### The CCRC Monitoring Program: History and Accomplishments

What is Monitoring?

- In natural resource management, monitoring is generally used to determine whether the management has occurred as expected or planned, a problem has arisen, and results indicate the management was effective.
- It often uses "indicators," which are indirect measures that help to infer the conditions of more complex systems.
- Objective for the CCRC indicators monitoring was to detect results out of the desired range of conditions.

### Summary of Priority Rangeland Stewardship Concerns Expressed by Ranchers and Agency Managers in 2006

	Identified by:					
Topics	Agenc	Ranchers in:				
	North (East Bay)	South (Mont. & Morro Bays)	Nor (East	-	Central (Mont. Bay)	South (Morro Bay)
1. Management planning		Х	Х		Х	Х
2. Non-native invasive plants	Х		Х		Х	Х
3. Reduced opportunities and incentives for ranching	Х		Х		Х	
4. Watersheds and water quality			Х		Х	Х
5. Excessive rest and under-grazing			Х		Х	Х
6. Animal diversity declining					Х	Х
7. Improving public image			Х			Х
8. Homogeneity versus heterogeneity	Х					
9. Fire hazard reduction	Х					
10. Soil productivity					Х	

### Nine Fundamental Ecological Variables

- 1. Stewardship Plan
- 2. Bare Ground
- 3. Soil Structure
- 4. Aquatic Macro-Invertebrate Occurrence
- 5. Residual Dry Mater (Autumn)
- 6. Thatch Persistence
- 7. Desirable and Undesirable Plant
- Occurrence

8. Infrastructure Function Index

9. Rangeland Stability and Profitability Index

# **Original Purposes**

- 1. Fostering a cooperative experimental approach
- 2. Catalyzing the awareness of rangeland stewardship
- 3. Improving rangeland stewardship and management planning
- 4. Demonstrating management that results in "rangeland sustainability"
- 5. Demonstrating the importance of rangeland management practices

# Progress

- Excitement and interest generated in 3 years—now heading toward a CCRC cooperative "research" program to go beyond the limits of "monitoring." Some active members want to compare the effects of different kinds of management on the fundamental rangeland health variables and other measures of stewardship.
- Eventually--expand the monitoring with indicators designed for the special management issues of each property (such as measuring recreational qualities at public lands, and deer and pig habitat quality related to hunting enterprises on ranches), and offer technical assistance (with the help of NRCS) to the managers of each property for planning and investigating problem results. At each step we'll continue to explore and learn.
- The other rangeland coalition (CRCC) wants to use the CCRC's monitoring program to assess their properties.

# Monitoring Program Design

