U.S. DEPARTMENT OF TRANSPORTATION

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PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

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GREAT LAKES AND COASTAL ECOLOGICAL UNUSUALLY SENSITIVE AREAS

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PUBLIC MEETING

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WEDNESDAY
JUNE 12, 2019

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The Pipeline and Hazardous Materials Safety Administration met in the U.S. DOT West Atrium, 1200 New Jersey Avenue, SE, Washington, DC, 20590 at 8:30 a.m., Steve Fischer, Senior Program Manager, PHMSA, presiding.

PRESENT

STEVEN FISCHER, Senior Program Manager, PHMSA
EROL ALAVI, Supervisor, Integrity Engineering, Plains All American Pipeline, L.P.
HOWARD "SKIP" ELLIOT, PHMSA Administrator
BONNIE FREEMAN, President, FreemanGIS, Inc.
KAREN GENTILE, Community Liaison
LEIGHA GOODING, GIS Coordinator, PHMSA
SAM HALL, Senior Program Manager, PHMSA
ALAN MAYBERRY, Associate Administrator for Pipeline Safety
CHRISTIE MURRAY, Director of Outreach and Engagement, PHMSA

JACQUES ROTOLO, Engineer/Pipeline Compliance Specialist, Louisiana Department of Natural Resources, Pipeline Division
CARL WEIMER, Executive Director, Pipeline Safety Trust

ALSO PRESENT
ELAINE LAN CHAO, Secretary of Transportation
HUNG NGUYEN, PHMSA Staff
ANNEMARIE ROBERTSON, PHMSA Staff

C-O-N-T-E-N-T-S

P-R-O-C-E-E-D-I-N-G-S

8:30 a.m.

MR. FISCHER: If I could ask everyone to take their seats, please? Good morning. Sorry for the echo, maybe I should turn down my volume a little bit or step further back.

Is that better? Can you hear me okay? Okay, good. Welcome to everyone that's joining us here in person as well as all the viewers that are watching via the webcast.

My name is Steve Fisher and I'm with the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration. And we're glad that we've got probably about 50 or 60 people here in the audience this morning for the USA section.

Sorry about that echo. Is it okay? We'd like to kick off first by just having a very brief safety introduction here. I know a number of you probably have been at similar kinds of meetings here at USDOT but this is the address of the facility here.

If there is an emergency, you'll hear an audible alarm and it will give instructions on what the proper response is. So, if the alarm does go off we'll wait and we'll hear what the response is and what the directions are for how we should respond.

If there's a call for shelter in place, I think we're having good weather today so there shouldn't be any problems with that.

But if we do need to shelter in place and we need to be somewhere that we're not underneath an atrium, we'll move back behind us into the conference center and we'll provide direction on that if something does occur.

If we have a medical emergency, Sam Hall has agreed to call 911 and to work with security to make sure that we're able to get medical personnel in here as soon as possible.

Do we have anyone who is willing to by volunteer who is CPR certified? Okay, well, several of us, our certifications have run out but we will do our best to attend to anyone who's

having any type of medical issue and get someone here as soon as possible.

Hung -- where is Hung, there he is -- has agreed to get the AED, which is back behind us. So, we'll be in good shape with that. And if we have an evacuation, I've got a map here, in a second I'll show you, but Christie Murray and I -- I think everyone probably knows Christie.

Christie, if you could raise your hand back there? Come out? Christie Murray and myself will be leading everyone down to the rally point, which is about a block away at the fountain.

And then Sam Hall and Annmarie will be doing a sweep through the room to make sure that all of our participants have safely made it out of the building and are moving to the rally point.

Actually, it's set up the proper way for this room so we're going to be heading out this way to the Third Street exit and then going to the south, we'll be to the right when you

leave the building.

Everyone should have received this morning a copy of the agenda in the folders that were handed out. Actually, that's fairly visible. Or you could refer to the agenda.

This morning we are focusing our discussion on USA definitions and we'll be getting into those discussions, talking a little bit about the background and how the Agency is looking to move forward regardless addressing those Congressional mandates.

Leigha Gooding will also be providing a number of examples of maps and data that we're considering so she'll be able to show some illustrative maps of what we are considering and discussing internally.

And then also we've shared questions that we're looking to receive input on from the panelists as well as from all of you that are attending here in person, as well as people who are viewing via the webcast.

We will break at about 12:30 p.m.,

we'll go to lunch, and then the afternoon session will be focused on pipeline awareness and engagement.

And I wanted to mention also, for the viewers that are watching the webcast, if -- let me just go back up here for one second.

The email address here on the front, phmsa.pipelinesafety@dot.gov, if you're having difficulties with viewing or hearing the webcast, you can send an email to this email address.

It's being monitored here in the room. Obviously, we can't address personal issues related to your own individual computers but if you're experiencing any issues, let us know because that might give us the idea that we're having wider issues that we need to address with our excellent IT people that are here.

Also, then, if you have questions, for those would be viewers you can send your questions in as we go through this morning's program, as well as the pipeline awareness and engagement sessions.

You'll be able to send an email to this email address with your questions, comments, concerns. Those are also being monitored and we will try out level best to get through as many of those as we can when we get to the Q&A sessions.

If you haven't found them already, the restrooms are located out behind you on this side down the hallway, it will be on your left-hand side. Everyone should have been issued temporary Ids, it looks like everyone has them.

You need to keep those on while you're in the building and to the degree possible you should have a DOT escort before moving around the building.

So, likely what will happen when we break, if anyone needs to go over to the cafeteria for something to drink, we can have somebody escort a group over there so they can get what they need.

And we'll do the same thing probably at lunch, have some DOT escorts escort a large group over so that we're trying to kind of keep

everyone together.

If you haven't already, please silence your mobile devices and I've already addressed the next point here regarding the webinar participation. Please send us your comments and your feedback, we want to hear from you.

I think we've got a total of about 87 people that have registered for in-person, so obviously not everyone is here this morning which is what we assumed. We probably will have a little bit larger of attendance in person this afternoon.

And then I think we have about 140 people who have registered to view online. And also, as we go through the day, and this is for the people who are watching via the web, you'll see that there are eight different sessions.

So, this morning's session that you're watching now is Session Number 1. After break, there is a Session 2, so when we come back from break and I'll have a queue here.

Actually, it will be on one of the

Leigha's slides, there is a queue and a reminder that when we come back from break you'll want to start viewing the webinar using the Session 2 video screen that you see on the page.

And on the meeting registration page, it contains the agenda and all the pre-reads that we've asked the panelists to review.

So, if you're interested in looking at any of that information, please go out to the meeting registration page to find those documents out there.

We strongly encourage your comments and input and active participation. We're hoping to have a lot of good feedback, both in this morning's session as well as the sessions on pipeline awareness and engagement.

If you would, please hold your comments until we open the floor for Q&A, and we're going to have a couple of our community liaisons that will be walking around with microphones.

So, please wait until they can get to

you. We'll select you, we'll identify you. When you raise your hand, they'll get a microphone to you and then you can ask your question.

That way, everyone here in the room and also importantly, everyone on the video watching the webinar will be able to hear your question.

Please state your name, company, and organization if you have an affiliation with someone. If you're just with the public, that's fine, you're with the public. We ask that you please keep your remarks brief, to about three minutes or so.

We want to make sure that we're able to get through everyone that has comments. If we don't get to all of your questions and there's time, we'll come back and you can remind us and we'll try and get back and make sure that we answer all the questions that you have.

We also ask that you please engage in civil discourse. We're all adults here, we want to have a productive meeting and I'm sure that we

will.

But just so that we're clear, if there's any disruption, any disruptive individuals, we will have to ask security to help and escort you out. So, I don't suspect that's going to be a problem but just so that we're all on the same page.

And also, this is the PHMSA docket number for the USA definition that we'll be discussing today. If you have any comments and wish to put them on the docket, this is the docket number that you'll need.

So, at this point, I'd like to ask Alan Mayberry, Associate Manager for Pipeline Safety to come up, please.

MR. MAYBERRY: Thanks, Steve, and good morning. I think they've taken care of that echo for the most part. It's not quite like talking on a bad cell phone but thank you for that, for working through that.

Anyway, again, good morning. Thank you for being here and also for those of you on

webcast, thank you for joining us today.

Meetings like this are very important for we at PHMSA as we go through what we call the sausage-making of policymaking. And we find that, and a common theme is, as I talk to many of you, that words matter.

We need to get it right, we need to get it right the first time and so that's what we're after. So, thank you to help us get there, to get it right for your participation.

And like Steve said, it's very important that you do participate and give us your comments. There's no bad comment and so please participate and make your thoughts known.

Some people don't like really raising their question in public. That's not a problem, you can put it on the docket or you can slip the question to one of your neighbors over here. There are a variety of ways to do that.

But anyway, without further ado, let me introduce my boss, the Administrator of the Pipeline and Hazardous Material Safety

Administration. Please join me in welcoming Skip Elliott. Thanks.

(Applause.)

MR. ELLIOT: Well, good morning, everyone. I promise you two things. One, I will come in under the three minutes and two, I will not provide any civil discourse.

But I am glad to see that Steve finally smiled, so that's a good thing to do.

I wanted to add on behalf of my boss, Secretary Elaine L. Chao, our formal welcome to the Federal Department of Transportation Building and, as we affectionately call it, the West Atrium, well-known for its acoustical problems.

But I hope you all have a good and productive day.

I think before I just provide a few formal comments about what we're doing here today, it's only appropriate to pause for a moment and remember that it was 20 years and two days ago that a horrible tragedy occurred in Bellingham, Washington that resulted in the death

of three young men.

I have been on this job coming up on two years and as I told Carl Weimer, if there's one poignant moment in the almost two years I've been here, it was the trip that I took to Bellingham last year and standing in the park and listening to one of the city employees who was there that day 20 years ago talk about the events.

And it's almost every week that for some reason I'm giving a speech or I'm having a discussion with my staff that that conversation, that story that that employee 20 years later, or 19 years later, how that resonated with me.

And it also reminds me each and every day to remember that the primary mission of PHMSA is safety and we will continue to do everything that we can each and every day to improve the safe transportation of energy products and other hazardous materials that we move in this country.

And this forum allows us to do that

because if we're not willing to be open and listen to all stakeholders, then we're never going to be able to keep moving in the direction that's going to help us improve our safety.

I was just looking at my notes here and I think I'm going to kind of skip right to the end here.

So, I'll get to a few bullets that I think are important about how today's meeting is an important step as we determine how to best define and map areas that are identified as ecological, unusually sensitive areas.

And whether you're sitting here in the audience or joining us via the webcast, and hello to you joining us remotely, we appreciate you taking the time out of your busy lives to participate in this important discussion.

All of you, and I want to underscore the fact that it's all of you, will have the opportunity this morning to provide your input, concerns, and maybe even support as we talk today about how PHMSA plans to address this 2016

pipeline's mandate.

And there's one thing that we've just reintroduced -- well, we've just introduced our part of a pipeline reauthorization bill last week.

And getting ready for the introduction of that bill and reauthorization, I had the opportunity to participate in a number of hearings.

And one thing I think was very front and center is that PHMSA needed to do a better job of moving to close our open mandates that go back not only to the 2016 PIPES Act but the 2011 PIPES Act as well, and we've been working hard to do that.

With regards to this meeting, we've also created a docket and I think Steve talked about that. And we encourage you to submit your written comments. We also plan to transcribe this meeting and post the court reporter's notes and all the presentations that you'll see today.

And I think I'm messing up your

computer here so I'll do this. I hope the presentations you'll here today, both from PHMSA staff and external speakers, will be informative.

I also hope that you don't hesitate to share your thoughts and expertise because it will help inform PHMSA decision-making as we work to meet the USA ecological resource mandates in the PIPES Act of 2016 and enhance the safety of our nation's pipeline system.

So, your active participation is critical.

I've been on the road the last three weeks at a number of speaking engagements and one of the things that I have mentioned in each one those speaking opportunities is the importance of public meetings that we hold such as this.

Our federal advisory groups, both the liquid, the gas, we have a new one on the HAZMAT side that's going to deal with lithium batteries.

But again, in my relatively short time as PHMSA administrator I've got one observation that I think by far and away helps us understand,

helps us better understand, all the concerns, all the issues, and to hear all the points of views from all stakeholders as we look to do rulemaking.

So, I can't underscore enough the importance of your participation today and I hope to get back on and off over the next couple days to sit in and listen to that.

So, without any further ado, please accept my thanks for your participation today. I hope you find that PHMSA Staff will be engaging and helpful as we go through this process, and thank you for your very good work.

MR. FISCHER: Thank you, Skip and Alan. Sorry, I'm not one to smile a lot when I'm doing a presentation so if I look angry, I'm not, just know that.

And also, I think that we're going to have index cards. Do we have index cards back here? We do, and over here.

So, my experience in over 20 years working in the pipeline safety industry, I know

that there are a few shrinking violets in the crowd generally.

But if there are and you would prefer submit some written questions as we go through this morning as well as through the remainder of the program this afternoon and tomorrow, we have some index cards back on the back tables if you'd like to grab some, jot down some questions.

