

MODOC - WASHOE

EXPERIMENTAL STEWARDSHIP PROGRAM

Success Stories

Tuledad Special ACP Project for Range Improvements

1984 marks the fourth year of one of the first action plans endorsed by the Modoc/Washoe ESP Steering Committee. The project has progressed, in spite of adverse weather conditions. Approximately 3600 acres of brush control, 2200 acres of seeding, 19 miles of fence and 11 water developments outlined in the five year action plan are on the ground.

ASCS, BLM, SCS and five permittees coordinated planning and pooled money for the installation of essential improvements on this 180,000 acre (132,000 acres public, 48,000 acres private) unit spanning three counties Washoe, Lassen, Modoc and two states, California and Nevada. When completed, the 5-year project will represent a \$430,000 investment (\$324,000 public and \$106,000 private). Permittees can earn up to \$75,022 cost-sharing under the ASCS Agricultural Conservation Program (ACP) for improvements on private lands done with private dollars.

Completion of this project will assure the continued success of the five livestock operations consisting of 1484 head of cattle, and 3000 head of sheep for a total of 11214 AUM's. Completion will also assure the prosperity of the environment, the wildlife and 200 head of wild horses now inhabiting the intermingled private and public lands in the unit.

In general, even though the project area has been plagued with abnormally low precipitation and adverse weather conditions the individually installed

practices have met the project objectives. The land managing agency (BLM) and the permittees feel the results of the installations are satisfactory and meet the purposes for which they were intended.

One seeding has converted 35 acre/AUM range into 4 acre/AUM range and was harvested at this rate in the spring of 1984. In the other seeding area desirable vegetation has definitely been maintained and with favorable weather conditions it has the potential of converting into an improved area comparable to the first area.

Livestock producers in the Tuledad allotment area were faced with drastic cuts in livestock numbers before the special project. Improvements installed under the special project have maintained livestock numbers; provided an early turnout for a portion of the livestock; and have deferred movement to upland ranges. Improvements thus far have benefited wildlife and wild horses as well.

The coordinated planning and on the ground action by the various agencies, groups and individuals resulted in a complete resource area being evaluated and treated for the benefit of all land uses. Action accomplished under the coordinated plan has reversed the downward trend in vegetative cover condition. The ACP funding provided sufficient incentive to the private landowners to secure their participation in both the cost-shared and non-cost-shared measures.



The Consensus Process

by Rex Cleary

The Second in a series of success stories from the Modoc/Washoe Experimental Stewardship Program, working to resolve conflicts and improve the rangelands in northeastern California and north western Nevada.

The "Consensus Process" is viewed by some as the unique ingredient in the Modoc/Washoe Experimental Stewardship Program that has made it so successful. The Program was "born in conflict" (see "Background of the M/W ESP," Stewardship Success Story No. ?). Rex Cleary, BLM District Manager, told the Steering Committee at their first meeting he was tired of conflict and hoped that the Stewardship Program could solve some of those problems. In a portion of an article appearing in the August, 1984 issue of **Rangelands Magazine**, Mr. Cleary explains how the Consensus Process played a key role in the Stewardship Success Story:

Consensus

"We agreed at our first Steering Committee Meeting to take the ultimate risk in a negotiation setting. We agreed that all decisions or actions of the Committee would be reached by consensus. For us, it means that all decisions, recommendations, and actions taken by the Committee would be by unanimous agreement. Any issue not receiving unanimous resolution would be sent back to the working committee for further study or would be tabled. We extended this operating rule to all levels. No level of the structure can pass a recommendation on to the next level without unanimous agreement.

"I emphasize this because I feel the consensus rule has been particularly instrumental in the Success Story. Yet, the concept of operating by consensus is controversial itself. The concept is frightening to some. Everyone was at least apprehensive at the outset. But, the longer it has been used, the greater is the confidence and trust in the process. I have been on the road telling the Stewardship Story to a number of groups and organizations. Without fail, the notion of operating by consensus has generated the greatest reservation in all I have talked to.

"William Ouchi, in his book on Japanese Corporate Management "Theory Z," states: "American managers are fond of chiding the Japanese by observing that if you're going to Japan to make a sale or close a deal, and you think it will take 2 days, allow 2 weeks and if you're lucky you'll get a "maybe". The Japanese business people who have experience dealing in the United States will often say Americans are quick to sign a contract or make a decision. But, try to get them to implement it, it takes them forever!"

