ERDC - EL
Moderator: Courtney Chambers
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Courtney Chambers: Okay at this time I am going to give you today's speakers. Sharing the U.S. Army Corp of Engineers Threatened and Endangered Species Team, known as TEST Approach, looking at the Endangered Species at Section 7A1 and Engineering with Nature.

Our first speaker, Ms. Jennifer Gerhardt-Smith is a research biologist in the wetlands and coastal ecology branch of the U.S. Army Engineer Research and Development Center Environmental Laboratory. Jennifer's work includes research for the dredging operations environmental research program and program management of the dredging innovation's group. She specializes in federal laws, regulations and policies related to threatened and endangered species with a focus on dredging activities and has experience with USACE civil works at the district, ERDC, and headquarter levels. Jennifer also provides coordination for the Threatened and Endangered Species Team Initiative which we will hear more about today.

Today we are also going to hear from Mr. Paul Hartfield, an endangered species biologist with the U.S. Fish and Wildlife Service stationed in Jackson, Mississippi specializing in imperiled aquatic fauna. Mr. Hartfield has conducted status reviews and prepared federal register documents listing 24 species as threatened or endangered and designed more than 1200 miles of stream and river channels - I'm sorry designated more than 1200 miles of stream and river channels as critical habitat under the Endangered Species Act. He also identifies recovery strategies, prepares and publishes recovery plans and works with agencies, local partners and communities to protect and recover endangered species.

More about both of our speakers can be found in their bios posted with the presentation and recording of today's meeting on the DOTS Web page for your reference. We are very happy to have the two of you sharing with us today.

At this time, Jennifer I am going to give you the presenter rights. We will enter listen-only mode and then you are free to begin.

Jennifer Gerhardt-Smith: Thank you.

Operator: All participants are now in listen-only mode.

Jennifer Gerhardt-Smith: Thank you Courtney and to the DOTS program for the opportunity to share and discuss this approach for advancing USACE practice with respect to compliance with the Endangered Species Act. I am going to go ahead and get just a little screen here. This Webinar is divided into four main sections.

An introduction to the USACE TEST, a presentation from Fish and Wildlife, Paul Hartfield on Section 7 conservation, a briefing on why USACE is interested in advancing our approach by integrating Section 7A1 and how we can do so through Engineering with Nature. Followed by a question and discussion session at the end.

The USACE Threatened and Endangered Species Test or TEST approach was recently initiated for the following purpose.

Accelerate the development of solutions to priority threatened and endangered species issues at will, improve operational flexibility, reduce future costs,

improve budget planning capabilities, reduce adverse impacts to mission execution and improve species conservation outcomes.

The background to the test includes recognition of the scope of USACE missions as wide ranging from construction to O&M and unique one time opportunities to repetitive activities. We have budget packages that must be formed years in advance which can hinder mission execution when service demands increase and unanticipated restrictions are added. Species are sometimes very wide ranging crossing over many USACE business lines. Trophic and species and project interactions can be complex and understanding of impacts is sometimes lacking. It is not uncommon to see high variability and effects characterizations in 7A2 consultation outcomes.

Across USACE we have over 400 projects for which the ESA comes into active play. On average we have ESA related expenditures for over 450 different species every year. And these expenditures have amount to over $1.3 billion in the last five years. And our posture, the USACE posture to ESA compliance is commonly reactionary, resource constrained, lacking scientific evidence for assessments, accustomed to confrontational consultation, and without a strategic corporate approach for addressing threatened and endangered species issues and mission impacts.

The composition of the TEST is focused on team. The persons involved will vary according to which solutions are being pursued and will evolve as we move through the various stages of identification, development and implementation.

The TEST will work with and report to headquarters with Mr. Joe Wilson as the headquarters lead and will be coordinated by Dr. Todd Bridges, ERDC. And of course involvement of division and district leadership. Threatened and

endangered species subject matter experts and project managers will be critical as well as our resources at the Institute for Water Resources academia and resource agencies and other stakeholders.