You can give those questions to anyone back here at the table here or back on the other side and in the middle.

We've got PHMSA personnel all along the back so you can turn those cards into them, and we will get to those then when we do the Q&A.

So, the session I'd like to talk about next is doing a little bit of a background as well as talking about some of the next steps as we look to address the Congressional mandate.

So, just for some background, as many of you, I know several of you that are here in attendance were at the 2017 public meeting that we had.

That was really an initial discussion to try to understand what is meant by coastal marine waters and coastal beaches.

It was also meant to understand how we might potentially define those, what data may exist that we could use to map those areas, if there were existing definitions that other federal agencies used to define these areas.

Because certainly, we don't want to reinvent the wheel if at all possible.

So, it really was that initial discussion to understand collectively from a various of SMEs, both in the private sector as well as with other federal government agencies, what existing data is out there that we may want to consider.

And so as Skip mentioned, today's meeting really is to follow up on that initial discussion.

We'll lay out for you in several presentations coming up the efforts we have made in analyzing data and sources that were

recommended to the Agency in that 2017 meeting. And we'll have maps showing what we've been considering.

I think that we have narrowed down in some ways the best data sources that we believe are going to fit the bill. But when you're dealing with GIS data and when you're look at how it's defined in regulations, there's lots of details that have to be worked out and considerations regarding the data, the accuracy and so forth.

So, we'll be talking about those kinds of issues this morning. This has been an ongoing learning process for us. Following the 2017 public meeting, we conducted an internal data pilot project, which we'll talk about a little bit.

And ultimately, it is in trying to understand how best to define these Congressionally-identified, ecologically unusually sensitive areas. This is really sensitive.

And last but not least, it's implementing the plan on moving forward to identify these areas and start mapping them and fulfill the Congressional mandate. So, this is the actual mandate here.

It's from Section 19 of the PIPES Act of 2016 and Congress instructs to the Secretary to explicitly state that the Great Lakes Coastal Beaches and Marine Coastal Waters are USA ecological resources.

As you know, we already have identified ecological USAs. We have drinking water USAs.

The current ecological USAs that are defined in the regulations in 195.6 are very species-focused, looking at threatened endangered species, critically imperiled species.

So, that's really the focus of ecological USAs within the Agency to date, at least what's been defined in the regulations.

So, this is a bit of a different approach to what else may be included as

ecological USAs and that's really what we have been struggling with as well as evaluating the data that we'll be laying out for you this morning.

Some of the input that we received in the 2017 public meeting, there was a lot of discussion about how the Great Lakes are mapped already as commercially navigable waterways.

But when you look at -- we call it CNW, commercially navigable waterways -- that data, when you're dealing with areas that are open waters such as the Great Lakes as well as the Gulf of Mexico, you see a bunch of lines.

And rather than the entire Great Lakes being portrayed as a USA, you instead see a bunch of lines and there is concern, confusion that the Great Lakes possibly are not being represented to the degree they should be in their entirety as a USA.

And so that's one of the things we'll be talking about.

And then when you get into talking

about Coastal Beaches and Marine Coastal Waters, some of the feedback that we received was suggestions, recommendations that we should be including wetlands when we're talking about Marine Coastal Waters.

There's also the question of how far inland should a USA, a coastal area's area USA, how far inland should that come? The other question is how far out should that area be to open waters to sea.

So, these are recommendations but there are also just a lot of additional questions that came up. And that's good because it just means there are additional things that we need to evaluate to determine and define what we mean when we perceive these coastal areas.

There's also quite a bit of discussion from the federal agencies that participated with support for NOAA Environmental Sensitivity Index, ESI data.

And we've been evaluating that information and I think probably even during the

public meeting it came up for discussion.

We certainly have been evaluating the data following the public meeting and there are some concerns about the availability of data because when we're looking at data, we're looking at national data sets.

So that's always a challenge in that that's the requirement that we have, to be able to identify data nationally.

And so often times that limits what information we may have access to because if it's for a specific state, that's not going to help us out when we're charged with providing nationally available HCA information for operators to use for integrity management.

And then the other potential issue with the ESI is that there is the potential for in the future that as NOAA makes modifications to the data, it may come to include additional waterways that may not fit how we've defined a coastal area USA.

Or that it may include additional

areas that don't meet the definition that we've defined or that there are areas that we really don't believe should be included within a marine coastal waters USA.

So, just some issues that we've been discussing based on the feedback that we received at the public meeting.

I've already talked a little bit about the marine coastal waters as far as to what degree should we be including wetlands and marine coastal waters definition as well as to what degree should offshore areas be included in a definition?

Coastal beaches, ESI, there is ESI shoreline data that actually categorizes geographic features as beaches, and it's fairly detailed.

There's a number of types of beaches that are identified within the data but once again, what came out of the public meeting was to what degree should environmentally sensitive areas adjacent to those beaches be included in

that beach-defined geographic area?

And then the other issue is what's the intent of Congress? Was Congress's intent that we should be identifying beaches and marine coastal areas that are primarily for recreational activity?

Or should it be a much broader definition of these coastal areas to include, and protecting, a wider variety of coastal beaches and marine coastal areas in addition to those that are just used primarily for recreational purposes?

And then finally, the last issue is should we be looking at limiting mapping of the Great Lakes Coastal Beaches and Marine Coastal Waters to those areas found to be unusually sensitive?

So, is the Great Lakes in their entirety, should that be a USA? Should all coastal beaches be USAs?

Or should it be a subset of those areas that are based on some criteria to be

unusually sensitive and those are the areas that we should specifically focus on?

So, those are some of the questions that came out of that 2017 public meeting and that we have been having ongoing conversations on since then.

In 2018, we conducted an internal pilot project and there were really three primary purposes of this pilot project. One was an effort to create and maintain new GIS data that's going to reflect these potentially new USAs.

And of the data that is available to potentially reflect these geographic areas, what is the quality of the source data, and how well will that data support potential definitions that we may use in defining Marine Coastal Areas and Coastal Beaches?

The other thing that I have focused on given the feedback that we received at the 2017 public meeting was we wanted to compare the ESI shoreline data with the 2018 ecological USA data, which Leigha will be talking about shortly, which

will be coming out this summer.

But we wanted to compare that ESI shoreline data with the 2018, the new 2018, ecological USA data to identify what percent of the shoreline in the ESI is actually classified with this 2018 data as an ecological USA?

So, where is the overlap between the ESI and the 2018 eco data? And the findings are that about 59 percent in the lower 48, there was an overlap between that shoreline currently -- well, with the 2018 data -- being covered by an ecological USA.

And then we factor in Alaska, we're at about 54 percent. So, just slightly over half of that shoreline area will be covered by ecological USAs when we release the 2018 data.

Leigha will have a number of sample maps that she'll be showing during the presentation so I think that'll help once you start seeing some of those sample maps.

And also when we talk about the specific questions I think that it will help in

understanding the challenges that we've been investigating and evaluating.

And then all of this information, just as we used the information from 2017, the information that we receive from this public meeting, from comments that we receive on the docket, we'll be taking all that information into account as we move forward onto the next phase of addressing the Congressional mandate.

And all this just helps to inform our policy decisions. So, the first point is that PHMSA's plan is to update the National Pipeline Mapping System and if the Great Lakes as an ecological USA.

The Great Lakes are a defined, known entity. They're identified by the U.S. Geological Survey, which is a federal agency, highly regarded for their mapping of geographic features.

So, the Great Lakes aren't such a difficult issue because they're known. You say the Great Lakes, most people know what that

means. But there are still some remaining questions, we'll be getting to these this afternoon, or this morning I mean.

So, as I mentioned previously, we don't want to reinvent the wheel. So, if there's current regulations that define what the Great Lakes are, ideally that's what we want to use.

And so we're looking at 33 U.S.C. 1268 definition of the Great Lakes, which includes the Great Lakes as well as all of the connecting waters. So, all of the rivers as well as I think Lake Sinclair around Detroit.

All those features in where the Great Lakes water is ultimately running from Lake Superior all the way through to the Saint Lawrence Seaway, it includes all of those features, all those water bodies.

And so the question is should PHMSA be considering both the Great Lakes as well as all the connecting waters when we define the Great Lakes USA?

Or as Congress stated in the 2016

reauthorization, the mandate, they said the five Great Lakes. So, there is the potential that we could define the five Great Lakes and not include connecting waters.

So, that's another question that we'll be getting to as we go through the panel discussion today.

And then the mapping of connecting waters poses a little bit of a challenge because we have been researching and trying to identify national data sources, such as USGS, to map those features.

Because when we have evaluated, and Leigha will get into this in a little bit, but when we evaluate the Great Lakes' geospatial data available from USGS, it is the five Great Lakes.

It's not including these connecting waters and I think it is reasonable that we probably would want to include connecting waters when we're talking about the Great Lakes, given the fact that you have water that, as I said earlier, is going from Lake Superior all the way

through.

So, another question.

So, as we move forward, we'll be taking all the information that we receive today in addition to information on the docket and sort of going through and analyzing and synthesizing the feedback that we receive.

So we're really looking forward to the panelists' discussions this morning.

I know that we'll be having a wide variety of presentations that we've received so I think it will be a good discussion covering a wide array of issues related to both defining these new USAs as well as more on the technical GIS side and actual data sets that exist, and any limitations with those data sets.

So, it should be a good, well-rounded discussion.

So, next steps, like I said, we'll want to map the Great Lakes as USA ecological resources as soon as we settle on exactly what that is to include.

We'll continue investigating and evaluating the data recommendations that we receive out of the input that we get today, as well as what we receive online.

And then we'll move forward with defining and mapping the Coastal Beaches and Marine Coastal Waters as USA ecological resources, and everything that will be related to defining those definitions and incorporating them into the regulations.

So, thank you, that concludes my remarks for everyone who has joined us via the webcast. This is the email address that you can use to submit any questions you may have and we encourage you to do so.

What we're going to do is now go ahead and have Leigha come up, do her presentation, and then we'll entertain all your questions following that.

And we'll have up until the break, which is at 10:00 a.m. for Q&A, so I think we're going to have plenty of time for a good Q&A

session after her presentation.

Okay, thank you.

MS. GOODING: All right, hello, good morning, thanks for joining us. I'm Leigha Gooding, I'm the GIS coordinator here at PHMSA.

I work specifically with the National Pipeline Mapping System and I'm going to go through a couple things today, mainly giving you an update on the newest data that's coming out for drinking water and ecological USAs.

But I'm going to start with a quick overview of what the NPMS is, what public resources we have available, how you can use our system, and some of the USA/HCA data that we currently have.

I'll go into the updates on both the drinking water and the ecological data that's about to come out soon.

And then I'll go through a little bit of the existing coastal area coverage comparisons that we did with the new 2018 ecological data.

So, quickly, to start with the NPMS

and what it is, the National Pipeline Mapping System, the NPMS, I believe most of you here have probably heard of it but it is a GIS database.

We have a lot more than just pipelines in the NPMS and I'll go over that in a second, and we are part of the PHMSA's Outreach and Engagement Division.

This map here is actually a completely public map that you can download on our website, and I'll point that out in a second.

So, the main data sets that are included in the NPMS include groups of data that we collect from pipeline operators directly, as well as data that we produce here at PHMSA.

We collect Gas Transmission, Hazardous Liquid Pipelines, and I've listed the regulations where you can find the requirements for submitting this data. We also collect Liquefied Natural Gas Plants.

Breakout Tank point locations are submitted on a voluntary basis at this time.

We also collect and map Accident and

Incident locations, but here at PHMSA we also collect data from other sources other than the pipeline operators to map all the high-consequence areas including the unusually sensitive areas.

We also build a database of pipeline history and we map inspection boundaries to incorporate a lot of our internal inspection records geospatially into our system for some spatial levels of analysis.

This is just a snapshot of the homepage for the NPMS website, you may recognize it. I really want to point out that we have three different types of users broken up on our website.

We have our government officials, the pipeline operators, and then the general public. The green box above and all those green arrows, those are pointing out the resources that are available to absolutely anybody who goes to our website.

This includes the public map viewer

and an iPhone app for the public map viewer. You may be familiar with this.

You pick one county, you can see pipelines for that county, you could zoom into about 1 to 24,000 before the pipelines disappear. You could see some other information, you could search your address, see if there's pipes by your home, et cetera.

We also have a spatialized directory where you can search for operator contact information based on where they operate pipelines, by zip code, county, or state.

And then we have a couple of different types of data and maps that you could just download.

One is that map that I showed you a couple of minutes ago, and then we also have lists of information about pipelines broken down by county, as well as pipelines broken down by offshore areas.

You could read about what the name of those pipelines are, what they carry, the

diameter of those pipelines if that is submitted -- that's a voluntary attribute at this time -- et cetera.

So, we try to distribute information not only in spatial ways but also in tabular ways. You can take that data, put it in Excel and do some of your own analysis.

Below, there's of course the link to the NPMS website and over in the blue box are the resources that are restricted to both the government officials and the pipeline operators, including namely PIMMA, which is Our Pipeline Information Management Mapping Application.