"I see a parallel in our process. We have, and still do, take a lot of time, worrisome time to some, in taking our actions. But, the implementation is happening easily!"

The Modoc-Washoe Stewardship Committee is one of three such Committees mandated by Congress to explore new ways to improve the public rangelands. For information, write ESP, P.O. Box 1090, Susanville, CA 96130.



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The Technical Review Team Process

by Alan Hoffmeister

The third in a series of success stories from the Modoc/Washoe Experimental Stewardship Program, working to resolve conflicts and improve the rangelands in northeastern California and northwestern Nevada.

"We can sit around this table and argue until we're 'blue in the face', but we'll never solve these problems until we get out on the ground, look at the **real** situations, and realize what we're all talking about!"

The Steering Committee came to the above realization as they struggled with some very complex problems in the early days of the Stewardship Program. The Steering Committee was intentionally composed of management level representatives. They were not expected to be technical experts and they soon realized they needed some technical expertise on the ground to represent their individual concerns and solve some of the difficult conflicts.

To get the right mix of technical expertise out on the ground, the **Technical Review Team Process** (TRT) was formed. Their mandate was simple... "Go forth into the field and don't come back until you can all agree on what should be done."

The first team looked at the Home Camp Allotment. The team was made up of the grazing permittees, the field biologist for the Nevada Department of Wildlife, the District Conservationist for the Soil Conservation Service, and the Range Staff Specialist for the BLM.

The team worked under the Consensus Process similar to the Steering Committee (see "Consensus Process", Stewardship Success Story No. ?). They were able to reach consensus. Their recommendations were written on the hood of a pickup and signed in the field. The Steering Committee accepted their recommendations and the BLM District Manager eventually modified his decisions and implementation began.

Since that first success, TRT's have been involved in solving problems or initiating management plans on many BLM and Forest Service Allotments. In almost every case, consensus was reached and Management has begun.

The Steering Committee has learned that several important points must be followed to assure a successful Technical Review Team:

- 1) The team must be composed of "Field-Level Technicians" who have a familiarity with the area under discussion.
- 2) Discussions must take place on the ground.
- 3) Complete and thorough staff-work must be provided to the team members prior to the field tour. This information would include maps, resources, developments, past and present grazing practices, current and potential uses, etc.
- 4) The TRT must be composed of representatives from **all** concerned parties. A minimum of five members has been established representing the BLM or Forest Service, the Soil Conservation Service, the State Wildlife Agency, a permittee representative, and environmental interest. Additional representatives are added as needed, i.e., wild horses, archaeology, off-road vehicles, etc.
- 5) All agreements must be documented and signed by all participants.

The TRT process has been called by some, the "Guts" of the Stewardship Program. Experimentation with the process is beginning in area outside of livestock grazing issues. The Process was used this year in developing a preferred alternative for BLM Wilderness Suitability Recommendations on the Susanville District. Mike Lunn, past District Ranger on the Warner Mtn. District of the Modoc National Forest is using the process to guide the development of a ski-area on his new National Forest, the Okanogan in Washington State.



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The High Rock Canyon Success

by Curtis Spalding
Modoc-Washoe Experimental
Stewardship Committee

The fourth in a series of success stories from the Modoc-Washoe Experimental Stewardship Program, working to resolve conflicts and improve the rangelands in northeast California and northwest Nevada.

The Land

High Rock Canyon is the most scenic as well as the most controversial piece of land in the Stewardship Area. Sheer rock cliffs; nesting golden eagles; the historic Lassie-Applegate Emigrant Trail; pioneer inscriptions intermixed with Indian cultural sites; wild horses. The canyon is grazed by cattle and sheep and is important to two livestock operators, while the peaks are candidates for bighorn sheep reintroduction. ORV'ers, rockhounds, campers, hunters, and hikers compete for parts of the scenic canyon.

The Issues

The demands for the resources of High Rock Canyon has long been the focus of disputes, appeals, and unsuccessful planning initiatives. Livestock operators wanted to continue grazing the canyon and the rangeland on the canyon rims. Continued sheep grazing could pose a threat of disease transmission to a potential bighorn sheep reintroduction. ORV'ers wanted continued open access to their roads and trails; wilderness enthusiasts wanted both sides of the canyon road protected as federal wilderness; emigrant trail enthusiasts wanted a National Historic Trail or a National Monument. And BLM just wanted a management plan that met the requirements of law and pleased everyone. Understandably, it seemed like an impossible task.

