RANCHING SUSTAINABILITY SELF-ASSESSMENT (RSA)

A voluntary program developed by California ranchers for use by the California Ranching Community

May 6, 2014

MISSION STATEMENT

To create and implement a voluntary self-assessment program in which we evaluate all aspects of our operations to ensure the sustainability of our production, lands, and families. To determine what we do well and find ways to ensure proper stewardship of ourselves, the animals, and natural resources.

TABLE OF CONTENTS

INTRODUCTION....1
SUBMITTING YOUR RSA EVALUATION....2
GENERAL INSTRUCTIONS....2
PERSONAL CONTACT INFORMATION....4
RANCH INFORMATION....5
SELF-ASSESSMENT CATEGORIES....6
Livestock Management....6
Soil Management....7
Forage Management....8
Biodiversity/Wildlife Management....9
Regulations and Regulators....10
Relationships: Family, Employee, and Community....11
Economics....12
Energy....13
Monitoring....14
Pest Management....15
Water Quality....16
APPENDIX
Future directions....17
Authors....18
Acknowledgements....18

INTRODUCTION

Welcome to the Ranching Sustainability Self-Assessment (RSA)! Developed by a committee of ranchers with some input from natural resource professionals, the RSA is intended primarily as a ranching self-help tool to stimulate awareness and critical thought about how to keep ranchers as working stewards of the land indefinitely through proper economic, social, and environmental practices. Your participation, expertise, and feedback will help the RSA evolve and will ensure that it meets the needs of the California ranching community now and in the future. The more people who self-assess their operations, provide feedback, and submit their data, the greater the potential benefits, not only for the individual, but for the industry as well. The greater the participation, the more we can learn and the better is the potential for the widespread adoption or continued use of sustainable practices throughout the California ranching community.

The self-assessment process, with a "positive points" philosophy (e.g., as employed to great effect for many years by the Central Coast Vineyard Team), will recognize existing efforts and motivate each of us to continually strive to enhance the success of our operations. This approach is designed to provide positive reinforcement of effective or otherwise successful practices, and to encourage participation, progress, and innovation. The process will help the individual identify specific "action items" that he or she wishes to pursue to enhance the operation. This means of documenting the good practices being employed will help the ranching industry meet both current and future regulatory requirements. In summary, the RSA is a powerful non-regulatory tool to guide rangeland owners through everyday decision-making processes, and a way to monitor the most important resource in the management process; i.e., The Manager! Ultimately, it provides a means for ranchers to shape the future of California ranching on as much of their own terms as possible.

The RSA guides the producer through a series of questions within 11 assessment categories of social, economic, and natural resource management practices. These evaluations will be based on the best information currently available to the rancher. Scores will change over time not only as ranching operations improve, but also as our knowledge of sustainability grows, based on an ever-growing body of knowledge from the industry and from science-based studies. This proactive approach will help ranchers maintain the autonomy of their lifestyle and their role within the larger community, thereby providing significant ecosystem services through good land stewardship.

SUBMITTING YOUR RSA EVALUATION

When completed, submit your RSA Evaluation to the San Luis Obispo Cattlemen's Association (SLO CA), C/O Steve Sinton (see below for mailing address). The SLO CA will remove all personal identifiers and replace them with a code unique to each ranch or individual. The SLO CA will then send the evaluation to the San Luis Obispo County Cooperative Extension Office (CE). The CE will enter the RSA evaluation scores, identified only by the unique code, into a Microsoft Excel database. Following this procedure, the CE will summarize the data and periodically distribute data summaries, e.g., in industry newsletters and trade magazines. In this way, ranch practices and ranch sustainability can be assessed and evaluated over time for individuals and the industry in general.

It is important to note that even though SLO CA collects the RSA Evaluations and sends them to the Cooperative Extension Office without personal ranch identifiers, confidentiality cannot be absolutely guaranteed. There is always a risk.

