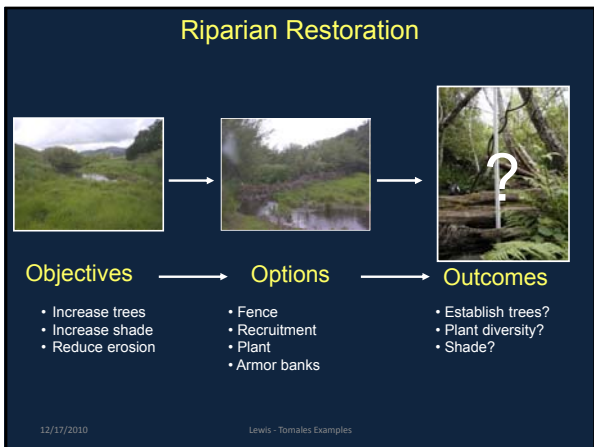
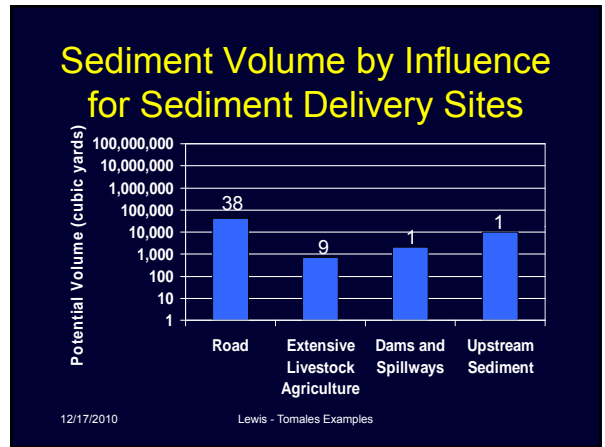
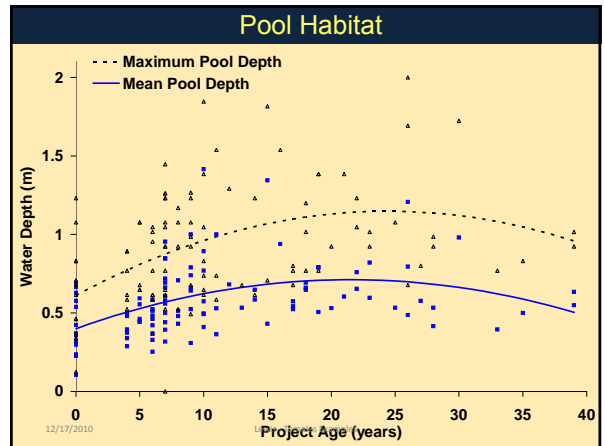
DATE	LOCATION (pasture/field)	Describe Water Quality Concern	Notes (action taken, avoided, & future needs)

Completed by: Landowner Rancher Other: _____
 (print name) _____
 Signature: _____ Date: _____
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Submit copies for landowner & Rancher. Mail completed form by registered mail before November 15 to:
 San Francisco Bay RWQOCS
 1010 Clay Street, Suite 1400
 Oakland, CA 94612
 ATTN: The Grazing Operations Review Program

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Kenneth Tate – Rangeland Hydrology Specialist, UC Davis
 Michael Lennox, Stephanie Larson, and John Harper – UCCE
 Robert Atwill – Veterinary Specialist, UC Davis
 Nancy Scolari – Marin Resource Conservation District
 Charlette Epifanio - Natural Resources Conservation Service
 Patricia Hickey - Marin Agricultural Land Trust
 Dominic Grossi - Marin County Farm Bureau
 Leslie Corp and Paul Martin - Western United Dairyman
 Justin Olfield - California Cattlemens Association
 John DeGregorio - Point Reyes National Seashore
 Carmen Fewless and Susan Galdstone - Regional Water Quality Control Board

Site Selection Criteria

- Tributary streams
- 4 years since project and greater
- Reach extensive projects
- Known methods and dates
- "Successes and failures"

