STEVENS: Hi. We'd like to welcome you to species and vegetation planning course overview. My name is Katie Stevens.

I'm a planning coordinator with Montana BLM. And we just wanted to welcome you to this training today.

I became involved with this training because I review a lot of land use plans both in my state and in other states. And so I'm always looking for opportunities to help specialists make the plans effective for them. And that's really what we want to help you do with this training course.

But before I go too much further down that road, I'd like to ask my co-instructor to introduce herself.

WARD: Thanks, Katie.

Hi, I'm Joni Ward. I'm the deputy director of science for the Nature Conservancy.

And I'm here with Katie today because my organization over the course of the last 15 years or so has developed a highly effective regional planning technique and we believe that many aspects of the Nature Conservancy's techniques are directly applicable to the work and the planning that you all do here at the BLM.

And so myself and several other Nature Conservancy colleagues have been working with Katie and

other BLM staff over the past year to develop the course curriculum for this course that you are about to take.

STEVENS: We've actually spent a lot of time working with Joni and the other Nature Conservancy staff. And we're excited about this training.

We think that the benefit to BLM from this training will be more consistent documentation, greater clarity of the administrative record. And we also think there's some really great opportunities to just facilitate better informed planning decisions and ultimately improve the quality of the planning decisions that we have in our RMPs.

So to kick this off, I'd just like to share our overall course objective with you. And that's to assist BLM planning teams in incorporating biological information for vegetation, special status and other priority species into our updated RMPs.

Joni, would you like to go over the outline of the course?

WARD: Sure. So the format for the course is going to be a combination of both distance learning and on-site training.

Many aspects of the course will be available to you, like today's presentation, through the BLM training

center's online website, and we will combine this with a week of intensive training that will take place on site at a BLM field office.

So just as a friendly reminder, there are several prerequisites that you should have already completed before viewing this presentation today. And they include Planning, Nuts and Bolts. Planning Concepts is the second prerequisite. And then in addition to that, you should have already viewed the session that describes the knowledge that you need to have before starting this course.

And so the other distance learning aspects of this course are the overview that you're watching today. And then there's another training module, Gathering Key Guidance, Direction, and Resources. And there will be a homework assignment associated with that online training.

And there's two additional online trainings. One is the Planning Area Overview and the other is one that I will teach, Selecting Priority Species and Vegetation.

And in the case of the Planning Area Overview, as well as Selecting Priority Species and Vegetation, you will have a brief homework assignment associated with each one of those. And the purpose of those homework assignments is to prepare you so that you can get the best use of the time

that you'll spend during that one week of training on site.

STEVENS: During that one week of training, you'll be coming together with other BLM specialists and working together to go through the information and learn how to identify the topics we're going to be covering.

Those topics that you'll be working together on are, Identifying Priority Species and Vegetation; Describing Current and Desired Condition; Identifying Restoration Opportunities; and Identifying Management and Restrictions Where Needed; and also, Introducing the Monitoring Framework Methodology.

Our key focus, though, right now on this online module is to introduce the planning steps to you in a broad overview type of way and to tie them to the BLM planning requirements so you can understand where you're headed during the other elements of the training.

Joni, would you like to describe the methods we're going to go through?

WARD: Sure. So, during the past 20 years, a systematic planning approach has been developed within the discipline of conservation biology, and the goal of that planning approach is to sustain the plants and animal communities found throughout the landscape.

During this course you're going to learn how to

implement each step of the systematic planning approach. And what we're going to do today is describe that, each step briefly, and show how completion of those steps will help you with the revision of your resource management plans.

And so when undertaking the revision of a resource management plan, like you are, or any other kind of regional planning approach, the first step is to identify priority species and vegetation that characterize your landscape.

Once you understand what you're planning for, those priority species and vegetation, then you need to describe their health or current condition.

Once you understand current condition of those priority species and vegetation, then you need to identify those factors that could be impacting their health. And it's important to understand the underlying causal factors that could be impacting health so that you can develop effective management strategies that will either maintain priority species and vegetation health or improve it.