This, instead of allowing the user just to select one county at a time, we actually have vetted you and we've given you access to the pipelines in your jurisdiction, being that your county, your state.

If you're a Federal Government employee and you need to see everything, you see everything. There is an iPhone app for PIMMA. As well, you can request GIS data to make your

own maps.

And just a little bit more into the HCA/USA data that we already distribute and the data sources that we've used, both the high and other population areas are based on data we collect from the U.S. Census Bureau.

The commercially navigable waterways, that data is the national waterway network that's collected from the U.S. Army Corps of Engineers.

And currently, the ecological USA data and the drinking water USA data, they are produced and the eco USA data is actually produced from a data source from a company called NatureServe.

And the drinking water unusually sensitive data that is produced by both EPA and state data sources, and I'll get into that a little bit more in a minute.

But I've also listed the parts and the regulations here where you can see these definitions if you do want to look into them. And quickly, just ways that you can currently

access HCA data, three primary ways.

One, GIS data, for those of you who actually use GIS systems out there, I know that's always your preference, both the HPAs and the OPAs, that stands for the high-population, other-population area data, those are public JS data downloads as well as the CNWs.

However, the eco and the drinking water USAs are restricted when it comes to the GIS data. And I'll go through that process in a minute about how to request that.

Next, we have our PIMMA mapping application, that's the one restricted to the Government and pipeline operators.

There you could see the HPAs and OPAs, however, you will no longer be able to see the ecological or USA drinking water data layers on PIMMA once we distribute this newest update that I'll talk about in a second.

And last, the public map viewer, everybody can see the HPAs, OPAs, and CNWs on there as well. I already mentioned that the HL

operators, the Hazardous Liquid operators, are the only ones permitted to request this data.

All right, so now I'll jump into the actual update, the recent update, for the drinking water USA data. This was just delivered to us last week, the final pieces of it. It's been a very large project.

It will be available to all Hazardous Liquid operators who operate hazardous liquid pipelines this summer. And you will be notified through a mass email.

We'll send that out to every Hazardous Liquid pipeline operator listed as a primary contact in our NPMS database. So, this email should be going to your GIS or your mapping departments.

I do want to stress that consultants cannot initiate a data request, that has to come from an employee of the pipeline operating company. That is not a new requirement.

And we will be continuing to distribute this type of data by state. So, we

will have to validate that you operate hazardous liquid pipelines in the state before that data is released.

So, there will be detailed instructions for how to request the new drinking water USA data. We're calling that the 2019 DW data, it will be on the NPMS website.

This is actually the link where currently the existing procedures are listed and that will be updated very shortly for the distribution this summer. I'll do a quick review of the process.

First, the operator, after you receive the email telling you that the data is ready for distribution, you come to our website and you can see information about how to make the request email.

So, the operator will send the request email, PHMSA will go through an employment verification and verify your applicability for the data.

Next, the operator will need to sign

and return data-use agreements to PHMSA, and last, PHMSA will deliver that data to you by a secure FTP download.

So, you will not have to wait for data in the mail or anything like that, we will be sending that to you rather quickly.

The drinking water update for 2019 does include data for all 50 states, plus the District of Columbia and Puerto Rico.

The metadata about the information that was produced for every one of these states in D.C. and Puerto Rico is actually available to the public and can be pulled from the NPMS website.

And again, this information will not be displayed on PIMMA or the public viewer moving forward.

Since I unfortunately really can't show you maps of the drinking water USA data because of the sensitivity of the data, I did want to tell you a little bit about how it looks and how it's changed.

When we ran some analysis with the 2001 drinking water data, we found about 18,800 miles of hazardous liquid pipes in the NPMS that intersect those areas.

When we ran the same analysis with the 2019 data we just finally completed last week, we're finding out the intersections are only about 11,600.

So, there was a decrease in the mileage but remember that these are intersections. They could affect mileage so those numbers are going to larger when you consider how many miles could affect a drinking water USA.

Some of the reasons for the changes, first of all, back in 2001, the data really came from the EPA and during a data pilot project that was done a few years ago when updating this information, we learned that the EPA data was not maintained in the way necessary and the way that we were hoping in order to update the drinking water USA data.

So, we ended up going directly to the states and pulling data from state databases. Of course, every state may do it a little bit differently so it took some massaging and processing to get the whole national data set.

And we fell back on some EPA data when states did not have available data at the level that we needed.

Moving onto the ecological USA data update, this data was delivered to PHMSA in 2018 and we even started the early distribution pilot in 2018. So, there may be some operators here that already have that data in hand.

Generally, anybody who reached out to us, anybody who we were speaking to, expressed interest, we asked them if they would be interested in being part of our pilot because the data request process for the ecological data is different this time.

There's some specific training that needs to be completed so we really do appreciate those operators who reached out, went through the

bumps of going through that process the first few times, and we shared the data with them already.

But it will be available to everybody, just like the drinking water data, this summer. Again, there will be an email that goes out to all the NPMS primary contacts, so it will be your GS and mapping departments that are notified.

Consultants cannot initiate the data requests and again, only operators that can be verified to have Hazardous Liquid pipes in that state will receive that data, and that hasn't changed. Detailed instructions will be on the NPMS website.

And just a quick overview of the actual request process. Similar to the drinking water data, the operator sends the email request to PHMSA, however, what's different is that the operator needs to include a list of every single person who's going to use the data.

This is going to include not only the operator employees who actually use the GIS systems, do the analysis, produce the maps, but

also your consultants.

So, PHMSA will be verifying the requester's employment and applicability for the data to determine what states they can receive data for.

And then the operator in every single one of the users listed will have to complete NatureServe's online training and agree to their data policy.

This is video-based training, it is approximately 75 minutes with a quiz, but it can be broken down into about 4 different modules so you don't have to complete it all in one sitting.

But no data will be released to the operator until every listed user completes this step and NatureServe verifies with us that we are now able to release the data to you. And then we'll deliver the data via secure FTP download.

Again, I cannot show you the maps of the 2018 ecological USA data but to give you a little review of what that data looks like, we do not have an update for D.C., Delaware, Hawaii,

Ohio, or Puerto Rico.

The data simply was not available in a format and up to date and at a quality that would be any better than the 2001 data. We do have 2001 data for every one of those areas with the exception of Puerto Rico.

So, if you do request access to any of these areas for the 2018 update, you will receive a hybrid data set that will be both the 2001 data as well as a little bit of the 2018 data, the overlap from the surrounding states.

So, if you're requesting Ohio, something that came in from Kentucky in the 2018 update, you will receive that in your Ohio data delivery. Metadata, again, is available for the public.

As well, this data was very cumbersome. It was a very, very large data set that we had a hard time using even on our servers. So, we have dissolved the data down, removed some of the overlap just so it's more useable for the users.

But we have developed additional lists of the eco-unique IDs, if you're familiar with that, so you can still backtrack and go back to NatureServe and identify the exact species that are in those areas.

You'll just have a list of various species that are in that area, and I thank Bonnie for that recommendation, it was a great one.

Okay, and the mileage differences. So, with the 2001 data, we have over 14,000 miles of Hazardous Liquid pipe that intersected. 2018, just over 9000 miles. Again, this does not include all of the could-affect mileage.

To give you an idea of what that data looks like, we have larger areas of the coast that are covered, then in 2001. And the improved data really did result in more precise and smaller locations being identified inland.

So, it's more coastal areas covered, it looks like less inland area is covered, but really the data did not need to be buffered to the extent before. It's more accurate and we

were able to be more precise.

And last section before we get to Q&A, I want to talk a little bit about the analysis and the comparisons we ran between the ESI data set, which Steve introduced.

It was probably the biggest topic of conversation in our 2017 public meeting, if any of you were there. NOAA's Environmental Sensitivity Index, also called the ESI, they make a number of different products, one of them being an incredibly detailed shoreline.

It follows inlets and everything and you'll see it show up in various maps today. And so like I said, this was the primary GS data source that was discussed in 2017 and it actually categorizes coastal area sensitivity to oil.

So, we see it as a very relevant product to what it is that we're trying to do and it's developed by NOAA, a leading authority in mapping and understanding coastal area.

A quick little review of the ESI shoreline, so in both the Atlantic and the Gulf

together, we ran some overlap analysis with the 2018 ecological USA data and found about 59 percent of this was already overlapped by the 2018 ecological USA data.

The areas on the map that are red are the areas where they had the lack of overlap. The green covers the overlap. I will point out it looks like Louisiana is not covered. It's not necessarily that Louisiana is not covered at all.

That shoreline down there in that ESI product is very detailed in following all those inlets, as you can imagine if you're familiar with Louisiana.

So, the vast amount, the length of the shoreline down there is very long and it was bopping and weaving in and out of the current eco USA data, as you can imagine.

Next, some analysis of the Pacific Coast, just on the West Coast. This does not include Hawaii or Alaska. About 65 percent of this and Puget Area Sound, everything up north, again very detailed shoreline up there.

Those are definitely some areas that were not completely covered. There were some areas in Southern California as well.

Last, a quick review of Alaska. It was only 30 percent but, of course, there's a lot of coastline in Alaska and only very few areas where pipelines approach coastlines in Alaska.

So, it's not as bad as it sounds but you can see the highlights of the areas that are in red. We do not have the overlap in green, we did have the overlap.

And with that is the end of that presentation, just an introduction to the NPMS and an update on the ecological and drinking water USA data that will be available to you, all the Hazardous Liquid pipeline operators, shortly.

I guess now we can open it up for Q&A. You can send your questions if you are on the webcast to the website -- or I'm sorry, the email address that's listed here.

Somebody in the room will take those questions and pass them up to us, and I will take

questions from the table.

And one last note that after the break when our Q&A is done, make sure that you look at the session number 2 link to continue watching the webcast.

Thank you.

MR. FISCHER: Any questions? Can we get a mic up front, please? Tom, up front?

PARTICIPANT: Hi, so when you were doing the comparison of the 2018 eco USAs to the ESI shoreline, it looks like you used all shoreline types.

Was that true?

MS. GOODING: Yes, that is true. We used all shoreline types, we did not minimize that just to the beach.

We've been recommended to and we're looking at the ESI product to really derive a number of the different definitions.

So, we weren't really doing this analysis with only coastal beaches in mind, but just as a way of considering the entire coastal

area in all the shoreline.

PARTICIPANT: Okay, and did you ever run a statistic with just the beaches of the actual shoreline, like maybe using the NHD coastline?

MS. GOODING: No, I do not have any of that information here when we broke it down to just the beaches. I do have some analysis and some maps showing just those areas and how they differ and how much of the coastline is covered.

I do not believe I have statistics available with me right now about the portion that is included in the eco USA 22 data, but it's something I could look into.

PARTICIPANT: Yes, that's what I was thinking. The percentages may very well go up if you just limit it to the beach and not --

MS. GOODING: I don't doubt it.

PARTICIPANT: -- all of those inland waterways.

MS. GOODING: I agree, that's true.

MR. FISCHER: Do we have any other

questions?

MR. HALL: We do have one question from the webcast from Rebecca Craven at the Pipeline Safety Trust.

It's a three-part question. The first question is will PHMSA map could-affect areas or will operators be responsible for that?

MS. GOODING: The quick answer is no, we will not be mapping could-affect areas. In all honesty, anybody familiar with how to determine could-affect areas -- and I am not personally an expert on this.

There are so many different factors that come into play, elevation, slope, types of soil possibly, water features in the areas.

It's depending on exactly where the pipeline is, what the pipeline carries, the size of the pipeline, and so many other factors can determine whether or not a pipeline here or there could affect.

So, we will not be making a blanket, polygon data set that says every single pipeline

in this location could affect. That is an interpretation that is best left to very individual focused analysis by the operators themselves.

MR. HALL: Thank you for that. The second part of the question is when will PHMSA be enforcing use of the new data?

MR. FISCHER: I'm sorry, when will PHMSA what?

MR. HALL: When will we, PHMSA, enforce the use of the new data? When will it be required that operators use the new data?

MR. FISCHER: Well, it will fall within the protocols that operators require by the regulations to incorporate within their baseline assessments.

So, one year for incorporation I believe, five years for identification of could-affect areas. So, it'll be the same.

MR. HALL: Very good, and the last part is how are you figuring the percent of coastal areas that are covered when the areas has

not yet been defined?

How do you figure the percent of coastal areas that are covered when the area has not yet been defined?

MS. GOODING: Oh, yes, that analysis was done with just the ESI coastline data set and the 2018 update of the ecological USA data. The 2018 update of the ecological USA data has been defined, we have it in hand.

Pilot operators who participated also have that data. The ESI shoreline is also in existence and has been defined.

So, we have not defined the final definitions for the terms in the mandate but we use existing definitions for that analysis. Anything else?

MR. FISCHER: We have questions up here. To your right.

PARTICIPANT: We had a question about when you're submitting the request for the ecological data. You said that the operator, and the consultants, and anyone within the operating

entity that might be using the data would have to be included on the request.