Please submit all inquiries or correspondence to:
San Luis Obispo Cattlemen's Association
C/O Steve Sinton
Post Office Box 112
Shandon, CA 93461

GENERAL INFORMATION, SCORING, RSA SELF-ASSESSMENT CATEGORIES, & POSITIVE POINTS

The self-assessment questions are organized into 11 subject categories:

- Livestock Management
- Soil Management
- Forage Management
- Biodiversity/Wildlife Conservation
- Regulations and Regulators
- Relationships (Family, Employee, Community, Land)
- Economics
- Energy
- Monitoring
- Pest Management
- Water Quality

We encourage you to complete the RSA with other members of your family and ranch managers. There is a certain amount of intended overlap among categories that reflects fundamental interrelationships. Each category has a customizable question: "Is there some aspect of your…that you could change to improve the social, economic, or natural resource aspects of your practices?" and an area for making notes that allows individuals to identify areas for change.

SCORING

Score yourself or your ranch operation from 1 to 7, 7 being the highest score. Enter "N/A" if the question does not apply to your ranch. FYI, a comment from a rancher: "I might never give myself a 7, because I feel there is always room for improvement, but I might give myself a 6.5, for example." You may want to use decimals.

Sum your scores. To calculate your average score for the Category, divide your Total Score by the number of questions you scored.

You may want to make a copy of your Evaluation to keep for comparison with the next round.

PERSONAL CONTACT INFORMATION

This information will be kept confidential by the San Luis Obispo County Cattlemen's Association. University of California Cooperative Extension will only input non-personal information into a data base, which will remain anonymous.

UNIQUE CODE: _____

Date	
Ranch Name	
Last Year's Rainfall	
Your Name & Title (spouse, son, foreman, etc.)	
Street Address	
City	
State	
Zip code	
Home Phone	
Office Phone	
Cell Phone	
Fax	
Email	

RANCH INFORMATION

UNIQUE CODE: _____

Do you have a written ranch plan?	
Do you have a map or set of maps that you can use as a planning tool?	

AREA

In what County is your ranch located?	
Coastal or inland?	

SIZE (acres)

1-1000	
1000-5000	
5000-10,000	
10,000-15,000	
15,000 plus	

LAND OWNERSHIP

Own	
Lease	
Own and lease	

TYPE OF OPERATION (check all that apply)

Cow-calf	
Stocker	
Other livestock	
Dry farming	
Irrigated land	

RANCH DETAILS

Do you have riparian areas? YES or NO	
If so, are they mostly wet or mostly dry?	
Are you located in a special designation watershed? E.g., TMDL	
Do you operate a hunting program?	
Do you operate a recreation/agritourism program (other than hunting)?	

RANCHING SUSTAINABILITY SELF-ASSESSMENT CATEGORIES

For each question, based on your familiarity with the practice or how well it applies to your operation, score yourself or your ranching operation from 1 to 7 (7 being the highest score). Enter "N/A" for not applicable if the question does not apply to your ranch.

LIVESTOCK MANAGEMENT

Thoughtful and careful animal handling will improve productivity from the ranch to the plate. It will improve forage growth, utilization, water quality, and animal nutrition. Demonstrating good livestock management practices is also important in the marketing of ranch animals.

Question	Score
1) How well does your class of livestock match your environment?	
2) How well do you calve in synchronization with your feed conditions?	
3) How high do you rate your success by the number of lbs./acre of beef sold?	
4) How much do you value each cow in your herd?	
5) Rank your knowledge of the principles of low-stress livestock handling and its economic value.	
6) How vigilant are you at maintaining a herd-health program?	
Total (Add up your score)	
Average (Divide your Total by the number of questions you scored)	

Action Item: Is there some aspect of your livestock management that you could change to improve the social, economic, or natural resources of your practices? Note any other comments or questions here. Add any other comments or questions here.

SOIL MANAGEMENT

Soil structure and nutrient content affect forage health and vigor. A healthy soil profile will favor good forage over noxious weeds. The objective is to conserve and improve naturally-occurring beneficial soil characteristics and use best management practices to correct any deficiencies in the soil.