And then finally, by taking all of these first four steps, the last step is to formulate a monitoring plan that will help you evaluate the effectiveness of your management strategies and be able to continue to monitor

the health of your priority species and vegetation.

And so returning now to the first step that we're going to discuss in a bit more detail, identifying priority species and vegetation, Katie, what does the BLM planning requirement say about this step?

STEVENS: Our planning guidance directs us to identify priority species and vegetation, and those usually include habitats or populations that are significant for something like size, density, diversity, remnant character or age, in addition to our special status species.

In session 2, we're going to help you gather resources for those species to prepare you for the on-site session and then also just to use in your land use plan.

But before we get there, Joni's going to explain how we're going to walk through this process of identifying priority species and vegetation.

WARD: Well, I'm not going to give a lot of detail today other than to let you know I will be teaching another online training module that you will take where we will go in great detail about how to select priority species and vegetation.

And the primary point of that training will be that it's not possible for you to plan for every single species or priority vegetation type that occurs within your

planning area. And so what we'll do is learn some techniques that will enable you to select a subset of representative species, as well as vegetation types, that will make it possible for you to prioritize your management strategies.

And so during this course you will also learn how to use a planning tool that runs in Microsoft Excel. And you're looking at a screen shot of the home page of that planning tool right now.

So for example, those four species and vegetation types listed there are the priority species and vegetation types for this particular example.

And this tool will be very helpful to you. You will continue to see screen shots during our presentation today. We think it will be very valuable because it will allow you to capture in one place all of your documentation about the biological resources that are you planning for. So it will be very transparent why you chose the species that you did and why you came to the conclusions that you did in the preliminary aspects of your management plan.

So returning once again to our five basic planning steps, once we identify our priority species and vegetation, the next thing that we need to do is describe their health. And once again, the BLM does offer specific

guidance about this, as well.

STEVENS: There are several places in your planning effort where you're going to have to explain current condition or health of your resources.

The first place is the analysis of the management situation. And the reason that's important is that you pair that understanding of current condition with your knowledge about what resource management is being applied so that you can understand whether that management is adequate for your resource or not.

That's really important because eventually when you start working with your interdisciplinary team, you're going to be trying to hone in on areas where there is an opportunity to improve management. That becomes the foundation for your RMP alternatives.

So to prepare you to identify desired future condition, you first have to understand the current condition. And Joni's going to take us the process of establishing that.

WARD: Thanks, Katie.

So we understand that you are required to describe current condition for your priority species and communities. Well, how do you go about doing that?

The first step in describing health or current

condition is to select key attributes for each priority species and vegetation type.

Key attributes are simply those aspects of species or vegetation that must be present and properly functioning in order for that species or vegetation type to be sustained through time.

And what you're looking at now on the slide are some examples of key attributes for the greater sage grouse, a species that many of you will need to consider in your resource management plans.

And the second step in determining the current condition for your priority species and vegetation types is to identify measurable indicators of your key ecological attributes.

And again, using the greater sage grouse as an example, this slide shows one indicator identified for every key attribute. And proper identification of indicators is important for two reasons.

First, indicators are what you actually rate and measure in order to determine current condition.

And second, indicators can be used later on to develop an effective monitoring plan.

So what you're looking at now is a screen shot from the planning tool that I described to you just a

moment ago. And within the planning tool, as you identify your priority species, your key attributes and indicators, this information is automatically populated in the work book which is what you're viewing now. And that creates almost, that creates your monitoring plan from that information.

And I'll return back to this point later on in our presentation.

So back to assessing current condition. Once your key attributes have been identified and you've determined a measurable indicator, then have you to assess current condition. And to understand how the current condition of an indicator is rated, we need to understand the concept of acceptable range of variation.

Describing the acceptable range of variation is done through understanding the historical or natural range variability for those indicators that you're measuring. Now, it is true that sometimes a historic range of variability simply won't be known. In that case, you're going to have rely on expert opinion, perhaps computer generated models, but it will be up to you to find the information to determine what that acceptable range of variation is.

