

Project Objectives

1. Source search monitoring for FIB, pathogens, and nutrients on 12 to 15 allotments across Region 5.

Project Objectives

1. Source search monitoring for FIB, pathogens, and nutrients on 12 to 15 allotments across Region 5.
2. Correlate water quality with livestock and other USFS management.

Project Objectives

1. Source search monitoring for FIB, pathogens, and nutrients on 12 to 15 allotments across Region 5.
2. Correlate water quality with range health, and livestock management.
3. Make information available so decisions can be made.

Timeline	
Period	Activity
Sum 2010	Initiate project. Pilot monitoring on Stanislaus NF. Field trips.
Win 2010-11	Evaluate results of pilot monitoring. Enroll forests and allotments in the project. Develop monitoring plan. Share plan broadly for review and comment.
Sum 2011	Conduct monitoring on 12 to 15 allotments on 4 to 5 forests across California. Field trips and workshops.
Win 2011-12	Analyze, report, and publish results. Outreach to share results with stakeholders. Plan follow-up monitoring based on results of Year 1.

Timeline	
Period	Activity
Sum 2010	Initiate project. Pilot monitoring on Stanislaus NF. Field trips.
Win 2010-11	Evaluate results of pilot monitoring. Enroll forests and allotments in the project. Develop monitoring plan. Share plan broadly for review and comment.
Sum 2011	Conduct monitoring on 12 to 15 allotments on 4 to 5 forests across California. Field trips and workshops.
Win 2011-12	Analyze, report, and publish results. Outreach to share results with stakeholders. Plan follow-up monitoring based on results of Year 1.

Timeline	
Period	Activity
Sum 2010	Initiate project. Pilot monitoring on Stanislaus NF. Field trips.
Win 2010-11	Evaluate results of pilot monitoring. Enroll forests and allotments in the project. Develop monitoring plan. Share plan broadly for review and comment.
Sum 2011	Conduct monitoring on 12 to 15 allotments on 4 to 5 forests across California. Field trips and workshops.
Win 2011-12	Analyze, report, and publish results. Outreach to share results with stakeholders. Plan follow-up monitoring based on results of Year 1.

Timeline	
Period	Activity
Sum 2010	Initiate project. Pilot monitoring on Stanislaus NF. Field trips.
Win 2010-11	Evaluate results of pilot monitoring. Enroll forests and allotments in the project. Develop monitoring plan. Share plan broadly for review and comment.
Sum 2011	Conduct monitoring on 12 to 15 allotments on 4 to 5 forests across California. Field trips and workshops.
Win 2011-12	Analyze, report, and publish results. Outreach to share results with stakeholders. Plan follow-up monitoring based on results of Year 1.

Monitoring plan so far...

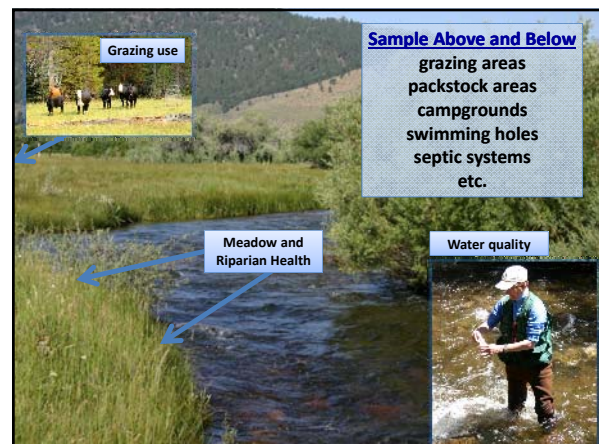
Candidates: Stanislaus, Tahoe, Plumas, Klamath, Shasta-Trinity National Forests.