Question	Score
1) How well do you leave the proper amount of RDM for its many benefits: moderates soil temperature, helps prevent erosion, and enhances soil organics?	
2) How well do you monitor and record areas of your ranch that are at risk for erosion (e.g., once or twice a year)?	
3) How much baseline soil information do you have (e.g., pH, type, organic matter, fertility) from NRCS, other soil surveys, or information from your own testing?	
4) How well do you monitor for soil health, e.g., pathogens, nutrients, bacteria, and fungi?	
5) Rank your understanding of the value for increasing organic material in your soil.	
6) How well do you utilize practices that increase organic matter in your soil (e.g., leaving RDM or increasing deeper rooted forages)?	
7) Rate your awareness of the difference in soil building capability between annuals and perennials?	
Total (Add up your score)	
Average (Divide your Total by the number of questions you scored)	

Action Item: Is there some aspect of your soil management that you could change to improve the social, economic, or natural resources of your practices? Add any other comments or questions here.

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FORAGE MANAGEMENT

Good management of rangeland forage provides food for livestock, food and cover for wildlife, a filter to slow and cleanse runoff, increases percolation, and protects the following year's emerging forage. Public perception of rangeland stewardship is usually most influenced by how much of the available forage that landowners leave.

Question	Score
1) How well do you implement practices that will keep native and other beneficial grasses or forbs?	
2) How well do your grazing practices allow native and other beneficial plants to regenerate (e.g., oaks, wildflowers, grasses)?	
3) How well do you leave the proper amount of RDM to protect new grass from frost, heat, and moisture loss?	
4) How familiar are you with the potential benefits of managed grazing?	
5) How well do you leave adequate recovery time for your plants after grazing?	
6) Rate your understanding of the terms overgrazing, overbaring*, and biological overgrazing? *A condition where too much ground cover was removed by wind, low soil moisture, traffic, livestock, etc., to maintain the long-term health of the site.	
7) To what extent do you have a range improvement program that includes methods, such as management of intensive grazing, seeding, fire, and monitoring?	
8) How well do you maintain and budget for the ranch infrastructure, e.g., fences, roads, water troughs, that enable successful forage management?	
Total (Add up your score)	
Average (Divide your Total by the number of questions you scored)	

Action Item: Is there some aspect of your forage management that you could change to improve the social, economic, or natural resource aspects of your practices? Add any other comments or questions here.

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BIODIVERSITY/WILDLIFE CONSERVATION

Good stewardship of the land will foster diverse plant and animal communities and enhance economic opportunities involving wildlife. This not only provides for game species and watchable wildlife, which can be the foundation for an economically viable hunting and tourism program, but also demonstrates recognition of the important role played by private lands in protecting and enhancing biological diversity.

Question	Score
1) How well do you provide habitat enhancements, such as nest boxes, bat boxes, raptor perches, and water sources for wildlife during drought and other critical times?	
2) How committed are you to leaving snags and downed wood for small mammals, nesting birds, or logs in streams for fish cover?	
3) How well do you follow accepted guidelines to avoid unintentionally damaging live native trees?	
4) How well do you meet the habitat needs of game species?	
5) How well do you provide for non-game species that offer natural resource values, e.g., insectivorous birds that may help to control pest species?	
6) How well do you use grazing management to enhance natives and other beneficial forbs and wildflowers that support pollinators?	
7) To what extent have you considered using a conservation easement to protect habitat?	
8) How well do you understand the potential contribution of game and nongame wildlife to the environmental, economic, and social values of your ranching operation?	
Total (Add up your score)	
Average (Divide your Total by the number of questions you scored)	

Action Item: Is there some aspect of your <u>biodiversity management</u> that you could change to improve the social, economic, or natural resources of your practices? Add any other comments or questions here.