And so this graph represents an indicator such as

average fire size measured. And average fire size that is within the dotted lines is considered within the acceptable range of variation.

Much larger or much smaller average fire size trends outside of that acceptable range.

And so indicators that are well within the acceptable range of variation and really require no or very little active management could keep them there are rated as very good. Those indicators that may require some active management in order to keep them within that acceptable range of variation are rated as good.

And then as you start to trend outside of the acceptable range of variation, the rating drops to fair an then finally, those indicators that are so far outside the acceptable range of variation that it may be extremely difficult or just too costly to restore them, they're rated as poor.

So if we return to the graph I showed you just a moment ago, those indicators that fall within these two dashed lined are either very good or good, that's their rating.

And then as you start to trend outside of those dotted lines, you get a fair rating. And then finally farther out, you get a poor rating.

And so thinking ahead to desired conditions, generally for priority species and vegetation, you want to develop management strategies that will maintain your priority species and communities in that good or very good status or develop management strategies that will help improve their current condition from perhaps fair to good.

And so again, looking at the planning tool that you will learn how to use, what we're seeing here is a screen shot that shows our priority species, the key attributes and indicators, as well as a description of the different ratings from poor to very good.

Now, the blue cells that you can see in this screen shot show that there are comments inserted to the planning tool and this is very valuable because it will be readily apparent to anybody who looks at your planning tool why you selected the species that you did, the key attributes, the indicators and what data you used to determine that current indicator rating.

So now that we know the current condition of our priority species, the next step is to identify those factors that could be impacting their health. And there are two steps that are required to understanding impacts to the health of priority species and vegetation.

The first is to identify altered key attributes,

and the second is to identify the underlying source of those altered key attributes. Keep in mind when I say key attributes, I'm referring to those key attributes that we identified that are so important to those priority species and vegetation types.

And so Katie, how does this analysis of identifying altered attributes and the sources of those alterations relate to BLM planning requirements?

STEVENS: Well, Joni, those who have worked on NEPA projects before are probably going to recognize the term impact analysis.

When we explain this, though, it's probably going to feel a little bit different because we're going to ask you to do it slightly earlier in the process, supported by the BLM planning tool that we showed you earlier, and we're going to ask you to use it to come up with an understanding of where there is need for change.

That's a key component of your analysis in the management situation, the idea that you understand where there's a need for change, what the management opportunities are for improving that management and you start to think about things like restoration needs to meet land health standards. That's information, as Joni said, out of the process of identifying altered attributes.

The second step in the impact analysis that we're talking about is to identify sources of altered attributes. That's those activities are perhaps causing the impacts. This is really key because it helps you identify where uses should be allowed, restricted or prohibited. It helps you identify management actions, those proactive things we can do to improve protection of resources or initiate restoration projects.

This is also really important because there are a lot of places where our management is in good shape and we have been doing a great job over the last 20 years of managing our resources. It's important for us to understand that we don't always need to change management, there are some places where existing management is fine.

Looking at the process we're going to walk you through, the next step after understanding what your current condition is and where there's some issues with that, is developing strategies to maintain or improve health for the RMP alternatives.

What we have been talking about so far is focused on what you might think of as the no action alternative. You've been working, hearing about identifying priority species and habitats, describing their health and identifying factors affecting their health. All this gives

us an idea of where we have opportunities to improve management.

I'm going to go back to the planning tool that we were looking at before. And ask Joni if she wouldn't mind walking us through this and helping us understand what it's telling us.

WARD: Sure, Katie. So what we're looking at here is a summary table of health or current condition for your priority species and vegetation types. Those priority species and vegetation are listed in the far left column.

Then the three middle columns are a calculated rating of current condition for each one of your priority species and vegetation.

And then finally, probably the most important thing to look at on these summary tables is the far right column, which is an overall summary of health or current condition for each one of the priority species or communities.