TEST goals include development and sustaining the organizational capability and technical team to address threatened and endangered species solution development, addressing priority issues that are resolvable and that we can expect to have a high return on investment for mission sustainability. Providing evidence based science methods and decision support, developing and deploying the solutions to the field, supporting implementation, measuring effectiveness and evolving our compliance strategies as needed. And then documenting and transferring lessons learned so that we can increase the benefits from the efforts undertaken.

For the TEST to succeed we need four critical elements. Those are, focused cooperative participation across USACE from across the field and management levels, resource leveraging and financing concepts including cost sharing and in kind services. Collaboration with external partners and stakeholders for increasing knowledge, productivity and ownership of solutions. And we need to be adaptive to evolving needs, challenges and opportunities. And importantly, we must improve our communications about intentions and transfer lessons learned to work smarter.

This slide is a partial list of the initial activities of the TEST. We started with developing the TEST strategy and are working on awareness of the approach and establishing initial collaborations. We are working on issues identification including tools to assess vulnerabilities and risk for prioritization efforts, a recent assessment of potential impacts from upcoming ESA listings has been completed and we are working on knowledge transfer tools for that. There is support to the interior least tern delisting process and we are actively

collaborating with U.S. Fish and Wildlife Service Region 4 and we have a focus meeting with them next week to work on this last listed item, ESA opportunity assessments which is also our topic today.

And so with that introduction to the TEST and how we got to this Webinar I will turn things over to Mr. Paul Hartfield, Endangered Species biologist with the U.S. Fish and Wildlife Service Region 4 Mississippi field office.

Paul Hartfield: Thank you. Let me see, I have about a 40 year history of interagency actions, court cases, legal reviews and I have to summarize it all in about 12 minutes. So there is a lot being left out of this very brief discussion.

Let's start with a primer on the Endangered Species Act. All right I am clicking and nothing is happening.

Courtney Chambers: All right Paul you should have the presenter rights at this time.

Paul Hartfield: Oh there we go okay.

Courtney Chambers: Great.

Paul Hartfield: There we go. The Endangered Species Act has two clear purposes. First it was to conserve imperiled species in their ecosystems. And the second was associated with that. It was to provide a program to achieve conservation. Programs conserve clearly included all federal agencies not just the interior and commerce.

The intent of the Act is supported by the Congressional record of that time where Congress committed every agency to conserve listed species and their habitats. The method to implement the policy was outlined in Section 7 of the

Act which was titled, Interagency Cooperation. This is through cooperation between any and all agencies whose authorities might contribute to conservation. Obviously this is a very practical and cost-effective way to share conservation duties and burdens across all agencies that may have positive or negative impacts on species. In other words, we were intended to work together not against each other. By the way, the original text of Section 7 of the Act consisted of a single paragraph in two sentences. This is the second sentence of the original Act. Note that the first half of this sentence deals with authorities and programs while the second half deals with actions.

Then along came the Tellico Dam, the endangered snail darter and the first jeopardy determination by Fish and Wildlife Services. And also one of the first major court cases on Section 7 of the Endangered Species Act.

The Supreme Court ruling led Congress to recognize that they had left no room for exceptions to the Act. So in order to provide for this Congress promptly amended the Act. However, these amendments as you will see did not change the original intent of the ESA or these priorities that were recognized by the Supreme Court.

In their amendment Congress kept programmatic conservation duties completely unchanged. They had the opportunity to change this but they didn't. This is what we now call 7A1.

So the conservation mandate and authority to all federal agencies to conserve species in their habitats remained unchanged. The mandate to ensure that actions avoid jeopardy what we now call 7A2 also remained unchanged. But it is now followed by 12 additional sections in the Act. These were the big amendments that actually detailed the 7A2 process, the components of 7A2 and exceptions to 7A2.

In all, if you have an Endangered Species Handbook these amendments constitute eight full pages. Even so, Section 7A2 remained focused on actions and that is avoiding jeopardy adverse mod and minimizing and authorizing take incidental to federal actions.

So consultations under 7A2 are concerned strictly with facilitating federal actions within defined action areas. In other words, it is simply a permitting process to allow you the federal agency to adversely affect the listed species.