When you say using it, are you saying anyone that would just be potentially viewing it within your company or actually manipulating the data?

MS. GOODING: Actually that's a really good question. I can provide clarity on that. When we say users, and this clarity will be explained on the NPMS website when we do get that updated, it will literally be the people using the data in the GIS data system.

So the other people in your operating -- I know that -- I'm sorry if I caused some fear there, not my intent. So your GIS analysts, the people who are actually using the dataset and who are responsible for the products that are going to be distributed and displayed for the other people in your agency to view, so they're in control of the messaging, so.

MR. FISCHER: It will not become a new training program for your company.

MS. GOODING: Unless you want to, no problem.

MR. FISCHER: Other questions? We have plenty of time.

MR. HALL: Just as a reminder to the members of the audience, when you do speak, it would be very helpful if you could identify yourself with your name and your company for the viewers of the webcast and for the record. Thank you.

MR. FISCHER: Did we do that good of a job in explaining all of this?

MS. GOODING: I think we're done.

MR. FISCHER: Is there another question?

MS. GOODING: Yes, I saw this gentleman in the red tie.

MR. FISCHER: Okay.

MR. MEDINA: Thank you and good morning, Nick Medina with ExxonMobil Pipeline. The code effect data, right, I know it's up to the operator to use analysis to define it, but

will you provide guidance in how do operators help define that or share examples on what it is that is expected for operators to define that?

MS. GOODING: Do we provide that guidance?

MR. MEDINA: Mm-hmm.

MS. GOODING: I know that there are, I want to say -- I don't want to speak out of turn. I'm sorry. Do we have an integrity management person who can speak? There is some guidance.

MR. FISCHER: Like through FAQs.

MS. GOODING: FAQs, thank you, Steve. There are FAQs and there are guidance documents that do exist.

MR. MEDINA: Okay.

MS. GOODING: And if you need some help identifying those or pointing to those exact resources, we can get those locations for you during the break.

MR. FISCHER: But all of this should be the same that you've been using for the past,

you know, 20 years or approximately, so no changes with the addition of this new eco and drinking water USA data.

MR. REYNOLDS: Good morning, James Reynolds with the Enforcement Division here with the Pipeline and Hazardous Materials Safety Administration. I just have two questions, one for Steve and one for you, Leigha.

The question for Steve is once the definitions for the ecological areas and the coastal waterways is defined and agreed upon, and I think you mentioned that there will be some more regulations once those definitions have been in place, do you foresee any economic impact to pipeline operators to comply with those regulations?

MR. FISCHER: That'll be part of, if we go the route of a rulemaking process, that would be part of that process that will, it will have to be analyzed and identified. So I don't have an answer for you now. It will just follow the normal protocol if we take the rulemaking

route in defining those features.

MR. REYNOLDS: Thank you. And Leigha, when you spoke about the, and I apologize if I get my terms mixed up here, you spoke about the drinking water and ecological data from the different states, and I think you mentioned that you didn't have anything from Puerto Rico.

And so my question is, is that important that that information is not available for Puerto Rico and are there any efforts underway to obtain any updated information for Puerto Rico?

And I think you said that there was no data even in 2011 for Puerto Rico, and if you can explain?

MS. GOODING: Yes, the ecological USA data specifically has come from a data source that is produced and maintained by a company named NatureServe, and NatureServe did not have the data in their database available for this, and by recommendation, we did not -- you know, there was no authoritative way to produce data in

that location.

With future updates, we'll certainly try to find Puerto Rico again. We won't stop looking for Puerto Rico data to fulfill that, but there's no effort at this time to do that.

MR. HALL: We have an additional question from the web viewers. This is a question from Nan Gray with Soil Works Incorporated. She says, "Maps need to include areas to avoid. Unsuitable soils need to be avoided. How are you incorporating the natural resources conservation service soil survey?"

MR. FISCHER: Okay, well, we appreciate the comment. We'll take that into consideration. I certainly recommend for any of the web viewers or anyone in the audience to submit your comments, questions, or concerns to the docket as well so that it's officially included as part of the process.

MR. HALL: She also goes on to state, "PHMSA needs to require on the ground order one soil surveys for pipeline routing long before

construction," just a comment, not a question.

MR. FISCHER: Okay, thank you. Yeah, thank you for that submission.

MR. WEIMER: Can you hear me? Carl Weimer, Pipeline Safety Trust. I was wondering if you can speak a little bit -- I know in the past, local elected officials and government officials can get password entry into the NPMS.

I wonder if this new data is going to be available to those folks and if they're going to have to go through the same certification process that operators are going to have to go through?

MS. GOODING: Yes, that's a good question, and unfortunately, no. The 2018 ecological data and the 2019 drinking water USA data will no longer be available. It's not a decision from PHMSA. It's a limitation from the vendors who produce the data. The data, the ecological data is proprietary.

The drinking water data is highly sensitive, and we went through a lot of

agreements with different states individually just to get the data for use by our pipeline operators, and we are limited in that we are only permitted to distribute this data to the pipeline operators for that purpose.

MR. WEIMER: All right, and how about state regulators? How are they going to be able to access and get certified to look at this data so they can enforce these rules?

MS. GOODING: State partners, I'd have to look into that, but I imagine as state partners of PHMSA, they're working together with us. We are trying to, you know, prepare for inspections in similar ways, so we'll be sharing that under confidentiality agreements for all types of inspectors, I imagine, but I can certainly get a firmed up answer for you during the break.

MR. WEIMER: Okay, you know, the public's kind of in the dark on this stuff, especially the drinking water stuff because we can't see it, so it kind of concerns me that

local government officials that use this information to define their aquifers and protect their aquifers can't see what you're using, so what kind of verification is there that this data is good data with the people that it really means the most to?

MS. GOODING: And I'd say the verification of this data is that it came directly from the states who produced the data, and they all have their own processes for producing these datasets, and I'm sure individual state agencies, which you can learn about in the metadata that is available to the public. The metadata can contact these state agencies and ask them that question because they really truly did develop that data.

Now, in terms of taking that data and processing it into data that meets the USA definition for PHMSA, that was not only done by a contractor who helped develop that definition, but then other contractors were hired to do third hand validation of the data as well, and that's

one of the reasons why we've taken the amount of time we have to create that data. The accuracy of it is very important.

MR. LESNIACK: Good morning, Chuck Lesniack representing the public. I want to reiterate what Carl said, that to not have the eco USA data and particularly the drinking water data not available to local governments is a real problem, and if one of the reasons is that it's a proprietary product, that's also a problem.

This is public -- this is now government data that should be shared with at least representatives of the public, the local governments who are often the people, the entities that produce the drinking water. We need to find a better way to get better data.

And then the other thing is just about the accuracy of the data. I was a local government official for 28 years, and my experience in our area is the federal data about ecological resources and drinking water contributing areas and protection source areas at

the federal and state level was often very poor, and it's also true for the ecological data. The state agencies in Texas do a pretty --

The data at the state level was very gross, and so if it's going up to another level to the federal level and being produced by a third-party vendor, I think, I suspect, I believe the data to be highly suspect in terms of it probably is a decent overview, but when you get to the level of where the operator is going to use that data to create their code effect areas, those areas are probably going to --

There's another level of error that they can put into it, and so what we have historically seen at the local level from the operators that rely on national level data is it's often very, very inaccurate.

And so, and then to not be able to share that information with the local governments, much less the public who can actually ground truth this information, that's a real problem.

MS. GOODING: Okay, thank you for your comment.

MS. CROWNHEIM: Good morning, my name is Patty Crownheim. I'm with Rethink Energy New Jersey and I'd like to echo, I think quite literally, the comments of Carl and Chuck.

In New Jersey, we have seen a great amount of frustration from municipalities who want access to comprehensive and accurate information, and I think that while the information may come from state sources, it tends to be fragmented.

There isn't a good place for the municipalities to be able to access it, and they are the entities that the general public goes to first to find out information, so they really are an important partner, I think, in information and engagement for PHMSA.

So the other piece is that the municipalities' ability to access this information, and as Chuck said, fact check it and make sure that it's actually what is happening on

the ground, is important.

And they may be able to have the ecological information, but to be able to have the overlay of the pipeline information, they don't have access to that, so that's what's really missing.

And that would be why it's so valuable and I think crucial that you have some way of interacting with municipalities, whether you create some kind of a program or pathway for certain leaders in municipalities and identify key people in municipalities who can enter into these kinds of information sharing with PHMSA, but there should be able to be a pathway for that to occur. Thank you.

MS. GOODING: And you mentioned these municipalities and these other levels of government, which is good, and not groups that are responsible for pipeline inspections specifically, but more for environmental protection generally?

MS. CROWNHEIM: I'm sorry. I couldn't

hear the last part.

MS. GOODING: Oh, sorry. The municipalities that you're speaking of that should be able to see this information, these are not municipalities that do any, that participate in inspection of pipelines specifically, but they're more interested in general environmental protections and things?

MS. CROWNHEIM: These are municipalities that have miles of pipelines running through them --

MS. GOODING: Yeah.

MS. CROWNHEIM: -- and proposed pipelines as well. These are the people on the ground impacted.

MS. GOODING: And they can absolutely gain access to all of the pipeline locations in the NPMS, not just the public view, but the actual PIMMA and the actual GIS data for the pipeline locations as well, but the point is well taken about the USA data as well. Thank you.

MS. FARRELL: Hi, Linda Farrell,

Pipeline Safety Coalition in Pennsylvania. I would like to also echo.

Chuck made a very, very good point about ground sourcing, and I think many of the conversations we'll have over the next two days will be about public engagement, and the fact that the top down rather than the bottom up approach to information sharing and to information gathering needs to be reexamined is something I hope we'll be discussing in detail.

As Patty said, we see people. The public sees on the ground a lack of communication between the permitting agencies and the local municipalities who have -- municipalities and also actually some of the permitting agencies who have, let's say, conservation districts on the ground, who have better information. Better perhaps is not the right word, but have boots on the ground.

The conservation districts know what's going to happen on a steep slope in their area, and so the information sharing from what we've

just discussed to the entire public awareness and education I think is all very, very tied in and really needs to -- I'm looking forward to how you all address that.

MS. GOODING: Thank you.

MR. FISCHER: Thank you.

MR. HALL: We have two additional questions from our web viewers. The first is a follow-up question from Rebecca Craven at the Pipeline Safety Trust. It's regarding the enforceability of the use of the data.

She says, "Will the one year to incorporate/five years to be enforceable also apply to the new definitions for the Great Lakes once they are defined?" So once the Great Lakes are defined as USA as the coastal areas, will the one year/five year rule still apply?

MR. FISCHER: I believe so. I mean, that information will be -- you know, PHMSA is required to make that information available through the NPMS.

So once we work through that process

and create the data and publish it on the NPMS, and we go through a similar notification process where we notify all of the operators about the availability of that new eco data, then I suspect it should, that the same time frame would apply.

MS. GOODING: And it will be part of the written definition in 195.

MR. FISCHER: 195.6.

MR. HALL: She also says, it's formulated as a question, but I think given your answer, it's more of a comment.

She says, "So from the 2016 date of the mandate, it will be at least four years before the definition is finished, and then an additional five years before operators are held accountable for using those in their identification of code effect areas?"

MR. FISCHER: Okay.

MR. HALL: The second question we got is from Sheila McGinty at Williams. She says, "The source information for the drinking water and ecological metadata is often a link to a

general website such as a state DEQ. Is there a location that shows who or which agency to contact?"

MS. GOODING: In the newest metadata that's coming out for the 2018 and 2018 data updates, there should be information in there about the state agency and a contact person who is representative of the data source, yes.

MR. HALL: Thank you. That's all of the questions from the web viewers now.

MR. FISCHER: Thanks, Sam.

MS. GOODING: Absolutely, thanks.

MR. FISCHER: Any additional questions? Okay, well, that will conclude the session. It looks like we'll have about a 25-minute break here. We will reconvene at 10:15.

For everyone who is watching the web cast, when we come back at 10:15 Eastern time, you'll need to select the second session on our launch page in order to watch the video for that portion of the meeting. So thank you and we will convene at 10:15 Eastern time.

Oh, and we have one other -- hold on.

MS. MURRAY: Good morning. Instead of coming back at 10:15, can we just take a 15-minute break?

MR. FISCHER: Okay.

MS. MURRAY: And that way we can advance in our program and possibly wrap up a little bit earlier for lunch if it affords us that opportunity?

MR. FISCHER: So you want people back at 10:05?

MS. MURRAY: 10:05 would be perfect.

MR. FISCHER: So at 10:05 Eastern time, we'll reconvene session number two.

(Whereupon, the above-entitled matter went off the record at 9:50 a.m. and resumed at 10:10 a.m.)

MS. MURRAY: Okay, if everyone could take their seats? And if our next panel, if you could make your way up on the stage, we'll get started in just a minute.

As everyone is taking their places, I

do want to circle back around and have Sam Hall read one remaining web cast question we received from Nan Gray on the web cast.

So we're going to kick off with addressing that question from the last conversation, and then we will proceed with our next discussion. Sam?

