Welcome to the All-Hazards Resource Advisor training curriculum. You are currently beginning the Basic course, considered an introduction to being a Resource Advisor. This is the first of three online courses that will help prepare you for possible deployment to an incident as an All-Hazards Resource Advisor. This course has been designed for students that have not yet served as Resource Advisors on an all-hazard incident response. If you have been involved as resource advisor in the past, there is still much that you can learn in these three courses that will help you to better advocate for the needs of natural and cultural resources during response efforts.

We anticipate this first online training module can be completed in 3-4 hours. Simple navigation controls allow you to start and stop the training at any point, go back to previous sections, view voice transcripts and access additional information through the glossary or attachments link.

All of the pages in the course can be accessed from the Table of Contents; it is the drop-down menu in the upper left. The green progress bar in the upper right fills in as you go to show your progress through the course.

You can control the audio narration through the audio controls in the lower left. Please note there is extra information not listed on the screen within the narration.

At the end of each module of this course you will be presented with a knowledge check assessment. These interim assessments serve to gauge your level of comprehension of the material presented before moving on to new topics. You will need to achieve a score of at least 80% one each knowledge check before you will be able to take the final assessment at the end of the course.

When you are ready to begin the course, click the Continue button at the bottom of the screen.

No narration.
Maria and Aaron

PRIMARY NARRATOR: As you navigate through the course, from time to time, two characters, Maria and Aaron, will appear to give you a bit more detailed information on a topic or what you can expect during your work as a READ. While Maria and Aaron are fictional, the information they provide has been drawn from the experiences of numerous READs in their real experiences in the field.

MARIA: I’ll try to clear up some technical information to help you be more effective in your role as a READ.

AARON: I’ll give you some insights from my deployment experience on what you can expect when you are in the field.

Welcome Message

No narration – link to McKinley Ben Miller welcome video clip includes closed captioning.

What You Will Learn

This course is meant to introduce you to the basic functions of an All-Hazards Resource Advisor. There are five basic objectives of this portion of the training.

First, that you become familiar with the potential roles of an All-Hazards Resource Advisor. This includes the responsibilities of a Resource Advisor, communication and reporting points, and the limits of a Resource Advisor’s authority.

Second, that you are able to identify a range of natural and cultural resources that an All-Hazards Resource Advisor may encounter.

Third, that you are able to identify and briefly describe the range of authorities and regulatory frameworks that Resource Advisors often deal with.

Fourth, that you are able to list or describe the actions and steps you need to take prior to your deployment date.

AH-READ Training Process I

The All-Hazards Resource Advisor training process includes three individual online training courses. Each builds upon the previous training and is crafted to use the knowledge gained in each module and the listed prerequisites.

This Basic course should take approximately 3-4 hours to complete and includes seven short modules. These will cover the roles and key skills of a READ, brief introductions to natural and cultural resources and their regulatory frameworks and finally guidance that discusses what to expect during a deployment. Prerequisites for this course include FEMA ICS training IS 100 and IS 200.
AH-READ Training Process II

THE AH-READ intermediate course should take no more than six hours to complete. It is comprised of three modules: natural resources and their regulatory frameworks; cultural resources and their regulatory frameworks; and methods to go about rapid resource assessments and ways to engage in strategic decision making. Prerequisites for the intermediate course include the AH-READ Basic course and FEMA ICS training IS 700.

THE AH-READ advanced course includes four incident scenario modules that require the application of knowledge gained in the first two courses to address problems encountered by the Incident Management team or IMT during incident response planning and operations. ICS terms and processes are used throughout the advanced course, which should take no more than five hours to complete. Prerequisites for the Advanced course include the AH-READ Basic and Intermediate courses. Completion of the FEMA ICS course IS 800 is also highly recommended.

The prerequisites listed follow the DOI All-Hazards Incident Positions and Qualifications Guide which requires DOI employees working at and All-Hazard incident site to have completed the courses listed. If you have not already taken these courses, a link is provided here.

AH-READ Qualification Process

This training you are taking is important, but not the only set of qualifications to be deployed as a resource advisor on an incident. Simply taking this course does not guarantee that you will be deployed.

Each bureau may have different protocols and policies for choosing resource advisors. Each incident will require different skill sets, time commitments and qualifications needed from resource advisors.

Your first step is to talk with your supervisor to make sure that he or she knows that you are interested in becoming qualified and possibly deployed as an AH-READ. Your supervisor’s permission will be required to activate your availability in ROSS and to provide approval for each deployment.

You'll then need to follow agency protocols to enter your data into IQCS/IQS, determine when you are able to respond to a deployment request and make yourself “available” within your agency or bureau’s dispatching procedure.

Finally, you’ll want to consider other training that could be helpful to you, such as safety training, HAZWOPER, fixed or wing aviation training and others. Some of these will be discussed in later courses.

Module 1 Roles, Responsibilities, and Key Skills of a READ

Module 1: Roles, Responsibilities, and Key Skills of a READ
Module 1: What You Will Learn

By the end of this section on the roles and responsibilities of a Resource Advisor, you should be able to define the READ’s roles and responsibilities; define seven key skills a READ needs to do their job effectively.

What is a READ?

In this section, we will define the roles and responsibilities of an All-Hazards Resource Advisor. Throughout the training, the terms READ, AH-READ and Resource Advisor will be used, most commonly the READ. All are used to refer to the same position.

A READ is…

One of the first things you may come to realize in taking this training, or in talking to colleagues that have been deployed as READs, is that there isn’t one static and unchanging role of a READ. Taking on this role challenges you to think and act collaboratively to respond to dynamic incident response efforts. Here are a few READs and their take on what a READ is.

What is an All-Hazards Resource Advisor?

The roles and responsibilities of a READ are broad ranging and diverse – just as the incidents that they may be called on to respond. Each incident will demand different skill-sets and present different challenges. And even within an incident, the role of a READ may change as the incident or response efforts change over time.

On any all hazards incident, the highest priority of the response effort is to maintain public and responder safety. As a READ working within the response effort, your primary role is that you are an advocate for trust resources – resources that the Department of the Interior has been assigned to hold in trust or protect for the American public. These resources include DOI lands, natural resources such as flora and fauna, cultural resources such as archaeological sites and historic properties and landscapes, and trust responsibilities like ensuring coordination with potentially affected tribes.

You are also an advisor – you are providing information to the decision process rather than being the decision maker yourself. It is essential that you are an effective communicator – remember you speak for the resources.

Finally, the READ is a generalist. You are not expected to be an expert in all topics. Your individual specialty will likely play a role during your deployment duties, but you will also likely be called upon to provide input on resources outside of your area of expertise.
How does a READ work?

A READ also needs to be able to work within the context of the Incident Command System or ICS, so you will need to have a working knowledge of the organization, processes and functions within this system.

A READ needs to be able to anticipate the needs of both the resources themselves and of the incident responders. You may need to anticipate the need for materials to protect a threatened species, or perhaps identify additional personnel needed to complete a task.

Finally, you must be able to communicate the needs of the resources within the appropriate channels of the ICS.

What are a READ’s Roles? I

One of the main roles that a READ plays in responding to an incident is looking for ways to minimize or prevent further injury to resources as a result of response actions. As you work the incident, you will need to be aware of not only the location and needs of the resources themselves, but also of the planned response activities that may cause additional injury to those resources. As an example, the image here illustrates vehicle damage to a sensitive wetland that can occur as a result of response activities. A READ may be able to suggest alternate routes to avoid further harm or other mitigation techniques, such as, in this case, placing boards or planks along the travel route in those sensitive areas.

What are a READ’s Roles? II

A READ’s task is to protect the natural and cultural resources of a site, and often that means respecting the natural processes that have been brought on by the hazard incident. For example, barrier island shorelines regularly change over time and these changes are heightened by storm events. The effects of these shifting shorelines are allowed to remain when they do not affect other resources or values. In this first image, storm overwash events changed the shoreline and dune structures at Assateague Island National Seashore, but this overwash also creates new habitats along the back of the island. No actions to reverse these storm effects are taken. In this case, a READs role would focus mostly on documenting changes to the natural resources.

What are a READ’s Roles? III

In a similar incident, storm overwash formed a new inlet at Cape Hatteras National Seashore, a common occurrence along high energy coastlines. In many cases this would not result in the formation of an Incident Management Team, as the natural resources of coastal systems are adapted to disturbances of this magnitude. In this case, however, more than isolated natural resources were affected, as the new inlet severed North Carolina Highway 12, a vital transportation link in this coastal region. Incident response actions were taken to quickly rebuild the highway. As a READ, your
tasks might include observing and documenting effects on natural resources from inlet formation, as well as monitoring planning processes for highway reconstruction and recommending options to limit or eliminate further changes to the condition of natural resources as a result of construction activities.