The Process

In early 1982, the Stewardship Committee appointed a 10-person TRT (Technical Review Team) that represented all interest groups: wildlife, cultural resources, environmental, ORV/recreation, wild horses, two ranchers, farm advisor, SCS, Nevada State government, and the BLM Assistant District Manager as Team facilitator. Their task: come up with a consensus management plan.

The Results

For four days the Team met, toured the canyon, and back at the BLM office moved painstakingly through 16 resource conflicts the Team had identified on flipcharts. The discussions were long, laborious, and sometimes heated. At one point, hats were put on to leave. Follow-up meetings were needed in late 1982 and early 1983. Finally, the Team reached consensus on all major issues except one. On March 15, 1983 the Team members put their signatures on the list of agreements and recommendations establishing: a High Rock Canyon ACEC (Area of Critical Environmental Concern), cultural resource management plan, wildlife habitat management plan, wilderness TRT, fencing cattle out of the canyon bottom, riparian rehabilitation, and others. The thorniest issue, stocking rate, remained to be settled through litigation. But most other conflicts were resolved to a degree never thought possible in the B.S. years (Before Stewardship).

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**MODOC/ WASHOE
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Experimental Grazing Fee

Credit Program

The fifth in a series of success stories from the Modoc/Washoe Experimental Stewardship Program, working to resolve conflicts and improve the rangelands in northeastern California and northwestern Nevada.

In February, 1983 the Modoc/Washoe Experimental Stewardship Program initiated a program that allows up to 50% credit to grazing fees if the livestock permittee is willing to construct range improvement projects on Forest Service or Bureau of Land Management lands within his allotment. The objectives of the program are to foster cooperation and coordination between the livestock permittee and the land management agencies (F.S. and BLM); to explore innovative grazing management practices; to improve stewardship of the public rangelands and to provide increased private investment coupled with improved cost efficiency of federal funds. If successful, the program could be established throughout the F.S. and BLM as a means of constructing range improvement projects with cost savings for the government.

The program has been operative since 1983 and, to date, has provided many positive benefits. Savings in construction costs have resulted for both the BLM and F.S. Recently, reservoirs were constructed on BLM lands for \$.70/cubic yard versus BLM contracting costs of \$1.30/cubic yard. The Forest Service experienced savings on a small spray project. The livestock permittees accomplished the project at a cost of \$12.50/acre versus an estimated contract cost of \$37.00 for the Forest Service. Savings were realized by both agencies when the livestock permittees constructed fences using ranch labor. Since

the Grazing Fee Credit Program only allows credit for actual costs, the labor costs for the fences were credited at approximately \$5.00/hour versus and estimated cost of \$15.00/hour if the agencies had contracted to have the fences built.

Contract labor costs are usually much higher as the contractor is required to pay specified wage rates by law (Davis-Bacon Act) whereas the rancher is only required to pay minimum wage rates to his hired help thereby resulting in a significant cost savings to the government under the Grazing Fee Credit Program. In one instance, the ranchers donated labor, resulting in a significant savings for the BLM.

Intangible benefits of the Program cannot be measured in dollars and cost-effective means for the livestock permittees, big or small, to become involved in the construction of range improvement projects on their allotments. This has resulted in vastly improved cooperation and coordination between the land management agencies and the livestock permittee in the formulation and development of the projects. Most importantly, the Grazing Fee Credit Program has resulted in range improvement projects being on-the-ground which has accelerated grazing management for the benefit of all resources in those allotments.

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The Long Valley Allotment

By Richard Westman

The sixth in a series of success stories from the Modoc/Washoe Experimental Stewardship Program, working to resolve conflicts and improve the rangelands in northeastern California and northwestern Nevada.

The Long Valley Allotment is situated in the southern portion of a long, narrow interior basin. Four livestock operators run a total of 537 head of cattle in this allotment starting April 15 thru October 31. The average annual precipitation ranges from eight inches in the lower elevations to twelve inches in the higher elevations. This area has a long history of over grazing and most of the useable areas are in poor condition. A 25 percent reduction in livestock use had been proposed by the BLM.

