

Objectives in Monitoring

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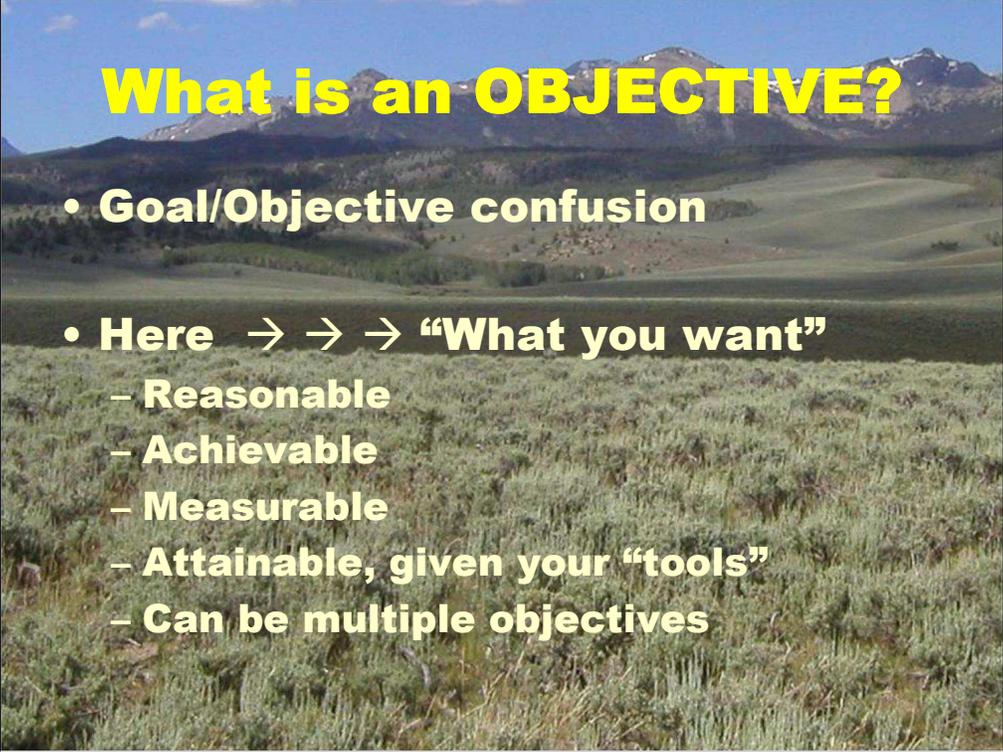




Motivation/Interest

- **Demonstrate stewardship**
- **CYA**
- **Justifying Range Program**
- **Insurance program**