A READ Supports the Incident Management Team (IMT) by:

A READ speaks for the resources, but must also realize that the incident response – what he or she has been sent to assist with – is controlled by the Incident Management Team or IMT. A READ serves to support the IMT by providing information about impacted resources or potential hazards that allow the IMT to craft response and mitigation actions that are sensitive to resources.

While you will come to the incident with your individual skills, interests and experiences, it is important to maintain a focus on the incident and resources at-hand, making sure to monitor all resources, and not just those that fall within your area of specialization.

Also, do not undertake projects such as sampling, data collection or photo documentation that do not directly help the IMT, even if they are related to your duties outside of your deployment.

In order to work beyond your own specialty and with multiple sets of resources and collaborating personnel, you need to “wear many hats.” The ability to think from multiple perspectives, including that of the IMT, local host unit administration, other bureaus or agencies, and even local community members, is an essential skill for a READ.

Finally, a READ needs to be able to communicate with many different audiences. You will be expected to talk with personnel within your chain of command and with subject matter experts that may not be at the incident site, as well as with local stakeholders and citizens, and even with the media. This will require you to tailor your language to each audience. For instance, you will use ICS language to speak to your chain of command in the IMT, but local stakeholders and citizens will not likely be familiar with many of the terms used there. So you’ll need to communicate your messages using language to which your audience can relate.

Competing Interests

Because of the challenges that face a READ; supporting the IMT, advocating for the protection of all resources, understanding the perspectives of many different colleagues and stakeholders, working in very time-sensitive situations, the READ may feel stretched in many directions at once.

Remember to do the best that you can do with the time, equipment or expertise that you have available to you at that time. READ’s may feel isolated because they may be working independently at the incident, but they have a whole host of other READs, job aids and resource specialists ready to help. So when you need help, ask for help. That may be a phone call to a migratory bird specialist to ask about nesting times for your location, or it may be a request for additional personnel with special skills.
### Advisor…not Decision Maker

Remember that as a READ, you are one voice of many at an incident. Decision makers are weighing other factors too. Human life takes precedence over all. The threatened natural or cultural resources that you are speaking for may be sharply in focus for you. Their needs, and the actions and possible outcomes will be very real to you. But there are others who have that same clear vision for the duties they have been tasked with. Resources may be at risk, but so may human lives in a surrounding community or neighborhood. Your role is to make recommendations that the IC will weigh against other competing recommendations. He or she is ultimately responsible for the recovery actions taken. Your goal is to be able to provide the kind of information that allows the IMT to take actions that are sensitive to natural and cultural resources.

### Key Skills -- Identifying

So far, many of the roles and responsibilities of a READ have been discussed, but what are some of the **Key Skills** that an effective READ must work toward?

First, there may be legal requirements for resource protection that will need to be communicated to the IMT. Legal and regulatory frameworks will be outlined later in this course and also discussed at length in the intermediate level Resource Advisor training.

Second, a READ needs to be able to identify the impacts to resources as a result of the hazard and/or incident versus those that may have been caused by response activities.

Third, a READ needs to be able to proactively identify potential impacts that may result from planned incident operations for specific resources. In the photo example, following Hurricane Katrina in 2005, the site of a proposed trailer court undergoes subsurface archeological testing to assess potential impacts to resources. The READs role in this case was to recommend testing of the area while the trailer court was in the planning stage and then to report the results of the testing to the IMT.

### Key Skills -- Assisting

As a READ, part of your role will be to assist others on the incident team. Before the first equipment is moved or shovel of soil is turned, incident action plans, shift plans and other documents need to be assembled. The READ brings resource concerns and condition assessments to these efforts. These may be initial visual observations or a call for more rigorous science-based resource information to be collected. During the early phases of a response, the urgency of the situation may require you to make quick recommendations prior to documentation, or they may push you outside of your comfort zone.

Try to make decisions based on the state of the information you have at that time, document those recommendations and move on. As Incident Action Plans become an evolving set of documents, you may come back to these same decision points later with more relevant information your earlier documentation of recommendations will only serve to help you or fellow responders as the response effort progresses.
Your assessments as a READ will also need to include both short- and long-term actions to be taken to protect or stabilize resources. Keeping in mind that natural processes will be respected, a “light on the land” or “minimal influence” approach is recommended as the first of many options to consider. As an example, short term actions for impacted turtle nests may be to flag the area and avoid any interaction while long term actions may necessitate ongoing monitoring that requires human interaction.

**Key Skills -- Communicating**

Effective communication is a vitally important skill for the READ, but that does not mean the best speaker or the loudest voice. With many different people to interact with think creatively about different ways to get them to understand the needs of the resources.

Different methods of communication can be used to reach people in different roles on the incident, whether verbal, written or graphic. Other languages may be needed to speak with local populations – will you need an interpreter? Audience appropriate presentations may better convey the value of complex resources.

Some people respond to facts, others to feelings and human-level impacts. Gauge your audience and adapt your message to their needs.

**Your Voice – Satin Video**

No narration – link to Satin Bowman video; video includes closed captioning.

**Key Skills – Critical Analysis**

And a note on critical analysis which in the case of a READ can be thought of as a three-legged stool:

Resource knowledge forms the first leg. This includes fact gathering about the resources present or possibly present in the incident area. This also includes your own knowledge about resources present and your ability to contact others about resources that you are not as knowledgeable about.

Understanding the actions needed to stabilize or protect these resources form the second. This may not be immediately apparent to you, even if you’ve collected a great deal of information about the resources present. You will likely need to develop several solution options to present to the IMT. As the incident response develops the actions needed to protect resources may change your solution options and you’ll need to adapt to these.

Effective communication skills for the READ are like the third leg on a stool. The third leg is built on communicating your knowledge of the resources and your assessment of actions needed in the form of protective strategy options that can be presented to the IMT. Without this vital communication the needs of the resources may not be recognized. Keep in mind though, that there may be times that other response needs may override the ideal needed action. Your critical analysis skills will help you to respond to these changing needs by working your way back through knowledge of the resources, a revised understanding of needed actions and additional communication with the IMT on new solution options.
Key Skills – Working Proactively I

Tied to effective communication, working proactively with others in the incident command is another vitally important skill for the READ. You were not sent to the site to impede the efforts of the IMT, but to support their efforts in ways that serve to protect resources. There may be some instances in which a READ will need to stop the work of contractors or other response personnel, but these are less common and communication protocols and chains of command are key in these instances. Chains of command will be discussed in the next section.

Key Skills – Working Proactively II

You can provide response alternatives to the IMT, which may be as simple as suggesting that the bulldozer “go around” the sensitive wetland.

Key Skills – Working Proactively III

Alternate strategies make you a valued member of the team. Reacting by stopping work does not.

Key Skills – Documenting

PRIMARY NARRATOR: Another skill that you need as a READ is the ability to document the resources present at an incident. You will need to identify sensitive resources, potential threats to those resources posed by the incident or response actions, and actual impacts caused by these as well.

Remember that your observations, reports and recommendations are being made to help others – those in incident command – to make decisions. Keep your documentation to the facts that you see or understand at that time, not opinions of how things came about or should be handled. These resources or impacts may change over time and you or another READ will be able to report your objective observations of these changes as they happen.

It is important to note that any observations that you record, or documentation that you complete will be read and used by others. Whether this is someone else within the incident chain of command while you are still on your deployment or the next READ that replaces you or resource managers of the property once the incident response is complete. Clear documentation of what you saw, what you did, and what tasks remain to be done, will be vital in maintaining an efficient incident response.

Finally, on any response to incidents on Federal property, all incident documentation may be subject to scrutiny during legal proceedings. Keep documentation factual, professional and clear.
MARIA: With everything that you see and do as a READ, and all of the people you collaborate with, there can be lots of documentation to complete. But don’t fret, many standard forms are available to help you communicate within your chain of command. Understanding forms such as ICS 214, the Daily Unit Log, and ICS 209 the Emergency Management Situation Report, will take you a long way.

The Daily Unit Log, or ICS 214 records the daily activities of you and your team. Be as precise and specific as you can in this report, because it will help others to fill in ICS 209 which is the Emergency Management Situation Report, sometimes listed as the Incident Status Summary.

So rely on these and the other forms provided to you, but also, if you do have a specific concern that needs attention and that you’ve noted on the daily unit log, you can still bring that up verbally to others in your chain of command.