MR. HALL: This question is a follow-up question from Nan Gray with Soil Works Incorporated. She says, "Thank you for this mapping tool, and not all drinking water and/or source water is recognized or mapped by our state."

She says, "How does the drinking water map change the routing or construction of a pipeline? Does the highest integrity pipe, highest class pipe get used in the areas of eco USA or HCA?

"And then ground truthing and water truthing, even ephemeral water truthing needs to be performed. Ecological studies should not be performed by inexperienced or untrained

personnel."

MS. MURRAY: Okay, thank you for that. So we're going to get Karen Gentile one of our mics and she's going to offer some good insight into that question, particularly as to how drinking water may change, the drinking water map may change the landscape of how operators may work to get their pipelines constructed and routed.

MS. GENTILE: So pipeline operators -- so PHMSA does not have jurisdiction over sighting pipelines. However, what would happen is the construction process would work through the Federal Energy Regulatory Commission, and based on the class location of those pipelines, the pipeline would have to be designed according to PHMSA's regulatory requirements, so they would have to design for the highest location class pipe for the area.

MS. MURRAY: And the drinking water information, which certainly goes into feeding and helping to define what those locations are,

will inherently, as we refresh the drinking water, it will also fit under the same existing requirements we have.

And operators who may be operating in a state that wouldn't necessarily grant them access to the eco and drinking water data in a particular state, and they may have an interest in planning new construction in a different state, we will be able to work with them on a case by case basis to get them additional information they need to help support those planning purposes. All right, well, thank you, web case viewer Nan Gray for that question.

So let me kick off the next discussion. I'm Christie Murray. I'm the director of our outreach and engagement team here at PHMSA in the Office of Pipeline Safety, and I'm going to be facilitating our discussion for the rest of the afternoon on our ecological USA panel.

And just one thing, in your folders, if you have not already found them, I think it's

on the left side of the folder in the back, you'll find a set of pre-read questions regarding this topic.

Feel free to pull those out as I introduce our next presenter, Leigha Gooding. She's going to come back up and give a little bit more insight into some of those questions.

If you are participating by web cast, if you go to the meeting registration page, you will also find the pre-read questions there for you to also pull up and follow along with us.

With that being said, I will turn it over to Leigha Gooding, and she's going to share and talk a little bit more about the pre-read questions that we hope you have given some thought to, and we'll hear more from our additional panelists on in just a few minutes.

MS. GOODING: All right, thank you, Christie. All right, so I'm going to go over these questions for consideration if you haven't read through them already.

I'll not only go through the

questions, but I'll display some of the data and some of the maps that we've produced that really led to some of these questions.

These are maps and data that we produced during the data pilot and as a result of the conversations and insight we gained from our last public meeting in 2017.

So I will go through these questions, and this is really what PHMSA -- these are the questions, the second round of questions that we've come up with, discussions that we would like to have to help us evaluate how to best meet this congressional mandate.

They were developed based on feedback from the first public meeting in '17, as well as the data pilot concluded during 2018, and the following slides include the question text as well as some sample maps to support the conversation.

So to get started with question one, this one is focused on the coastal beach definition. Question one is, "Should PHMSA

define and map coastal beaches based on the Environmental Sensitivity Index, ESI, shoreline features that include beach as part of the shore type description?"

We then go a bit further to ask, "Should PHMSA apply a quarter mile buffer to these shoreline segments to represent the body of the beach, or do you suggest another size buffer and why?"

Next, "Should PHMSA consider all shoreline features regardless of the type description as the basis for defining a coastal beach?" And, "Are there any other various datasets that you would recommend that we consider for this definition?"

Some quick maps from the analysis that we had done internally, the yellow buffer area around the shorelines, that represents about a quarter mile all around the ESI shoreline product. This is only displaying the sections of the ESI shoreline product that are described as beaches.

We had two possible approaches here. We have both beach as a primary category or beach as one of the categories. There are many segments of shoreline that can be described in more than one way.

And so if any one of the maybe two or three descriptions of that section of shoreline included describing it as a beach, it was included in the data that is red. That is the thicker shoreline that is on the bottom. On top of that, you'll see the orange thinner shoreline.

So you can see that there is more red shoreline than there is orange shoreline, orange being primarily described as a beach, red being definitely described as a beach, but also described as something else.

And we focus on Massachusetts and Texas for the purpose of this data pilot. So throughout all of these questions and definitions, you'll see Texas and Massachusetts again and again.

Here is just a quick description.

This is the list of descriptions that the ESI uses to describe the different sections of shoreline, so you see how detailed it can get, and those yellow stars are next to the only six that actually describe beaches.

So it's only six out of, what do we have here, 43 different classifications, and the classifications are all ranked from least susceptible to impacts from an oil spill to most susceptible to impacts from an oil spill, most susceptible being the 10F side, least being the 1A, and you see all of the beaches reside right in the 3A through 6B range in the susceptibility index.

Next, I'll review the questions for marine coastal waters. "Should PHMSA include estuaries, swamps, and marshes from the USGS National Hydrography Dataset as part of the definition of marine coastal waters?"

"Should PHMSA reference the extent of US state submerged lands to define the extent of marine coastal waters?"

"Should PHMSA mimic the EPA's definition of coastal waters as defined in the nutrient criteria technical guidance manual for estuarine and coastal marine waters?"

In that document, they define, the EPA defines the marine coastal waters as measuring 20 nautical miles from the shoreline.

And then to go further, "Should we be measuring those not only from the primary shoreline, but also the shoreline of islands?" "Do you have a recommendation for that shoreline definition that we should use for the purpose of this measurement?"

Next, to C, "Should PHMSA include all coastal waters, all the waters out to the federal/state water boundary?" and we'll have some maps to illustrate these.

First, here we have an example of the marshes, wetlands, and estuaries that we've pulled from the water bodies out of the National Hydrography Dataset. This comes from the USGS. It can be downloaded at the link that we have

here.

In these maps, this is a result of all of those specific areas, marshes, wetlands, and estuaries, that intersect this quarter mile buffer around the shoreline. So this isn't every single marshland, wetland, or estuary, only those that do intersect that buffer, and it includes the entire wetland.

So if five percent of that wetland happens to be within a quarter mile of the beach, we're showing you the entire wetland, and that's for display purposes and for conversation purposes.

The quarter mile measurement was based on the ESI shoreline, and here are just two examples in both Massachusetts and Texas, and later on when we are having conversation, if we have any other comments, I can come back to these maps if you want to reference them or ask specific questions about them.

Here is an example of the US state submerged lands data both in Massachusetts and

Texas again. I did want to mention we ran some additional 2018 eco USA data intersection analysis with these proposed definitions during the data pilot.

99.9 percent of the data for matching the US state submerged lands definition is already intersecting the 2018 eco USA. When I say intersecting, I mean it's already covered by the 2018 eco USA data. Going over to Texas, it was about 67.2 percent of that area.

And last, the 20 nautical miles from the coast measurement as recommended by the EPA, or used by the EPA, I should say, about 71.9 percent of that area in Massachusetts. You can see that area.

It certainly extends further offshore going around the cape and all, and then about 42 percent of the Texas area was already intersecting the 2018 ecological USA.

And last, just a quick map showing all of the waters that we grabbed. For this example here, we grabbed all of the waters beyond the

boundary of the county from the U.S. Census Bureau.

The U.S. Census Bureau has the county boundaries and state boundaries that we use internally for the NPMS, and so we just took all of the water past the county boundary according to the U.S. Census Bureau out to that fed/state water line. Again, Massachusetts, nearly all of that area is already considered in ecological USA, and about 67 percent of that area for Texas.

A couple of questions here that we don't have reference maps for, "If PHMSA references the beach categorization from the ESI shoreline product, how should the agency define this definition in text or handle potential extensions of the ESI shoreline product further upriver?"

Number four, "Are coastal beaches limited to those along the Gulf of Mexico and the Pacific and Atlantic Oceans, or do the Great Lakes, commercially navigable waters, and other inland water bodies also include coastal

beaches?"

Number five, "Should PHMSA seek to combine coastal beaches and marine coastal waters into existing eco USA resources, or given that these coastal areas are not defined by ecological factors related to species, should the agency seek to define and map a new type of coastal USA?"

Number six, "Does PHMSA need to differentiate between the coastal beaches and marine coastal waters or produce a single coastal areas USA definition and data layer?"

Number seven, "Is shoreline sensitivity the same for all of the different hazardous liquid products subject to Part 195, and how about the impact of those various products on various parts of the shorelines?" We'd be interested to hear your feedback on that as well.

And number eight, "Do operators currently consider the entire body of the Great Lakes as an HCA or only the representative

shipping channels in the U.S. Army Corps of Engineers' national waterway network?"

And last, number nine focuses on the Great Lakes. There is a lot of text on this slide here. I don't expect you to be able to read it, so I actually broke it down and included it on separate slides next to the maps to support the conversation.

So question nine, the primary question was, "Should PHMSA define and map the Great Lakes as all water bodies within the Great Lakes watershed based on the boundaries in the USGS National Hydrography Dataset?"

In this map, you can see the watershed boundary actually shows up in yellow, and then we selected a few areas where we focused in closer to the data because it's hard to see at the larger scale, where you can see all of the water bodies in blue within that watershed.

So would this be an appropriate and effective way to define the Great Lakes for the purpose of what we're trying to do?

Nine A, "Should PHMSA reference the extent of the US state submerged lands around the Great Lakes to define the extent of the Great Lakes and their connecting channels?"

Again, zoomed into the area around Lake St. Clair here just to really demonstrate the US state submerged lands not only includes the bodies of the lakes themselves, but it did cover all of the connecting channels, Lake St. Clair, the St. Lawrence Seaway.

So we personally during the data pilot found it to be a consistent single data source that covered all of the areas that we thought should be included as connecting waters potentially.

Nine B, "Should PHMSA consider the Great Lakes definition as found in 33 USC 1268 which defines the Great Lakes to be Lake Ontario, Lake Erie, Lake Huron, including Lake St. Clair, Lake Michigan, Lake Superior, and the connecting channels, including St. Mary's River, St. Clair River, Detroit River, Niagara River, and the St.

Lawrence River to the Canadian border, and do you have any recommended data sources for these bodies, not the center lines?"

We know that the center line that comes from the National Waterway Network does not, already does not display the entire body of the lake, and that's what we're looking for, and even for the connecting channels. Instead of a line going through the center of the channel, we really want a polygon showing the entire area.

Nine C, "Should PHMSA define and map the Great Lakes as only the bodies of Ontario, Erie, Huron, Michigan, and Superior without the connecting channels based on the boundaries in the USGS National Hydrography Dataset?"

And this was a conversation we had a lot in 2017. I won't say the prevailing conversation. I don't think anybody disagreed that the nature of these bodies of water, water is flowing from one lake to the next, and those channels that connect them, they consider to be just as important as the bodies themselves, so

we're interested to hear your opinions on that today.

And the last part of D, "Is there a different GIS dataset available at the national level that PHMSA should consider for the basis of defining and mapping the Great Lakes and connecting channels?"

And here I just wanted to make a quick little note that the NHD water bodies, we went through and analyzed that data during our pilot project and we found that it only includes polygons, meaning areas for the St. Lawrence River and Lake St. Clair.

So not all of the connecting waterways were we able to find in a polygon form in the version of the NHD that USGS delivered to us specifically for this data pilot, and even the line data, there were parts of the St. Mary's River missing.

But before I dive too far into those details, I just wanted to review the questions real quick, show you the maps that we have

available to support the discussion. I hope that these questions lead to a good conversation. And with that, we'll introduce our panel of experts to give their opinions. Thanks.

MS. MURRAY: All right, thank you, Leigha, for teeing up those questions. It's certainly a mouthful and a lot to digest, so we're going to talk about them in different segments and hear from different panelists on some of those questions.

First up, we have Erol Alavi, who joined Plains All American Pipeline in 2015 where he currently is the engineering supervisor for the integrity technical advisor group.

His areas of specialty include risk assessment, HCA analysis, corrosion management, inspection, engineering critical analysis, and material and failure analysis.

He has held a variety of roles in industry, beginning his career as a manufacturing HSE engineer at Cummins Diesel Engines before working as a consulting engineer working on

offshore oil and gas projects mainly for BP.

So with that being said, I introduce Erol Alavi. Thank you.

MR. ALAVI: Good morning. To the agenda, we have the type of HCAs, type of analysis. Maybe that will answer the question's code effect. We will talk about scheduling and pressure reduction.

We will talk about prioritization of HCA versus non-HCA, the misconception of NICA, the conservatism that's used in the calculation, and recommendation.

As you've seen in earlier presentation, we have five categories based on 195.450, and those are highly populated areas, other populated areas, commercial navigable waterways, drinking water, unusual sensitive area, and ecological unusual sensitive area.

Also, we go above and beyond, and if you look at those HCAs that is not covered under this, for example, if you build a new subdivision, it is not covered under these five

categories. We create polygons and we input inside our model.

