The Central Coast Rangeland Coalition: Rangeland Health Indicators Project



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CCRC Rangeland Health Indicators Project

- Purposes
- History
- Defining Rangeland Health Indicators
- Initial and Added Indicators
- Need for Rangeland Health Indicators
- Preliminary Results
- Conclusions

Three Project Areas within the Central Coast Region:

1. East S.F. Bay 2. Monterey Bay 3. Morro Bay



Purposes of the CCRC

- Foster a cooperative experimental approach to sustain biological diversity and natural resources of rangelands.
- Catalyze awareness of rangeland stewardship.
- Enhance knowledge and economic viability of rangeland stewards.



CCRC History

- First meeting January 2002.
- Need tool to assess healthy rangelands, accepted by ranchers, agencies, and scientists.
- Focus on divisions over grazing, threats to watersheds and wildlife, and decline of rural communities and infrastructure.



CCRC History

Core participants--ranchers, agency managers, and scientists

Joe Morris, T.O. Cattle Co.

Rich Morris, and numerous other ranchers

















CCRC History

- NRCS supported a Cooperative Agreement to develop the indicator system.
- Held three meetings of ranchers and two meetings of agency rangeland managers.
- Prepared summaries of priority concerns and indicator concepts.



Phase One--Define the Indicators and Monitoring Protocols

Objectives:

- 1. Determine existing and desired rangeland health conditions and highest priority indicators in the region.
- 2. CCRC reviews at majors steps to refine and approve the system.
- 3. Incorporate advice from scientists.
- 4. Refine indicators based on appropriate criteria.
- 5. Incorporate appropriate monitoring protocols.

Indicator Project Flowchart

Rancher Meetings
Jan-Apr 2006

Agency Manager Meetings
June 2006

CCRC General Meeting
August 2006

Science Panel
Sept 2006

Phase II Test Monitoring
November 2006

CCRC General Meeting
October 2006

Initial and Added Indicators

Three Indicator Categories from NRC and NRCS Conventions:

- 1. Degree of soil stability and watershed function.
- 2. Integrity of nutrient cycles and energy flows.
- 3. Presence of functioning recovery mechanisms.



Initial and Added Indicators

Two More Indicator Categories from CCRC Meetings:

- 4. Maintenance of rare/endangered species, species richness, and habitat quality.
- 5. Socio-economic values and planning.



Need for Rangeland Health Indicators

- Demand for management that results in "rangeland health" and "sustainability."
- "California Rangeland Resolution" demonstrates the "critical importance of California's privately owned rangelands."
- Rangeland management planning will be improved with understanding and credibility.



Need for Rangeland Health Indicators

- Monitoring is more efficient and relevant with an accepted indicator system that is practical to apply.
- Rangelands are not usually monitored or are monitored insufficiently to determine rangeland health.

• "Manager knowledge" is imperative.



Ranchers and agency managers share common concerns that "one-size-fits-all" management doesn't work:

- the challenge of differing environmental characteristics and different landowner goals.



Ranchers and agency managers want the CCRC indicators to help them demonstrate and evaluate good management, while meeting their own goals for rangeland health and special resources.

- Ranchers want recognition for environmental benefits.
- Agency managers are limited to policy mandates.

Among the ranchers' 46 highest priority indicator concepts, 5 were most important in all 3 areas:

- Ground cover trend after drought, storms, and livestock grazing; and autumn residue
- Soil retention
- Thatch (excess accumulation of herbaceous mass)
- Structural/habitat diversity
- Special resource conservation—rare plants and animals; reduction of pest plants

Among the agency managers' 28 highest priority indicator concepts, 5 were most important in both areas:

- Water quality—TMDLs, aquatic fauna
- Soil productivity
- Control of noxious/undesirable plants (like ranchers)
- Structural/habitat diversity (like ranchers)
- Special resource conservation—rare plants and animals (like ranchers)

CCRC Indicators Project

- Both science and practical/indigenous knowledge are necessary.
- Planning is fundamental--including record-keeping, monitoring, analysis of results, adaptation, and peer review--and based on different goals and settings.
- The CCRC hopes its indicator system will be a model that is widely accepted, and attracts others to follow and offer improvements.