Key Skills – Working and Playing Well

And lastly, the READ needs to take the approach that he or she is part of a team with the same over-arching goal; to help the local park, preserve or unit, its employees and stakeholders recover from a hazard event. Being part of this team means that you always try to work and play well with one another.

Remember that good working relationships will go a long way toward providing protection or recovery of the resources for which you are the advocate. To do this, you may need to pay extra attention to your cultural sensitivity and flexibility. Try to keep all interactions positive. Everyone will be tired or stressed to some degree; no one needs enemies during an incident. Be tolerant of your peers and try not to take things too personally.

Finally, where appropriate, use some humor. Sure, you’ll be in some serious situations, but everyone needs a smile from time to time.

Module 1 Review

To review: As a READ you have many challenges, tasks, sets of knowledge and relationships to juggle. But these six statements broadly define your role and the mindset or approach for a successful Resource Advisor:

1. You’re an advocate for trust resources – you serve as the voice of the resources.
2. You’re an advisor, not a decision maker – working to facilitate the process, not stop it.
3. You’re a good communicator – building relationships, finding the right audience and tailoring your message
4. You’re a generalist, not an expert in all topics – you can learn from each other on the incident or from your many subject matter experts available to help you while in the field
5. You are proactive and anticipate needs – providing information that helps plans, decisions and resources at the same time
6. You have to work and play well with others – you’re part of a team. Share burdens, share successes.
Knowledge Check Instructions

Each module concludes with a knowledge check. These help gauge your level of comprehension, prior to the final assessment. Click the continue button when you are ready to begin.

Module 1 Knowledge Check Question 1
No narration

Module 1 Knowledge Check Question 2
No narration

Module 1 Knowledge Check Question 3
No narration

Module 1 Knowledge Check Question 4
No narration

Module 1 Knowledge Check Question 5
No narration

Module 1 Knowledge Check Question 6
No narration

Module 1 Knowledge Check Question 7
No narration

Module 2 A READ’s Role in the Incident

Module 2: A READ’s Role in the Incident
Module 2: What You Will Learn

In this section, we’ll briefly discuss the READ’s role in the Incident Command System or ICS. We will describe the structure of the system and where the READ may be located within that structure. This will help you identify with whom you communicate and the overall chain of command of which you will be a part.

We will also discuss the limitations of authority that the READ has on an incident and how to obtain assistance within this chain of command.

A READ’s Role in the Incident

An understanding of how a READ operates within the ICS is essential prior to any deployment. As noted earlier, prior to taking this course, you should have successfully completed two of the ICS training modules. While the ICS courses will not cover
actions that a READ will specifically take, they provide an understanding of the fundamental structure and processes of the ICS that the READ will be working within. As discussed earlier, one of the core skills that a READ must have is the ability to communicate and work well with others. Having a clear understanding of the hierarchies and roles present in the ICS will help you to communicate appropriately.

Examples of Roles Basic

In a simple incident, there may be times when the READ is representing the local unit, preserve or park administration and has direct contact with the incident commander.

More commonly, even on simple incidents, the READ will report within one of the ICS sections such as Planning or Operations. The READ’s chain of command is then through that section and not directly to the incident commander.

Where you are placed depends on the type of incident you are on, and when in the time-line of that incident response you report.

A READ can be plugged in anywhere in the ICS structure depending on the needs of the IMT and you may have to communicate with people at different levels of the org chart. Where a READ is assigned depends on the type of incident they are on. This reporting relationship may change throughout the incident. In a simple incident, there may be times when the READ is representing the local unit and has direct contact with the incident commander. More commonly, even on simple incidents, the READ will report within the ICS Planning Section and not directly to the incident commander. The READ’s assignment is commonly working directly with the Operations Section; however their chain of command is typically through the Planning Section. This reporting relationship best allows the IMT to incorporate potential impacts to resources from response activities into the planning process. In rare instances, the READ may even report to the agency administrator. Regardless of where the READ is assigned, they are above all an advocate for the resources.

In rare instances, the READ may even report to the agency administrator.

Examples of Roles Complex

In a Complex Incident the READ most often reports to the Operation or Planning Section leadership. As the incident grows the READ may become one of a number of Resource Advisors and/or technical specialists and may be designated as a lead READ. The READ may recommend additional personnel with approval through their chain of command and documented on an ICS-213 General Message submitted to the Supply Unit who will place the resource order.

As an incident gains in complexity, you can expect the organizational structure to be confusing and subject to change. You may be reassigned to a different location one or more times during your deployment as the response effort progresses. On a more complex incident, the READ is often farther from the decision makers, though in these complex incidents a lead read may be assigned to work directly with section chiefs or even the incident commander. Again, regardless of where the READ is assigned, they are above all an advocate for the resources.
A READ’s Location in the ICS

PRIMARY NARRATOR: While your tasks and responsibilities may be wide-ranging depending upon the incident complexity, several tasks or actions that you will typically take part in are:

Daily Briefings - Briefings can be very formalized and difficult to get your voice heard. They are intended to be short and concise. If you have been asked or have an appropriate input during a briefing, speak up and be an advocate for the resources! Very often, all hands briefings will be followed by breakout briefings of small groups. This may be a planning section briefing or a group of READs that plan the tasks for the day. This is your time to mention resource issues or clearly express your need for information, experts, transportation, equipment etc.

Create a network - Introduce yourself and ask to be introduced to others. You may encounter resistance, depending on the type of incident. Remember, you are part of a team of individuals at an incident that need to work together to achieve the overall goals of the IMT. It’s all about the people and creating friendly and productive working relationships. Get to know the others working to mitigate impacts to humans and resources. You have important things to say and contribute and once you’ve made these relationships, people are more likely to listen to you.

Provide information that others may be able to use to complete their tasks while at the same time minimizing impacts to resources.

As an example, use aerial and ground reconnaissance to protect resources – if you hear of overflights or ground recon activities that might be able to provide you with needed information, coordinate with Operations to see if they can capture the information you need too. Or in reverse, if you are scheduled to gather aerial or ground information, check with operations to see if others can benefit from your work.

Find existing data, share data. You may reduce others’ work and help to maintain consistency of information on the incident. This also helps build your own credibility within the IMT.

And, as discussed earlier, document everything you see, do and find. Then share that through your chain of command.

AARON: The structure of the Incident management team can be large and intimidating; even if you have good information to convey.

There are different types of briefings that range from the General Morning Briefing, led by the Incident Command staff, to smaller division or sub-unit briefings. Generally the Morning Briefing is not the place to speak up, unless you’ve been asked to give information or you have a serious safety issue to report. If you do need to speak up during the briefing, keep your message succinct. As an example, you may simply ask for a side-bar meeting with a dozer crew to let them know of a sensitive habitat area you’ve been documenting.

After the morning briefing, typically IMT divisions or sub-units will hold mini briefings. This is the place to bring up information or concerns. Your immediate supervisor will likely be in these meetings and will be able to relay your information up the chain of command if appropriate.
## Your Place in the ICS

No narration – link to video by Ray Albright will be closed captioned.

### A READ’s Location in the ICS

Since a READ can be placed in many different areas in the IMT, it may be a bit confusing, but it’s actually very straightforward once you know your reporting location. The chain of command that is the ICS builds an orderly line of authority and reporting relationships with lower levels subordinate to and connected to higher levels.

When you check in to the incident, if you don’t already know, find out then who your boss is. Sit down with that person and discuss your primary tasks and objectives. Your place in the IMT may change during your deployment and this may be a challenge to you. Each time this happens, make sure you clearly understand your new reporting relationships and new or revised tasks and expectations.

While orders within the IMT will follow the chains of command, keep in mind that members are encouraged to share information directly with one another to promote the overall goals of the response effort. Attending, and where requested, contributing to briefings will also help keep you connected with the many others in the IMT that are all working on a common set of goals.

### A READ’s Role in Public Interactions

On many incidents there will be great interest by the public and the media to have answers to questions such as what resources have been affected, when parks or refuges will reopen and what’s being done to recover from the incident. Because your role on the response team may put you in a position of knowledge on many of these issues, you may be asked to comment or provide an interview. While the public and media do have a right to know, you will need to determine if you are willing or able to speak. Here are some guiding principles to keep in mind.

- Remember that you may need permission to speak to the media.
- Accuracy of information is critical. Speak only about facts. Do not speculate, presume, or give your opinions.
- Provide information only in areas that you are qualified to speak about as a READ – stay in your lane.
- Some information cannot be divulged. By law, you can’t divulge archaeological sites and endangered species data. These should be vetted through the local experts and officials for that resource so you may want to simply state that you cannot comment on those specific resources or findings.
- Use your best judgment. Be professional. Speak only about your own duties and not on behalf of other disciplines, bureaus or agencies.
- The Public Information Officer or PIO may provide specific direction for a specific incident.

