

National Invasive Species Information Management System

How the NISIMS System Works: Demonstration

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Hello. This is Kathie Jewell, and I am the project manager for the National Invasive Species Information Management System, referred to as NISIMS. And with me is Donna Degner, who is the Application Programmer at the Montana State Office, who has been giving programming support to the NISIMS system.

What we're going to do today is walk through a whole demo of the application and let you see where and what and how this system works, from the field collection to loading it into the database and generating reports. We're going to try and show you all the facets of the NISIMS system.

Where we start is on the Oregon system. And what we end up using is Citrix to be able to take and get into NISIMS, and from there, walk through the entire process. The system is going to be set up where we have a national database, and then each state will have their own State database. But it will be replicated up to the national image and allow Washington and States to be able to get either state reporting or national reporting.

With that, Donna, would you start the demo for us.

Donna Degner:

Okay, Kathie. This is where a user would first initially go into the Oregon Citrix environment. They would have this icon that allows them to - once they click on it, it will open up an ArcMap document. The ArcMap document would open up as such, and you would want to open up an empty ArcMap document.

The next thing that you want to do, is you want to open up an area where you're going to

access your programs from. And this is - if you right-click on this portion, it would bring up the toolbars. The other way to do it is to go to Views and Toolbars. Then you would go down to where it says BLM Weeds Task Assistant. When the user clicks on this, it creates this toolbar, which you can pick up and move, or you can actually dock it on the other toolbar. You would click on this, and it would open up this mid-section within the ArcMap document.

Task Assistant Toolbar: What this section does is - this is a Task Assistant toolbar. This was created specifically for an ArcMap document. It allows a user to bring in programs that have been written specifically to run within Task Assistant.

In our case, we're going to open up a program by clicking on this XML button, and then we will open up the actual program that will be located within the C:\Program Files area of the computer. In this case, as you can see, it is in the, C:\Program Files\ESRI\BLM Weeds ArcMap\bin, directory.

Kathie: Now, Donna, could you tell me, is it always in that for everyone? Will it always be found there?

Donna: It will be in here unless the system administrator has - if you're running it off of a different system - and the system administrator has installed it to a different drive somewhere. In this case, we're running it from the Oregon system, which most of you will probably be running at least for a while. So, then we would click on this "BLMWeedsTACconfig" file. And what that does is it loads in the program into this Task Assistant area.

Programs within the Task Assistant: And within this Task Assistant area, now we have the programs for running the Weeds process or the NISIMS process. And it has five main areas. We can 'Download Data to ArcPad', 'Upload Data From ArcPad to Local', back to the local database, 'Data Entry', 'Upload Data To National Server' and 'Generate Reports'.

Now within each of these steps, there's additional steps. Before a user begins, they should probably understand that the process really starts with a data set. The data set is located at the Oregon system as the national data set. Each State would then have an additional data

set that is apart or cut off from the national data set. And then each user would create a version from that data set.

Load Data Set: So the first thing that a user really wants to do is load their own data set in. So they do that just by using the ArcMap functionality of 'Add Data'. When you add the data, it's going to bring up this box that allows a person to browse through the directory or area that they need to be to get the data. In this case, I already have what is called a Database Connection made to the Oregon database, and it's a version that I have already created.

So then I would click on all of the data within that. I would go over here and click and do a shift-click to get all of the data in between. Now my database currently has an extra table or too full. You probably won't have those. So now I click on the Add, and it adds all of the data to that data frame.

Now this data will come up, and it will be still windowed to the entire national dataset, so it will look very small and very tiny. It doesn't really matter at this point. We just need to have the data loaded in order to run through further processes.

So now my data has loaded in, and you'll notice that it's very tiny. And it has all of these different tables and stuff associated with it, as well as the additional feature datasets, which are located here at the top.

Kathie: Can I mention a couple things here to let you know where we are on our overall datasets? We have taken all of the legacy data from all the States and put them into the national database. So when Donna says that it's very small as far as what's actually showing, we end up taking and having all legacy information in there. The majority of the data has been the infestations themselves and not the treatments. But all those infestations are there.

And I just would like to take and recap, for just one moment, in telling you that we've not taken any of the functionality away from ArcMap or from ArcPad. All we've done is given you additional capabilities. The Task Assistant is there to be able to take and guide you through the workflow. And the ArcPad is there for you to be able to take and capture the information. So nothing has been lost in any of the functionality of those two systems. Donna?

Donna: Thank you, Kathie.

Display Area: The additional things, as you notice - there are all these tables showing, and it's a lot of data to be looking at. You'll notice that the tabs at the bottom here show a 'Display', 'Source' and 'Selection'. Source will show all of the table data, which you don't need to see at this point. But I'm just going to click on this Display tab and get rid of all of those extraneous tables. Now I can see more of what's going on. When I have all of these clicked as blue, that means that they were all selected. To deselect everything, I just clicked on this white space, and it took that blue highlighting away. So now you can better see all of the different layers. We have a weed infestation location layer, proposed treatment location, photo location, ownership, these kinds of things.

One thing that I generally do is when I come in, there's a lot of data in this township and the ownership data layer. So I usually shut those off so that they don't print up every time that I do any activity.

The other option is, is to take this Zoom In key and zoom in tighter to that three-state area, which Montana covers. Montana covers Montana, North and South Dakota. You'll also notice there's a couple of other states that are the bordering states kind of show up around them, but there's no data actually in there.

Data Download: For us to see exactly the area that we want to be working in, we would click into this Download Data To ArcPad. Now, as I told you earlier, there will be some different, additional functions within each of these folders. So we would want to work from the Data Download From National Repository.

We want to go in and select the field office that we're going to be working in. In this case, that field office comes from our layer called the Office Boundaries. And we can select the field office itself. In my case, I'm going to use the Billings Field Office. I can either use this drop-down menu here as an option, or I can start typing with the letter, and as I start typing, it will move down the menu choices for you. I'm just going to select Billings and go on. And then I say OK. It will plot up just the Billings Field Office area. Once this plots up, you'll be able to

see a little bit better some of the different data layers and how they interact with each other.

Table of Contents: This Table of Contents over on the side determines what order everything is displayed in. So sometimes, you may want to display something on top of the others so that you can see it better. The weed infestation location is very important to have towards the top of the program so that you can see it. If you see these light green areas, these are some of your weed location areas - actually, it's the yellow area. The green areas, it looks like, would be your proposed treatment or, possibly, your weed management areas, probably weed management areas. Here's the weed infestations. They have shown up now.

