C. Humphrey: Welcome to the Cumulative Effects Analysis course presented by the Bureau of Land Management's National Training Center. My name is Cathy Humphrey. I'm a training coordinator for planning and NEPA-related courses. It is my pleasure to bring to you this course on how to analyze cumulative effects, which is one of the most daunting concepts in NEPA.

This course is presented in three parts. The first two parts are online and the third part is an on-site workshop. Module 1, which is what you're watching now, provides an overview of cumulative effects analysis and it is based on the Council on Environmental Quality's guidance and the BLM's NEPA Handbook section 6.8.3. Module 2 goes in more depth illustrating some potential complexities in the process using four examples. We have a timber sale, a grazing permit renewal, a right of way application, and a plan of development. Module 3 is an on-site workshop and it's taught by BLM employees and/or experienced contractors who will help your team work through an actual project that you're struggling with.

We've got a variety of other resources that can also provide potentially useful information. These resources are from the CEQ, Department of the Interior, the Environmental Protection Agency, and the Bureau of Land Management. They are available by selecting the Resources button on your screen.

The purpose of this module is to show you how to complete a cumulative effects analysis using a 7-step process that's presented in the BLM NEPA Handbook. When you complete this module, you should be able to do the following things:
- Identify sources of cumulative effects guidance,
- define cumulative effects and describe why they're important, and
- describe the relationship between cumulative effects and direct and indirect effects.

This is an intermediate level course. In order to get the most out of it, you need to have a basic understanding of and some experience with conducting NEPA analysis. To increase your level of knowledge, we highly recommend that you complete the following online courses before starting this course: The first one is NEPA Analyzing Impacts, it's course number 1620-10, and the other one is the NEPA Analysis Process for the BLM, 1620-03.

You can access them by going either to DOILearn or the NTC's Knowledge Resource Center. DOILearn is doilearn.doi.gov, no www in there, and then the Knowledge Resource Center is www.ntc.blm.gov/krc. To find the courses, you need to enter part or all of the name of the course in the search box. If you have trouble finding them, some people have some trouble, don't hesitate calling or e-mailing me.

Because this is an intermediate course and because we have other recommended online courses for you to take before watching this one, which probably most of you have already seen, I won't go again through how to take an online course. But if you

haven't ever taken an online course from us or if you need a refresher on how to make your experience better, we have listed some tips for you, and if you want to find those you just go to the Resources button on your screen.

One of the other things that you can find under this fabulous Resource button is the names and contact information for me and the instructors who I will introduce now. Richard Hardt is from Eugene, Oregon. He is an ecologist and he has been with the BLM working on various aspects of NEPA since 1994. He helped develop the BLM's 2008 NEPA Handbook. You might recognize him because he's been on a lot of our online NEPA courses. Hi Richard.

R. Hardt: Hi Cathy. Thanks for having me here.

C. Humphrey: Ken Bogdan is Environmental Counsel from ICF International. He's been working with NEPA since the late '80s and he teaches planning and NEPA classes at the BLM and other federal agencies. He's taught our Planning Nuts and Bolts class for several years and he's one of the online instructors for that class. It's nice to see you again Ken.

K. Bogdan: Hi Cathy. Thanks. It's great to be here.

C. Humphrey: Ken, why don't you start us off by reminding us how the Council on Environmental Quality defines cumulative effects?

K. Bogdan: Sure. In understanding NEPA concepts in general, I always like to start with CEQ's definitions, which are found in their NEPA regulations. The CEQ and NEPA regulations include the following: Cumulative impact. It's the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. That's regardless of what agency, federal or nonfederal, or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. That's found in 40 CFR 1508.7.

So let's think of it this way. You analyze the effects of your action on a resource; then you analyze the effects of other actions on that same resource, past, present, and reasonably foreseeable; then you add them up. That's the cumulative effects. Sure it sounds simple and we know sometimes in practice it's not that simple, and that's why we're going to discuss now how to approach it in seven basic steps that are found in the BLM NEPA Handbook.

So you might be asking yourself, well why do I care about cumulative effects? Well there are several reasons to care. First is, of course, the perspective from the environment, which relates to those combined effects. In fact, CEQ has stated that there is evidence increasing that the most devastating environmental effects may

result not from the direct effects of a particular action but from a combination of those individually minor effects of these multiple actions over time.

The other perspective on why you care about cumulative effects relates to legal compliance. As an attorney, I always focus on these kinds of things. It's the consideration of cumulative effects that's required as different parts of the NEPA analysis. First focusing on categorical exclusions, we're considering cumulative effects in reviewing whether those extraordinary circumstances preclude the use of the categorical exclusion. Very important.

Of course, in doing the environmental assessment, also very important, because we need to decide if there is a significant effect on the quality of human environment. Can we use this EA to support the finding of no significant impact? One of those issues is, is there a significant cumulative impact?

Then, of course, in preparing the EIS we need to analyze cumulative effects and include that as part of our disclosure document. A good cumulative impact analysis, of course, doesn't just create a legally defensible NEPA document, but maybe most importantly for BLM, it's gonna help you make a good, informed land management decision.

R. Hardt: Let's talk about the relationship of cumulative effects to direct and indirect effects. Analysis of cumulative effects is not fundamentally different from analysis of direct and indirect effects. Cumulative effects analysis is focusing your attention on the combined effects of all actions on a resource.

For example, let's take a habitat restoration action. Say BLM is proposing to restore 4 acres of habitat for a species and that past actions have reduced the amount of habitat for that species to a current amount of 1,000 acres. Let's say that at the same time the Forest Service is proposing to also do some habitat restoration and they're going to restore 2 acres of habitat for that same species. So the cumulative effect here is the restoration of 4 acres plus the restoration of 2 acres added to our current amount of 1,000 acres for a total of 1,006 acres. This is a very simplistic example, and forming an analytical conclusion about the impacts of this habitat restoration may be more complicated, as we'll discuss later, but cumulative effects analysis is really very simple in concept, and this is the starting point.

Cumulative effects analysis is not an afterthought. It should not be saved until the end of the analytical process. Cumulative effects analysis needs to be considered throughout the process starting with scoping.

C. Humphrey: We're gonna describe conceptually how to do cumulative effects analysis, and then we'll show you where in the NEPA process you will complete each step.