Without positive conservation actions what we are calling 7A1, successive 7A2 consultations would simply erode a species baseline that progressively limits action agency management options because eventually they are going to hit a jeopardy level. Obviously this was not the intent of Congress.

That is the extent of my primer or history lesson. What is 7A1? We are defining it as a programmatic strategy developed and implemented by the federal agency and consultation with the services outlining how their authorities can and will be used to contribute to the recovery of the listed species. This can include project planning, design, techniques and processes to not only avoid or minimize impacts but when and where possible to include actions that actually benefit the species. This also includes habitat rehabilitation and research. Now I bolded these because action agencies are often turned off when they see these two words. Throughout my career I have been told by action agencies that they do not have the authority to go beyond the scope of the project.

However, 7A1 provides both the authority and the mandate to utilize that program to conserve species and ecosystems. This can include habitat rehabilitation.

Now we are not looking necessarily for landscape level projects. We are looking for small improvements over time. These are also in the agency's interest because improving the habitat baseline will actually increase their future options.

Many federal agencies tend to think that the more listed species there are, the wider distributed they are, the more problem they are but it is actually exactly the opposite. We have a similar problem with research where action agencies quite often believe that research is unrelated to the agency's authorities or that it is simply a black hole which you pour money into.

Under 7A1 though, this research should be information that is critical to management whether it is dealing specifically with species, habitats, numbers. All of this needs to be thought of in terms of management.

You can also think of it in terms of intelligence. Why would go into a battle without the proper intelligence? It should be focused in other words, again on information that is critical to management and species conservation.

Why should you do this? First it is the law. But as this comprehensive well not even comprehensive list shows there are multiple benefits it can accrue to the action agency through 7A1.

Under the Act, federal agencies must actively conserve listed species but where and when it is completely at the agency's discretion. So 7A1 is controlled, it is a process controlled by the action agency not by the Fish and Wildlife Service. Unlike 7A2 implementation is flexible.

I want to bring your attention to Bullet 5 which we have already talked about a little bit is that it improves status and the action agency footprint will actually increase your options.

And the reason to bring your attention this is the second to next bullet. This may create a very important paradigm shift that can only come about through 7A1 and that is to transform the perception of your program from a threat into a conservation tool.

That leads directly to increased collaboration with other agencies, states and NGOs. All of this, Section 7A1 process complements, streamlines and facilities the 7A2 consultation process through addressing cumulative and direct impacts and data gaps.

Has the potential to mitigate the adversarial process between agencies and it fulfils the legal obligations that minimizes your agency's vulnerability to litigation.

It is not that easy it turns out. There are a lot of challenges to implementing 7A1 conservation. The very foremost of which is the lack of any guidance through the 40 year history of the Act.

If you go to our regulations you will find that the guidance for implementing 7A1 is a single sentence. It can be summarized as, hi we are the Fish and Wildlife Service and we are here to help you should you choose to ask us for that help and that is it.

That is compared to Section 7A2 where we produced a 315 page consultation handbook. Not just the additional regulations but this huge handbook to guide you through that process.

So there is a huge disconnect here between and if you count papers then 7A2 definitely gets the ranking.

These other bullets here, they are cultural challenges or information challenges. Cultural challenges we have learned on the Lower Miss they can be overcome through improved collaboration. The other challenge will be overcome or improve from experience and implementation.

So how do you this? When and where do you start? There are multiple ways to initiate 7A1 consideration and planning. You have got multiple laws and regulations that can trigger this.

First and foremost of which is the Endangered Species Act and 7A2. If you have been dealing with multiple 7A2 biological opinion you definitely need to be going down the 7A1 path.

Biological assessments for future projects is another way to start early 7A1 planning before you even get to the table on 7A2.

In ramps with the military or grade process to initiate as well as other things like need for regulation, Fish and Wildlife coordination. Literally anything that causes you to consider the effects of you program.

There is a multitude of tools as well and that is the other part of this presentation is Engineering with Nature. Engineering with Nature provides a toolbox of sustainable engineering practices.

While 7A1 provides a process to utilize these tools for compliance not only with the Act but also other legal mandates and missions such as the Migratory

Bird Act. And some of your portions of work where you have to deal directly with recreation and ecosystem recreation.