To make something show up so that it is the top layer, you would want to click on it and move it to the top. Now in this case, we don't have any actual photo locations, so it's not really showing you anything. But you'll notice, like if I take the county boundaries, and I move them up to the top, it changes the way that everything displays, and you no longer are able to see your weed infestation locations or your weed management areas. I'm going to go ahead and take this and move it back down so that it's where I can see what I needed to see.

The other thing that I like to have towards the top is my county boundaries. And so that's why I've got it right where it's at. It still shows the weed locations, but it also - I can see the county boundaries themselves.

Add Treatment Proposal Location: Now the first thing, like I said, when we go in it, we want to go in and do what is a treatment location, or a treatment proposal location. So I would go down to where it says, 'Data Entry' and open that folder up and do an 'Add treatment proposal location'. When I click on that, it brings up this box [Proposed Treatment Location Feature dialog box]. What this box allows me to do is create a location of where I'm going to do my proposal for.

I can do it in one of two ways; I can hand-digitize the actual location. It could be just the small area, or I can copy a source feature from another layer and to create that. In this case, I'm going to copy a source feature. I'm going to go up and tell it that the layer that I'm going to create that feature from is my county boundaries.

Once I have told it that I am creating it from a county boundary, I can tell it I'm ready to begin. So I say, "Begin," and I go out, and I click and select a county boundary. Once I select in that area, or click in that area, it will select that county. And now I tell it that that is, indeed, the area that I want. So I'm ready to end that process.

Once I end that process, it takes that county boundary, and it makes it into a proposed treatment location. It creates it. It tells me here it made a new feature with a object ID (OID) of 646. And that is now a feature within this proposed treatment location. And now I've got what I need, and I can say, "I'm ready to close out," or I could create another one if I so chose.

Enter Treatment Proposal: The next thing that I want to do is I want to create the actual proposal. So I can click on that "Enter treatment proposal" option, and then I go over and I click on the area that I'm interested in creating it for. And that would be an area that I just created, which, in this case, was this county boundary. And then it tells me that it wants to know the location, and I'm going to just call this Sweetgrass County. And then I have the option of creating either a BCARP, which is a Biological Control Agent Release Proposal or PUP, which is a Pesticide Use Proposal.

In this case, I'm just going to go ahead and create the BCARP and use the following format as my standard format. First of all, I want to know that this is the administrative state that this BCARP is good for. The next that I want to know is the fiscal year that it is good for. And then I want to use the Field Office code, followed by the actual number of the proposal.

The next thing it shows is the BPS number. This BPS number is not a required field, but you can add one in if you want.

Then you have a NEPA Reference document that refers back to this proposal as well. This can be one or many of these. In this case, I'm just going to add one. And, again, add that number, and then I'm going to say, "Okay, I'm ready to proceed." What that will do now is that it has created a proposal area we created in the first step. And now we're telling it that we're tying this BCARP proposal to that proposal area.

The next screen that will come up will be a document to fill in to create the rest of that proposal. Once I've created this proposal, it will, indeed, create a Microsoft document that a user can save and/or print. So when the screen comes up, then it will have the following information that I've already filled in, plus additional fields that it asked me to fill in for the process.

Info Tab: Now the second screen comes up that displays that this is what we are going to add for additional information. This additional information, as you can see, it's already filled in the BCARP Number, and the BPS number would've filled in had we entered that in the first screen. The Location is also filled in, and then the Date. And the date, typically, refers back to the current date.

So in this case, I am doing a proposal from 2008, or from fiscal year 2008. So I need to enter that information, or change that information, I should say. And also, I can change the dates if I want to. I can click on the drop-down arrow, and what it does is it gives me a calendar that allows me to enter the information through the calendar. So in this case, I clicked on it, and I said the - just click on that date, and it fills in the date portion for me.

Then the next piece of information that it wants is the Estimated Acres of this proposal is for. I'm going to say it's good for 120 acres. And, as you can see, it's also got the NEPA reference numbers all filled in.

The next information that it wants is it wants the Co-Operators that are associated with this proposal. In this case, I was going to tell it the Billings Field Office and leave it at that. I can add additional ones if I so chose.

Page 1 Tab: Once I have this information filled in, then I want to go to the tab at the top that says Page 1. This is the next piece of information. This wants to know what the 'Release Timeframe' is. So in this case, I'm just going to say that I'm going to release in May to September, and I'm going to perform one release [Number of Releases].

The next thing is the information for the actual agent that I'm going to be releasing. In this case, I'm going to say that I'm doing 'Biological Species'. And then this is the 'County' that the

agent was bought or selected in. And, again, you can start typing on these and get the information to move down to the list, through the list. Then this is the 'State', the geographical State, the information was also selected or bought in. And then the 'Life cycle' of the agent, whether it was an adult, egg, larva or pupa. I'm going to go with Adult. And I'm saying that the number of 'Specimens' that I am going to release are 200. This would show me the 'Host Material' that the agent was brought or selected in, stored in or bought with, and it is not a necessary field. It's just an optional field. And then the next thing is the 'Permit Required'. Is there a permit required on this? I'm going to say, "No." Had I said, "Yes," then it would require me to fill in a permit number and a permit date.

I can go back, and I add multiple agents, if I so chose. I'm just going to stick with one.

The next field is for the 'Weed Species' themselves. What species am I trying to treat? And, as you can see, I'm again, typing my way down through the list, and as I type, it works it down through the list so that it makes less scrolling for me. I can add one or, again, multiple species. I'm just going to go with one, and go to Page 2.

Page 2 Tab: So Page 2 is this next tab. This is free format data entry that is information that has always shown up on proposals. Typically, it's going to be a large amount of data. I'm just going to type in a small amount just for speed purposes, and then go on to the next tab, which is an Approval tab.

Approval Tab: The first thing we want to do is tell who the 'Originator' of the proposal is. When you fill in that particular name, then the organization, the current date, and the phone number of that person fills in as well. Again, we would want to be a little bit different as far as the date. Again, you can type in portions of it, or you can use the drop-down and go back to the calendar portion. Then the phone number is also filled in.

The next one would be the 'Reviewer'. This would be the person in the field office that reviews it to make sure that it is appropriate and that it's going to pass muster. Within that portion of the reviewer, we have the organization, their approval code, whether it's approved, not approved or approved with modification. If it's approved with modification, there's also a comments field within that that allows the user to say what those modifications might be or

what they're saying that they need to change.

And then the next person would be the 'Field Office Authorized Officer'.

And then the next approval would have to be from the 'BLM State Pesticide Coordinator'.

And then the 'Deputy State Director (Natural Resources)' would be the final signer of the proposal itself. It's just the same as what was for business process for doing approvals has always been, however this is putting it all on to the paper and through the system itself.