So how do we do the analysis? We look at two different things. We look at pipeline rupture, worst-case volume that comes from pipeline rupture, and then we create flow lines and we try to figure out how far it can go.

Also we look at span analysis. We look at orifice size and then angle from a puncture, and again, we figure out how far it can reach. And the figure of these two, a buffer zone is going to be used in analysis.

So the analysis type of five different type of analysis in there, and I'm going to go through each of them. Direct is where your pipeline go inside an HCA. It's called direct.

Indirect, where your HCA overlap with your pipeline buffer zone. It's called indirect. Direct watershed, this is when any NHD can cross from the pipeline. Where it hits the pipeline, we calculate 32 miles downstream of that to see if in that area it passes inside any HCAs.

Indirect watershed, because of the terrain, because of the sloping it comes inside the HCA. Again, we look at 32 miles that it can travel.

And terrain flow, if it is not covered by any of these top four, then we look at the terrain and we create flow lines to make sure that, if it's going to reach any type of HCA or not.

So one of the concerns that we have is scheduling and pressure reduction. As you understand, if any anomalies concern and they are inside HCAs, then they are a type of condition change. They become either immediate, or 60 days, or 180 days.

For example, I'll give you an example. If you have any corrosion with dent, it will be immediate regardless of the percentages.

So this will create some impact on the anomaly repair schedule because say that you have stabilized 50 percent of corrosion, or a non-injurious dent, or a non-injurious metal loss

with indents, or corrosion along, but not impacting the long seam, all of these anomalies that really are not injurious, now because they are under the HCA, we have to go dig it up and we have to repair them.

There is another way that we can do engineering critical analysis, but unfortunately, most of them become immediate and filling the exception for engineering critical analysis is not practical.

Another thing is unnecessary pressure reduction. If, giving you an example again, if you have corrosion with dent regardless of size or shape, even if they are not injurious, we have to pressure reduct. We have to a reduction in pressure, and by that, it's going to upset our delivery time and it will upset the business.

The other thing, that tool tolerance is incredibly sensitive now days. Like in earlier time, they wouldn't pick up anything less than one percent. Now they can pick up 0.5 percent of dents and read metal loss less than 10

percent. So because regulation says any depth, any size, now we have to put that in the same criteria.

So why prioritization in HCA and non-HCA is important, because imagine we have a line, right, and we are going to repair all of the concern anomalies. First, we prioritize the one in HCAs and we are going, usually we go and repair them first.

In the case of this proposed USAs become a rule, then there will be confusion of which one we are going to repair first. Now you have a high populated area and then you have these proposed HCAs, and in this case, like if there is an immediate in both sites, how are you going to define which one is going to be first repaired?

The other thing that we are concerned is original HCAs, all of these five categories that we explained, they are justified by scientific data, and it is my understanding that these new proposed ones is not.

The other thing is misconception of non-HCA. There is a misconception in the industry that operators do not repair the anomalies. That is not true. We actually do, and as a matter of fact, we repair in the same similar manner. The only major differences is prioritization and repair scheduling.

And one more key point is conservatism in calculations. When we calculate dispersed pressure, such as like B31, modified B31, RSTRENG, LnSec, they actually don't fail based on calculation. We assume that they are going to fail.

By saying that, we also add tool tolerance on top of this calculation and we make extremely conservative. Also we use that conservative approach for HCA analysis.

We assume that worst-case scenario rupture volume is going to happen at the same time where maximum flow rate is there, also maximum respond time when considering this analysis, and we will assume during a rainy day,

et cetera, and, I mean, the list goes on.

So by saying that, if release happens, it will not reach what we find based on these like, based on these analyses, so we go above and beyond that.

So there's a recommendation, we believe. HCA can be considered in other priority tiers such as medium consequence areas, not high consequence areas. We can utilize the same repair criteria and we need to provide additional time to prepare and make repairs.

Also, we believe more time and discussion is needed with operators as main operators are not aware of the proposed change.

Another feedback or recommendation that we can give is more attention should be given in research, also engineering critical analysis such as PHMSA enrollment with dent assessment has been very constructive. That's all I have.

MS. MURRAY: All right, great, thank you for that presentation. What we'll do is

likely take questions after we have heard from all of the panelists, and then we'll go into a more robust discussion on many of these questions.

Next, I want to introduce Bonnie Freeman who is the president of FreemanGIS, Inc. Bonnie Freeman has worked with geographic information systems in the pipeline and environmental engineering industries for over 30 years.

In 1999, Ms. Freeman took on the job of project manager and lead programmer of a joint U.S. DOT and API pilot to identify areas unusually sensitive to environmental damage from a hazardous liquid pipeline release.

In addition, she launched her company, FreemanGIS, in 2007, and continues to provide support to the pipeline industry by updating HCAs with current data and assessing risk to the sensitive resources that they identify. So please welcome Bonnie Freeman.

MS. FREEMAN: Thank you, Christie.

Thanks, Christie. Thanks, Steve. I've been working with high consequence areas since their inception 20 years ago.

Using GIS, I helped develop a methodology to map them, and I've pretty much been babysitting them ever since. I'm really happy to be here and appreciate the invitation to speak to you today on this important topic.

I'd like to start by underlining some important facts about high consequence areas. First and foremost, they are a valuable tool for industry because they prioritize work by putting the health and safety of environment first. The HCAs we have today already cover much of our nation's most sensitive ecological resources.

Ecological USAs are species that are in danger of becoming extinct. Drinking water USAs are the sources that supply water to our homes. Populated areas are where people live, work, and play, and commercially navigable waterways are vitally important to our nation's commerce and defense.

Operators currently use these existing HCAs to prioritize resource allocation when responding to anomalies. It's important to note that HCAs do not drive spill response. A spill is of the highest priority whether it's in an HCA or not.

HCAs do drive the repair scheduling of anomalies, but they are not used to avoid repairing an anomaly. Every anomaly is addressed. If it's on a pipeline segment that could affect a high consequence area, it's addressed first. If you consider the 2.4 million miles of pipeline we have in the U.S., it's easy to see why prioritization is very important.

The definitions for the current, for the existing HCAs are based in science. Ecological USAs are places where a sensitive species has been seen. They are not areas where there is potential habitat for a sensitive species because this can become mired in controversy, so it's a very scientific observation with a time and a place.

Drinking water USAs are the source water protection areas defined and mapped by state agencies. These areas take into consideration time and travel of groundwater to a well and the location of intakes in the lakes and streams they draw water from.

Populated areas are mapped by the Census Bureau. Commercially navigable waterways are crucial to our nation's commerce and defense. They are mapped by the U.S.A. Army Corps of Engineers.

It's important to remember the congressional mandate, and that was to include the Great Lakes, coastal beaches, and marine coastal waters as USA ecological resources.

USA stands for unusually sensitive areas, an area that is unusually sensitive to environmental damage from a hazardous liquid pipeline release.

That is, and this is in the Code of Federal Regulations, defined as an area where a pipeline rupture would likely cause permanent or

long-term environmental damage.

It's important that we maintain the scientific basis for new HCAs. Since Congress mandates they be ecological resources, they should have something to do with protecting life, flora, fauna, people. To honor the intent of Congress, we must keep these concepts front and center when formulating a definition.

The HCAs must be objectively grounded in science and they must remain useful as a prioritization tool. If everything is high consequence, then the norm becomes high consequence and nothing rises above it. We must resist painting the world in HCA. It will not improve pipeline safety. It simply depreciates a valuable tool that we already have.

Formulating a new HCA definition should not be taken lightly. Our nation is vast and covers many types of shoreline from the rugged cliffs of northern California, to the broad, flat beaches of South Carolina, to the retreating coast of Louisiana.

These new HCAs are important and the GIS data that will define them are complex. Further research is needed to review the available GIS data for our varied shorelines.

With the limited time I have left, I will address some of PHMSA's questions for consideration using Louisiana as an example. I wish I could have done the same thing for the Great Lakes and other areas, but I got Louisiana, so that's what we're going to do.

All right, question number one, in Louisiana, when all ESI features that include beach are selected, gaps appear along the shoreline. So the green areas are what are defined as beach in the ESI dataset, okay.

When the NHD flow line features, that's the USGS National Hydrography Dataset, when they're selected for coastline, this is continuous. That's the red, and it actually goes underneath the green on this map.

Question 1A, a quarter mile buffer to represent the body of coastal beaches sounds

reasonable, but the widths should be tested to make sure it captures the majority of beaches along representative shore types from the Atlantic Ocean, the Pacific Ocean, the Gulf, and the Great Lakes.

Question 1B, including all ESI shoreline types regarding of shore types, and not just beach, but anything that's considered a shoreline in the ESI dataset would extend coastal beaches 15 to 50 miles inland in Louisiana, including all of the coast along, all of the shoreline along the Mississippi River from the Gulf to the Mississippi state border.

And that's -- here is the Mississippi right here. And I didn't zoom out enough, but it goes straight up to the border. This area seems to stretch far beyond what we typically think of as coastal beach.

Question two, including all NHD features marked as estuaries, swamps, and marshes would extend marine coastal waters over 100 miles inland in Louisiana.

Marine coastal waters are typically thought of as areas of open ocean and unprotected coastal habitats characterized by exposure to wave action, tidal fluctuation, and ocean currents, and by the absence of trees, shrubs, and emergent vegetation.

The area in green, and look, it's going all the way up to Alexandria here, is far beyond what we typically think of as a marine system, which is usually considered to be at or near the full salinity of seawater.

Question 2A, US state submerged lands extend about three nautical miles offshore except for Texas and west Florida which are three marine leagues offshore. That's about nine miles.

Applying their extent to the offshore side of marine coastal waters makes sense. It's a band of water that accurately represents the interface between land and ocean. The extent also coincides with the extent of marine species that are currently mapped by existing ecological USAs.

And while you don't see that in the 2001 version of ecological USAs, you will see that in the refreshed versions that are coming out this summer.

Jumping ahead for a moment to question 2C, what if the full extent of US state submerged lands became the marine coastal waters? That's everything in purple you see here. It goes all the way up to the border of Louisiana and Mississippi.

Paired against all ESI shoreline features, that's in green, the purple lines of state submerged waters extend farther inland than one would expect of waters associated with open ocean and unprotected coastal habitats.

Returning to question 2B, the extent of EPA's coastal waters, and that's 20 nautical miles offshore, is a much wider band that is more representative of open water than the land/ocean interface covered by the offshore extent of state submerged lands.

So the bright purple here is the state

submerged lands, and then the softer purple is the 20 nautical miles offshore. I'm almost done.

Touching on question four, do inland water bodies include coastal beaches? We return again to the mandate. In and of themselves, inland shorelines will not suffer permanent or long-term damage from a hazardous liquid release. It's the life on the shorelines that would suffer and that is what we're trying to protect.

In fact, we're already doing this through the ecological USAs we currently have, and like I said, you'll see that much more coastline is covered by the eco USAs when the updates come out.

Questions five and six speak of combining the definition of coastal beaches and marine coastal waters with existing ecological USAs. Not only do the definitions need to remain separate, but they must be distinct from one another.

These new USAs will be mapped with jurisdictional boundaries that are based in

policy which can change over time. It's important to be specific about why we're calling them out as high consequence areas.

And to end, we did a great job with the definitions of the existing HCAs. They are grounded in science and have been protecting our nation's most sensitive environments for 20 years.

They do need to be updated, which is happening, and when you see the new updates, you will see they cover much more of our nation's coastlines than before because most environmental datasets are digital now and they weren't 20 years ago, and that's the reason why we had the absence of eco USAs along our coastlines.

Let's think these new HCAs through carefully so we can keep up the good work and continue to protect these important areas for future generations. Thank you very much for your time.

MS. MURRAY: Okay, thank you, Bonnie, for sharing those insightful points. Next up we

have Mr. Carl Weimer, who is the Executive Director of the Pipeline Safety Trust. Many of you know who he is.

In that capacity, he has served as a member of the U.S. Department of Transportation's Technical Hazardous Liquid Pipeline Safety Standards Committee And also the Canadian Energy Pipeline Association's External Advisory Panel and the Governor appointed Washington Citizen Committee on Pipeline Safety.

Carl has been called upon to testify to the U.S. House and Senate multiple times as a witness by the National Transportation Safety Board and was honored in 2015 as a champion of change by the White House for his pipeline safety efforts.

He has organized 12 National Pipeline Safety Conferences, pushed for stronger pipeline safety legislation on the national and state level and regularly serves as an independent source of pipeline safety information for news, media, local government and citizens across the

country. I'm certainly looking forward to hearing what Carl has to say.

MR. WEIMER: Good morning. Is it still morning? I'm from the West Coast so I'm time zoned challenged right now.

Well now for a totally different perspective. I thank PHMSA for inviting me to represent the public, one idea from the public.

Just a few comments. You know, it's been three full years since the PIPES Act was signed so it's a little confusing to us why PHMSA is still asking the public in this meeting where it can find GIS datasets. It seems from what we've heard they already have the datasets. It seems like we just need to be moving forward.