- **Don't confuse motivation with range management objectives**

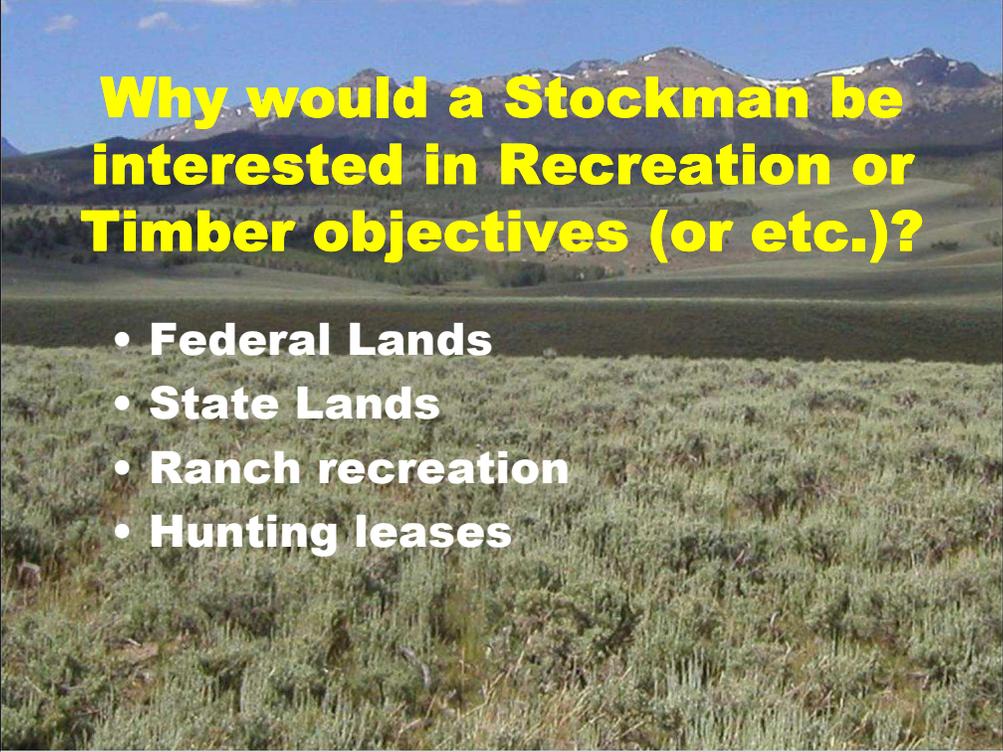


What is an OBJECTIVE?

- **Goal/Objective confusion**
- **Here → → → “What you want”**
 - **Reasonable**
 - **Achievable**
 - **Measurable**
 - **Attainable, given your “tools”**
 - **Can be multiple objectives**

“Objects” of Objectives

- **Animal Use**
 - Livestock
 - Wildlife
- **Recreation**
- **Watershed**
- **Visual**
- **Timber**
- **Others????**
- **Fulfillment of Ranch plan**
- **Financial sustainability**
- **Economic Unit**
- **Family issues**
- **Cattle use patterns**



Why would a Stockman be interested in Recreation or Timber objectives (or etc.)?

- **Federal Lands**
- **State Lands**
- **Ranch recreation**
- **Hunting leases**



Partner interests

- **Agency represents interests/values from Land Management Plan**
- **Multiple use**
 - **Every use, every acre?**



In the development of a Cooperative Permittee Monitoring program, the absolutely most important component is the close coordination of permittee and agency professional. Without this coordination, neither party will understand why any monitoring is being done. Without cooperation, there will be resistance on the part of both parties, and there will be reluctance to defend the results of the monitoring research if faced with challenge. The data gleaned from the monitoring studies must be defensible. To achieve this, there must be training adequate to assure the validity of the data, and in many cases there must be provisions for quality control. Finally, if the monitoring plan (including the development of objectives, selection of methodology, etc) hasn't been jointly developed and practices by the range specialist and permittee, the data doesn't go into the official allotment files.

The success of a cooperative monitoring program revolves around the development of clear objectives for the monitoring which everyone understands and agrees to. They must be achievable, and they must be objectives which the permittee has the ability to affect via the management of grazing.

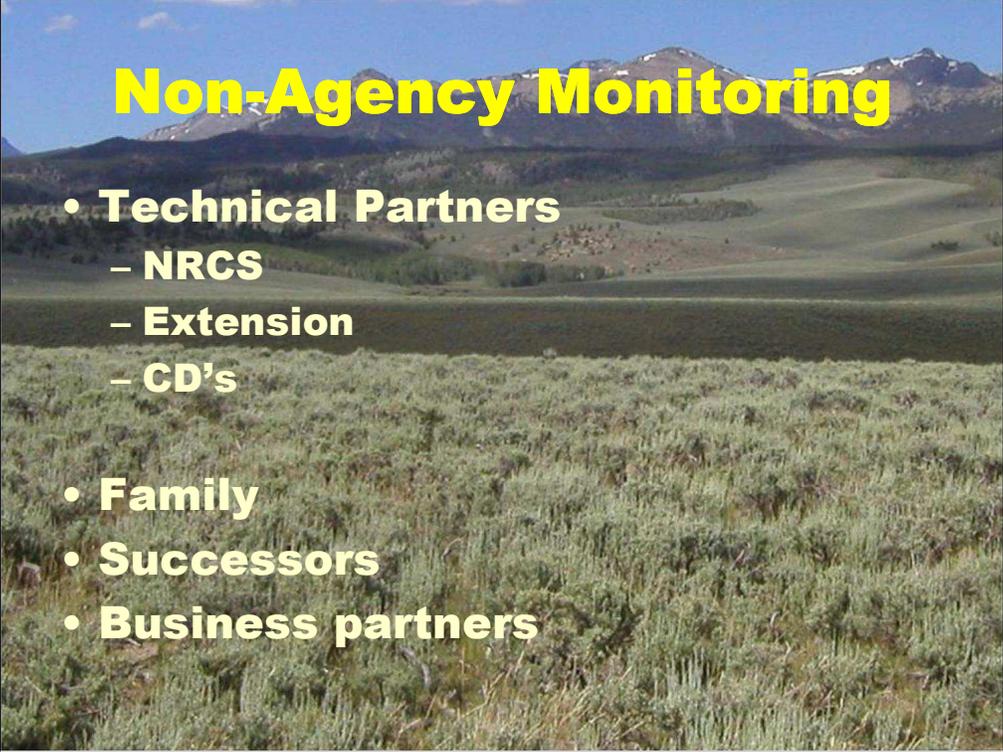
It is extremely important to understand and acknowledge that an agency professional and a permittee live in different worlds, react to different pressures, and have different level of investment in the grazing program. We need to be careful to understand that often agency professionals feel pressure to look at range assessment and inventory issues and other driving forces emanating from within the agency. Meanwhile a grazer is compelled by his need to maintain a financially viable operation. The agency professional has to manage within regulations, land planning documents, their training and experience.