Here's where we fill in the approval code for the approver. It is approved, approved with modifications, or disapproved. I'm going to say that this was approved, and say, OK. Once I have clicked on this OK, it will then take all of the data that I have currently entered into this, and it will create a Word document, which the user can save off, and they can either print, or they can save it to a file.

Report Document: This is the form that pops up when the user has finished the process. It is a Word document. Again, it can be saved, or it can be printed or both. This form, this document, may not look exactly as what you're used to seeing. However, we went through the process of looking at several different documents seeing what information was common among all them and making the decisions to make one national standard for the report itself.

So this is what we ended up with. This is the date. Then you have the location, the co-operators, all of the information that we input on those screens is now on this form. If you come down through it, you can see the free format information that was put in. And then the final page is typically the approver's information. This is where we have the originator and then the reviewer. Had we finished filling out the rest of the processes, additional people would also have been filled in.

So then we can go back to the process again. And we now have what is called a BCARP. We now need to add what is called a PUP.

Enter Pesticide Use Proposal: So, again, we enter the treatment proposal, and we click on the location that we want to treat it for. That location can have numerous PUPs or proposals attached to it. So, again, we want to say "Sweetgrass County". I could call this something else if I had wanted to. The PUP number - again, the same type of format that we had used in the previous version. And, again, the NEPA Reference Number. And like I told you, you could have multiples of these. And then click the OK.

Once the OK has been clicked, again, you'll get the second page of information that it wants you to input. And it's a whole different form with different tabs associated with it. It's very similar process as what we went through with the BCARP, and this time, we're just going to add the information that is necessary for a PUP or a pesticide use report type of issue. So when we go out and do a chemical treatment, we have a proposal that covers that treatment process.

Page 1 Tab: Again, the information is already filled in with what we had filled in from the previous form. And we need to change some of the information to reflect the current process. I am going to, again, use the same kind of issues. And then it wants to know the duration of the proposals. A pesticide use proposal can be good for one, two or three years. I'm going to do a three-year one and tell it the estimated acres that I will be treating. In this case, I'll say 230. Again, I'd also have my NEPA Reference Number.

Page 2 Tab: I'm now ready to move on to page two, so I click Page 2. And now I'm going to tell it the trade name of the chemical that I'm going to release out there. And then it wants to know the actual information as found on the chemical label properties, and so I'm going to tell it for range land, it's a late rate of one, two, three fluid ounces per acre. I can fill in multiples of these for the same chemical, or I can add additional chemicals as well. This is just the label information, again, for the chemicals that I plan to treat with.

The next thing that it wants to know is the application timeframe. I'm going to say April through October, and then I'm going to apply - do two applications. And then I'm going to choose a delivery method of either aerial or ground. In this case, I'm going to tell it that I'm using ground. I then tell the coverage pattern, and I tell it what kind of coverage pattern I'm going to use. I have the options of band, broadcast, or spot. I'm going to tell it that I'm doing a broadcast.

Page 3 Tab: I am now ready to move on to Page 3. And this is one that tells me the information as far as what species I am treating, what weed species I am trying to get rid of. Again, I'm going to use the Euphorbia. And then I have the free format field again, a little bit different naming, but the same kind of process. And, again, I'm just going to add pretty generic-type stuff so that we can move on.

Approval Tab: And then the next page is the approval information again. Very similar to what we had before.

Here we have entered in the information for the 'Originator', which, again, filled in the organization. We had to change the date from the current date to the actual date of the origination of the proposal and the phone number.

We then entered the information for the reviewer [Field Office/Field Station Weeds/Pesticide Coordinator], and it fills in the organization as well as the license number for a qualified applicator, which, in this case, would be Melissa Half.

The approval code, again, would be the same: approved, approved with modifications, or disapproved. And then there is a comment field that allows the user to comment on what modifications or necessary changes there might be.

Once everything has been filled in to where the user is satisfied, then they would click the OK. Again, it would create the report. And the report will come up as a Word document, able to be printed or stored on the system.

Report Document: Again, the report will come up in a Word document, which can be used as a print or saved off to a file, or both. And, again, it may not be in the exact format that a user is used to seeing. However, it is the best of what we could come up with for providing everybody's needs. It shows the information of the duration of the proposal, the estimated treated acres. It shows what the chemicals will be provided in the tank mix and the intended rate of application. It shows the delivery method and all of the additional information that we entered into on those screens, and then the approval information.

Enter Official Certification Information: The next thing that I am ready to do is I also have additional data entry functions that I could also use. I can enter the official certification information for my users. In most cases, those have already been entered. What we've been doing is as a person completes a class, the class information is already entered into the system, showing the user's information as far as what license number they were provided by the BLM.

However, we could also add information for an additional user as far as what state - their state licenses as well. This is the information, the data entry form that would be available for that process. I'm not going to enter one at this time. However, do know that it is available to the user.

Enter Seed Lot Information or Weed Management Areas: There is also a table or an information to enter - an option to enter data for the seed lot information as well as enter data for weed management areas. We're not going to go into those at this time.

Start Download Data Process: However, now we are ready to download the data, start the download process.

One of the things that we want to make sure of is when we have this data layer, this data view set up. It shows that it automatically comes in as 'Layers' For the purposes of this program, the program needs to know what the national dataset is. So we would rename this portion to "National." To get it to do this process, a user would click on it until it came up to where it was highlighted and had the box around it and then retype the whole new name in there. This becomes very important later on in the process.

A lot of times when I first come into the whole system, the first thing that I will do, is I will go up and rename this to "National" so that it is ready for when I get down to the additional steps to where it is necessary.

Processing Speed Consideration: The next thing that we will do is - we already selected the field office that we want to work in. However, a user generally won't be working in the entire

field office area. So I would use the Zoom In function to zoom in to the actual area that I'm going to use. This also helps with the processing speed. It helps speed the process up so that you're not downloading all of the unnecessary data that you may not be using anyway.

So now that I've zoomed in to the area that I'm actually interested in, the next thing that I want to do is this next step.

Select Layers to Download: It's called Select Layers to Download. When I click on this, it gives me this box. It allows me to select additional layers that are not necessarily the NISIMS data, but just data that might go in the background with it. I'm not going to select any of this additional layer - however, I still need to go through this process so that the system knows that I have gone through each of the individual steps.

Download Lookup Tables Checkbox: Notice this portion here, where it has the dialog box where you can click it active or not. This allows me to download my lookup tables. If I had just recently done a download and had not changed any of my lookup tables or additional information, I would not necessarily need to do this. However, I haven't done any downloads recently, and I've probably done some different downloads, different values added into some of those tables that are used for lookup.