As an example, during the Deepwater Horizon oil spill, READs were issued media cards with specific guidance as shown here (Media Card to be replaced with clearer image)
Finally, even if you don’t speak directly to the media, you may be asked to provide information to the PIO or Public Affairs personnel related to your duties or actions on the response effort. Following the above guidelines will help you keep your message clear and appropriate in this situation as well.

**Key Skills – Public Interactions I**

No narration – link to video by Tom MacKenzie will be closed captioned.

**Key Skills – Public Interactions II**

No narration – link to video by Ray Albright will be closed captioned.

**Key Skills – Know Your Limits**

Lastly a key skill for a READ, and one that comes with experience, is to know your own limits. This may be your limits of authority, the limits of your own area of expertise or even the physical limits of what or how long you are able to perform.

Each READ, and every other individual assigned to the incident, wants to do the best job possible to deal with the effects of the incident. But you must always work within the ICS – the structure set up to specifically deal with the incident you’ve been assigned to. As a READ, you are there to gather and provide information and recommendations to the decision makers within the structure.

You are not an enforcement specialist. You may see impacts or actions that threaten resources and if you do see a violation of Federal law, you are required to pass this information up your chain of command or to law enforcement. More commonly, you may also be able to help to educate those within the response effort of legal requirements that may be in place for certain resources. This will make the IMT’s job easier, but remember you’re not there to enforce laws, you’re there to advocate for resources.

Actions on an incident may move at a rapid-fire pace. You may be asked to make quick assessments in a limited amount of time. Your background and training as a subject matter expert may draw you towards a full analysis of impacts to specific resources. You won't have time for that. You will need to keep in perspective that you're there to advocate for all resources and spend your time wisely. So you'll frequently need to perform a triage of sorts to prioritize your effort. This also means that you'll need to recommend priority actions for the IMT. You must clearly articulate concerns over threats to resources; but you may be expected to do that in a limited amount of time. As a result, you'll need to recognize “good enough” given the speed at which the incident response is progressing.

**Module 2 Review**

In this section the READ’s role at the Incident and operating within the Incident Command System was explained and typical tasks and actions were outlined.

You viewed a presentation to help you understand what to do when you first arrive at an incident and how to know “who’s your boss?”

Public interaction and information was touched upon, along with guidance on what to
avoid when speaking to the media or the public.
Finally, knowing your limits as a READ, whether in terms of authority or skill sets, understanding where you stand is key.

### Module 2 Knowledge Check Instructions
Knowledge check - No narration

### Module 2 Knowledge Check Question 1
Knowledge check - No narration

### Module 2 Knowledge Check Question 2
Knowledge check - No narration

### Module 2 Knowledge Check Question 3
Knowledge check - No narration

### Module 2 Knowledge Check Question 4
Knowledge check - No narration

### Module 2 Knowledge Check Question 5
Knowledge check - No narration

### Module 3 Natural Resources

#### Module 3: Natural Resources

**Module 3: What You Will Learn**

In this section, we present the major types of natural and cultural resource which a READ will likely deal with on an incident. At the end of this module, you should be able to briefly describe these types; but stay tuned, because the Intermediate course is where you will be shown much more about specific trust resources that a READ will often work to protect while involved in response and recovery efforts.

#### Interdisciplinary Resource Knowledge

This section will focus first on Natural resource types that an AH-READ may encounter in the field, then on Cultural Resources.

Earlier, we looked at how you will feel pulled in multiple directions as a READ due to the wide range of resources you speak for. But remember, the READ is not expected to be an expert in all disciplines – rather, a READ should know when and how to relay vital resource information to subject matter experts during the incident response and recovery period. There may be incidents where you are able to add your specific skills or expertise to the recovery efforts. But a READ speaks for ALL of the resources no matter whether they fall within your area of expertise or not or even under the responsibility of your agency or bureau. In fact, during a recovery effort, you may need
to work outside of your comfort zone even when working within your field due to the speed at which assessments, recommendations and decisions need to be made. So you will feel pulled in multiple directions. You may think, “But I’m a biologist, what do I know about historic structures or cultural landscapes?” You may actually know more than you think you do, and quite often more than the other response personnel around you. This training course is intended to guide you through the basic skills needed to know how to look at all trust resources and their threats, to understand your role as a READ and the limitations of that role, and how to effectively communicate the needs of all resources to the IMT. As you progress through the AH-READ Intermediate and Advanced courses, these topics will be discussed in greater depth.

Natural Resources

The Resource Advisor needs to have a working knowledge of natural resources which might be encountered at an incident. The next few slides will provide a brief introduction to resource elements you should be able to recognize. The Intermediate course will provide a more in-depth look at many different individual resources and resource types.

Types of Natural Resources

In the next few slides we'll introduce the major types of natural resources you will likely come into contact with during an incident. These include:

- Water. Such as streams, lakes, reservoirs and groundwater
- Geology and Soils. Such as volcanoes, geysers, hot springs, landslides, rock arches and more
- Air is a resource. Important considerations include air quality and visibility
- Animals such as birds, mammals, fish and others
- Plants such as trees, bushes, grasses and more
- Microbes -> algae, fungi, and bacteria

Water Resources

Water resources can be divided into waters on the surface of the earth, such as lakes, streams, wetlands and reservoirs and the waters beneath the earth, called groundwater. Groundwater is usually found in rock layers which we call aquifers. Sometimes, groundwater rises to the surface in springs. On an incident response, the AH-READ needs to be aware of the potential issues of water quality or the cleanliness of the water, and water supply, of how much water is available. Protecting water quality from further degradation is usually the largest issue regarding these water resources.
Geology and Soils

Geologic resources are things formed in, on and around rock. Caves, volcanoes, sink holes, rock arches and even water falls can be considered geologic resources.

Fossils were once living things but now are rock. Paleontology is the study of fossils, but for the sake of this training, they are considered geologic resources.

Soil resources come from the underlying geologic rocks. Soils can be composed of primarily mineral elements or organic elements, or a combination of the two.

Geology and soils form the foundation of what lives and thrives on the earth. They are the underpinnings of our environment.

At an incident, geologic and soil resources often play an important role. The AH-READ needs to be aware of special geologic landforms, such as caves, and also realize that the potential for landslide, mudslide and erosion should be assessed.

It is very important to know that many geologic landforms have strong cultural significance. Sometimes the cultural values for a geologic resource is the primary reason it has significance and must be protected.

Air Resources

Air is a natural resource.

This includes air both at the surface of the earth and up into the atmosphere.

On an incident response, protection of the air resource is usually not a pressing issue, however the AH-READ needs to be aware that the Clean Air Act which regulates pollutant discharges into the air and how much visibility can be reduced due to incident response actions. The Clean Water Act will be briefly described later in this course.

Plants and Animals

Plants and animals will often be the primary natural resource concern at an incident. It is important to know that all plants and animals can be described in terms of species, populations, communities and habitats.

An AH-READ is expected to be able to address plants and animals as individual organisms (species), as populations, as communities, and as habitat for a specific species. Each type (organism, population, community) has a particular way of being described and analyzed, and each type is significant (or not) depending on which laws cover the protection of which plants, animals, and habitats.

Let’s look closer at species and their habitats.
Species

PRIIMARY NARRATOR: An All-Hazards READ may encounter and need to deal with a wide variety of plants and animals; from small insects to huge redwood trees.

It is important to remember that animals are mobile, and usually have home ranges which vary in size, but may include very different habitats and needs for hunting, nesting or dens, mating, etc. Time of year is important for understanding which part of a home range may be needed by a species.

Plants are stationary, but their seeds may travel long distances. Because plants cannot move, plant communities may be subject to greater injury from an incident and the response.

Generally, READS do not spend a lot of time on abundant or highly mobile species. When a population or community has very few species and its existence is in peril, we call these ‘rare’ species or ‘rare’ communities.

On an incident response we usually focus on very rare species and those species facing imminent threats from the incident. These are often listed as threatened or endangered and you will hear them referred to as T&E species.

Be aware however, that humans often place high values on certain species such as charismatic megafauna like deer, bear, dolphin, turtles, etc., which may shift focus away from other species, even if those other species are rare, threatened, or endangered.

Also be aware that many species have cultural importance to Native Americans, such as the raven and coyote, and some plants are culturally sacred, such as grasses for weaving and herbs for medicines. Protecting the knowledge of the location of these plants is often as important as the plants themselves.