There was a previous workshop in 2017 that basically asked and discussed many of these same questions. So I'm not quite sure why we're doing it again later.

And also we'd just like to point out that the maps that have been discussed weren't a part of the pre-read. The agenda in the pre-

reads of the meeting were not up for the public to review and comment on until just the last couple of days. So, you know, we're kind of at a disadvantage to make legitimate comments at this workshop.

It's also difficult for the public to comment because we're commenting on all of this USA stuff with blinders on because the public is not allowed to see where the majority of the HCAs are.

We're not allowed to see most of the USA designations. So we're kind of guessing what it is we're talking about. And as I already mentioned, none of the maps were provided beforehand so we could compare what PHMSA is considering.

One of the things we certainly hope PHMSA does is avoid repeating past mistakes in defining and mapping USAs. Maps and definitions should look like and define what is commonly meant.

Congress mandated commonly understood

areas as USAs. They said include riverine and estuarine systems. They said include National Parks. They said include wilderness areas, wildlife preservation areas and wildlife refuges and wild and scenic rivers.

Those are things that the public understands. When you go and look at what PHMSA has turned into USAs, none of those things are defined and used.

So if you're defining and describing an elephant -- I stole this picture from Dr. Murray -- if you're describing an elephant, your picture should be a complete and recognizable elephant, not some weird piece of an elephant.

PHMSA's implementation has been tortured and not followed and perhaps included the Congressional mandated intent. We don't know if National Parks of wildlife refuges are included in USAs because we can't see those. We have those other definitions, and we don't know where the overlap is.

For example, we were very surprised

when Congress thought they had to mandate the Great Lakes as an unusually sensitive area. You know, everybody -- I grew up in Michigan. Everybody knows that lives in Michigan that the Great Lakes are an unusually sensitive area. So why the need for a mandate?

When you hear that the waters where a substantial likelihood of commercial navigation exists, we think, wow, the Great Lakes are already unusually sensitive areas because commercial navigation exists throughout the Great Lakes. But, no. Substantial likelihood of commercial navigation turned into commercially navigable waters which then turned into a map of actual freighter and tanker routes.

So what was included as USAs for the Great Lakes are just those dark lines where freighters and tankers go, not the whole Great Lakes themselves.

Now we don't know as the public whether this makes any difference because the rules say, could affect. It's hard for me to

imagine how a pipeline company thinks they could spill oil into the light blue areas and not affect the dark blue areas.

So perhaps from an individual company standpoint, there's no real difference because anything in that water could affect something else.

You know, this tortured definition of commercial waters left out commercial fishing. It left out treaty reserved tribal and commercial subsistence fishing. It left out charter and pleasure boats, all of which provide massive commercial benefits to the Great Lakes.

But Congress in 2016, sensing that PHMSA hadn't done a very good job of defining these things did an unusually explicit directive. They said you shall revise this section to include the Great Lakes coastal beaches and marine coastal waters.

To take it one step further, while we're all arguing today about where the actual HCAs are and what are USAs, the real meat of the

integrity management rule is the could affect part of the rule.

So you can define the lake, but then the industry has to define where a spill could happen that could affect that lake, which is a much larger area.

There is a number of issues to resolve. We need to come up with regulatory definitions. We need to figure how those are defined in USAs and mapped. And we need guidance on the could affect area and how operators will be held accountable for these things.

For the Great Lakes in the marine coastal waters, we suggest the well-defined scientifically understood and inclusive watershed base method to show both the defined USAs and to provide the guidance for the could affect areas.

Agencies like local storm water districts, local watershed protection districts, state environmental agencies and the EPA for years now have been harking on the public like us to make sure we tune up our car because a drip of

oil from our car will end up in the watershed, which will end up in the local waters.

We need to worry about where our dogs take a crap because it will end up in the local waters. Farmers have been getting dinged all over the place for fertilizers hundreds of miles upstream because it ends up in the local waters.

So you can use this same thing for defining the Great Lakes. Use a watershed approach. Here's a watershed approach. The Great Lakes are in blue. Any sixth grader that grew up in the Great Lakes will know that.

The green area is the Great Lakes watershed. Anything you spill in the green area could affect the blue area. So this is the type of approach that should be used. This then puts the onus on the operator of the pipeline segment based on the regulations in their integrity management plan to demonstrate if they have a pipeline anywhere in the green area that could have a spill, whether it will affect those blue areas or not.

The same could be done for coastal marine waters using the watershed approach. And some of these watersheds are huge. So if you own a pipeline in Montana that might spill into the Yellowstone River and you know you're not going to recover all that oil, you could affect the marine coastal waters of Louisiana.

The Clean Water Act seems like a logical possibility, the use for marine coastal water designations, along with some others. There's maps that were included in there, if you followed the links, that show all the stuff.

But our main comment is we've spent three years fussing over the details of this, trying to pick the GIS layers, when in the reality the could affect part of the rule is broad enough to include all of the concerning details.

So pick a GIS layer and let's move forward. Pick a layer that's used for other purpose. Pick GIS that avoids confusion and conflicts with regulatory schemes. Pick some

options. Put them out there to interested folks to comment on and get an explanation and put out a proposed rule so we can get this done so the time will start ticking on when the industry has to put this.

Adopt a rule, enforce it, hold the operators accountable and make the USAs and HCA designations publicly available on NPMS so the public has a sense of whether PHMSA, the operators, are doing a good job of defining those things. Thank you.

MS. MURRAY: All right. Thank you very much, Carl. We look forward to some robust conversations over the Q&A part. Lots of great points so far from the panelists made. And we'll move on to our next panelist, our final panelist, and then we'll have Q&A.

Jacques Rotolo is an engineer and pipeline compliance specialist with the Louisiana Department of Natural Resources, Pipeline Enforcement Division, where he is the lead inspector for integrity management.

Jacques has been with the Department for more than 13 years. Prior to that, his employment with the State of Louisiana, he's had a successful career as an engineer for a natural gas distribution company and a compliance specialist for a hazardous liquid and gas transmission gathering company.

So with that, please welcome Mr. Rotolo.

MR. ROTOLO: Good morning. I'm glad to be invited here. Although we did not see each other's presentations so mine may be a little redundant. Of course, we're here for unusually sensitive areas, USAs.

There are existing USAs and other high consequence area drivers for hazardous area pipelines in Louisiana. My presentation is going to be more directly just for Louisiana. I'd say not just for Louisiana, but how it affects Louisiana.

Of course, high consequence areas means ecological USAs, drinking water USAs,

populated areas as high and other and commercially navigable waterways.

In Louisiana, we have numerous existing ecological USAs in our coastal zone. And these ecological USA candidates include imperiled species, ecological communities, threatening endangered species, depleted marine mammals and migratory water birds concentration.

We also have numerous drinking waters. And these are from the NPMS, National Pipeline Mapping System. The drinking waters include public water systems, source water protection areas and source aquifers.

Also, as mentioned in the previous presentations, we have highly populated areas and other populated areas. And this map here is also from the NMPS depicting these areas.

Of course, the highly populated areas are areas with 50,000 or more people, with a concentration of at least 1,000 people per square mile and the other populated areas, such as cities, towns and villages or other defined

areas.

Also part of the HCAS are commercially navigable waterways. And this is also from the NMPS, and it shows the navigable waterways within the Louisiana coastal zone.

This is just a general map found on the internet showing the Louisiana coastal zone lined out in the white and black dotted lines. And it indicates the existing pipelines on the Louisiana coast. As you can see, we have a few pipelines.

This is from the Louisiana Department of Natural Resources. And it just shows the coastal boundary, just without the -- a little simpler view illustrating the coastal area.

And then this is the previous snap showing the coastal zone again. And when you put the coastal zone, you see all the navigable waterways and the other USAs. You see that the pipelines cover most of the coastal zone and therefore, what we have as far as the effect of the pipelines on the USAs and HCAs -- excuse me.

This is what we think would be the effects of the new marine coastal water definition in Louisiana. Because of the existing HCA drivers and the possible water transport of hazardous liquids in southern Louisiana, we expect a minimal increase in pipeline companies new to the integrity regulations, if any, and a minimal to a marginal increase in actual pipelines that would be new to the integrity regulations, but a definite increase in the assessment mileage that these current pipelines assess on the integrity management regulations.

And this is dealing with some of the questions that were generated, the marine coastal water definitions. We feel that estuary swamps and marshes should be included in the marine coastal waters definition as they are habitats with diverse wildlife species. They traverse by pipelines frequently and are difficult to cleanup, restore and mitigate.

Also for coastal beaches and marine waters, we would say combine the coastal beaches

and marine waters into the existing USA ecological resources since they are all considered ecological and produce a single coastal area USA definition and that they include both coastal waters and marine coastal waters.

And for shoreline sensitivity, of course, shoreline sensitivity would differ by shoreline type. And the effects of a shoreline type would differ by hazardous products such as crude oil, refined products and highly volatile liquids.

And for better or worse, that concludes my presentation, and this is my contact information. Thank you.

MS. MURRAY: All right. I want to say thank you to all of our panelists. Let's give them a round of applause.

So what I'll be doing is facilitating an open discussion and questions regarding any of the topics you've heard, talked about from the panelists, certainly anything that you may have thought from looking at and previewing the

preview questions as well.

And to kind of tee up the discussion, I want to first go back and just draw a few common themes myself.

So from the various panelists there were some discussions earlier around this can be complicated. Let's no oversimplify it to I think we're complicating it too much. Let's get on with it already. And I'm paraphrasing.

And so I guess with the panel -- and then there was some questions regarding the coastal beaches and marine waterways where combining them doesn't make good sense. And then other sentiment where there may be some situations where it may be more appropriate to combine it.

So I just want to tee that back up to the panel and just kind of talk through somewhere meeting in the middle. And that's the essence of these kind of public meetings is to talk through some of those things.

Any thoughts? Any additional

thoughts?

MS. FREEMAN: All right. To address the first one about GIS data is complex but hurry up. Let's get on with it. I get that. It's been years coming. And the GIS data is complex.

So I think we've just finally reached the point where you guys are doing pilot tests, and we're really looking at this information. I did get the preview questions only about a week ago, so I was only able to do a limited amount of research and just picked Louisiana out of the hat.

So I do think that we need to pick some representative states and look at their shoreline types. I did mention a couple, you know, from California to South Carolina and Louisiana, these are completely different shoreline types.

We run a pilot test on the data we have discussed. We are discussing now. And, you know, come up with some solid, solid options here. And, yes, that will take time. Hopefully,

it won't take too much time.

And then secondly about making these definitions distinct, so my concern is moving forward we want to make sure that future generations -- you know, as we get older, we retire and new people come onboard. The idea of these new high consequence areas is grounded in science and is as solidly understood, commonsense-wise, as the high consequence areas and unusually sensitive areas we have today.

I don't want that knowledge to disappear as, you know, we retire and move on. And so I do think they need to be distinct definitions that specifically call out why they are of high consequence, why they are unusually sensitive. And then when datasets are developed in the future because, I mean, I'm thinking 20 years out -- I've been doing this for 20 years -- everything still holds.

MS. MURRAY: Okay. Okay, Carl?

MR. WEIMER: Yes, I think one of the things that perhaps could help the public

understand this better is if we could see some graphic descriptions of how pipeline companies interpret this data.

I mean, there's a number of pipeline companies that operate in the Great Lakes, Enbridge, Marathon, Wolverine. We don't know how they interpret the data and how they define their could affect areas.

You know, if those companies are already including all of their pipelines in the Great Lakes states as HCAs because of the could affect rule, then worrying about the definition really is not as important.

But we never get to see that information. So perhaps it would be good to get some companies to share that with us because I suspect that some of those companies are doing that.

And it would also be very interesting to know if Marathon does the could affect interpretation the same way that Enbridge does, the same way that Wolverine does or if they're

all interpreting it differently. And that ought to tell PHMSA something about the need for clarifying that could affect definition.

MS. MURRAY: Thanks, Carl. That's a point well taken that while operators are applying some of this data to their integrity management programs and determining their could affects, having more insight into how that's done and implemented could be very helpful in terms of understanding how to move this forward.

So that's something that we can certainly take back and can elaborate with operators to find out how that can be done. I think that's a point well taken.

What I do want to offer, too, I know Carl made a good point about we've talked about this in 2017. We're here in 2019, and we're still having conversations. A point well taken.

And I do want to add to that, PHMSA, when we held our public meeting back in 2017 we were scratching our heads wanting to work and collaborate to understand what information and

data was existing and possibly available and definitions as well and also having an opportunity to do some pilot testing on some of the data sources that came out of that, emerged from that conversation. And that emerged some of the questions that we're teeing up here for today.

So with that being said, Sam, are there any questions from the webcast viewers from the panel? There are none. Okay. Thank you.

Well, I will open it up to the floor. Are there any questions from any of our in-person participants?

MR. LESNIACK: Chuck Lesniack, CL3 Consulting, representing the public. I think mainly I've just got some comments about where we're at. I would agree with Carl. I think we are overcomplicating it.