During March of 1981, a Technical Review Team (TRT) was put together to look at the resource conditions and problems and to make recommendations for future management of the Long Valley Allotment. The team was composed of a BLM technician, the permittees, a Soil Conservation representative, and a representative from the Nevada Department of Wildlife.

After reviewing the area, the Team agreed the allotment was mostly in poor condition and that reductions in livestock use of up to 80 percent would be needed to achieve vegetative improvement through stocking rate alone. This would be financial disaster for the livestock permittees. Therefore, the Team set-out to formulate management recommendations that would improve resource conditions while at the same time maintain the existing livestock operations. This required deviating from the standard approach of reducing livestock numbers to the capacity of the useable area. The Team recommended, rather than reduce livestock, to provide additional forage to meet the livestock needs. This would be accomplished through water development in un-

used areas and the development of seeding. The Team also agreed a pasture rotation system would have to be developed to provide sufficient rest to meet the plants growth requirements.

They recommended a pasture be fenced off at the north end of the bottomland area and that the mountain slope be fenced into a separate pasture for management once additional water is developed. For the next few years, stocking the allotment at its present rate would not result in any significant change in its present condition. Therefore, the Team recommended to maintain the present stocking rate until the proposed projects could be completed.

These recommendations resulted in some controversy since no reductions were imposed. There would be no resource improvement in the Long Valley Allotment if the proposed projects were not completed in a timely manner. This became a concern to the Stewardship Committee and they made the implementation of the TRT recommendations a high priority. Following this direction the BLM channeled its funding sources toward that direction with the following results. In 1981, eight reservoirs were completed, 2,995 acres of sagebrush were sprayed and seeded during 1982. In 1983, the permittees assisted in the effort by completing the northern pasture fence using the newly implemented grazing fee credit program along with their contributed labor. In the fall of 1984, a fence along the lower slope of the mountain area will be completed. In 1985, an intensive management system will be implemented on the Long Valley Allotment.

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Technical Review Team Approach To Wilderness Recommendations

The seventh in a series of success stories from the Modoc/Washoe Experimental Stewardship Program, working to resolve conflicts and improve the rangelands in northeastern California and northwestern Nevada.

On August 4, 1983, an item on the agenda of the Modoc/Washoe Experimental Stewardship Steering Committee meeting read "Wilderness Study Procedures in Surprise Resource Area." Susanville BLM District Manager, Rex Cleary, explained that the Draft Environmental Impact Statement of 13 Wilderness Study Areas in the Surprise and Eagle Lake Resource Areas was due by the end of the year. He expressed concern about the Bureau developing preferred alternatives that would be acceptable.

It was suggested that the Technical Review Teams (TRT's) be used to develop these alternatives and the Stewardship Steering Committee adopted a resolution requesting this approach by the Susanville BLM District Advisory Council (DAC).

Technical Review Teams using the consensus approach to decision making was developed and proven by the Modoc/Washoe Experimental Stewardship Program. The TRT's include all interests involved in conflict resolution studying those conflicts together on the ground where they exist. Consensus requires that everyone agrees with the decisions that are made. This would be the first time the TRT process had been used in a land use issue other than grazing.

It was important that as many interest groups as possible be represented without getting the teams too large. The following groups were approached by the DAC: 1) livestock/adjacent landowners; 2) motorized recreation; 3) BLM; 4) wildlife; 5) wild horses; 6) minerals/energy/utilities; 7) cultural/historical/archaeological; and 8) wilderness/

dispersed recreation. Most team members were asked to represent a large number of interested people. Two separate teams were formed: One to review 7 Wilderness Study Areas (WSA's) in the Stewardship Area, and one to review 6 WSA's in the Eagle Lake Resource Area.

Simply stated, the teams were asked to study and review the wilderness suitability and non-suitability and, if possible, reach consensus on a preferred alternative for the Environmental Impact Statement.

The BLM staff scheduled an orientation meeting where team members had an opportunity to become acquainted and react with each other. Preparation also included a review of wilderness law, wilderness management including interior management, and problem solving techniques. Each team member was supplied with an analysis of the management situation and a Preliminary Draft Environmental Impact Statement.

Teams were taken on helicopter flights to predetermined stops in each WSA where potential resource conflicts were reviewed and discussed. This was followed by hours of round table discussions where each concern was reviewed and each conflict mitigated until consensus on all but one issue was reached.