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REGULATIONS AND REGULATORS

To learn and stay ahead of the latest developments is crucial to successful ranching. Careful compliance with regulations will help landowners avoid conflict with regulators and may help reduce the imposition of additional regulations. Compliance with federal and state employment laws and worker protection measures is important to avoid, injury and/or legal conflicts. In addition, the intent behind most regulations makes compliance in the best long-term interest of the landowner.

Question	Score
1) How well do you follow label directions when using vaccines, medications, and chemicals?	
2) How well do you adhere to proper disposal requirements of chemicals, containers, and biological waste (e.g., livestock vaccination needles)?	
3) Rank your understanding of the secondary effects and life cycle of any chemical products that you use?	
4) How well do you update your labor law and OSHA/safety employee notices?	
5) How well does your safety plan on file comply with OSHA requirements?	
6) Rank your awareness of applicable regulations affecting your operation.	
7) How complete are your plans to meet the current regulations, e.g., a water quality plan?	
8) How active are you in the regulatory/political process?	
Total (Add up your score)	
Average (Divide your Total by the number of questions you scored)	

Action Item: Is there some aspect of your regulations management that you could change to improve the social, economic, or natural resources of your practices? Add any other comments or questions here.

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RELATIONSHIPS: FAMILY, EMPLOYEE, COMMUNITY, LAND

You can enhance your operation by fostering good relationships with your family members, employees, business contacts, and consumers. Providing a healthy and pleasant work environment will improve worker productivity, saving ranchers time and money. Maintaining good personal and business relationships fosters product satisfaction and a healthy ranching lifestyle.

Question	Score
1) How well do you provide regular safety talks on proper handling of herbicides, vaccines, medications, and other chemicals?	
2) How committed are you to providing educational opportunities for employees, yourself, and your family, including in the native language, as needed?	
3) How active are you in trade organizations and other groups?	
4) How well have you and your family established written goals that are clearly defined and inclusive of everyone in your operation?	
5) How would you rank the quality of communication within your operation as it relates to advancing the common good?	
6) How complete is your succession and estate plan?	
7) How do you rate the creativity of your operation?	
8) How willing are you to change the way you look at things to better achieve long-term goals?	
9) How complete is your written checklist of guidelines to help ensure that your decisions will lead your operation toward sustainability?	
Total (Add up your score)	
Average (Divide your Total by the number of questions you scored)	

Action Item: Is there some aspect of your relationships management that you could change to improve the social, economic, or natural resources of your practices? Add any other comments or questions here.

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ECONOMICS

Profitability ultimately drives the ranch business. Producing livestock and other ranch products that buyers want is essential to success. Being a low cost producer requires an understanding of cost-benefit decision making. Landowners also need to consider alternative income streams for their property: Hunting leases, agricultural related tourism, and other opportunities may be as important an income opportunity as raising livestock.

Question	Score
1) How efficient is your record-keeping system, e.g., computerized spreadsheet?	
2) How diversified is your income, e.g., multi-species operation, rental property, hunting, and agritourism?	
3) How active are you in participating in associations for purchasing, marketing, or production?	
4) How important is value-added marketing in your operation?	
5) Rank the extent to which you feel you are rewarded economically for sustainable practices?	
6) How complete is your drought plan for protecting your current and future investments in your land and livestock?	
7) How well do you track your economic success on a net dollars/acre basis?	
8) How well do you reinvest some of your income in the maintenance and improvement of your infrastructure, e.g., fences, water, roads, buildings, and equipment?	
Total (Add up your score)	
Average (Divide your Total by the number of questions you scored)	

Action Item: Is there some aspect of your economics management that you could change to improve the social, economic, or natural resources of your practices? Note any other comments or questions here. Add any other comments or questions here.

ENERGY

Successful ranching requires managing costs. Energy is becoming an increasingly significant portion of ranch expenses. Examining ranch energy efficiency, including the use of vehicles, fertilizers, alternative fuels, and travel plans, is critical to the long-term viability of operations. Ranchers are encouraged to consider energy opportunities, including solar, wind, and biofuel production, and incentive programs.