Meanwhile, the permittee has the management of the animals who graze. The agency professional isn't likely to feel much compulsion to adopt cowman objectives like 550 pound weaning weights. Neither is a grazer going to be motivated by a statement dealing with recreational user days.

The point is, both parties have different perspectives, but there is common ground where common objectives thrive. The management which can achieve these objectives can be defined, and uncomplicated research which measure the progress or achievement of these objectives can be prescribed through agreement between each other.

If both parties cannot support and contribute to monitoring and achieving a monitoring objective, then we need to think hard about that objective's appropriateness in a monitoring program.

Furthermore, the close collaboration of agency personnel and permittees must continue well beyond the setting of objectives. There needs to be lots of hand holding, particularly in the beginning. Grazers will be tentative about issues revolving around monitoring methodology. They will feel vulnerable when it comes to their understanding of ecological processes. On the other hand, agency professionals will be vulnerable in their knowledge of cattle management practices, animal behavior, and many of the other issues which a producer probably grew up understanding.



Non-Agency Monitoring

- **Technical Partners**
 - **NRCS**
 - **Extension**
 - **CD's**
- **Family**
- **Successors**
- **Business partners**



There are several things which need to be accomplished at the meeting.

First, it is important that every individual involved say, out loud, verbally, in front of each other, their commitment to stewardship of the land and support for involvement in CPM. This is the first place where everyone can come to agreement and begin to see that they can have a common goal. Don't skip it or simply take it for granted. It is important that everyone think about why they are there and make that verbal statement in front of everyone else.

After signaling commitment to the resource and support for involvement in a collaborative monitoring program, it is appropriate that the agenda include time to discuss both agency and permittee needs, their issues and concerns peculiar to the permit. This is an opportunity to get things out on the table, and it is important that everyone show their cards. This might be the time for the involvement of a resource skilled in group development. It is the tough stuff. Give it time and don't move on too quickly. And, this important step should help everyone understand why you don't want NEPA adversaries involved!

After that, things get easier. Spreading allotment maps on the table and talking about cattle movements and preferences, and agency interests or concerns begin the process of designing the program. It is a natural progression to begin to talk about what kinds of characters would describe key areas.

It is also extremely useful to review the current allotment file and talk about the studies that the agency may have underway. Some of them may be readily integrated into the monitoring program. Others may not.

And finally, talk about a tour. Particularly the timing of the tour. The tour just cannot happen any old time. It needs to be integrated into the cattle movement and use pattern. And it needs to be scheduled well enough in advance to protect schedules



The design of each and every monitoring program will differ. In fact, the monitoring program in each pasture might be different. The design of the program must be in response to the monitoring objectives. They are the first job, and they must be set in cooperation with the agency professional you are working with. This is why it is so very important for the agency manager and the permittee to have talked quite a bit about what they would like to accomplish. Once there is agreement upon what should occur, then it becomes much simpler to make it through the difficult task of writing good, complete objectives. It's important to remember that each and every bit of monitoring that is installed should be in support of an objective. Selecting the actual monitoring methodology is really quite simple after that, because the objective will determine the type of data needed, and the type of data needed guides you to the actual procedure you'll employ.