On June 29, 1984, the DAC received and approved recommendations from both teams. The Susanville District Manager then used those recommendations to develop the preferred alternative in the Wilderness EIS.

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EMERSON PROGRAM

By Gene Jensen

The eighth in a series of success stories from the Modoc/Washoe Experimental Stewardship Program, working to resolve conflicts and improve the rangelands in northeastern California and northwestern Nevada.

Background

Range inspections indicated the capacity to be less than the obligated numbers on the Emerson Allotment. They also revealed several problems related to other resources such as soil movement on steep slopes and degradation of water quality and riparian habitat.

The Term Grazing Permit had been in the family for two generations, and implementation of a reduction program would have been a very unpopular decision, although from a natural resource consideration perhaps the correct one.

Action

Surplus (or unobligated) forage was available on the forest from prime grazing land acquired through a land exchange. Working with the permittees on an

adjacent allotment the Forest Service transferred his permit to the area known as the Triangle Ranch.

The vacated allotment was then added to the Emerson Allotment in 1982 and utilizing the Stewardship Technical Review Team process an Allotment Management Plan was prepared for the combined area that created three grazing areas (or units) and designed a rest rotation system of grazing. This system provides for complete rest in each of the units once every three years and a change in the time of use in the units used so they won't be used the same time each year.

Conclusion

Needed resource protection was achieved and a potential unpleasant conflict was resolved through the use of the Technical Review Team process under the auspices of the Modoc/Washoe Experimental Stewardship Program.

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Wild Horse Experiment

By Jean Snider Schadler

The ninth in a series of success stories from the Modoc/Washoe Experimental Stewardship Program, working to resolve conflicts and improve the rangelands in northeastern California and northwestern Nevada.

Wild, free-roaming horses are a natural resource occurring in the Modoc/Washoe Experimental Stewardship Program Area. The Modoc/Washoe Area produces several hundred horses a year for the BLM Adopt-a-Horse Program. The Area supports 9 herds, ranging in size from 10 to 75 horses. Wild horse management was addressed by the Technical Review Team for every allotment in which horses occur.

But, wild horse management is more than simple herd population control. The adoption demand is for young, healthy horses. The Wild and Free-Roaming Horse and Burro Act established a natural, public goal of healthy, viable horse herds inhabiting a natural habitat on the public rangelands. Resource managers need functional field tested approaches for meeting public and agency horse management directives. The Modoc/Washoe Steering Committee adopted and implemented an on-the-ground experiment comparing three functional management approaches to improve the adoptability of the Wild Free-Roaming Horse, through the BLM Adoption Program, while maintaining a healthy and viable herd on the public rangelands.

The specific items to be compared between each of the three management approaches include:

1. Adoptability of excess wild horses.
2. Effects of inbreeding verses outbreeding.
3. Herd health.
4. Herd viability.
5. Herd manageability, and
6. Herd cost.

Using three existing herds of 50 - 75 head, the experiment uses varying sex ratios, introduction of wild stallions from outside wild herds, removal of varying ages and selection for conformation, type, size color and hoof color to address each of the six comparison items.

Herd One will receive introduced stallions from other wild horse herds. The male to female ratio will be 1 to 2.3. The assumed norm is 1 to 1. Horses four years old and younger will be removed for the Adoption Program. They will be selected for conformation, type, size and color. Herd Two will not receive any introduces stallions, thereby demonstrating the effects of intensive inbreeding. Four year olds and younger will be removed for the adoption program, selected from the base herd for conformation, type and size, but not color. The sex ratio will be maintained at 1 to 2.3. Herd Three will act as the control. Herd population will be maintained by a gate cut, meaning no base herd will be established. Horses will be removed as they are captured, with no selection criteria used. Non-selective removal will indicate the affects of happenstance inbreeding. Sex ratio is expected to remain near 1 to 1.

The experiment is being conducted within BLM's normal horse management procedures, personnel and funds. Data will be recorded and evaluated through the Herd Management Area Plan evaluation process. Conclusions regarding the effectiveness of each management approach will be made as information warrants. An annual report will be made on the operational aspect of the comparison.

The experiment is not scientific. It is designed to benefit resource managers, in the field, who are attempting to improve wild horse management to meet the goals established in the federal legislation.