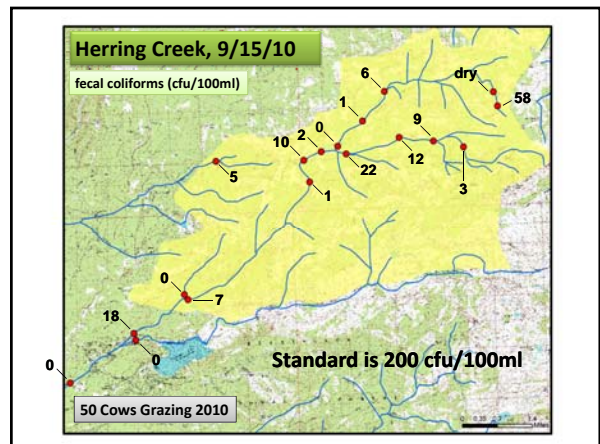
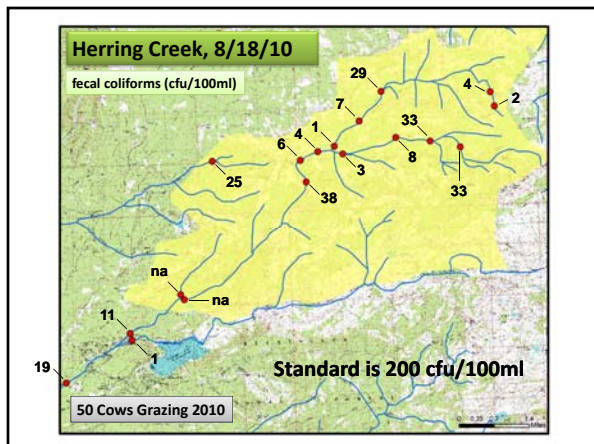
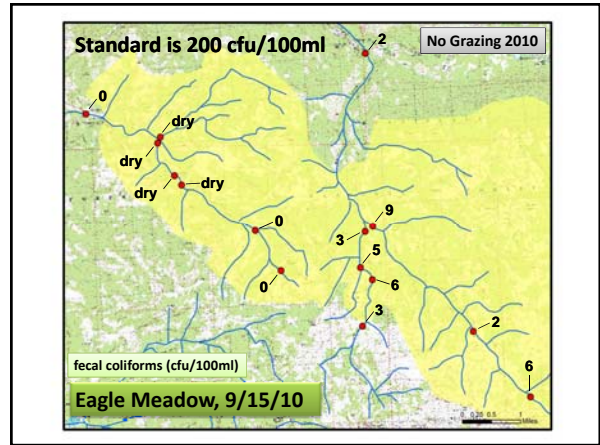
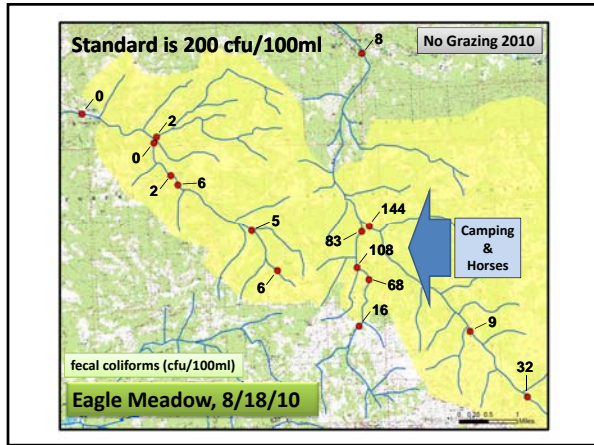
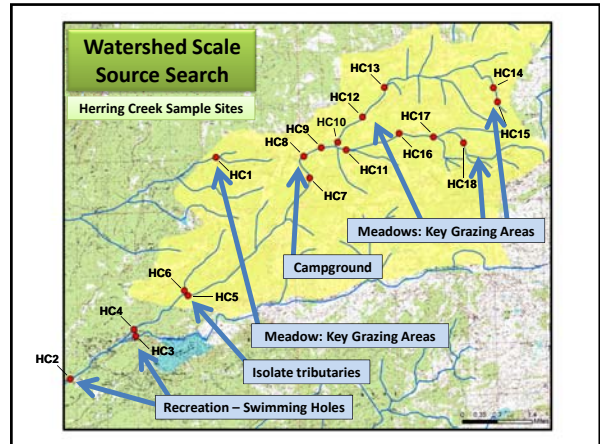
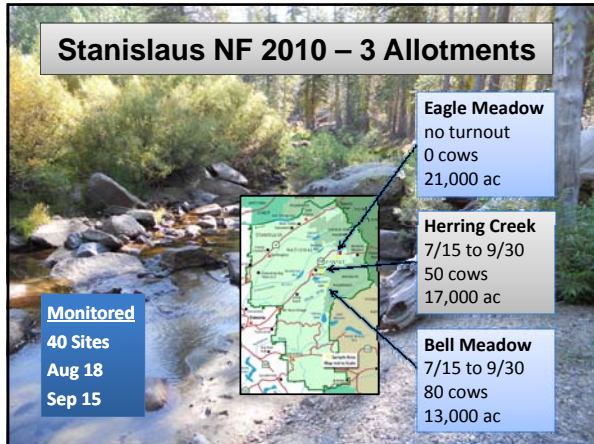
Pollutants: FIB, pathogens, nutrients.