It's important that the objective be written and saved for future reference. You must be able to remind yourself of why you are doing this monitoring, why you are employing the grazing strategies that you have implemented, be able to evaluate those strategies, and know if you are moving toward the objective that you set for yourself



CPM monitoring MUST be Objective driven. And the objectives must be something that a permittee can affect via the management of livestock grazing. If permittee and agency cannot support an objective within the framework of their obligations, then it has no business as a CPM objective.

Methodologies must pass three tests. Of course they must be reliable and valid. The important test is that the methodology be do-able after limited training. The method must not require any sophisticated expertise. Any method which requires any but the most basic of taxonomic or statistical skills will not pass the KISS test. Ranchers don't expect range specialists to know how to balance rations, and specialists don't expect ranchers to do a nested frequency. A little bit of training, however, will find specialists segregating forages from concentrates and ranchers segregating grasses from forbs.

Monitoring is important. It needs to be scheduled. For the ranchers in the audience, we should ask if monitoring should be treated any different than preg. checking? It has to happen in a certain time window and you'll be working with another professional who has a busy schedule during that critical time window. Schedule it!

Finally, it requires some bookwork in order fulfill our intent to make the data permanent. We will talk in greater detail about this later.



Origination of Objectives

- **Nexus of planning and management**
 - **Land Use Plan**
 - **Issues**
 - **Concerns**
 - **Management**
 - **Altruism**



Objectives are often the elusive element of Monitoring programs. There is an awful lot of monitoring which is done without; 1) Clearly defined objectives, or 2) Clear recall of specific objectives.

It is easier to run out there and pound some stakes, but this thinking needs to be done first and it is a logical process.

First there must be some sort of a concern or interest. Without some impetus for establishing monitoring, then you are simply out there for practice. From that concern one can rationally set together and craft an objective. What would you hope to accomplish there on that rangeland. More, less, same. Of what?

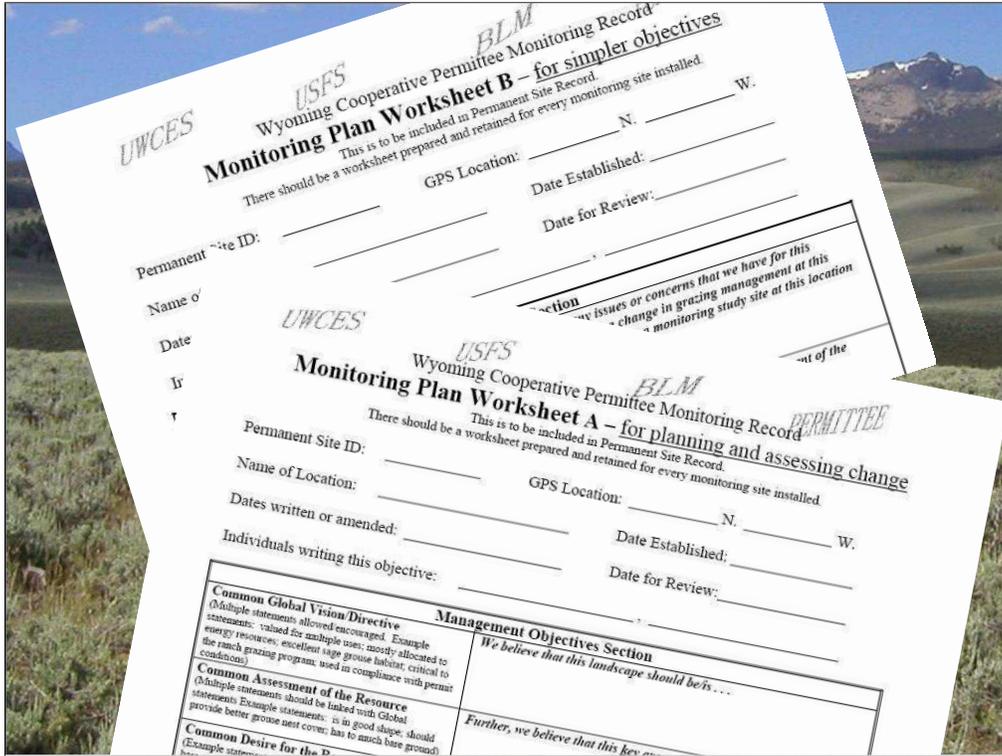
How can you accomplish that through the management of cattle. If you cannot – move on to some other concern or interest.