I would like to point out here that a lot of this is mental attitude and it is an attitude that you are going to have to share with you federal partner, other Fish and Wildlife Service offices. And that is that navigation channels, dams and other federal core projects are currently a part of the ecosystem. They are not apart from it.

And what our task is, is not to undo those other missions but simply learn to implement or to integrate development and management tempered by concern for conservation of ecosystem functions and benefits.

In closing, 7A1 complements, streamlines, and facilities 7A2 consultations and fulfills legal obligations that minimize your agency's vulnerability to litigation. The reduction of interagency conflict that can result from conservation planning allows us to refocus our efforts towards the species and their ecosystems as well as your primary missions as was intended by the Endangered Species Act.

Challenges to 7A1 conservation programs can be overcome. We have done it in the lower Mississippi River and I invite you visit our Web site for an example of a successful 7A1 program.

And with that Jennifer I will turn it over to you or go through these quick examples.

Courtney Chambers: At this time let's go back to Jennifer and then if we have time at the end Paul we can go through those examples.

Paul Hartfield: Okay.

Jennifer Gerhardt-Smith: Great are you able to hear me?

Courtney Chambers: Yes we can hear you Jenn and you should have the presenter rights now.

Jennifer Gerhardt-Smith: And now I do thank you. Well thank you Paul for that informative presentation on Section 7 complication in the 21st century. I am sure everyone appreciates the historical context as well.

I am now going to brief how USACE can advance its approach to Section 7 consultations by integrating Section 7A1 and Engineering with Nature into practice. We will cover a bit more about the why and how and with examples.

So why integrate Section 7A1? A question for you. Is Section 7A2 standard practice working? Is it working for you?

I am going to guess that there are few of you out there who looking into the past and envisioning the future can relate to this feeling.

To be sure, the common response to that question includes from USACE perspective. The job gets done but it took more time, it cost more money, it got pushed to a time we couldn't do beneficial use or we had to shut down operations from the start.

Frustration with feeling like we are being told what to do and things we feel that are not reasonable or we have no authority or no money and we are always in defensive mode for defending our actions.

And then from the resource agency's perspective that little recovery is actually achieved and that they are permitting detrimental activity. And that objectives for recovery are often unfulfilled and frustration abounds over it.

To get back to the question why 7A1? Let's put USACE in the driver seat. When we say we can do these things as an agency to conserve some issues. It facilitates positive agency interactions, collaborations and leveraging with stakeholders and can start to form the basis or justification for resource (unintelligible).

It allows USACE to present its actions from a beneficial perspective something that we rarely get to do within the confines of the 7A2 adverse impact paradigm.

And the work shore improvements to the species baseline. So why is the species baseline important? Paul talked about it a little bit before so I just want to go into it a tiny bit more here.

In here we have recovery up top, jeopardy down bottom with the average population of T&E species somewhere in the middle in responding to natural fluctuations.

This is an expected reality under the Section 7A2 paradigm alone. I think many of you would agree that over 40 years of working primarily with 7A2 has led to more and more restrictions, increased costs and loss of operational flexibility.

Now the outlook when integrating Section 7A1 conservation actions that result in improved outcomes benefiting species begins to shift towards

positive partnering, increased flexibility, cost savings, time savings, mission sustained and ecological benefits.

We all want to know what does a Section 7A1 plan contain? Well as Paul mentioned it is pretty flexible because there are few out there. And there is no really written guidance or standard.

So the document can be a standalone 7A1 or as mentioned (unintelligible) biological assessments or other documents and importantly it can incorporate things that we are already doing.

Not all management and conservation measures must be novel to be in a Section 7A1 plan. There are lots that we are doing across the floor that is beneficial that is not being captured.

Conservation plans in the Lower Mississippi River is an excellent recent civil work example and there is a picture of it there on the right.

The main section items listed here are from the framework of that plan. It doesn't mean that your Section 7A plan necessarily needs to follow this but I think this is a really good framework to begin to at least think about it.