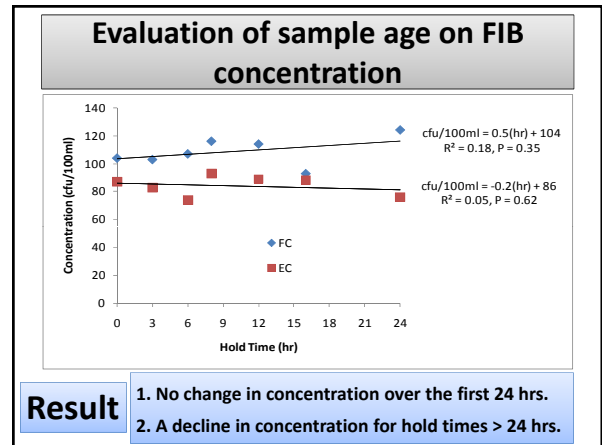
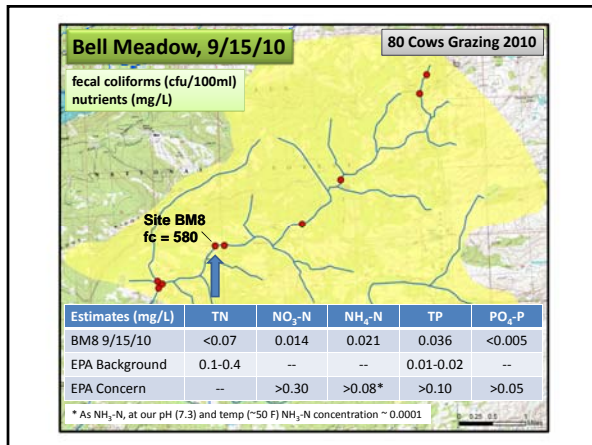
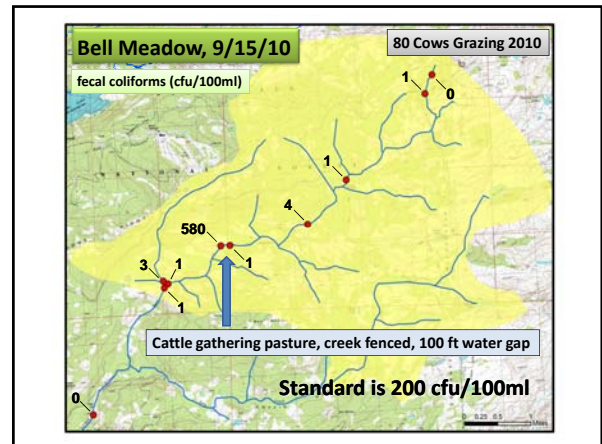
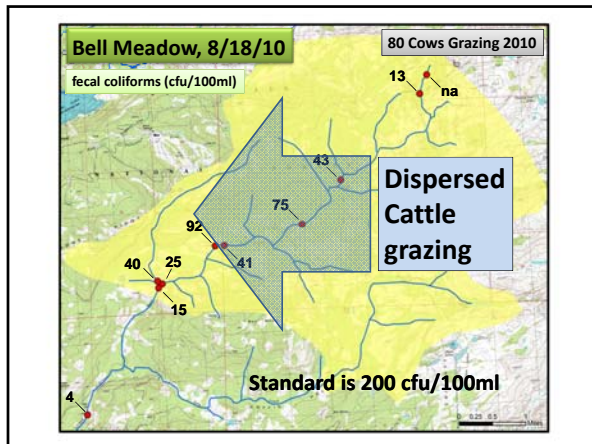
Sample Timing: Monthly from before until end of grazing.

Grazing: USFS grazing standards; fecal loading; livestock no. and distribution across allotment and season.

Range Health: USFS riparian and meadow monitoring.







Timeline

Period	Activity
Sum 2010	Initiate project. Pilot monitoring on Stanislaus NF. Field trips.
Win 2010-11	Evaluate results of pilot monitoring. Enroll forests and allotments in the project. Develop monitoring plan. Share plan broadly for review and comment.
Sum 2011	Conduct monitoring on 12 to 15 allotments on 4 to 5 forests across California. Field trips and workshops.
Win 2011-12	Analyze, report, and publish results. Outreach to share results with stakeholders. Plan follow-up monitoring based on results of Year 1.



Nutrients Low						
Mean Concentration (mg/L)						
Allotment	Date	TN	NO ₃ -N	NH ₄ -N	TP	PO ₄ -P
Eagle Meadow N=15 (11)	Aug 18	0.04	0.01	0.03	0.033	0.017
	Sep 15	0.07	0.04	0.05	0.056	0.015
Herring Creek N=16 (17)	Aug 18	0.19	0.03	0.04	0.082	0.026
	Sep 15	0.10	0.02	0.03	0.071	0.010
Bell Meadow N=9 (10)	Aug 18	0.07	0.07	0.03	0.023	0.014
	Sep 15	0.04	0.03	0.03	0.055	0.008
Levels of concern		>0.30			>0.100	>0.050
Percent (%) of Samples Below Detection						
Allotment	Date	TN	NO ₃ -N	NH ₄ -N	TP	PO ₄ -P
Eagle Meadow N=15 (11)	Aug 18	100	40	0	0	0
	Sep 15	82	18	0	0	18
Herring Creek N=16 (17)	Aug 18	56	19	6	0	13
	Sep 15	67	0	0	0	40
Bell Meadow N=9 (10)	Aug 18	56	0	0	33	22
	Sep 15	90	40	0	0	80

Stream Temperatures Low			
Allotment	Daily Stream Temperature (F)		
	Min	Mean	Max
Eagle Meadow	48	52	59
Herring Creek	47	51	56
Bell Meadow	49	53	59