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Interagency Permit Exchange

by Gene Jensen

The tenth in a series of success stories from the Modoc/Washoe Experimental Stewardship Program, working to resolve conflicts and improve rangelands in northeastern California and northwestern Nevada.

Background

Raymond and Peggy Page held a Forest Service Term Grazing Permit for 126 head of cattle on the Bald Mountain Allotment, Modoc National Forest and also a license by the Bureau of Land Management for 47 head of cattle on the Sand Creek Allotment, Surprise Resource Area.

Joe and Betty Parman held a Forest Service Term Grazing Permit for 35 head of cattle on the Bald Mountain Allotment, Modoc National Forest and also a license by the Bureau of Land Management, Surprise Resource Area.

This resulted in fragmentation of their livestock operations and duplication of permit administration, two billings for grazing fees from the agencies, two permits each, two turnout locations and dates, two off dates, etc.

Action

Raymond Page approached the agencies to see if there was a way to consolidate permittee operations

through the Stewardship Program, as it provides for looking at innovative ways to improve management of the grazing lands.

Because of the advantages to the permittee's as well as the two agencies a permit exchange was made. Joe and Betty Parman now have a license only on the Sand Creek Allotment which consolidates his livestock operations. All of his livestock go on at the same time and come off at the same time.

Raymond and Peggy Page have a small permit on Sand Creek (which is fenced) due to the difference in animal months associated with the original permits but the majority of his livestock now are on one allotment on the Modoc National Forest with one on date and off date.

Conclusion

Even though the authority for this type of transaction was available, it is because of the Modoc-Washoe Experimental Stewardship Program (which is providing the mind-set for looking at new and different ways of doing things) that it happened.

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Monitoring Rangeland Grazing

Wayne Burkhardt, Associate Professor

The eleven in a series of success stories from the Modoc/Washoe Experimental Stewardship Program, working to resolve conflicts and improve rangelands in northeastern California and northwestern Nevada.

Successful management of livestock grazing on Western rangelands is a skill. To develop the skill managers should annually record observations of grazing use and other events affecting the range. This information, referred to as range monitoring, is used to improve future grazing use.

On public lands, the management of grazing is of necessity a joint venture. The livestock manager and the range manager must work together to observe, analyze and adjust range grazing. The absence of working together generally leads to unilateral decisions and subsequent conflicts and appeals. Particularly on public rangelands, yearly observations of event and changes should be recorded in a continuing written record. Such records provide a needed defense for ranchers and agency people who have successfully managed grazing. The absence of such a record provides the opportunity for political and legal interference.

The following outline suggests the kind of information and interpretations needed to effectively manage grazing on rangelands.

Annual Event Monitoring

This involves an assessment of the entire allotment near the end of the grazing season to determine the nature of grazing and other events that occurred during the year. This information should provide answers for three questions: "What kind of grazing use actually occurred on the allotment this year?" "Was it in accordance with the grazing plan?" "What other events occurred that may produce future changes in the range?" The information needed to answer these questions includes:

- (1) Animal Actual Use Record - An accurate number of grazing animals and grazing dates for each field.
- (2) Forage Grazing Use Record - Mapping of grazing use intensity patterns of the allotment, especially problems areas (i.e., areas of obviously insufficient or excessive grazing); and,
- (3) Other Event Record - Any events occurring during the year that may significantly alter vegetation should be noted (i.e., general growing conditions, unusual weather events, fires, and heavy grazing by wildlife, rodents, wild horses, insects, etc.).

Long-Term Trend Monitoring

This involves measuring or documenting changes that occur in important forage or other resource characteristics of the allotment. This record is tied to a few selected sites on the allotment where permanent photo points and/or transects can be used to document changes over time (range trend). Selection of these trend studies should be based on the objectives in the grazing plan. Photopoints and transects might be established to document trend (changes over time) in certain important or undesirable forage species (i.e. changes in the amount of perennial grasses or halogeton on an important livestock use area or the amount of bitterbrush on an important livestock use area or the amount of bitterbrush on an important deer winter range.) These kinds of changes can be credibly documented by the following record:

- (1) Trend Photo Points - This photo record should be taken yearly and should include both a general view of the trend site and a close-up of whatever important resource characteristic is being monitored. This photographic record can be primarily obtained by the livestock manager once the photo locations are established; and,
- (2) Trend Transects - The photographic trend record should be supplemented by period-



ic (3-5 year intervals) samplings or measurements of the resource characteristic being monitored. This transect record should be based on specific grazing plan objectives and should be based on specific grazing plan objectives and should be based on specific grazing plan objectives and should be the responsibility of the range manager once the transect locations are agreed upon.