So, if you have an objective that can be affected via livestock management, what would you expect that outcome to be? More, less, same; of what.

How can you tell that your management is having an effect. What plant community characteristic out there will provide a clear indication of that status. Isn't that indicator readily interpreted in data? What would that data be?

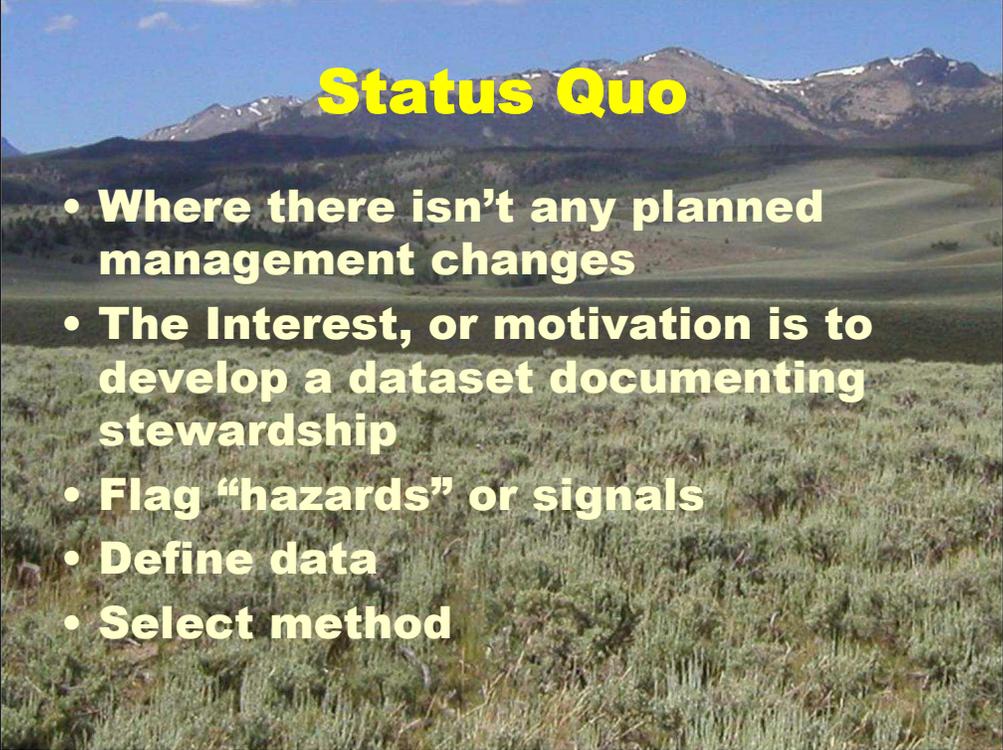
Finally, what KISS methodology quickly, easily and efficiently yields that data?

Fill in all the blanks and viola! – you have a monitoring plan.



It is useful to employ a worksheet to work through the logic process and capture - in writing - the particulars of the monitoring objective and monitoring plan for a site. This baby goes into the permanent file!

The objective is to be – no - MUST be written by the principals. Permittee and Specialist together. It probably ought to be done in the field. And it most certainly needs to be done prior to pounding stakes. It leads the writers through the thinking process which we just talked about on the prior slide.



Status Quo

- **Where there isn't any planned management changes**
- **The Interest, or motivation is to develop a dataset documenting stewardship**
- **Flag "hazards" or signals**
- **Define data**
- **Select method**

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PERMITTEE

Wyoming Cooperative Permittee Monitoring Record

Monitoring Plan Worksheet B – for simpler objectives

This is to be included in Permanent Site Record.

There should be a worksheet prepared and retained for every monitoring site installed.

Permanent Site ID: _____ GPS Location: _____ N. _____ W.