Question	Score
1) How aware are you of ways to lower your dependency on fossil fuels?	
2) Rank your use of alternative fuels or power sources, e.g., solar, wind, and biofuels?	
3) How committed are you to the use of energy-efficient vehicles and power equipment?	
4) How well do you reduce, reuse, and recycle to lower your energy demands?	
5) How important is it to you to produce energy (e.g., solar, biofuel) as a source of income?	
6) How aware are you of BEHAVE principles to reduce energy use, e.g., teaching livestock to eat weeds to reduce herbicide use?	
Total (Add up your score)	
Average (Divide your Total by the number of questions you scored)	

Action Item: Is there some aspect of your energy management that you could change to improve the social, economic, or natural resources of your practices? Note any other comments or questions here. Add any other comments or questions here.

MONITORING

A simple monitoring plan will provide a record of your range conditions. This will better enable you to recognize both positive and negative trends in range conditions. Any observed long-term declines in range conditions can be remedied only if the landowner can first recognize that change. Monitoring will also provide a record to demonstrate your positive stewardship of the land.

Question	Score
1) How well do you monitor your rangeland using photographs (aerial, infrared, standard, or digital)?	
2) How well do you record your visual observations of range conditions?	
3) How well do you keep records describing your annual management practices?	
4) How well do you monitor water quality, e.g., turbidity and temperature?	
5) How well do you monitor your finances?	
6) How well do you monitor your relationships, e.g., family goals, estate planning, and employees?	
Total (Add up your score)	
Average (Divide your Total by the number of questions you scored)	

Action Item: Is there some aspect of your monitoring management that you could change to improve the social, economic, or natural resources of your practices? Add any other comments or questions here.

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PEST MANAGEMENT

Understanding which pests can cause damage, and under what conditions damage is likely to occur, is a key to sustainable ranching. Healthy soils and grasslands will better resist invasive plant species, and knowledge of appropriate active management practices may enable landowners to prevent pest plants from spreading. Rodent and predator control can improve forage conditions, but can also cause unintended harm to non-target species. Thoughtful and informed use of pest control techniques can maximize benefits, while limiting unintended consequences.

Question	Score
1) How well do your provide for beneficial natural predators, such as owls, bats, and insectivorous songbirds?	
2) How important is it to you to manage to control rodents by means that limit secondary impacts?	
3) How committed are you to the use of fish in water troughs to control mosquitoes (e.g., to lessen risk of West Nile Virus)?	
4) How committed are you to dealing with predators by following proper regulations (e.g., non-lead bullets, pesticide poisoning) to protect non-target species?	
5) How well do you incorporate weed management into your operation, e.g., the BEHAVE practice of training your livestock to eat weeds?	
6) How careful are you to avoid dispersing noxious or diseased plants or animals, e.g., sudden oak death, invasive plant seeds?	
Total (Add up your score)	
Average (Divide your Total by the number of questions you scored)	

Action Item: Is there some aspect of your pest management that you could change to improve the social, economic, or natural resources of your practices? Note any other comments or questions here.

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WATER QUALITY

Healthy grasslands and woodlands will absorb water and slow its pace, reducing erosion and siltation of waterways. Maintaining residual forage cover at the beginning of seasonal rains is important to ensuring that the water leaving your land is as clean as possible. Proper road construction and maintenance is essential for preventing unnecessary siltation of nearby water bodies.

Question	Score
1) How well do you implement management practices to limit sedimentation?	
2) How well have you designed, modified, or maintained your roads to minimize sedimentation?	
3) How well do you implement livestock production methods to limit pathogens and sediments from reaching waterways?	
4) How well do you implement practices to stabilize stream banks?	
5) How well do you maintain ground cover to slow water in order to increase the infiltration and retention of water?	
6) Rank your awareness of watersheds of special designation (e.g., TMDL-designated water body)?	
Total (Add up your score)	
Average (Divide your Total by the number of questions you scored)	

Action Item: Is there some aspect of your water quality management that you could change to improve the social, economic, or natural resources of your practices? Add any other comments or questions here.