Interpretation of Monitoring Information

It is important to use monitoring information to effect better grazing management. Two types of interpretations are appropriate. The information gathered from the annual event monitoring should be used each year to make decisions about how grazing will be done next season. The goal should be to assure that grazing distribution, intensity and timing will occur as called for in the grazing plan. Decisions should jointly be made as to how any grazing problem that occurred during the current year can possibly be corrected or avoided next year. Discussion of these problems and their solutions is best accomplished during the allotment ride at the end of each year's grazing season. Open and informed discussions are an absolute necessity to effective grazing management.

The second type of interpretation should be the periodic (3-5 years) review of documented long-term changes (trend) and the determination of the cause of these changes. This type of interpretation

requires a review of the annual record (events) to define or explain why the documented changes occurred. These interpretations of causes and effects make possible an objective evaluation of whether the grazing plan is working or is in need of revision.

The entire process of range monitoring should be a simple and straightforward process jointly accomplished by the livestock manager and the range manager. The field work for most grazing allotments usually requires no more than 1-3 days at the end of the grazing season. This is usually sufficient time to jointly inspect the allotment, record the observations, discuss range events of that season and determine how grazing will be applied next season.

Skillful applications of the monitoring process, by the livestock manager and the range manager, inevitably will result in better management of grazed rangelands. Better grazing management lessens the political opposition of livestock grazing on public lands.

References

"Nevada Rangeland Monitoring Handbook" - a cooperative effort by the SCS, Forest Service, BLM, ARS, and Nevada Range Consultants.

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Developing Resource Management Objectives

by J. Wayne Burkhardt

The twelfth in a series of success stories from the Modoc/Washoe Experimental Stewardship Program, working to resolve conflicts and improve rangelands in California and northwestern Nevada.

This document describes a systematic, analytic process for developing allotment management or resource management objectives in terms of quantifiable characteristics of the vegetative community that will meet or supply land use goals. Trend monitoring can then be designed around those objectives and subsequent interpretation and reporting of management accomplishments becomes a straight-forward output of the properly defined objectives. This approach has been tested at workshops in Susanville and Cedarville and can be laid out as follows:

1. Identify the planning area (e.g., allotment), resource and land-use issues. Based on the identified issues, develop management goals for the planning area. Identification of issues and development of goals can utilize either Coordinated Resource Management (CRMP) or other forms of public input. Goals should be statements such as, "to provide mule deer winter range" or "...antelope fawning range" or "...livestock summer forage" or "...aquatic habitat".
2. Define resource management objectives for the planning area based both upon the land use goals and upon site capabilities. Those objectives should be quantitative statements of the desired plant community or communities which are: 1) *realistically possible* and 2) *which best provide for the accomplishment of the goals*. That vegetation description then becomes the focus of management and the measure of accomplishments on any particular landscape. Development of management objectives requires an inventory or knowledge of the ecological sites present on the planning area. Those sites which have the potential to uniquely provide vegetation favorable to the attainment of a particular goal are aggregated.

The range of possible plant communities for those sites (early to late seral) are identified and the vegetation characteristics within that broader gradient which best provides for a particular goal are described. That description becomes the blue-print for a desired plant community (DPC) which is the basis for a management objective and the focus of management activity on a particular area or landscape. An example of the above described approach might be as follows:

Planning Area - North Mtn.

Land-Use Goal - the CRMP group or TRT agreed that late fall-early winter range for mule deer was an important issue on portions of North Mtn. Therefore, the goal would be to provide late fall-early winter habitat for mule deer in suitable areas of North Mtn.

The inventory of North Mtn. indicates that the deer use area is a collection of several ecological sites all of which support a mountain big sagebrush-antelope bitterbrush community. The following sites have been identified:

Loamy	14-16
stony loamy	12-14
loamy slopes	14-16
loamy bottoms	
stony slopes	

The range of possible vegetation on this aggregate can be expressed as a gradient based on the percent composition of forbs, shrubs, and grasses, all important in deer habitat.