MARIA: Even though you may not see a species present in the immediate area of the incident you are working in, you may be within its home range, and it may travel through the area early in the morning, at night, once a week, or only once a month. Find a local expert if you suspect the species may be present anywhere in the response area!

Plant and Animal Habitats

Habitat can be found in vegetation, soils, streams, lakes and wetlands. The water, geology and soils resources are the foundations of habitat.

Habitat is important for breeding, sheltering, feeding, movement and vitality of plant and animals.

We assume that protecting the habitat also protects the species.

When there’s a potential for an incident’s responses activities to disturb a listed species (plant or animal) or its habitat (animal), the Fish and Wildlife Service must be consulted to avoid or minimize impacts associated with the response. This consultation is referred to as Section 7 consultation (the section of the ESA dealing with consultations among federal agencies).

And as a READ, you may be focusing on rare or T&E species, but remember to be sensitive to the habitat those species rely on. As an example, cutting down a number of trees of a species which is prominent in the area to gain access to a site may make sense logistically to give responders access, but those trees may be used by a subspecies of snail or fungus that only exists in that area. As a READ you will need to
look for threats to species, present that information within your chain of command in the IMT, and make recommendations of alternative routes.

**Some Common Threats**

Natural resources are subject to injury or harm. Some resources (species, habitats) are more vulnerable to disturbance than others. Some take a long time to recover. Some may never recover.

From an AH-READ’s perspective, threats to natural resources come from three potential sources:

- Incident response activities – for example, operating heavy machinery erodes soil and pollutes nearby waters, or the action of removing hazard trees further impairs a critical habitat.
- Secondary natural processes – for example, an unanticipated landslide resulting from an unstable slope occurs during an incident response, further complicating the overall situation.
- Expansion of existing low-level threats – for example, a few individuals of an exotic species may occur in the response area, but take advantage of the newly disturbed area to further colonize and spread. READs need to recognize the importance of limiting the transport of invasive species into or out of the incident. This could also include chemical contaminants that were safely stored but now have been released.

Some common threats are listed here and we'll in a little more detail about invasive species and contaminants next.

**Common Threats – Invasive Species**

Invasive exotic species (plant and animal) will often be of concern for an AH-READ when dealing with natural resources.

Disturbances at incidents, such as freshly plowed or disturbed ground, is an excellent bed for invasive plant seeds to grow or out-compete native plants.

Invasive species might also hitch a ride on incident equipment such as the underside of trucks and bulldozers or on boats and trailers. These can then spread by colonizing in new locations.

For more complete information on what you can do to limit the spread of invasive species during an incident response, a link is provided on the screen to view a 16 minute video on invasive species concerns that was produced by the U.S. Forest Service.

Further information can also be found at the weblinks provided here.

**Common Threats – Contaminants**

As a READ, you also need to be aware that many incidents will involve some aspects of chemical contamination.

While large oil spills are obvious and may be the primary focus of the recovery efforts, there are numerous all-hazard incidents that could result in spills or uncontrolled releases of contaminants. Any disaster might result in the failure of containment as with
pipelines and tanks or control functions such as loss of electricity potentially resulting in a release.

While typically smaller in their impact, residential stores of chemicals including fertilizers, pesticides and solvents may pose a threat following an incident.

When chemical contamination occurs, the many individuals and resources affected are considered “receptors” of the affects. As a READ, you will be called upon to provide recommendations for limiting the exposure of receptors. Depending upon the spatial area affected, recommendations could range from exclusion to hazing. Exclusion for a small area might entail netting to prevent receptors coming into contact with the contaminants. For large affected areas, hazing may be used as seen in the photo at the far right, which involves inhibiting contact with contaminants via auditory or mechanical measures.

Finally, decontamination, as seen in the bottom photo of the barge being washed of oil residue, will be very important in limiting the transport of contaminants from the affected area to those “clean” areas.

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<td>In this section you learned about the general range of natural and cultural resources you may encounter on an incident.</td>
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<td>Natural resources you will encounter on an incident can be classified into three major categories: vegetation, wildlife, and invasive.</td>
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<td>We tend to focus on vegetation in terms of communities and/or species. At the species level, we’re primarily concerned with those species at risk, but we may need to consider the community to know where to look for the species. Vegetation also serves as habitat for breeding, feeding, sheltering and/or movement for wildlife.</td>
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<td>When we consider wildlife, we tend to focus on rare (T &amp; E) species first, and then our trust resources – migratory birds, anadromous fish, etc. – followed by species of concern, whether of Federal or state concern. You need to take the species’ life-history into account to minimize response-oriented impacts.</td>
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<td>Invasive Species might hitch a ride on incident equipment such as the underside of trucks and bulldozers or on boats and trailers. These can then spread by colonizing in new locations. As a READ, you want to minimize this possibility as much as possible.</td>
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**Module 4: Cultural Resources**

**Module 4: What You Will Learn**

In this section, we present the major types of cultural resources which a READ will likely deal with on an incident. At the end of this module, you should be able to briefly describe these types, but stay tuned because the Intermediate course is where you’ll be shown much more about specific trust resources that a READ will often work to protect while involved in response and recovery efforts.

**Cultural Resources**

Cultural resources and historic properties are a part of our landscape, part of our environment and treasured as valuable assets by many cultures and communities. The role of a READ is often centered around people, whether they be colleagues in the IMT or stakeholders in the community. Cultural resources tell the stories of these communities, **THEY ARE REPRESENTATIVE OF CULTURAL SYSTEMS, AND BELIEFS**. The READ can play a vital role in protecting these resources for generations to come.

The READ should remember that most cultural resources are non-renewable and once lost they are gone forever. The READ needs to understand that just as with natural resources, cultural resources are vulnerable to the impacts from the incident itself, and response actions. Time and physical changes to the land can cause irreparable damage.

The Resource Advisor needs to have a working knowledge of cultural resources which might be encountered at an incident.

The next few slides will provide a brief introduction to the major categories of cultural resources you should be able to recognize. These are just to give examples of the range of resources that you may come across as a READ.

The Intermediate course will provide a more in-depth look at cultural resource, response strategies and information sources.
### Types of Cultural Resources

In this module we’ll introduce the major types of cultural resources you will likely come into contact with during an incident. These include:

- **Archeological Sites**
- **Submerged Resources**
- **Built Environment**
- **Landscapes**
- **Burial Sites/Cemeteries**
- **Objects & Collections**
- **Records & Archives**

Even natural resources can have cultural significance such as plants used for medicinal or ceremonial purposes.

In this course you won’t become a specialist but should be aware that as a READ you are a general advocate for a broad range of natural and cultural resources. The following several slides will briefly introduce these resource types.

### Archeological Sites

Archeological resources include the site itself, its setting, and any artifacts or objects associated with the site. The range of archeological sites include submerged resources and sites, from prehistoric to more recent times, and can include structures, gardens or other human alterations to the environment.

These resources can be observed in many different forms and across broad temporal scales from prehistoric to contemporary materials.

The important thing to remember is that an archeological site is inclusive and takes into account not only single artifacts, but all of the other culturally significant items including sometimes the land itself to represent a site.

### Submerged Resources

Resources found below the surface of water bodies which can include Inundated land sites can be offshore, in reservoirs, sinks and springs, rivers and caves.

- Often these submerged resources can be surprisingly well preserved.
- These are effected by natural processes… rising sea level, erosion, subsidence
- And by human actions….flood control efforts, dams, dredging, reservoirs, and other activities.

There are a variety of submerged cultural resources that could be encountered. Of course, there are shipwrecks. But there are other kinds of resources – aircraft, cars, WWII landing craft, etc.

Submerged resources can be found in inundated terrestrial sites, activity areas such as anchorages, landings and work sites. Other areas include deposition sites such as docks and ports, and finally maritime casualty sites such as wrecks, groundings, beached remains, hulls and survivor camps.
The Built Environment I

This category of resources refers to features or structures created by humans for a particular purpose. These can be buildings for human occupation or use, and structures that supports human activity or other objects of cultural significance.

Examples of buildings and structures include: houses, barns, motels & hotels, museums, monuments and memorials, aircraft, rockets, ships, and infrastructure to name just some examples.

The Built Environment II

PRIMARY NARRATOR: As a READ you will need to determine if the resource is a single feature or multiple features such as a lighthouse with keeper’s house, fog horn structure, actual light and other machinery.

MARCIA: When working with cultural resources, it is important to have a comprehensive understanding of the site. This photo shows a lighthouse, but it also shows a fog horn, keeper’s house and mechanical light; all of which contribute to the meaning and history of the site. A Resource Advisor should consider the entirety of a site; the resource is not a single structure but the sum of the parts as illustrated by this photo.