What these lookup tables are used for is when you're working within the ArcPad application later on, after you've pulled the data and are out in the field doing your data entry, it's a lot of your down - your drop-down menus have what is called these "lookup tables," and it's used for looking up values. And you'll see that process later on. For now, I'm just going to say OK and leave everything as is.

Download to Local Database: The next thing that I want to do is I want to select the local database that I'm going to download to. I have two different options to use. I can "Select an Existing Database," and it tells you off to the side that the existing weeds features will not be overwritten. Or you can create a new database. I prefer to create a new database so that I know exactly where my data is and where it's at, at all times.

Create a Database Into a Folder Area: So the next thing that it will do is it comes up to the last place that I was doing data entry into, or are working into, but I want to create a database into a folder area where I'm going to be able to find it. So once this comes in, then I'm going to go to my local workspace area, and I'm going to create a folder that is called something like "National to Local" so that I know that that's what I'm doing in that process, is creating a local dataset from the national.

What this does, essentially, is that national dataset is currently located in an Oracle database. When I download it to what is called a "Local," what it is creating is a local access personal geodatabase. And once it creates that local geodatabase, then we will go through the process of creating shaped files that will be able to be loaded onto the ArcPad application or on the mobile device to be used within the ArcPad application.

First thing that comes up is - this is my workspace area on the Oregon system.

I don't have a database created or a space created already. So I'm going to go over here and create a space, a folder, and I'm going to call it "Testing09202009," and there I have an area to go to. And I'm going to double-click on that. And then within that database, or that testing area, I'm also going to create that folder called "national to local". So once I have done that, then I will go down here, and I will call my database, "national to local" and I will say Save. It then fills in the information into that blank spot, and I can say, "OK."

Execute Data Download: The next thing that it will do is then I will want to execute the actual data download. This may take quite a bit of time. It depends on the amount of data or the size of the area that you're working within. Once this data download has been accomplished, then we will want to move on to the next sets of steps.

Once the process has finished running, there is this message box pops up to tell the user that the data download from the National to Local is completed and that it completed

successfully. The user simply clicks on the OK, and now the user has a new data frame available to them and is activated that shows the data that was just downloaded.

Send Data to ArcPad: The next process, as I've said, is to take that data from the local to the ArcPad application so that the user can take it out into the field. So the next thing we want to do is we want to work through this process and 'Select the Layers' to be included. Again, it gives you the options of choosing additional layers as well as the option to do the lookup tables or not. I'm going to say OK and then move on.

The next thing it wants to do is 'Select the Local Directory' that you're going to store the ArcPad files into when it creates this process. Well the first thing I want to do is click on the Browse [for Folder] and go to my local area that I was working within again. And that is local to what I'm working on with the Oregon State Office. Go to that testing area, that folder, and I'm going to create a new folder. And this time I'm going to call it "Local2Pad," which you notice that I'm taking it from the local database to an ArcPad application or a shapefile for the ArcPad application. It fills in the information again, and again, you just click OK.

And you click the "Execute ArcPad Data Conversion." Now it's going through that process of creating the data. What it's doing is, it's taking the data from the local database to shapefiles. Once those shapefiles have been created, we will be taking that data and copying it to the mobile device. Once the mobile device is loaded up with the data, then it can be taken out in the field, and data can be collected.

Once this process has completed, again, you'll get another message box, and it tells you that the download from the local has completed successfully. And then it tells you to further define - that you need to copy those files to the PDA for field data collection. So the user simply clicks OK, and we move on to the next process.

Again, the next process would be to take those files that we just created and copy them over to the mobile device. There are a couple of different things that we need to copy over to the mobile device.

Local to Pad Directory: The user needs to go through the area where they've been storing the data, which, again, is this testing area, in my case. And once I get to that, then I go to this 'Local to Pad' directory. Within this Local to Pad directory, there are two subdirectories; one is called an "Applets", and one is called "Data".

Applets Subdirectory: First, the Applets - what this stores is data that will be stored on the mobile device into the Applets folder. It is additional fields or tables, and it's called lookup tables. These are what stores those values for those drop-downs, as we discussed earlier. So I'm going to right-click on that and say, 'Copy'. I've selected everything in Copy. I could've sent that through here [Menu Bar]. I could've said, Edit/Select All, and then said, Edit and Copy, here.

Then I would go to the mobile device. And this time, I'm going to actually go to my local directory on the system because that's where I'm going to be running it. A user would typically go to the mobile device and go to Program Files\ArcPad 7.1\Applets folder, and they would right-click in this area and say, 'Paste'.

The other option is to also go to the Edit/Paste [Menu Bar]. And it will ask you if you want to overwrite if some of the data is already there. It's getting prepared to make that copy, and it's asking me if I want to overwrite. I'm going to say, 'Yes to all', and let it go ahead and do that copy.

Once this has copied, then I am going to take the data folder, and I'm going to copy it over to the mobile device. While the Applets have to be in a specific area, the data itself can be anywhere within that mobile device, as long as the user has access to it.

Data Subdirectory: So now that it's been copied over to the Applets folder, the next thing a user would want to take this data that is located within that same area under the Data folder. And I'm just going to take this whole Data folder, and I'm going to say, 'Copy', and I'm going to copy it to my local device in an area where I'm accustomed to working. And a user would typically copy this to the mobile device and not to a local directory, because that would be where they would be taking the unit out to the field and working within it.

So once I get to this folder, then I just simply right-click, and I say, 'Paste'. So now that I'm going to copy all of that data, which includes a bunch of shapefiles - which includes all of the weeds information in the shapefiles - and then those will be what we work with within in the ArcPad application while in the field.

Kathie: Okay, Donna, could you take and recap for us, while this is processing? So you're saying, right now, you're going to end up just taking and running ArcPad from your local machine, rather than on an actual handheld. So where you were copying it was one area, but if they're, in fact, getting it ready to be downloaded onto their handheld, they would end up taking and putting it. . .

Donna: On the handheld and what we call the mobile device. And when a user looks at this Explorer Window, there will actually be, instead of like a "C" drive or something to that effect, it would actually say, 'Mobile Device' and a picture of that mobile device.

Kathie: And in order for that to work, they have to have ActiveSync set up?

Donna: Yes. I believe they do have to have ActiveSync, although, we are not actually running it through the ActiveSync process.

Start ArcPad: Now this has been copied over, I can start up the ArcPad application. So the ArcPad application - I'm just going to start up a new one, and I'm going to say OK.

So the first thing that I want to do is I want to make sure that all my toolbars are in place that I'm going to be needing. And sometimes, this takes multiple times.