The environmental setting of the program or project including geomorphology, hydrology, habitat features. A description of the project including broad purposes and specific features.

General information on the threatened and endangered species including ranges and life history details, historical and current environmental baseline across the range and all factors (unintelligible) effective species baselines (unintelligible).

The effects of the project or program on the subject of threatened and endangered species including the understanding of the species baseline.

Importantly here, strategy and actions for avoidance and innovation, forming collaborative partnerships, conservation measures and features and monitoring our other research as supplies needed information for improving the activities and outcome.

Courtney Chambers: Jennifer are you speaking in your handset by chance?

Jennifer Gerhardt-Smith: I am.

Courtney Chambers: You are, okay. Could you may be just speak up a little bit. It seems a little bit quiet.

Jennifer Gerhardt-Smith: Will do so. Is that better?

Courtney Chambers: Yes that is great.

Jennifer Gerhardt-Smith: Okay, I apologize for that. I seem to not be able to - oh there it goes - okay my screen was stuck.

Okay so to provide some examples of these strategies and actions I have listed on the next slide some which have come from the Lower Mississippi River conservation plan and I just want to note that these are highly abridged and simplified from the LMR Channel Improvement Program.

And there is a link just there if anyone wants to go directly to the document and view it for yourself. So here are some examples from that plan.

So strategy, it works really well. You have strategies and then actions. So strategy, avoid adverse impacts directly associated with project actions.

Example actions here are complying with timing restrictions when appropriate or possible. And avoid closure of secondary channels.

Another strategy example could be develop construction in LMR practices that support growing environmental benefits and that are sustainable over time.

And for this one it includes the action of utilizing chevrons instead of dikes where appropriate and to reuse the large woody debris removed from dikes and levees to provide habitat diversity in the channel.

And then to another strategy, to develop collaborative partnerships and cost effective monitoring as funding allows to document species response.

To collaborate with partners to capitalize and grow the knowledge and evolve approaches and then utilize surrogate species for monitoring which is a great action that is in this plan because threatened and endangered species are sometimes hard to monitor because they are hard to find.

So considering the flexibility that is available for developing Section 7A1 conservation plans, what are the fundamental actions needed?

We need to understand the baseline and actions effects and that is both positive and adverse. Research the critical unknown, population status and ecology, the inner relationship between our actions and species life history needs and outcome.

And really we need to look for what do we need to know now to improve mission sustainability going forward?

We need to plan and implement strategies for avoidance and minimization and build an environmental benefit using habitat improvements and collaborations. And that can include project design that serve life history needs, natural and nature based features, construction O&M techniques.

For example, better usage of dredge material and lockages for fish migration and the use of natural processes to accomplish those outcomes.

So when considering how of Section 7A1 it became obvious that implementing Engineering with Nature principles and practices was logical and doable.

The engineering and nature program is focused on the intentional alignment of natural and engineering processes to efficiently and sustainably deliver economic, environmental and social benefits through collaborative processes.

Key elements include science and engineering that produces efficiencies and supports sustainable delivery of benefits. Using natural processes, minimizing project footprints and enhancing the quality of benefits and broadening and extending the benefits provided.

And you will see the image on the right there showing this triple win where we have social benefits, economic benefits and then environmental. And then it uses science based collaborative processes to organize and focus interests, reduce friction and delays.

Next we will go to just a few examples of Engineering with Nature, measures and features that can support 7A1 conservation plans.

The least (unintelligible) bar aquatic habitat rehabilitation. The red lines you see here are dikes with a primary purpose of flood risk management. Through a high level of collaboration with partners and a relatively small engineering effort notching dikes connectivity to over 11 miles of secondary channel habitat was achieved.

As for an another example, the Deer Island aquatic ecosystem restoration project. Here nearly the entire southern shoreline had eroded and a very large breach had formed along the western end.

This project team formulated a design and construction plan that created 110 acres of capacity for beneficial use of dredge material and that is the lagoon that you see there in between the sandy part and the marsh.

It restored nearly two miles of shoreline that has seen a high level of recreational use and it used soft shore engineering methods including sunken geo tubes for stabilization in lieu of the previously planned emergent rift rafts and native vegetation plannings.