Cultural Landscapes

Cultural resources include a wide range of resources associated with historic properties. The landscape is often the first thing you are aware of when you enter a historic property.

As integrated groupings of multiple cultural and natural resources these landscapes help us to better understand the stories of past cultures and their activities. Care should be taken that these landscapes be kept whole.

Many on-site indicators may be present to alert you to a cultural landscape. These can include plantings, structures, differing vegetation types and maturities and roads or other infrastructure.

Burials and Cemeteries

Burial sites evoke much emotion and reverence, and are considered sacred sites by many diverse cultures. As such they should be treated with respect and great care.

They may be indicated on a map but not documented

Or, the site may be documented, or it’s existence known by staff and community but not be recorded on maps.

Another thing to remember, over time headstones can sink, break, topple over and become buried, or are stolen.

Further, burials may not be marked or are marked with something other than headstone (i.e. trees, stones, rocks, and so on) A common historical planting that can
indicate the presence of a cemetery is Myrtle or Periwinkle also known as Vinca.

Burial sites should not be disturbed, but recorded, and archeologists or other cultural resource specialists alerted of their presence.

**Objects, Collections, and Records**

Objects may not be listed as historic artifacts, but may still be important and need to be treated as a sensitive resource. Historic resources may require different treatment than cultural resources during response and recovery.

Records and archives are the paper, electronic, audio-visual, and photographic documentation of information (e.g. supporting documentation about a site, it also includes but not limited to the following: government, court, medical, property, financial, church, school- basic documentation of all aspect of human life).

Paper records are one of the most sensitive items in any museum collection – without the records the objects and specimens become meaningless things.

Both Federal Continuity Directive 1 and the National Response Framework cite the importance of records in emergency preparedness, response and recovery. The security and availability of records critical to government operations, and are vital to the legal and financial rights and interests of citizens one of the lessons learned from Hurricane Katrina in 2005 was the importance of both electronic and paper records needed to re-establish the legal and financial rights of citizens and aid in the rebuilding of communities. Examples include records for court and law enforcement cases; records establishing identity, citizenship, and property rights; and financial records.

**Some Common Threats**

Cultural resources and historic properties are a part of our landscape, part of our environment. As such, they are vulnerable to the same threats and actions as natural resources – whether natural or human-created, both long-term, like erosion and subsidence, and immediate, like hurricanes and oil spills.

Some of these threats may be in response to the initial incident – the action of cleaning the oil, the establishment of a staging area, the creation of a temporary road to access particular areas.

There may also be additional natural processes that may complicate an incident – a thick band of severe thunderstorms with a chance of tornadoes is heading your way, or flood waters are moving downriver several days after a hurricane has impacted an area.

Generally the common threats to cultural resources are erosion, ground disturbance, chemicals, vegetation, water, mold, heat, and removal of debris or damaged materials from the resource. Even cleaning can result in damage to sensitive resources.

Some damage may not be readily visible for example during hurricane Katrina the estimated storm surge was 30 feet – completely engulfing Fort Massachusetts at Gulf Islands National Seashore. While the structure appears to be sound salt water permeated the mortar. Once the salts in the water dry, they expand and that expansion...
can cause significant damage to bricks and mortar.

The process of identifying resources that could be or have been impacted by an action or incident includes the consideration of these kinds of “secondary” or residual threats.

**Module 4 Review**

In this section, you learned about the general range of natural and cultural resources you may encounter on an incident. Cultural resources you will encounter on an incident can be classified in these general categories: archeological sites, the built environment, burials & cemeteries, submerged resources, landscapes, objects, records, and collections. Additionally, you learned about some of the threats an incident poses to these sensitive resources. When on an incident you will need to think about the immediate risks to the resources, as well as the long-term impacts.

**Module 4 Knowledge Check Instructions**

No narration.

**Module 4 Knowledge Check Question 1**

No narration.

**Module 4 Knowledge Check Question 2**

No narration.

**Module 4 Knowledge Check Question 3**

No narration.

**Module 4 Knowledge Check Question 4**

No narration.

**Module 5: Regulatory Frameworks**

**Module 5: What You Will Learn**

Let’s visit our course learning objectives again. It’s important for a READ to know that many actions he or she will be recommending to the IMT will be in response to, or at least guided by many regulatory frameworks. In this course, we will only touch upon some of the major laws that cover federal trust resources and will provide links to further information about each. At the end of this course, you should have the information to briefly describe these laws. In the Intermediate course that follows this one, specific applications of these laws will be presented.

Three of the most prominent laws that will apply to most incidents where cultural resources are present are the
• National Historic Preservation Act (NHPA)
• Native American Graves Protection and Repatriation Act (NAGPRA)
• Archaeological Resources Protection Act (ARPA)

And four of the most prominent laws that will apply to most incidents where natural resources are present are the
• Endangered Species Act (ESA)
• Marine Mammal Protection Act (MMPA)
• Migratory bird treaty act (MBTA)
• Clean Water Act (CWA)

The following six slides will briefly describe what each law protects and provides a link to follow for additional information.

These are by no means the only laws that a READ will come into contact with, simply some of the most prominent and far-reaching. A broader list of regulatory frameworks and laws that a READ may need to consider can be found on a job aid that is located in the additional resources website. Also, as mentioned, the intermediate course will delve more deeply into these and more.

NHPA

The National Historic Preservation Act, or NHPA, which provides for Federal agencies to take into account the effects of their undertakings on historic properties that are listed in, or eligible for, inclusion in the National Register of Historic Places, often referred to simply as “the register”, or in the case of a specific resource as “listed”

Section 106 of the national historic preservation act requires consultation with the state historic preservation officer (SHPO) and tribal historic preservation officer (THPO), as appropriate, and a plan for public involvement. It is the process through which the federal agency takes into account the effects of their actions on historic properties.

Three basic steps done in consultation with the appropriate SHPO, THPO and consulting parties:
1. Identify the Historic Properties
2. Evaluate significance or eligibility in terms of the National Register criteria
3. Assess Potential Impacts & Resolve adverse effects

Some agencies will have programmatic agreements, or PAs, in place with local representatives that may streamline the process of dealing with threatened or damaged cultural resources. In these cases, the PA may describe previously agreed upon actions or involvement of multiple parties, but it important to note that during emergency actions, the NHPA is not waived.

NAGPRA

The Native American graves protection and repatriation act (NAGPRA) which protects native American cultural items (native American human remains, funerary objects, sacred objects, and objects of cultural patrimony) discovered inadvertently or intentionally excavated on federal or tribal lands, and requires federal agencies to comply with the act. Often this is referred to simply as NAGPRA.

In short, NAGPRA protects Native American burial sites, including human remains
and funerary objects. Additionally this applies to sacred object and objects of cultural patrimony that include shrines and offerings. Whether a burial is discovered or intentionally excavated, federal agencies are required to consult with federally recognized tribes on the treatment and disposition of the site, remains, and cultural items.

**ARPA**

PRIMARY NARRATOR: The Archeological Resources Protection Act or ARPA, defines archeological sites, and protects archeological resources on Federal lands by requiring permits for archeological investigations, as well as providing for the confidentiality of archeological site locations.

During an Incident, it is imperative that archeological site locations are considered sensitive information, and may be shared with only a limited number of response personnel. Archeological sites may simply be designated as a “Sensitive Resource” on maps distributed to Response personnel, with a large buffer to mask its actual location. As a READ, you are not to divulge site location information.

Further, it is critical to remember that removal of any artifacts or disturbance of an archaeological site protected under ARPA is a federal crime. This is often referred to as looting. The site can be excavated if a survey plan was filed and an ARPA permit issued.

AARON: Looting is serious business and no READ wants to be part of this illegal activity. But it may not always be obvious, or even intentional. Let’s look a very common way that this can play out in the field.

Think of yourself arriving at an incident response site. One of the first things you want to do is gather as much information from local staff as you can to help you do a better job in assessing natural and cultural resources. In the process of meeting with them, one pulls you into his office to show you all of the great artifacts that he’s collected over time to give you a sense of what you may be looking for. Let’s look at the negatives that are a result of his “personal collection”.

First, the artifacts have been taken from their original context. It is likely that no documentation has been collected with these resources to indicate where exactly they came from or what time period they represent. In short, they lose all of their provenance and research value. Finally, the site may have been damaged as a result of his activities.

This is not the time to confiscate his entire collection as illegal looting, but you may want to mention that it’s important to follow ARPA regulations and that you’ll be consulting with an archeologist about things you find at these sites to make sure that they are treated appropriately.
**ESA**

The Endangered Species Act is one of the first considerations a READ should make concerning natural resources upon arriving at an incident. The original law was enacted to protect ecosystems and that is done by protecting species and their habitats.