Toolbar for BLM Applications: You'll also notice that we now have a toolbar right here that is BLM.

The 'I' is for an infestation. So that would be if a user was collecting an infestation; they would use these tools. So it would be an infestation point, line or polygon.

The same thing for "T" is a treatment. We have treatment points, treatment lines, treatment polygons.

While all of the data is eventually stored as a polygon, it can be created as a point or a line, and we will go a step further on how it is made into a polygon for purposes of being able to

calculate acreages and what not.

The next thing is ['E' for] an evaluation. This is an evaluation of treatment and not of anything else, specifically. We also have what we call a monitoring event, which is - it monitors an infestation to see what changes may have taken place over time with or without treatments being applied to that infestation.

The next area is an 'SA' or a survey area. This is an area that the user goes out and actually surveys to find the absence or presence of a weed infestation. While they're mapping many infestations, they've generally looked over an entire area, and that is the survey area.

The 'P' is for photos, which I'm not going to go over at this time.

Kathie: What Donna is going to end up showing is how each one of those items on the toolbar actually function. But what is not going to be gone over right now is all the business rules, or the protocol on how to be able to take and capture that information the same from area to area. In the other webcast that we have available to you, we've gone over all of the business rules that are applied for this program.

Donna: The first thing that a user wants to do is add their data in.

Add Data: So they would manipulate around within this area. You have to click the Browse button again to make sure that you find the area where you have stored your data. In my case, I have stored it here, and so that's where I'm going to go. Users would have to manipulate around within their mobile device to find the area that the data was stored.

So I would go to the area where I stored the data, and I would say OK. Well that would bring up any data within there. If you click on this plus sign, it drops down, and it shows you all of the data available within that folder. I want all of this data to be shown, so I'm just going to

click the box by the data, and notice how it clicks all of the data fields. And so I'm going to say OK. And then the data will show up on the screen.

Collect Data: There are two ways to collect data, and I'm going to use one of them, simply because I'm not out in the field. But a user, if they were out in the field, could use a GPS unit and actually turn on the GPS points and click 'Processes' and go with that. I am going to do what is called screen digitizing because I'm not actually out in the field and moving around.

Screen Digitizing: The first thing that we want to work with is I'm going to show you how to add an infestation line. I am going to say I'm walking down this line, and I collect my points, and then I end that process by clicking over here on this green arrow. When I do that, it will bring up the data fields that I need to enter to make this data complete.

Kathie: Now when you look at the information that you're actually collecting in the field, it has really been minimized. Although the overall database is much larger, we've tried to only have the fields that are really required to be able to do your State and National reporting collected.

Donna:

Info-1 Tab: You'll notice that when a user is clicking on this, it has created an 'Infestation ID'. This is not a field that a user actually enters. It is already defined, and it has been self-generated by the program.

The next thing it wants to know is the 'Date' that the observation took place. The default is for the current date, and if that's okay, then the user would simply click on that box and move on.

The next thing, it wants to know who was out there in the field collecting this data. Again, we have the drop-down boxes. This is where we were talking earlier about the lookup tables. These came from the data that you downloaded. So these need to be current at all times. The 'Last name - you enter the last name. And then you'll notice the 'First' name and the 'Office' code are filled in automatically.

Then it wants to know the 'Role Name'. This would be an employee, in this case. And I'm just going to click that it's an employee. And it wants to know the 'Observation Method'. These are the different observation methods that are available [in drop-down]; a Daubenmire, Ocular, Photo Point, Random Sample or a Transect. I'm going to tell it that it is an Ocular observation.

Info-2 Tab: Then when I'm finished with the first screen, I carry on to the next tab, which is Info 2.

Infestation Point: This wants to know what species the infestation is. An infestation may have, within an area there may be, multiple species. If a user runs across one of these areas, they would actually collect the infestation as two infestations, one for each species.

You'll notice that when I clicked on - entered the 'Species code', it filled in the 'Species Common Name'. I could have filled in the species common name, and it would have given me back the species code.

The next thing that it wants to know is the 'Percent of Coverage' within this. I'm going to say it's a 10 percent. And then it wants to know the 'Buffer Width' of this line. The reason for this is to create the actual polygon associated with this. So you're going to tell it that, I walked down this line, but I want you to buffer 15 feet, meters or yards [Buffer Units]. And I'm going to say, meters. And this one tells you - you want to buffer on both sides of the line, or if you want to buffer to the left of the line or to the right of the line. If you buffer down the center of the line, it buffers 15 meters on each side of that line.

The next options - you'll notice that there are five spots for this. This is the 'Land Use' associated with the area. So it's just a way for the user to denote that there are certain land uses that's going on within the area that could affect the treatments or could affect what kind of treatments you are doing. I'm going to say that it's a Chained area, and I'm going to say OK. Now I've created one infestation.

The next thing that I would want to do is I might have another infestation, say, a point infestation that's located over here. Again, the same area of the fields are basically the same. I tell it who I am, and what my role is, and what kind of observation it is, and the date of that observation. Then I would also tell it the species code, and it fills in the common name. And then I tell it the percent of coverage and the size estimate on a point.

In this case, we have three options of a size. If it's less than or equal to .1 acres, the point will be buffered to be .1 acre. If it says .1 to .5 acres, the point will be buffered to be .5 acres. If it says .5 to 5 acres, this point will be buffered to be 2.5 acres.

Kathie: So that necessitates anything that's larger than that has to be captured as a polygon rather than a point.

Donna: That is true.

Kathie: The other thing, ArcPad itself, allows you to take and set it up so that if you're doing multiples, and you have the same information, it would take and bring up that exact same information again.

Donna: That's right. It's called "sticky attributing," and there's an option up in the screen, up in the top part of this screen that allows a person to set those sticky attributes.

So then they would say OK, and now I've created an infestation point.

Treatment Point: I can also create treatment lines, points and polygons. So I'm going to create a treatment point right here, and again, it fills in a 'Treatment Component ID', which the user does not do.

Then it tells the user what the 'Start Date' and the 'Completion Date' of the treatment itself is. So when a user clicks on these, and then they tells it the user, which is the person out in the field doing the actual treatment, and then a 'Role Name', and it can be an applicator or an employee. I'm going to say it's an employee at this point.

And then the 'Project'. So these projects were given to us by users within the states, and they said, these are the projects that are still ongoing. And this just tells us what treatment that project is a part of.