STEVENS: When we get to the on site training, you're going to learn how to enter this information into the workbook such that it works like this. What you'll probably notice, just looking at the screen, is the areas where poor stands out to you, maybe there's a condition of something that's in fair and your preference would be that

that's in good condition. This is a way to understand current condition and really look at where you have opportunities to improve management.

WARD: And so there's also a second summary table that can be helpful, as well. And what we're looking at here is the summary table of impacts.

And so the impacts across your planning area in this case are shown on the far left column. And then as you go to the right, each column captures the information for each priority species or vegetation type.

And there's also a couple key summary calculations that are done here that could also be helpful to you in thinking about management strategies.

So the first is that impacts for a priority species or community are essentially calculated across the planning area. And so, for example, the desert shrub land overall impact rating is high. And the overall impact rating across the planning area for sage brush shrub land is very high. And I'm getting that information from the bottom row of this table.

There's another summary, piece of information here in the table and that is the overall rating for each impact and that's shown on the far right column.

So for example, invasive and alien species have

an overall impact rating across the planning area of high. And that's because they have a greater impact on more priority species and vegetation types than, say, for example, fire suppression which has an overall rating across the planning area of medium.

STEVENS: And again, we'll go into much greater detail on this when we actually meet with you in the on site version. But for now, what we wanted you to notice is that there are ways to see, similar to the current condition workbook, where your impacts might cause you to focus in on a change being needed.

In this case, the information on the sage brush shrub land showing up as a very high impact, that's something that you might focus attention on. But it's also important to look at the overall impact as Joni was just describing. The key point here, though, is that thinking about current condition and where there are impacts going on will help you come up with a list of known needed changes.

In looking at our planning guidance, we're really getting into the area of devising alternatives. And looking into our planning handbook, there's two main pieces of planning alternatives.

The first and over arching one is desired

condition. Now this includes both goals and objectives. And typically we think of goals as being those really broad statements that probably apply to all alternatives.

But when you get down to the level of objectives, we're finding more specific information that identifies the desired outcomes. Kind of sets those marching orders for you and identifies where you want to head.

So the planning handbook breaks that down by resource. The resources we're interested in are primarily vegetation, fish and wildlife and special status species.

So our planning guidance tells us that we should be looking at desired outcomes for vegetation. That might include things like are which vegetation structure we're looking for, which mix of riparian and upland conditions we want, and how that should be oriented across the landscape and what sort of features we need in our vegetation communities to provide habitat for fish and wildlife, as well as forage for livestock.

The fish and wildlife desired outcomes include identification of ecologically important areas, scarce or unique habitats. Maybe identifying where there's a comprehensive strategy in place that sets some sort of important desired outcome for a certain landscape and similarly for special status species we're really looking

for those things that set some sort of marching orders for us.

For special status species it becomes more important because there's often recovery plans or conservation strategies for these species. But again, it's things like habitats that might be very important for a certain species, ecologically important areas, unique areas, scarce habitats and what we want those habitats to be in.

The second important piece of strategies for RMP alternatives are the management actions that may be needed and how we should think about the uses that are occurring on BLM lands in terms of whether they should be allowed, restricted or prohibited in certain areas to provide for the on conservation we're trying to achieve.

Again, the planning handbook breaks it out by vegetation, fish and wildlife, special status species. And with the management actions, we're looking for those proactive measures that can be taken to improve vegetation or habitat conditions and reach those desired outcomes.

With special status species, it's again a bit more critical but we're looking for the actions and restrictions that we can apply to either enhance or prevent avoidable loss of habitat or to act as a reasonable

conservation strategy for those species because our guidance tells us that's one of our responsibilities for these species.

That understanding of where we have management opportunities at this point will be largely based on your assessment of current condition of the resources in light of the current management that's being applied.

You might have a preliminary idea of some wish list of changes that you would like to apply for your resource and you'll be able to feed that information into the interdisciplinary process when you get together with the other specialists in your office and work on melding their wish list of items with yours.