All types of threatened and endangered species are protected from “take” and protection is not limited to the species itself, but also the “Ecosystems upon which endangered species and threatened species depend” (Quoted directly from the ESA, section 2(b).)

Authority to list species under the ESA comes from the U.S. Fish and Wildlife Service (FWS) for land and freshwater species, the National Oceanic and Atmospheric Agency’s National Marine Fisheries Service (NMFS) (a division of the Department of Commerce) for marine species. Authority to enforce the ESA comes from those two agencies, as well as the Coast Guard, which relates to both the high seas as well as ports.

The READ will not interfere with response efforts when human life or property are endangered. The READ should make recommendations to avoid and minimize trust resource impacts, but keep in mind that human life and property prevail in all cases.

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**Endangered Species Act Explained**

No narration – Frank video of ESA website will be closed captioned.

**Marine Mammal Protection Act (MMPA)**

The Marine Mammal Protection Act is similar to the ESA in protection but it is for all marine mammals, and their parts, including, but not limited to, seals, sea lions, whales, dolphins, manatees and polar bears. Every effort should be made to avoid any “take” or “harassment” of these species.

The Marine Mammal Protection Act is under the authority of NOAA.

**Migratory Bird Treaty Act (MBTA)**

The MBTA protects all migratory birds, their nests, eggs, feathers, and all other parts from physical collection.

Of primary consideration is time of year and life cycle of the birds at the time of incident response activities.

For a READ dealing with the MBTA, most issues will be due to the response activities rather than the initial incident itself. It is the READ’s responsibility to ensure response efforts avoid or minimize disturbance to migratory birds as much as possible. Sometimes, the response will disturb individuals, but a lack of response could destroy an entire colony.

The Fish and Wildlife Service enforces the MBTA.
Clean Water Act (CWA)

The Clean Water Act made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA’s National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. The READ has no control over what spills or discharges were caused by the incident. Sometimes, this may be the cause of the incident itself. It is the READ’s responsibility to ensure the response effort avoids any additional discharges or leaks from entering navigable waterways.

The environmental protection agency is the primary agency which administers the CWA, although other agencies, such as the U.S. Army corps of engineers and the states assist in administration, permitting, and enforcement of certain sections of the statute. These coordination efforts will be discussed in the intermediate course.

Module 5 Review I

In this section we presented the major regulatory frameworks that will apply to the majority of incidents…

For Natural Resources, we discussed the:

- Endangered Species Act that protects all types of threatened and endangered species and their habitats from any form of “take”
- The Marine Mammal Protection Act, which is similar to the ESA and covers all marine mammals, and their parts from both “take” and “harassment”.
- The Migratory Bird Treaty Act which protects all migratory birds, their nests, eggs, feathers, and all other parts from physical collection.
- And the Clean Water Act regulates any discharge of pollutants from a point source into navigable waters.

Module 5 Review II

For cultural resources, we covered:

- NHPA and the Section 106 process including consultation, identification of historic properties and assessing impacts of actions on historic properties.
- NAGPRA - Protection of Native American burials and cultural items. Requires consultation with affiliated federally recognized tribes.
- ARPA - Protects archeological sites: requires permits for surveys and excavations, prohibits looting of sites, and site locations are confidential.

Module 5 Knowledge Check Instructions

No Narration

Module 5 Knowledge Check Question 1

No Narration
Module 6: Being Deployed as a READ

Module 6: What You Will Learn

Back to the course goals and learning objectives one last time. It’s important for a READ to have some knowledge of what to expect during the deployment experience. This brief orientation will discuss issues of how to deal with home unit duties, safety, stress management during and after an incident, and some of the tasks you need to complete prior to your deployment if at all possible. These won’t cover all incidents, but through this introduction and through the intermediate and advanced training courses, you should have a much better idea of the dynamic nature of the incident response and how to prepare yourself to play the crucial role of that of the READ.

Professional Responsibilities

Your deployment as a READ is a voluntary one and should have been worked out between you and your supervisor prior to agreeing to the assignment. Along with this assignment there needs to be the understanding that you will be leaving your home unit duties behind during the duration of your deployment which may last from two weeks to a month in duration. Activities of the IMT and working as a READ will take all of your time and mental energy, and then some. Before you leave, make sure to notify your supervisor, co-workers and those with whom you may have active projects. They may have to shoulder some of the load while you’re gone, but they should understand the importance of the job you’ve been called to do.
Personal Deployment Preparations I

Before your deployment you should begin to arrange the types of documentation, materials and supplies you may need if deployed.

First, prior to being called to be a READ, make sure that you have critical documentation such as health insurance information, identifications, legal documents, emergency contact information and immunization and prescription records. This information may take you a while to assemble and will be difficult to pull together in the hours prior to a deployment. You will need to take some of these documents and you may even wish to leave copies of these in a safe location at home in case you lose them during your deployment.

This is also the time to work on further training beyond the ICS courses that are prerequisites for this course. We’ll talk about specific recommended training courses in both the intermediate and advanced courses.

Personal Deployment Preparations II

Next, just prior to deployment, you’ll want to get some personal and household matters taken care of. Things like care for pets, arrangements for paying bills and other special arrangements will need to be quickly put in place and you should make arrangements that will cover your absence for two weeks up to one month. Remember that at the incident, you may have limited ability to call home, either because of challenges with infrastructure or simply because of the amount of work that you’ll be involved in during your time as a READ.

Personal Deployment Preparations III

PRIMARY NARRATOR: Finally, you’ll need to pack. And this won’t be the same as packing for a family vacation. Depending upon the type and location of the incident you’re being deployed to, your packing list will vary widely. You’ll be packing not only personal items, but also personal protective equipment (PPE), clothing and gear to fit the environments you’ll be working in, and any of the local resource information that you’ve been able to gather.

You may have questions related to food and lodging availability or weather conditions at the incident site.

Or you may want to bring along job-related supplies that may help you do your work.

The resource order that you received notifying you of your deployment is a great place to start for specific information. This may list any specific instructions on what to bring, specific duties, working conditions etc. If these are not listed, the phone number of the dispatch office should be listed and you can call for more information.

If you are replacing another READ at the incident site, you can work through the dispatch office to contact them with your specific questions. They are preparing for you to continue their work and, provided you can establish communication, should be happy to pass along the information you need.

As a starting point, a job aid is available in the additional resources section to help
you get started on some of the most essential items to consider packing. Finally, bring along copies of training certificates. Training such as HAZWOPER and fixed wing aircraft training may be important to carry out your duties and in the event that internet service is down you want to be able to quickly present your credentials.

AARON: Once you know the nature of the incident that you are being called to respond to, you may want to bring along technical equipment to help you do your job. Here are a few things to consider:

First, you need to make sure you have permission to bring the equipment from your home unit. Or, if you have permission to bring personal equipment such as special cameras, GPS devices etc., realize that any damage may not be reimbursed. Secondly, remember that even though you have your full set of archeological tools or water sampling equipment along, this will be only part of your assignment. The READ works to protect all trust resources in and around the incident site.

### Seek Local Information

There are times when you will be deployed with very little time to pack and prepare. Sometimes, though, you will have some time, even a day or two, to prepare. Along with your own personal preparations and communicating with colleagues on work-in-progress, it may be helpful to seek information on the incident site that will help you when you arrive. Networks and telephone communications may be down at the incident site, so, in these cases, whatever information you can gather prior to deployment will allow you to begin your resource assessments more quickly.

These can include maps or resource inventories, local contacts or other issues specific to the park, preserve or other DOI unit.

Remember that access to agency-specific information may be behind a firewall and may be easier to access or request from your home location.

### Safety I

**Find current narration**

On an incident response, many hazards to …

### Safety II

The first thing to learn is that you are not alone! There is a safety and health organization behind each and every responder. However, it is up to the responder to identify hazardous situations.

The responder is the first line safety officer. Everyone is responsible for their own wellbeing on a response.

The Safety Officer is a key player on the Incident Management Team and has the ear of the Incident Commander. They will be able to help identify hazards and can provide mitigation measures. If a job cannot be done safely, the responder has the right
to decline the assignment.

The IMT Safety officer has various levels of support behind them. They can call on safety and health assets throughout the organization and can request technical experts or other resources to address complex situations.

It is up to the individual responders to protect themselves and it comes down to situational awareness and communication that are keys to a safe response effort.

Practice situational awareness wherever you go during a response. Even the most routine actions need your full attention.