The next thing we have some 'Buffer Radiuses' and 'Buffer Units'. These are not the same as what was the points were within the infestation. These are simply - one of the business rules of a treatment is that it must be tied back to an infestation. This tells me to buffer this point by a certain buffer distance to find all of the infestations within that buffer area. If I say that I want it to search for 10 yards for any area, then when I click on this next tab, it will tell me what

infestations were found within that buffer area. In this case, there was only one, and that is the infestation that the treatment will be associated with. So I simply denote that by activating that particular box.

The next screen tells me what kind of a treatment I am going to be doing. There are different options. We have Chemical treatments, Biological treatments, Fire treatments, Re-vegetation treatments and Physical treatments. Physical treatments can be broken down into mechanical or manual treatments. In this case, we're going to do a biological treatment. And then I'm going to tell it that the phenology of my weed species at the time of the treatment is that it was a bud. And once I've got that, I'd say OK.

Bio-1 Tab: And now it brings up the information associated with the biological treatment itself. First thing it wants is the proposal that you're working off of. And it shows the proposals that we just created in an earlier step when we started this process.

The next thing it wants to know is the 'Species' [Code] of the biological agent. This should match the species of the biological agent as the proposal has. And then it wants to know how many were released ['Number Released'] and the 'Life Stage' of that agent at the time of the release, as well as, any Protection Method, if any, was used at all to protect the bio-agent from being destroyed.

Bio-2 Tab: The next tab, which is Bio 2, shows the wind direction. This is the direction that the wind is coming from and the wind speed. And wants to know the temperature, and temperature is always in Fahrenheit, as well as, the soil texture. The reason for collecting this data is anything that may affect the treatment itself or the bud that is being released. So we only say OK. And we now have a treatment associated with this infestation.

Treatment Line: Now we may want to do a treatment line. And I'm going to say that I am treating this area, and that I treated it starting this date. And I am this person and that this is my 'Project' that I'm working on. And this time, I'm going to be the applicator. And my 'Buffer Units', in this case for the line, a treatment, the buffer units do tell me how wide of a buffer I'm actually doing my treatment in. In this case, I'm going to do a chemical treatment. And I tell my infestation, I'm going to do a chemical treatment. And so this means that I have - I am

spraying 15 feet to each side of me. My weed species ['Phenology'] is at a flower stage. And I say OK.

Info1 Tab: Now it wants to know when I started that treatment, what time of the day it was that I was starting this treatment. And this is the military time. So I'm going to say that I started it at 8:00 in the morning, and I finished at 9:00 in the morning.

And then it wants to know what equipment I used to do this process. I used an ATV. And then I was using this particular PUP number. And my carrier was water for my product. And in that carrier, I used 20 gallons of water. My calibration rate was to put two quarts per acre of water out there.

Info2 Tab: And then I go to the Info 2. This tells me what kind of delivery method I used. I was on the ground, and I was doing a broadcast, and that the temperature was 56 degrees at the time, and the direction of my wind and the wind speed, and the relative humidity, and the distance to water. In this case, I'm going to say that I was greater than 100 feet from water.

Chemical Input Tabs: The next one - and there are five tabs of these. If a person were to scroll through here, you'll a Chem1, Chem2, Chem3, as well as an Adjuvant 1, Adjuvant 2, 3, 4, 5. These are your chemical tank mix tables that give the information of the actual chemical within that tank mix, and you can have up to five chemicals and adjuvants mixed into this tank.

Chem1 Tab: So I'm going to give it the trade name and then the manufacturer of that trade name and the pesticide amount that I put in there. And I'm going to say I put in five quarts in my tank mix. And it was being applied at three fluid ounces per acre. And then for the adjuvant, I'm telling it that I used an adjuvant at the rate of five pints per acre. I can add additional ones if I so choose. Then I say OK. And now I have created a chemical treatment.

Info Polygon Treatment: The next one, we might do a polygon treatment. And, again, the same kind of information is added and my role name and the project. Again, it takes the infestation, and then it asks what kind of treatment I'm going to be doing. In this case, I'm going to do a physical treatment. As I said earlier, I have the option of doing either a

mechanical or manual. These are separated by the type of equipment, basically, that is being used to do it. And I'm going to say that I'm doing a plowing and that my weed is currently at a vegetative state. And that takes care of my physical treatment.

The next option that I have is to do an evaluation.

Kathie: Donna?

Donna: Yes?

Kathie: Would you mind going back over and maybe doing another treatment just to be able to take and show the choices and the information on a fire or a re-veg?

Donna: Sure. A fire or a re-veg - again, it's going to be a polygon treatment. And, again, I have all of these same information, and the infestation. And then I have a fire treatment. And I tell it the phenology of my plant species at the time of the treatment. And then what it wants to know is the burn intensity, whether it was a combination, high, low or moderate. And then the fuel model that was used, and say OK. We now have a fire treatment.

We can also do a treatment for a re-veg. And we show all of the same information again. And the infestation, and we tell it a re-vegetation treatment and that we have dormant plants, and we say OK.

Now the information that it wants to know, it wants to know the overall re-veg rate. And so we're going to say that we put out 12 pounds per acre. And the equipment that was used was a drill. And the phenology of that, we were doing a seed.

Evaluation: The next option that we have is the evaluation. This evaluation allows a person to go out after a treatment. Within a certain amount of time, they would go out, and they would evaluate the actual treatment to see how well the treatment took over. And so I'm telling it that this is the treatment that I'm going to evaluate, and this is the date of that evaluation, what the percent of the cover of the species now is, and when I think that I need to re-treat again and the efficacy rate, the efficiency rate of this treatment. I'm going to say this wasn't a real good

treatment - 'needs work'. This is a free format type of data entry field right here to be kept fairly brief. And say OK. Now I've created an evaluation.

The next option that I have is to do, maybe, a monitoring.

Kathie: Donna, before you go any further - so what is happening here is that you have a infestation that has a treatment tied to it and then an evaluation of that treatment. So if you go out and do another treatment, it will still be tied to that infestation. So you'll be able to take and see, over time, the treatments that are occurring in that geographic area as well as the evaluation of those treatments.

Donna: That is true.

Monitoring: And now what we're going to do is a monitoring or an evaluation of the actual infestation to see how the treatments, or sometimes, the lack of treatment, is affecting that area of the infestation.

Now I'm going to draw a new polygon of where that infestation currently lies. And then it, again, will fill in all of the information. It tells me this is the infestation that I'm doing the monitoring to. And so the next information is the date of that observation and the user, or the person doing the observation, and the observation method. Now we are not allowed to change the species code because it's the same infestation. The species is still the same. And then we want to tell it the percent of coverage that is currently affecting that.

We have the option of creating the geometry as a new polygon to show that the size of this polygon or the size of this area has changed, or we can say that we want to use the existing polygon, that it really has not changed over time, and that the feature itself has not changed. In this case, I'm going to say that, yes, we have a new polygon.