This restoration and soft shore design made it possible for loggerhead sea turtle nesting in 2012 which is one of the first recorded nestings in the state of Mississippi in nearly a decade.

In the upper Mississippi there was a need to focus and maintain flows in the navigation channel. The project used chevrons to accomplish this which allows flows to be maintained in the secondary channel as well.

Monitoring has shown that the chevron features themselves have created plunge pools that are providing increased habitat diversity for fish.

And on the right is the Horseshoe Bend Dredge Material Island. Dredge material has been placed back into the river and using natural currents and deposition has created this island.

Research and analyses are currently being conducted to improve our understanding of the engineering and natural factors that led to the success which provides an important bird habitat so this technique can be implemented in other areas.

One of our last examples today is from the (asterbueler) breakwater which was undergoing needed repairs and maintenance. Through collaborative scoping with stakeholders under the Great Lakes restoration initiative two Engineering with Nature features have been integrated into the project.

On the left you see turn nesting and rearing habitat that has been constructed on top of the breakwater with support from the environmental protection agency and on the right is an experiment to determine if simple, very low cost modification to toe blocks.

We are talking just some changes to the forms that are used to make these things such as dimples or grooves can be employed to encourage colonization by invertebrates which can then become productive forging habitat for threatened and endangered species.

Early monitoring shows the groove blocks as being more productive in this particular area while monitoring is ongoing. These methods have also been

used elsewhere in the Great Lakes and lessons learned are being documented and used in (asterbueler).

Here are a few Engineering with Nature aligned resources. The information which could be transferred to other mission purposes, business lines and projects.

Looking towards integrated approaches for human and ecosystem resilience using a combination of measures including natural nature based non-structural and structural to achieve the full range of benefits including environmental.

Still want to get back to why? Why are we interested in integrating 7A1 Engineering with Nature in the Section 7 practice? And I am just going to sum it up very briefly.

With over $300 million in threatened and endangered species per year or on average. It is always there are inefficiencies and prophecies including consultation.

And I think that we can realize that we have an unrealized potential to expand the benefits and thereby improve our mission to sustainability.

And in so doing we can increase our value to the nation. And how can we do this? By exploring opportunities for integration 7A1 into Section 7 practice and by implementing Engineering with Nature to the maximum extent to add benefits.

And just here on the bottom, Engineering with Nature has got its own Web site. The link is there. There are lots of resources there. Information about other projects and tools that can be used.

And that is the end of the presentation here. The POCs for the Webinar is Mr. Hartfield and myself and then we have also got (Steve) and (Rick) at Wildlife Service and Dr. Bridges here at ERDC.

And with that I would like to say thank you all very much for participating in the Webinar and we will be glad to take questions.

Courtney Chambers: Wonderful thank you very much Jenn and Paul. At this time we are going to return to interactive mode.

Operator: All participants are now in interactive talk mode.

Courtney Chambers: So at this time you are free to take your phones off of mute and ask questions to Jenn and Paul. And yes Jenn will return to our home screen here. So you will also notice the chat screen in the lower right hand corner. You are welcome to send questions that way as well.

Additionally while everyone is thinking. If you would like to have a PDH credit for today's Web meeting you can also send that request to me through the chat feature like many of you have done as well as send me the information about the number in your group if you are calling in with others today. Thank you.

Jennifer Gerhardt-Smith: Courtney have any questions come in through the chat feature?

Courtney Chambers: Not yet no. Did you have a question for them Jennifer?

Jennifer Gerhardt-Smith: Yes I do and I will put it up here now. So there is the question on the screen. The 7A1 is so different from what we have been doing for so long

that I think some folks maybe are just kind of wrapping around the knowledge that it is even there. And thinking about well how can we do this? There is authority under the law and we have lots of different opportunities within our authorities to build in these benefits that can conserve the species. I definitely think there are ways to improve through utilization and Section 7A1 and Engineering with Nature is a great way to accomplish that.

So I am just interested to hear what people think are the opportunities and/or the challenges that they might want to ask Paul Hartfield on the phone and others.