Early	Seral	Gradient	Late	Seral
			←-----DPC----->	
60-80% Grass			60-80%	Shrubs
5-10% Forbs			0-10%	Forbs
0-10% Shrubs			5-10%	Grass

Within that range of possible vegetation from a grassland to a closed shrub stand the vegetation which would be most likely to provide good late fall-early winter mule deer habitat is



represented by the DPC portion of the gradient and could be described as being about 40-80% shrub, 5-10% forbs and 5-40% grass. That description then becomes the management objective expressed in quantitative terms. That objective can be effectively trend monitored.

If the primary management goal has been livestock summer forage, then the DPC would likely have been at the opposite end of the gradient. The livestock description would be 40-80% grass, 5-10% forbs and 0-40% shrubs. It is apparent that if the land use goals had been both mule deer and livestock habitat, then the plant community or habitat that could supply both goals would be a mid seral compromise.

In neither of the two above situations would it have been appropriate to have described the management objective in terms of improving range condition. In the case of mule deer habitat we would likely want to move toward or maintain a lower condition class. In the case of the livestock forage goal management would likely be toward higher condition class. However, stating objectives in terms of condition class (an abstraction) obscures the real attribute of the vegetative community (structure and species composition) that creates unique habitat and that can be managed.

3. Develop a management or activity plan. Such a plan would be the traditional one detailing how grazing would be conducted or what other method would be used to manage the vegetation to achieve or maintain the DPC.

4. Develop a monitoring plan which would detail how events which occurred on the planning area would be recorded and how longterm accomplishment of the objectives would be measured.
5. Evaluate and report on progress. Evaluation would involve the periodic assessment of monitoring information to identify changes, as they occurred, in the nature of the vegetation resource. Evaluation would also include looking at the events that probably produced the changes. The changes would then be compared to the management objectives to evaluate the success of management. Reporting could be in the following term:

Management On Target

Present plant community is within limits of the DPC and trend is stable or toward DPC.

Management Off Target But Acceptable

Present plant community is within the limits of the DPC and trend is stable or toward DPC.

Management On Target and Unacceptable

Present plant community within DPC but trend away from DPC.

The Modoc-Washoe Stewardship Committee is one of three such Committees mandated by Congress to explore new ways to improve the public rangelands. For information, write ESP, P.O. Box 1090, Susanville, CA 91630.



Testing Objectives A Seven Step Process

by Banky Curtis

The thirteenth in a series of success stories from the Modoc/Washoe Experimental Stewardship Program, working to resolve conflicts and improve rangelands in northeastern California and northwestern Nevada.

"Setting objectives and monitoring progress" seems like a very basic part of every program and yet it often is neglected or poorly done. Since its inception, the Stewardship Committee has "hammered out" a series of new allotment management plans with significant improvements for resource management.

As the time came for a review of those plans to see how things were progressing, it was soon apparent that the original objectives were not clear and that it was often difficult to determine how well they'd been met. Often objectives were vague like "improve livestock production" or hard to measure like "create additional deer fawning areas".

To resolve this issue the goals and objectives subcommittee developed what has come to be known as the Seven Step Program. As objectives are being developed, they are subjected to the "seven-step process" to assure clarity, attainability and acceptability.

The seven step process is summarized as follows:

1. State the objective in *clear terms*.
2. State a time frame or series of time frames in which the objective is to be accomplished.
3. State the *rationale* that *leads* to the objective.
4. State the *action* to meet the objective.
5. State how the objective will be measured (*by whom, how often, using what technique, ect.*).

6. State *what equals success* for the objective.
7. Test to be sure that our objectives are compatible and that there are no conflicts between objectives.

Use of this process has had several beneficial impacts. As various interest groups discuss objectives it helps them clarify what they are really striving for and makes it possible for people of different backgrounds to see the "same objective". Most of all the process makes the monitoring of progress not only possible but rather straight forward.

How many times have we been in meetings and solved a very complex controversial problem by agreeing on a compromise action only to find that as that compromise was implemented there were different opinions on what that compromise really was. Terms like "made a significant improvement in riparian habitat" mean different things to different people. Using the seven step process has changed "make a significant improvement in riparian habitat" to items like a specific change in water temperature or increase the percentage composition of willow along a stream.

This system has improved the objective writing process and has changed our monitoring program from one that was time consuming and confusing to one that is efficient and relatively clear. Efforts are now being made to hold workshops to train appropriate personnel in how to use the "seven step process" to write good objectives.

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