Name of Location: _____ Date Established: _____

Dates written or amended: _____ Date for Review: _____

Individuals writing this objective: _____ , _____

Objectives Section	
<p>The reason for this monitoring study Examples of statements refining the statement: ... document longstanding stewardship. ... gather baseline information on the resource. ... gather information documenting compliance with permit terms and conditions. ... gather information assisting in grazing program scheduling.</p>	<p><i>We believe that any issues or concerns that we have for this landscape do not warrant a change in grazing management at this time. Our interest in installing a monitoring study site at this location is to...</i></p>
<p>Threats/hazards/emerging issues Examples of statements refining the statement: ... perceptions of overuse. ... complaints about streambanks. ... drought and attendant reductions in stocking rates.</p>	<p><i>Things which could become important to the management of the grazing program on this landscape might include...</i></p>
<p>What do you want continue to achieve Examples of statements refining the statement: ... maintain the current state. ... assure adequate watershed (erosion) protection. ... maintain forage production/quality & weight gains.</p>	<p><i>We have agreed that we want to...</i></p>

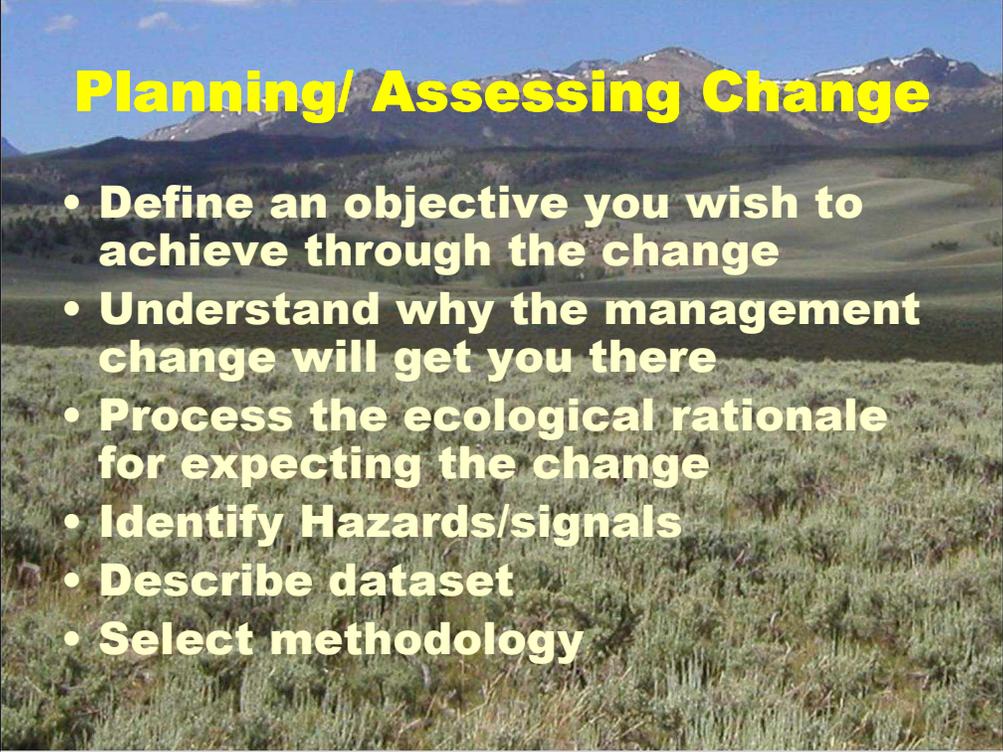
Management Strategy Section



Objectives Section	
	<i>We believe that any issues or concerns that we have for this landscape do not warrant a change in grazing management at this time. Our interest in installing a monitoring study site at this location is to....</i>
	<i>Things which could become important to the management of the grazing program on this landscape might include. . .</i>
	<i>We have agreed that we want to . . .</i>



	Management Strategy Section
	<i>The grazing management strategies that have resulted in the state of this rangeland have been. . .</i>
	<i>If things were to begin to come apart under current grazing management strategies, the first indicator would likely be. . .</i>
	Monitoring Methodology Section
	<i>This is a <u>key area</u> because. . .</i>
	<i>The data which will be gathered is . . .</i>
	<i>The methodology employed to generate required data, and the time and frequency of data collection will be. . .</i>



Planning/ Assessing Change

- **Define an objective you wish to achieve through the change**
- **Understand why the management change will get you there**
- **Process the ecological rationale for expecting the change**
- **Identify Hazards/signals**
- **Describe dataset**
- **Select methodology**

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PERMITTEE

Wyoming Cooperative Permittee Monitoring Record

Monitoring Plan Worksheet A – for planning and assessing change

This is to be included in Permanent Site Record.