Paul Hartfield: Well I think I have pointed out I see everything as an opportunity out there. We are exploring opportunities virtually with every project that we get through from any federal action agency out of our office.

You have seen some remarkable transformations in our relationships with these agencies with this approach. So literally anything. I think the one thing I need to point out is you shouldn't wait for the service to approach you about 7A1, 7A1 is actually...

Courtney Chambers: Excuse me sorry, anyone else on the line if you don't mind putting your phone on mute while you are not asking a question it would be much appreciated. Thanks.

Paul Hartfield: I assume that laughter was directed towards my comment.
But it is true. This is something that you all need to initiate. The services policy is pretty much hands off and business as usual. So we have got to literally change agency cultures and I think the place to start is within your own culture. I am working on my culture. You work on yours.

Courtney Chambers: Great thanks Paul. I did receive one challenge in response to Jenn's statement here on the screen. Section 7A1 for multiple coastal projects under different authorities. One issue on the coastal projects is the permitting of offshore sand sources to nourish beach fill projects. That came from NAB.

Okay and then I did have a request. Paul this was a request for you to maybe provide a quick summary of the contribution of Section 7A1 to the five year review and the potential for the delisting of the interior least turn.

Paul Hartfield: Yes can we go to those extra slides that I had?

Courtney Chambers: Yes you bet we can. One second and I will get to your presentation.

Paul Hartfield: Okay do I have the helm?

Courtney Chambers: You do now yes.

Paul Hartfield: Okay I am going to click through that one. We might come back to it. But this is - I was going to use this as an example of the value of research. This is actually whether they knew it or not this was a 7A1 project by the DOTS program. Where they went out and assembled - they basically communicated with everybody range-wide that was doing least turn and surveys and they assembled that information in a single year report.

This is the most comprehensive look that we ever had of the range and status and interior least terns since the species was listed. And it was done by the Corps. This was the basis for the delisting recommendation in the five year review. The other very important part of that recommendation was one of the things that you really need to delist is a commitment, a long term commitment to management.

And then there is 7A1 program, the Corps' commitment in their conservation plan. Essentially they committed to utilize these practices, this strategy that they are using regardless of the status of the species.

So we had a full time commitment, a long term commitment for delisting from an area of the range that supported over 60% of the entire population. Now we are still waiting on those commitments from the Southwest Division and the Northwest Division. So as soon as we get those we can move towards delisting the species.

Courtney Chambers: Great thank you Paul.

Paul Hartfield: Did that sum that up?

Courtney Chambers: I think you addressed it. (Rich) if you have any further comment you are welcome.

(Rich): Hey Paul this is (Rich). I just wanted to make sure you got a chance to provide a quick overview of the 7A1 approach to benefiting the recovery of the interior least tern so that was great thanks.

Paul Hartfield: Yes I mean the delisting of this species when we come to it, the credit will go to the Corps. And, you know, in my talk I mentioned the paradigm shift from Corps' activities as threats to Corps activities as conservation tools. This has been definitely realized in the lower Mississippi River. It attracted partners and let me go back to that...

Courtney Chambers: Uh oh it sounds like we have been put on hold with background music. That is what that sounds like. Paul I am going to go to listen-only mode for a minute and then you can address this example here.

Operator: All participants are now in listen-only mode.

Courtney Chambers: Okay so Paul if you will unmute your - do the master unmute feature.

Paul Hartfield: Yes I did. Can you hear me?

Courtney Chambers: Great; yes we can, thanks.

Paul Hartfield: Yes this is - I wanted to use this example. Jenn already used it once but what I wanted to point out was the cost, $167,000 which is I think you agree is fairly low for a federal project. This involved 8 dikes and 11 notches down to a low water reference plain of zero.

Let's put water into this 11 mile secondary channel most of the year now. We have flow. It not only benefits the three listed species in the area, the least tern, pallid sturgeon, the fat pocketbook mussel. But it also opens this area up to recreation and it definitely benefits migratory shorebirds as well as new tropical migrants.