Remember that safety is always the first consideration on an incident response. If you don’t think something looks right, speak up! Just because someone else is doing it, doesn’t make it safe.

**Common Safety Hazards I**

To give you an idea of types of hazards these are some of the common health and safety hazards seen on responses.

Many conditions can lead to injury and illness and often these are tied to instances of no power – no air conditioning – long work hours – high stress- poor sleeping conditions – physical work – unfamiliar settings – close quarters with others. All can increase stress and thus increase the likelihood of accidents.

**Physical Agents**

**Heat Stress:** Unacclimated workers are more susceptible to heat stress. For example, persons from Alaska responding to Florida will be more likely to succumb to heat related issues. Consider a period of acclimatization or light work during the first several days. Make sure you know of a source of clean drinking water or electrolyte drinks to prevent dehydration. In extreme settings, establish a work rest cycle allowing for recovery in a cool location.

**Noise:** Always use hearing protection for noisy environments. Rule of thumb: If you need to raise your voice to be heard over the equipment, you should be wearing hearing protection.

**UV Radiation:** Sunburn

Make sure you are able to find shade somewhere near your work locations and use sunscreen.

**Vibration:** if you are going to be working with machinery such as chainsaw or hand tool work, make sure to wear proper work gloves.

**Safety III**

In summary, don’t be afraid to ask for help on safety and health issues! There is a whole organization waiting for the phone to ring. You have to be the one to identify a bad situation and you have to responsibility to not put yourself into a dangerous situation. Pay attention to the daily safety briefing.

Common sense isn’t common and shouldn’t be the basis of your safety program!

Some additional tips:
• Do not be a hero. Dangerous conditions can be anywhere so keep aware.
• After an incident, buildings and structures are particularly prone to becoming a safety hazard. Do not enter a building that is not—or may not—be structurally sound.
• Always carry a radio or cell phone and let someone know where you are going and when you will return.
• Wherever possible work in teams of two or more and take all necessary precautions when entering confined spaces.
• Think about other inhabitants of the incident area. Animals and insect populations may have taken shelter in open buildings. Use caution to avoid snakes, spiders, rodents, etc.
• Finally, when in doubt ALWAYS wear personal protective equipment. When working with historic buildings and structures, hazardous materials such as lead based paints, asbestos-laden materials, and PCBs, may be present.

Dealing with the Stress of Critical Incidents

As a READ there are many ways that the good work that you have volunteered to do can turn stressful.
• You may have left family and friends at short notice and traveled to an unfamiliar place.
• You may see first hand the great damage caused by the incident and how it has affected local communities and the natural and cultural resources that they depend upon.
• The incident site and the atmosphere within the IMT may be a frenetic one, bordering on chaotic at times.

Some of this may be energizing to you, but some may cause negative forms of stress. These next few slides will introduce you to the types of stress, markers of stress to look for, some ways to manage stresses you may feel as a READ, and where to get help if you need it.

What is Stress?

First let’s look at the three different types of stress:
Eustress is a positive stress that can keep us motivated to run marathons, ride a roller coaster, & keep a job. As a READ you may be exhilarated at the travel, fast pace and new activities that you are involved in.
Distress is a negative form of stress that is caused by adverse actions (critical incidents) which can overload us and cause a variety of emotional, physical, cognitive, and spiritual reactions if left unresolved.
Finally, Chronic Stress, sometimes called “burn-out”. It can disable us and in extreme cases this contributes to our premature death. As a READ, you will likely be affected by some forms of distress, but the key is to be aware of how it is affecting you so that this situation does not lead to chronic stress.
Effects of Stress

The effects of stress are shown in many parts of the body which are natural an involuntary reactions meant for survival and sometimes called the “fight or flight response”. A racing heart and quick breathing can be brought on by stress. You may feel a rush of adrenaline when faced with stress, or a tightening in your “gut” as you deal with a stressful situation. Finally, stress affects our immune system, weakening our body’s defenses.

Incident Responses and Stress

Your work on the incident response may bring about stresses that you normally would not be faced with. When responding to natural or human-caused disasters we may be put in incident situations that challenge our ability to cope.

You may find:
- Long work hours on a response effort
- Unfamiliar or challenging working conditions
- A fast pace of work or communications on a response that you are not used to
- That you need to deal with human or environmental tragedies, and
- That time away from home and loved ones is a challenge

Managing Stress

Managing stress is not a one-time event, but something that you work into many activities throughout your day. The list here describes some of the basic everyday habits and actions that can help you to manage stress. As a READ at an incident response, it may be challenging to incorporate all of these things, but just being aware of actions like eating right or getting sleep can go a long way. Many others at the incident site will be experiencing similar stresses as you. And everyone responding to the incident want you and the entire IMT to succeed. So they will understand that you may need to find a place to relax for a short while, or that you can’t work round the clock. Taking care of yourself is better for the team responding to the incident than your becoming sick.

And remember, that the stresses that you felt while deployed as a READ to an incident don’t all disappear when you return home. You may find that you can’t just jump back into life as normal. Keep an eye on those signs and symptoms of stress and the small things you can to to manage stress even after you’ve returned home.
Who to Call

As a READ, you shouldn’t think that you can “go it alone”. Just as you are part of a larger team Incident Management Team, and also have the help of many other subject matter experts to help you, when dealing with stress there’s help out there for you too. On larger incidents there may be personnel to help you in dealing with stress, or to put you in contact with the right people and resources. The information here and in the resources tab can also be a place to begin. Most importantly, if you think that your work on the incident is causing stress that is affecting your ability to cope, seek help. People are there to help you through.

Module 7: Review

Review: On the Job I

So now, you’ve completed the introduction to serving as an AH-READ on an incident response. As we’ve pointed out, serving as a READ can be exhilarating, exhausting, chaotic and extremely rewarding…all at the same time. The work you are doing as a resource advocate not only helps to protect our nation’s treasured trust resources, but you’re also helping to facilitate the work of the IMT.

You may be shocked at either the scope of the damage resulting from the incident, or the speed at which you and others need to make assessments and decisions.

You may get frustrated or be uncomfortable either in what you are tasked to do, or the conditions in which you do those tasks.

But remember the critical role you play in advocating for these critical resources.

Review: On the Job II

A few words of guidance as you prepare for deployment:

Be proactive. The resources need you as their advocate, so speak up.

Use diplomacy before authority. Remember the “work and play well” approach. Use this in all your dealings as a READ.

Resolve disagreements at the lowest appropriate level. If you have an issue to resolve, make sure to work within the bounds of your chain of command.

If you and those in the IMT are at an impasse, go back through the Agency Administrator.

Finally, issues may arise that need input or decisions to be made from above you in the chain of command. Be sure to document any issues, actions and outcomes. This helps not only you, but future READs who follow you.

Key Habits

Remember some of the key skills discussed earlier? We discussed skills like being
proactive, being able to identify potential threats, in assisting the IMT, effective communication and critical analysis. Here are a few more words to consider.

- Be credible – speak within your abilities and expertise. Work with facts.
- Be persistent – you may need to ask twice…or more to get your point across regarding the needs of resources
- Be patient – each incident will include complex sets of personnel, logistics and challenges. These may take time. Work the system, and watch for the best times to advocate for the resources.
- Be flexible – Dynamic incidents need flexible READs that can change as the incident changes. Some even say “be fluid”, flexible is still too rigid.

And finally, be forthright – advocate for the resources with conviction. Be sure to speak up.

**Review: Know Your Limitations**

Lastly, when you are deployed as a READ, you will juggle multiple tasks, some of which will be new to you. Remember that you don’t need to be an expert in every field to be an effective READ.

You’re not alone in this effort. Seek the help and advice of resource specialists. Use the tools in this course and make contacts within the IMT to build a contact list.

Communication is key. When you are operating beyond your limitations, seek help. When you have input to share or new data that’s been gathered, let others know.

Participate in the meetings that determine the tasks that make up the Incident Action Plans or Shift Plans. Your input may turn out to be crucial in protecting the trust resources that so many in and around the incident site depend upon.

Finally, be available. Volunteering to become a READ includes you making yourself available for deployment. Keep your trainings current and speak to your supervisor periodically to discuss your possible deployments. When the call comes, the rest of the IMT and those directly affected by the incident need you to be ready.

**Training Next Step**

You have now completed the Basic online training in order to become an All Hazards READ. Your next step is to move on to the Intermediate course. This course will require 4-5 hours to complete and will cover natural and cultural resources in more detail. Regulatory frameworks will also be discussed in greater depth. As well, critical thinking skills for a READ will be introduced.

**Now for the Exam**

Read instructions on screen to take exam.