And then we can also associate, again, the land uses that were in the area.

Kathie: Now when you say "new geometry", it doesn't replace what had occurred earlier. It just takes and relates it to it, correct?

Donna: That is correct. It would have another relationship. It would still be the same infestation ID. It's just that it would also have a monitoring ID. And that way, we can track what is happening to this piece of land over time. So it is, in fact, within the spatial database itself. It is actually adding another polygon or another feature.

Okay. Once the user has accomplished all of this, they can then go back in - they're coming back in out of the field. They've got all of their data collection done. Now they can go back in and add this back into - up to the local - or national dataset.

Kathie: Could you just address what the "SA" stands for?

Donna: Oh. The SA is a survey area, and it is the area that the user went out to look for weeds. It is not necessarily where they found weeds, but the area that they surveyed to find the presence or non-presence of weed infestation.

Kathie: And then the "P" would allow them to be able to take photo points, whether they're doing a infestation, a treatment, evaluation. At any of those different functions, they would also be able to take and capture the photos.

Move Data from Mobile Device Back to Original Directory:

Donna: Now once the user has accomplished all of their data loads, they would take their information that they have created out in the field, and they would now copy it off of the local device. So, again, they would do the copy of the data and take it back to the original area that they were working within when they were doing the data loads. I did a copy of that field, and I go back to where it says Data.

Now I have a Local2 Pad directory. I'm going to create a new directory, and I'm going to call it 'PadBack', just so that I know that there is a difference, that this is the data that I brought back from the field. So now I am going to go to there [open PadBack directory], and I'm going to paste this data directory in there.

Once this data has been copied over, back over to the system, then the user is going to be able to bring that data back into their ArcMap document and work its way back up from the ArcPad shaped files to the local geo-database and back up to the national database. And then once it's all been created, then the user is able to create reports and other information, use the information from the national dataset.

So the shapefiles are currently copying, but then we will bring it back in and add it back to the ArcMap document. We'll have to do some massaging and different buffering techniques and things like that to make the data available or ready to be loaded back up. So there is additional steps in between actually taking it up to the local dataset or to the national dataset. So once this process has completed, we will then start the ArcMap document back up.

Upload Data from ArcPad to Local: Okay. That document, or the data, has been copied over. So now what I want to do is I want to go down to the next option, which is 'Upload Data from ArcPad to Local'.

So what I'm going to do is move the data from the ArcPad to the desktop, which we've pretty much done. Now we're going to select the desktop directory containing those PDA files. We need to tell it where the data is located at. So we're going to go through the Browse process again, and then we go back down to the PadBack and tell it this is the data folder and say OK. Now it knows where that data is located at within this box, and we say OK.

Add Project Files from Desktop to ArcMap: Then we're going to tell it that, now that you know where it's at, add it back to the ArcMap document. And so that's what it's doing now is

it adds it back into the ArcMap document. It creates a new data frame and opens it up and activates it.

Buffer Infestation Points: From there, the user wants to buffer the infestation points. What this does is it goes out and it finds any points that we collected infestations for, and it creates a buffer around that infestation. So if I were to zoom in to this infestation that we collected in the field, notice that it has buffered around it, and this is the new area that will be considered the entire infestation.

Buffer Treatment Points: The next thing that you want to do is buffer the treatment points. And, again, this is based on the - this is a 20 yard buffer - automatic for all treatment points. So if we were to zoom in to this treatment point that we created, again, you will see the little buffer area, and this is the area that was treated.

Buffer Infestation and Treatment Line: The next thing that the user wants to do is buffer the infestation and treatment line. Again, this is based on the parameters that the user told them they were using - that the user created - in this case, you'll notice that this is the infestation that we collected that was a line data. It's buffered that and created a polygon out of it. And this is the treatment area that we did. And this also buffers to make it into a polygon area. So then, once this process has been done, the user now has all of their data there, and they have buffered everything to the point where they need it.

Convert ArcPad Project Files To Geodatabase: So the next thing is they want to convert those ArcPad project files to the geodatabase. So, basically, what it's telling it is we want to take it back to the local geodatabase that we collected from the national dataset. So we tell it that we want to select that national geodatabase, and we say Browse. And we browse ourself to the location of where we stored that local geodatabase, which again, would be in that work space area and the testing location that I was working within. And in this case, it would be this 'National2Local' geodatabase, and then I say, Add. And it fills in the information, and I say OK. So now it knows where it needs to put the data, and so I say, go ahead and 'Execute Conversation', to make it go back to the local geodatabase.

Data Back to Local Geodatabase: So what it's doing now is it's taking all of the shapefiles from the data that was collected out in the field, and it's putting it back into the local geodatabase, which is the personal geodatabase stored in an Access, Microsoft Access database. It's uploading it all into there. And then from there, we will do some additional batch attribute updating and some quality assurance type of processing before we take it back up to the national geodatabase.

If a user were to notice, too, when we're doing a lot of these processes, in the lower part of the screen on the lower part of the ArcMap document itself, it's telling us what all the work it's

doing and how it's proceeding. So if a user had doubts as to whether this was really running or doing anything, they simply need to look down in this area and see that there is data being moved and that there is a processing going on.

Once the process has completed, again, the user will get a message box telling us that the data upload from the PDA or the unit is completed and has transferred to the local database. The user would click OK, and then we would move on to the next set of options.

Batch Attribute Updates

Check Distance and Dissolve: In this case, we want to do a 'Check Distance and Dissolve'. What this actually means is that, by our business rules, the distance between plants has to be at least 40 yards for it to be an infestation unto itself. So what this process is doing is it goes out, and it looks for polygons that are within 40 yards of each other. If they are within 40 yards of each other, it merges them into one polygon and makes it one infestation rather than two.

Compute Infestation Centroids: This next process is, it 'Computes this Infestation Centroid'. This was a need of the NAWMA, which is North America Weed Management Association, the standards that are followed across all of the area, and they are the national standards, at minimum. So in order for us to meet those needs, we had to compute the infestation, the centroids, the XY centroid of that polygon itself.

Calculate Area: The next process that it wants to do is the 'Calculate Area'. This goes through all of the polygons, the buffered polygons and stuff that we've created in this whole process. And it's calculating the actual area in acres for that polygon area.

Populate State and County Codes: After this process is completed, then we will go back down, and we will 'Populate the State and County Codes'. And these are the state and county codes of that location data. If it's located in more than one county or more than one state, it will take the majority state and county to populate.