There should be a worksheet prepared and retained for every monitoring site installed.

Permanent Site ID: _____ GPS Location: _____ N. _____ W.

Name of Location: _____ Date Established: _____

Dates written or amended: _____ Date for Review: _____

Individuals writing this objective: _____ , _____

Management Objectives Section	
Common Global Vision/Directive (Multiple statements allowed/encouraged. Example statements: valued for multiple uses; mostly allocated to energy resources; excellent sage grouse habitat; critical to the ranch grazing program; used in compliance with permit conditions)	<i>We believe that this landscape should be/is . . .</i>
Common Assessment of the Resource (Multiple statements should be linked with Global statements. Example statements: is in good shape; should provide better grouse nest cover; has too much bare ground)	<i>Further, we believe that this key area . . .</i>
Common Desire for the Resource (Example statements: maintain the current state; decrease bare ground; increase forage production/quality; increase forb diversity)	<i>We have agreed that we want to . . .</i>



Management Objectives Section

We believe that this landscape should be/is . . .

Further, we believe that this key area . . .

We have agreed that we want to . . .



Management Strategy Section

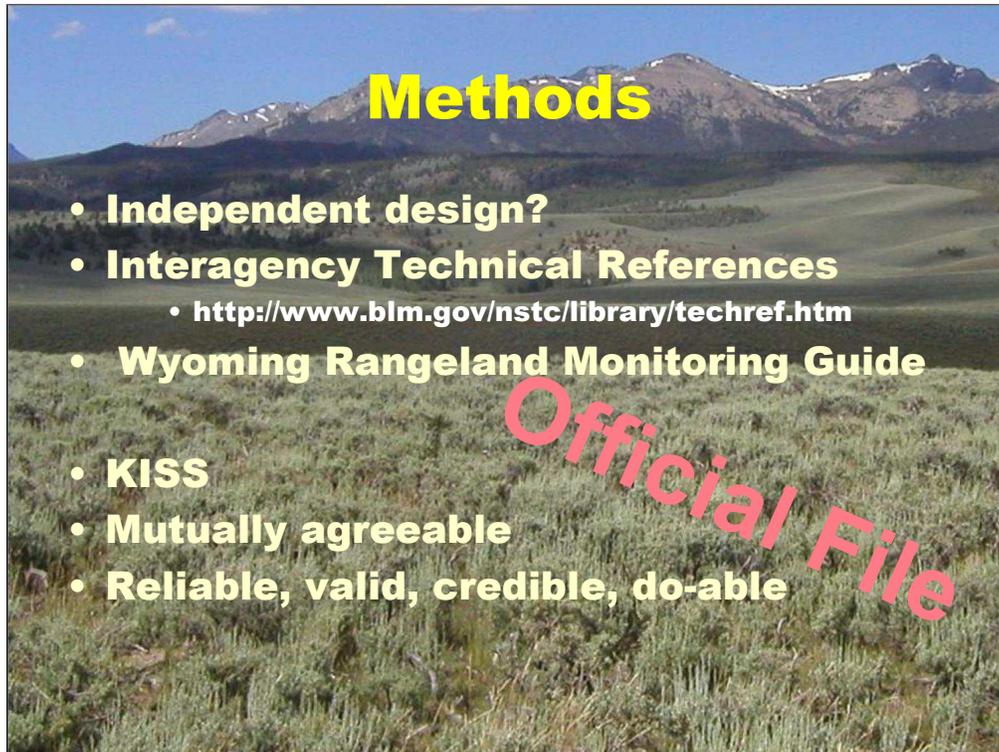
Some management strategies that the grazing program can employ to accomplish the things we desire are . . .

This strategy will . . .

The system will deliver this outcome because . . .