This was done - the way we do these projects on the lower Mississippi River is that the Corps designs them. And in collaboration with the partners, the states and the NGOs. The partners actually get the money, do all the paperwork and hire private contractor. That is how we keep the cost down through 7A1. We have done a total of 14 projects affecting more than 60 miles of secondary channels and affecting literally thousands of acres of

habitats. Again not just for the three endangered species but for all components of this aquatic ecosystem.

So this has all been done with at low cost to the Corps and with no loss of any flood control or navigation benefits that we have been able to do that.

Courtney Chambers: Wonderful thanks for sharing Paul. I would advise if you have a question that you go ahead and enter it in the chat feature just so that we can eliminate the background noise. I can attempt to return us to listen-only mode in case anyone else has comment.

Operator: All participants are now in interactive talk mode.

Courtney Chambers: Okay we are still on hold.

Operator: All participants are now in listen-only mode.

Courtney Chambers: Okay we will have to park right here for a little while. So Jenn you can do the master unmute for your line for any further comment.

But you are welcome to enter your questions through the chat feature or again you can raise your hand if you are having trouble being heard and I can contact you specifically.

Jennifer Gerhardt-Smith: I would - this is (Jenn). I would like to also just put out there that if anyone has got a few minutes on their hands we have the links to the conservation plan up in the presentation. You can also easily Google and go through to the biological opinions for the Channel Improvement Program.

And reading that biological opinion was shocking to me. Just the way that it reads is a completely different tone. It is in recognition of the benefits that are being provided and the efforts that the Corps is making to do good with their project.

It just really feels very differently from so many other biological opinions that I have read and just want to encourage folks to go look at it if you were looking for more reason to entertain the notion of going towards 7A1. It really does seem to be a paradigm shift just in looking at that document.

Courtney Chambers: Great well thank you both so much. We haven't received any other questions through the chat feature.

Any final comments other than again referencing them to that document Jenn? Do you all have any final comments for today?

Jennifer Gerhardt-Smith: Well from me from the Corps I am happy to take any follow on questions from anyone internally or externally that would like to discuss it further.

We are pursuing this as an opportunity to integrate into our Section 7 practices with recognition that not every plan needs to have three species or needs to be for a whole program. It can be for one species or for a project or a smaller set of activities. Again that flexibility really is there and we are looking to move forward with it and find some opportunities where we can employee this into our compliance toolbox.

So thank you all very much for joining. Thank you again Paul for being on the line with us from Fish and Wildlife Services. Your insight was really valuable thank you.

Courtney Chambers: Jenn we did have one question come in right quick if you don't mind. Is there any intent to combine nesting turtles and swimming turtles with the U.S. Fish and Wildlife Service and the NOAA fisheries? Do you all have any information on that?

Jennifer Gerhardt-Smith: I am not exactly clear on the question but when they are in the water they are being covered by NOAA. When they are on the beach they will be covered by Fish and Wildlife Services.

Courtney Chambers: Right.

Jennifer Gerhardt-Smith But I think that there are activities that - the opportunity may be for conservation for turtles may lie more so within the realm of Fish and Wildlife Service. But as far as getting a better understanding of the species' life history and effects then there may be some useful research that can be done to inform our management actions for activities in the water.

Courtney Chambers: Right and (Barb) made a good point related to research. The conservation plan was built on about 10 years of good research just as a plug for research and the benefit that we have seen from that. She was just commenting on that fact.

Jennifer Gerhardt-Smith: Absolutely. Research is really, you know, has really underpinned the Lower Mississippi River plan and is an important element I think in any plan going forward. But also Engineering with Nature practices and principles and building in benefits to the projects and really being forward thinking about the opportunities we have in order to do that I think is very important as well.

Courtney Chambers: Great thank you. Well at this time with no other questions coming in we will begin wrapping up. Jennifer and Paul thank you so much for your contributions to today and for taking your time and sharing your valuable insights and experience.

And participants thank you all for joining us today and for contributing with questions and comments to make this a successful Web meeting. Please watch for upcoming notices on additional DOTS Webinars from (Cynthia Bank) here at ERDC. And I hope you all have a wonderful afternoon.

Recording: Your conference is ending now. As requested by the host please hang up.

END