Update Chemical Component Use Rates: The next thing that it wants to do is 'Update the Chemical Component Use Rates'. This is the use rates, which is when we put the chemical

out on the ground, then we want to know the percent active ingredient or percent acid equivalents that is actually going out there. That's what this process is doing.

Import Photos: The next process is 'Import Photos'. We didn't do any, so we will skip that process.

QC Process: From there, we want to do the quality, 'QC process'. And what this is doing is going through to make sure that there were not any null values where there shouldn't be any null values. It is checking to make sure that all of the data is in the correct format that it should be in order to process and go up to the national database again.

So once that process has completed, then we can actually upload that data back to the national server. So it's telling us that there was no data errors found during the quality, or the QC process and that it's ready to upload to national. So the user says OK.

Upload Data to National Server

Note: Add National Database to the "National" Dataframe: And now we are able to move back on to the next process, which is the 'Upload Data to National Server'. This is where it becomes very important to have this data frame called "National" so that the database or the program knows where to upload the database to.

The first thing it tells you is this, 'Note' [Add National Database to the "National" Dataframe] - that you need to add the national dataset to the National data frame. So we've already got that in place. And so we just simply click on the 'Execute Upload'. Once this process has completed, then the user is able to generate whatever reports they would like to do.

Brief Summary: So let me summarize this real briefly. We went in, we created our proposals, or whatever, that we needed to go out into the field with. Then we took the data from the national dataset and downloaded it to a local geodatabase which is a personal geodatabase stored in Access.

From there, it was taking and created - we took it to what we call the ArcPad format, which was

shapefiles. It exports it out of the Access database, and it creates shapefiles. These shapefiles, we copied over to the mobile device. We also copied all of the Applets, which included all of the lookup tables that were used for drop-downs. We loaded those on to the mobile device, in the C:\Program Files\ArcPad area.

Then we went out into the field, and we collected all of the data that we were interested in collecting. We collected infestations. We collected points, lines, polygons. We collected treatments. We collected an evaluation. We collected monitoring. We could've also collected a survey area had we been out just surveying for weed infestations. We collect that area.

Then we brought all of that data back in. We brought it back into the ArcMap document. We took it up to the local database after creating all of our buffers and stuff so that we had polygon data and not lines and points.

Then we went from the local database we took, and we monitored, and we buffered everything. And we ran through some QC processes to make sure that all of the data was okay. And then we upload that data to the national dataset. Once this process is complete, then the user is able to generate the report.

Generate Report: At this point, the user is ready to generate reports. If they click on the plus sign, it breaks down the report. You have a BCARR report, which is 'Biological Control Agent Release Record'. You have a 'Pesticide Application Record', which is a PAR. You have what we call an IPMR, 'Integrated Pest Management Report', and a 'Pesticide Use Report', PUR.

BCARR Record: We'll start with the Biological Control Agent Record. We click on this, and it will open up a screen. That screen will allow us four different options for selecting how we want to print or what we want to print, as far as a BCARR is concerned.

The first option will be to print by 'Date', and it will be a 'from' date 'to' date. So if you wanted to print a series of biological control agents in a date range, you would put the from date and

the to date. In this case, they're both from the current date, and so that would be what we would print. Any biological control agent releases that we did during this particular day would be printed.

The second option allows us to select a 'Geographic Area', select certain features from the location – the treatment component location table - and then click on that, and that would allow us to pull up anything that was concerned with that particular area.

The third option allows us to select, based on the 'Weed Species that we were Treating'. In this case, we had done some treatments on leafy spurge, so that would be our option.

We also have 'Biological Species Released'. This allows us to select, based on the agent that we were releasing. In this case, I'm just going to select the current date that we did. We did one record, so that would give us one Biological Control Agent Release Record report. And, again, this report comes up as a Word document, which is useful for being either saved and/or printed.

The report comes up, and it shows all of the information concerned with the actual release. It tells you the project name, the organization that performed the release, the biological control agent proposal number, the NEPA number that - these are the documents that the user is treating against - the biological control agent, the person who did the release, the date of release, the location of the release, the method used to protect, if any, was used, the total project area in acres, the pest species that we were treating, the stage of the pest development, the general soil texture. Again, these are all of the information that we entered in the field during the process of performing the treatment.

PAR Record: The next one is the Pesticide Application Record. This one allows the same four options for creating the report. Again, it gives you the option to do it by a date range, which we will probably do. The other options are by the 'Chemical Release', the species that we were treating, and the geographic area. So the only one that really changes is the chemical release versus the biological agent being released. So we select the date range. And, again, this is the same date range that we had before, and we get this report.

The report shows, again, the field office, the Pesticide Use Proposal that's in place, all of the information that we collected out in the field during the time of the treatment. It shows the application of the chemical mix, as far as the acid equivalent amount, and that was a calculated field that we had talked about earlier. It shows the actual area treated and the total project area, the primary pests involved, and the stage of pest development, and all of the weather conditions at the time of the treatment.

IPMR Report: The next report that is available is the Integrated Pest Management Report. This one comes up with another screen as well that shows the state that you're working within, the administrative state, as well as the year, fiscal year, of the report. Once you click the OK, then the user will get the following report.

And this one shows the treatment acreage and what kind of treatment took place as well as the treatment method, as far as whether it was ground or aerial. In these cases, we've got chemical, biological, re-vegetation, fire, mechanical. And then at the bottom, we also show additional features, such as how many releases of the buds were made, of how many buds on what species.

PUR Report: The next report that is available is the Pesticide Use Report. This one, again, allows the user to select the state, the administrative state, and the fiscal year of the treatments, and the field office that you're concerned with. Once you click the OK button, the following report comes up.

And this one shows the active ingredient that was put out there on the ground as well as the treatment method as far as how much acreage was associated with each method and the total pounds of active ingredient applied in that field office area.

Now the user has been able to see the process of going through all of the steps within the Task Assistant and the programs. That concludes my portion.

Thank you.

Kathie Jewell

Thanks Donna for walking us through the application. I'd like to take a few minutes to summarize what was presented and the overall status on the application.

NISIMS houses the information on what BLM lands have been surveyed for the presence or absence of invasive species. It houses where the infestations exist and how they change over time. They also have where and what treatments have been done and an evaluation of these treatments.

All the required internal and external reporting generated through the use of this application. And, NISIMS is going to be - Oracle database that uses ArcPad and ArcMap. The user is walked through their actual workflow by the use of the Task Assistant. And the Task Assistant is accessed within ArcMap.

Currently the application is accessed through Citrix environment housed at the Oregon State Office. The application is scheduled to be deployed, at which time it will be housed at the NOC [National Operations Center].

The user representative for this deployed system will be Richard Lee.

< END >

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