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APPENDIX

FUTURE DIRECTIONS

With your help, this project will evolve over time to meet the needs of the California ranching community and reflect the industry's increasing understanding of rangeland sustainability and good stewardship practices. There are many excellent examples of agricultural sustainability programs that can be drawn upon to refine and improve this project, the written components of which may be considered a "living document" that develops and matures over time.

Among the plans are these:

- Proof of participation (e.g., certificate) for those submitting self-assessment data to the project
- A workbook with informational resources, funding sources, and the ongoing compilation of educational materials on rangeland practices
- Self-assessment workshops and other events to address the information needs of ranchers
- A website including a central hub of communications and information, the ability to view custom reports (compare yourself to peers based on size/type of operation, location/region, and statewide), and an interactive "model ranch" to illustrate some of the sustainable practices being used by California ranchers
- Collaboration with regulatory agencies to maintain or improve the utility of self-assessments
- Partnerships with ranching associations and other organizations
- Third-party certification that would provide unbiased confirmation of the sustainability of your practices for your customers, business associates, peers, regulatory agencies, and the general public

ABOUT THE AUTHORS (In alphabetical order following the Committee Chair)

George Work (Chair), Rancher, Work Ranch; Technical Advisor to the Upper Salinas-Las Tablas Resource Conservation District; 1984 Soil/Water National Winner; Planning Fellow for Roots of Change; 2004 National Environmental Stewardship Award (National Cattlemen's Beef Association); National Marriage Encounter honored George and Elaine as Volunteers Of The Year.

Cliff Garrison, Ranch Manager, Hearst Ranches; the California Beef Cattle Improvement Association named Hearst Ranch the 2008 Commercial Producer of the Year for progressive and sustainable ranching.

Kevin Kester, Rancher, Bear Valley Ranch and Vineyards; Past President of the California Cattlemen's Association (CCA) and of the San Luis Obispo County Cattleman's Association; past Chair of the CCA Wildlife Management Committee

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Chuck Pritchard, Rancher, Bitterwater Land & Cattle Company; President of the Upper Salinas-Las Tablas Resource Conservation District; Member of the Range Management Advisory Council to the State Board of Forestry; 1998 Biodiversity Conservation Award (California Biodiversity Council)

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Jim Zingo, former Staff Research Associate, UC Cooperative Extension

ACKNOWLEDGEMENTS

This project was inspired in large part by the tremendous success of the Central Coast Vineyard Team's "Positive Points System" that has been used by area grape growers since 1998, a system that has been adapted for use by California avocado and citrus growers and that also led to the development of a third-party sustainability certification program. The self-assessment for ranchers was also influenced by information from many other agricultural sustainability programs such as the Lodi-Woodbridge Winegrape Commission's "Lodi Winegrower's Workbook" and "The Lodi Rules," the California Sustainable Winegrowing Alliance's "Code of Sustainable Winegrowing Practices," the El Dorado County & Georgetown Divide Resource Conservation

Districts' "Farmland Self-Assessment Workbook," the USDA Western Sustainable Agriculture Research and Education (WSARE), and the National Sustainable Agriculture Information Service (ATTRA).

Many people contributed to the development of this project by providing helpful comments, reviews, or discussions. Among them are: Ray Allen, D.J. Funk (Executive Director, Upper Salinas-Las Tablas Resource Conservation District), John Garn (Consultant, California Sustainable Winegrowing Alliance's "Code of Sustainable Winegrowing Practices"), Deb Garrison (Central Coast Agriculture Cooperative), Roger Ingram (Placer-Nevada County Cooperative Extension Director and Farm Advisor), Marti Johnson (Upper Salinas-Las Tablas Resource Conservation District), Kris Beal (Executive Director, Central Coast Vineyard Team), Vance Russell (Director, and Audubon California's Landowner Stewardship Program). In addition, many ranchers and other individuals provided feedback during UCCE landowner workshops and Tailgate Meetings. All of your contributions have been most welcome and much appreciated.