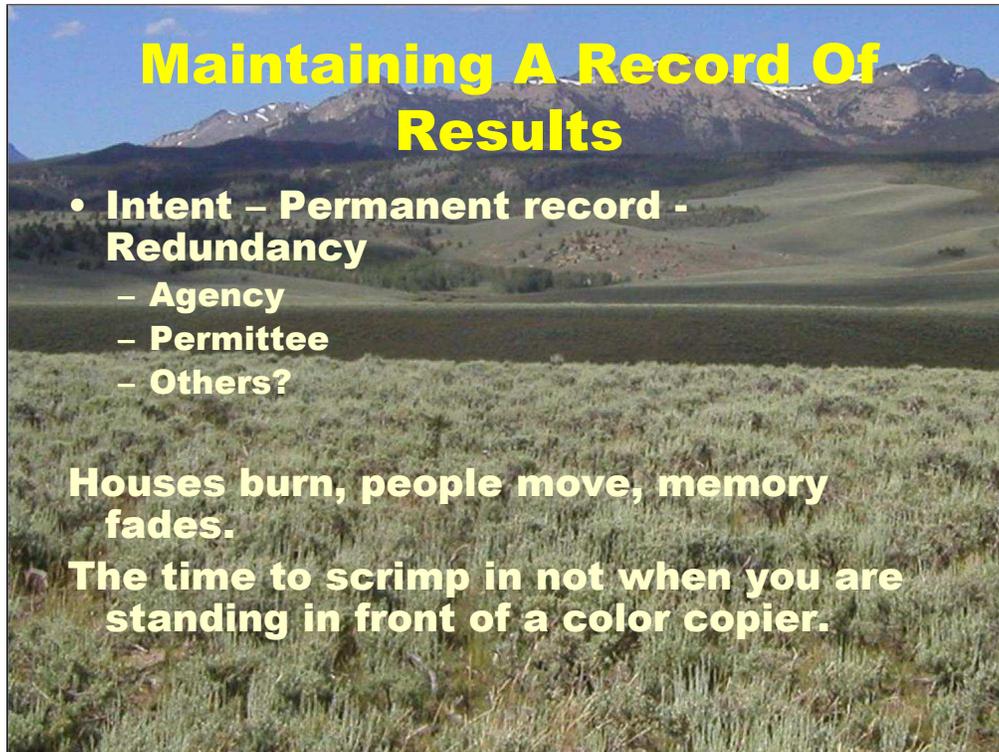
We would anticipate seeing results in our data . . .

Monitoring Methodology Section
<i>Data results which will monitor for the desired outcome are . . .</i>
<i>The methodology employed to generate required data, and the time and frequency of data collection will be. . .</i>



In addition to the methodologies described in CPM workshops, there are many more monitoring methods which may find particular applicability when developing documentation in support of an objective. There are many described in Interagency Technical References (“Utilization Studies and Residual Measurements” or “Sampling Vegetation Attributes”, available at <http://www.blm.gov/nstc/library/techref.htm>), and your range specialist may suggest methodologies which are favorites. In any event, in the selection of a monitoring protocol, remember these important points:

1. The protocol must be agreed upon by both parties
2. The protocol must be within the ability of either party to repeat with the full confidence of the other.
3. The protocol must generate data or documentation which clearly supports the objective for the monitoring.
4. The protocol must be generally accepted as valid and reliable in order for the data to be credible to any party and earn a place in official files.



All of this monitoring is nothing but recreation if there isn't a complete record available. The monitoring record might take any form, but should include several items. It is advisable that there be several copies of the monitoring record made and distributed to key people or locations. At minimum, there must be copies of the record made for the agency and the permittee. In reality, houses burn, people move on in careers, and other events can happen which threaten the intent that the monitoring record be permanent.

Most monitoring records will contain a substantial number of color photographs. Most towns have a place which can produce high quality color copies. Initially it may seem that color copies are expensive, but it is important to keep in mind the fact that much more is invested in gathering, recording and assembling the data. The color copy machine is not the time to turn frugal! In most instances, your county extension agent will be thrilled to have a copy of the monitoring record for two reasons. One, they can serve as another repository of the record in the event that the other copies of the record are lost, and secondly, they would be happy to have a copy of the monitoring record to show others the fine job you are doing and to encourage others to follow in your footsteps.



Thanks!