One thing we wanted to point out, going back again to the workbook, is that you'll start off with an understanding of how your resource is affected by current management. That's the no action workbook.

Once we help you fill out the workbook in the on site training, you'll be able to get a visual representation again of where there are impacts across systems that you're concerned about.

The valuable thing about the tool, however, is that you can also get an understanding once you start working with those other specialists in understanding where

they're needing to change management. You can alter the workbook so that it shows how that assessment of impacts will change.

So you can start to see how the current attributes that are being altered would change and also start thinking about how you might respond to that.

And again, this is just an illustrative example. But you can begin to see how you could populate the workbook for each alternative and see how the assessment of impacts changes.

That was something we were really excited about when we got going on this course because we all know that writing impacts is a difficult thing to do and it's also difficult to feed that understanding back into your alternatives process and realize where you might need some more mitigation or something. So this was a really exciting capability of the tool that we saw as planners.

So at this point, we'd just like to go back to the overall outline and look at where we are.

We've gone through the formative steps, and now Joni is going to kind of preview for you where you might end up in terms of a monitoring plan.

Joni.

WARD: Thanks, Katie.

So the last step in our systematic planning approach is to formulate a monitoring plan. And the beauty of this systematic planning approach is that by following it, many aspects of your monitoring plan will already be created for you. So just to remind you of how that works, the first step is selecting priority species and vegetation.

Once you do that and identify key attributes for them, the important step here is to identify those measurable indicators because that will really form the foundation of your monitoring plan.

And by going through each of these steps, you will have created for yourself essentially a monitoring plan that's tightly linked to monitoring the health of your priority species and vegetation.

Again, turning to our planning tool that you will learn to use, as Katie mentioned, during the on site training, what we're looking at here is the priority species vegetation type sage brush shrub land, its key ecological attributes, measurable indicators associated with it and just a couple cells to the right there that show some of the monitoring information that can be documented within this planning tool.

There's much more that you can document in the

planning tool with monitoring or much less. It's going to be up to you. But the beauty of it is that we have an opportunity here to truly make monitoring relevant and tightly connect it to those priority species and vegetation that you care about.

STEVENS: Thus was a piece that we were really excited about, because there's so much emphasis right now on being efficient and focused in our monitoring. It's something that we've been working on and we think tools like this can really help move us along.

It's also I think pretty valuable for identifying what your implementation priorities are after your plan is done. And it's going to take a little getting used to. One thing that we've noticed is that it's not something that you can automatically dump right into your plan.

But it can help you stay really focused and concise when you're writing impacts, when you're explaining what your monitoring strategy is and when you're explaining to the public what kinds of things are going to be priorities for you. So just the workbook is something we're pretty excited about.

At this point, we're almost ready to get you started on the work that you're going to be doing associated with this planning project. But before we go,

we just wanted to revisit our learning objectives to keep you focused on where we're headed.

In this overview, we've discussed the process of identifying priority species and vegetation at a very broad level. You're going to hear more about this in Joni's upcoming presentation that will be also available on line.

We talked a little bit about describing their health and identifying factors that are impacting their health. This is something we'll go much deeper on in the on site training.

We explained how developing strategies to maintain or improve health for RMP alternatives builds off that impact assessment.

And finally, we formulated, we explained how would you formulate a monitoring plan to evaluate effectiveness of manage many strategies and priority species and vegetation health.

All of those steps were put together to assist BLM planning teams in incorporating biological information for vegetation, special status and other priority species into our updated RMPs.

We're really looking forward to working with you on the on site portion of this course.

There are a couple other online modules we're

going to get you ready for.

The next session you can take is called Gathering Key Guidance Direction and Resources. That will help you prepare and be effective when we all get together.

But until then, Joni, is there anything else that you want to add?

WARD: I don't think I have anything to add, Katie, except that I'm excited to be here and participating with the BLM in this really important process that you all are undertaking.

STEVENS: With that, we'll plan on seeing you on site. Thank you.