I think that the idea that we're going to split shorelines into different classifications and think about going 5 miles out, 10 miles out, 20 miles out from a shoreline

to define HCAs or USA, you know what? I think ecological science tells you that shorelines and water/land interfaces are some of the most ecologically sensitive areas that we have regardless of location, regardless of shoreline type. And I think that any shoreline should be designated as an HCA just because of that.

Spills are very difficult to clean up in those kind of areas. Twenty miles out while you do start to get more of an offshore, open sea kind of environment, it's that 20 mile zone.

And we could split hairs. Is it 15 miles? Is it 20 miles? Is it 30 miles? It will vary somewhat by location. But that's the area where you've got critical fisheries. All around the country, if you have a spill within that 20 mile zone, it's highly likely to impact the beaches and shoreline because it's very difficult to contain in those areas.

To me it's a no brainer that we designate 100% of our shoreline as an unusually sensitive area because it meets the definition of

likely having permanent or long-term damage.

I've been all up and down the Texas coast. There's not a location hardly anywhere in the Texas coast that you can't walk today and find evidence of a past oil spill, not anywhere. And you will see tar balls all along the coast.

And so I think that that's a no brainer. I think we're making this a lot more difficult than it has to be.

And while we do have to have pipelines cross through these areas and it will impact existing pipelines, it will encourage pipeline operators to avoid these areas with new pipelines.

And even though we can't totally avoid them, we ought to be trying to avoid them where we can. And I think designating them as HCAs and USAs will encourage operators to do that where possible rather than have a pipeline in an area that we damage it and make it more sensitive by harming the habitat that may be close to pristine today. Well, later it does have imperiled

species because we damaged it by placing the pipeline there.

MS. MURRAY: Thank you. Any comments from the panel on anything Chuck has mentioned?

MS. FREEMAN: I just I -- whoops.

MS. FARRELL: That killed my Air Book. It's all right. It's still good. Sorry. Yes, did that wake everyone up? Sorry about that.

Linda Farrell, Executive Director of Pipeline Safety Coalition. So to follow-up on that, you know, and what Carl has stated, what I think we the public are saying is yes. Can we move forward instead of getting stuck in the minutia of what's this federal agency's definition of unusually sensitive area? Does PHMSA agree? Does another agency agree?

And the consideration of whether or not to have coastal beaches or the numbers of considerations, as Chuck said, I think there's got to be a consensus scientifically that our coasts are unusually sensitive areas.

And I'm not sure that we've even

discussed whether or not the considerations have included existing social impacts, human infrastructure pipeline. And I'm getting into minutia that I say I don't want to get into, but it's in support of the fact that there are so many layers that if we keep trying to pull back layers, we're going to be where we were in 2017 and where we are today.

One of the things that we've noticed with the public is that they are paying attention to what's coming out of PHMSA. They're paying attention to things like the advisories, the 2014 advisory, that PHMSA published for warning about repurposing pipelines. And this is just an example, in 2019 for putting pipelines into unusually sensitive areas, topography considerations.

And the public is realizing that these are great initiatives. These are great advisories from PHMSA, but they don't have any teeth. The operators don't have to even read these let alone follow these advisories.

And so you have a public who is seeing a lot of talk, a lot of inaction. And I think Carl is spot on. We need to stop talking and reevaluating and re, re, re, re, re and give them what we talked about earlier today.

You know, six years from now we're still going to be talking about the same thing if we don't change the way we communicate and the way we perhaps communicate with our legislators and Congress about how regulations are and are not codified.

MS. MURRAY: Okay. Thank you for that. We have another commenter.

MS. CROWNHEIM: Hi. Patty Crownheim, Rethink Energy New Jersey. I also serve on the board of the Watershed Institute. So this is fascinating to me, the conversation about how one uses science to determine these USAs.

And I have to say that, you know, to look at this from a watershed perspective, and there is a lot of wonderful watershed mapping in the country, it makes a lot of sense from a

scientific basis for me because it includes, you know, you have to look at the entire shed from source to end. And that includes a lot of times the C1 streams and the other issues.

But I have to say that in seeing a lot of pipeline infrastructure come through and exist in New Jersey, I have never seen, and maybe New Jersey is unusual, but I have never seen an operator not be aware of a sensitive area. And perhaps and in their proposals say, yes, we're going to up our class location or treat it as such. I haven't seen that.

What I unfortunately also haven't seen is the follow through on that. So that's why that language could affect, as Carl mentioned, is so troublesome. You know, where, it's the enforcement piece, and it's the follow through. And that's what the public doesn't see also.

So I think the definition parts, I mean, and I certainly appreciate the work that went into all of this mapping and making this accessible and having it be overlaid with

pipeline so people can see it. But it's really what do you do with it, right? And how is it enforced? How is it used by the operators? And that's something that the public really wants to see more of and have more transparency.

MS. MURRAY: Hey, Patty, while you still have the microphone, I'm putting you on the spot. Carl mentioned, particularly with the Great Lakes, that there was an area he had a good visual of an area where there's a watershed boundary around the Great Lakes.

Do you have any thoughts on that since you said you, you know, have some watershed experience that you support, some of his points regarding include that, the watershed area surrounding the Great Lakes?

MS. CROWNHEIM: Well, I'm not familiar with the Great Lakes. My focus is on the State of New Jersey primarily. But I would certainly encourage PHMSA and anyone working on this to reach out to the Great Lakes watersheds. I'm sure they exist and they're there. I would be

happy to answer that.

I know in New Jersey, absolutely, you want to look at entire watersheds and especially the most critical. Even within the watersheds, there are areas that are more critical than others, especially the source areas, the cleanest streams.

But I have to disagree with that we don't want to call something an eco-USA area if there's no endangered species or threatened species there yet because we have seen a comeback of species.

For instance in the Raritan Bay, there are a comeback of species. We have whales now, you know, North Atlantic Right whales, right now, playing in the Raritan Bay. And that's miraculous, a species that has so few left that we've given most of them names. So we're really excited about that.

MS. FARRELL: Christie, could I jump in here again? Linda Farrell. And this speaks to both what Patty and Carl talked about. And I

refer to earlier with the bottom-up approach conservation districts. And Carl mentioned farmers have traditionally been very restricted as to what they can and cannot put into a watershed.

And so there are best management practices that require, require farmers to act in a certain way. And from our experience, we have not seen that pipeline infrastructure development is required in these unusually sensitive areas to follow best management practices.

Frankly, they are not held to the same standards in our experience that farmers are.

MS. MURRAY: Thank you.

MR. LESNIACK: Christie, Chuck Lesniack. I can speak to the watershed question. I've spent 30 years doing watershed protection and surface water protection.

And what Carl is talking about is absolutely spot on that if you're only protecting the actual water body itself, that just flies in the face of water quality protection science and

best management practices. That it ought to be being looked at on a watershed basis and that the science is there, the engineering is there to do the kind of analysis pretty easily.

And PHMSA doesn't have to do this. They could make this a best practice required of the operator that says for every segment of your pipeline that's in a drainage area -- you know, the Great Lakes are a little different because their drainage areas are huge.

But you can take that even to a local level to a smaller lake or river and take those -- you're trying to protect a water body. You need to be looking at the watersheds that drain into it and the pipelines that are in those watersheds.

And we did an analysis in Austin -- or an analysis was done in Austin for a spill from a pipeline that we have there in Austin. The spill was predicted to be able to get into a creek within minutes before responders could ever be there and move four miles an hour.

And so if you're not managing on a watershed basis to protect surface water then you're missing the point.

MS. MURRAY: Thank you for that. Are there other comments or questions that we can help answer? Otherwise I'll tee up a few more. Oh, yes, Chuck has another point.

MR. LESNIACK: Chuck Lesniack. I've got a question for Leigha and maybe for you, Christie. So the data, I like what you all are doing with looking at this data and pulling the dataset. But as I mentioned in the earlier session, you know, a lot of this is pretty gross level data when you're looking at this kind of scale.

And I don't think that should slow down the adoption of trying to make it more accurate. But as the operators, as local governments, as state governments, develop more accurate data, say an operator does their could affect analysis. And they go into an area into a watershed. And they do some on the ground

surveying, find out that the data that PHMSA has got is actually off quite a bit and maybe in one direction or another.

Will operators or local governments or other sources that you all can rely on, will they be able to submit corrected data and so that PHMSA over time develops a more accurate dataset on kind of a hyper-local basis or will we continue to rely on sort of this generic gross level data?

MS. GOODING: What I can say to that is that the -- excuse me? I think it's on. Yes. You can hear me, correct? Yes.

All right. I know the process to develop the data that specifically adheres to this incredibly complicated definition that's in the regs, it is very complicated, justifiably so. It is science and science is never that clear or never that easy or straightforward I will say.

Taking all of these data sources, these national heritage programs that bring together all of this data and give it to

NatureServe, who then uses that data and other datasets to kind of adhere to that very specific definition.

It's been a large process where we don't have the personnel or expertise inside of PHMSA to take on that project ourselves. We hire experts in that specific field to do that process.

So there has been no plan to date to start accepting opinions or anything on a much smaller scale and changing the data from, like, a crowd source type of approach. There has been no plan. I appreciate the comment. And I think it's something to consider. But to date that is not the way that we have been building the data. We don't have that plan yet.

MS. MURRAY: And it's certainly something to consider to your point, Chuck. If there's an opportunity for us to think about that a little bit more and figure out how that could work with some level of validation to it to make sure that we have some reliability and comfort

around what is being submitted if we were to accept changes based on actuals that they, you know, have the experience working with. That's something that we should definitely keep talking about and see how that could work.

Thank you. Yes, two commenters from our panel.

MR. WEIMER: Yes. It might be interesting to Chuck's point to know if there's any of the pipeline companies that actually do outreach to local and state governments to try to define their own HCAs and their could affect areas. Because, you know, they have that liaison function with local governments. And they could reach out to governments and say here's what we're using as our could affect areas. Do you agree? And I don't know if companies do that or not.

MS. FREEMAN: I can address that. Yes, they do. So not only do they go out into their operating areas and collect current data and define operator identified high consequence

areas and unusually sensitive areas, but I personally on behalf of several operators have submitted updated information about specific plants and animals that we have found out in the field to confirm that, yes, they are still there, and this is where they're located.

And so the best way at this point in time because PHMSA is limited in resources is to actually submit that information to the source agencies. And they incorporate that into their datasets.

And so I have been successful in doing that with species in Utah to NatureServe and also the commercially navigable waterways cleaning that up around Fairbanks.

So right now even though you can't submit it to PHMSA, and I'm glad there's a crowdsourcing way to do it, there is a way to get that information updated. And then when PHMSA updates their layers, that information comes in.

I also wanted to address just to clear up a bit of a misconception about the watershed.

So watersheds are considered by operators when their determining could affect pipeline segments.

They run spill models. Okay? So they can see where product would go should it escape the pipe, downhill, down slope and downstream. Okay? These downstream traces can go very far.

You are picking up all of your downstream waters in a watershed downstream from your pipeline, not necessarily all. So even though it's not the entire watershed, the watershed is being looked at through these spill models and any HCAs that are downstream from you could be impacted.

And so I just wanted to make sure that that was clear that that is definitely something that is being done and has been done for the last 20 years.

MS. MURRAY: Thank you. So I'm going to tee up a question for our PHMSA staff and talk a little about the complexities over defining these unusually sensitive areas and how that impacts the overall definition of HCAs.

Is it as simple as it sounds to just pick some alternatives and to get those mapped? Or are there other considerations, legal, technical and so forth that have to be factored into the discussion?

MS. GOODING: Sure. I can summarize that pretty quickly. In public service, it's not what Leigha says. There are a lot of different procedures and different people and different authorities to speak with.

And what at first sounded very simple to me as a geographer to define what could be a coastal beach or what would be the Great Lakes? It did sound very simple until we opened that can of worms.

And you've got a couple different voices in the room. And you can consider the actual legal rulemaking process and who all is going to be looking at what you're proposing and picking it apart and questioning why you did this going through various levels at PHMSA. Going through all of our public meetings. Going

through the OMB and the whole rulemaking process. And it became very un-simple very quickly.

As much as I do personally agree, pick something and move on. Let's actually make an effect. I completely hear what you're saying. But we're really held to a standard in our process that makes us question things a lot deeper. And that has certainly complicated what seems like a very simple thing.

MS. MURRAY: And is there a correlation between how you define it, finding data sources to be able to map it? Can you talk a little bit about the correlation between the definition and the data that supports mapping it?

MS. GOODING: Absolutely. First of all we at PHMSA are not ecological scientists by trade. We should not try to assume that we know the answers to these very scientific water-based questions better than the actual scientists out there from, say, NOAA, USGS, work that Bonnie does and other agencies who are actually experts in this field.

So we do look for authoritative and existing definitions from ideally other agencies because we do need it at a national scale. It can't just be what's in the Florida Panhandle. And it needs to be covered and consistent for the entire United States, the entire coastline.

And one of the complications that we come across in other datasets and other HCAs and USAs is how detailed and how scientific the definition can get and then how do you create that data?

So one of the approaches we were trying to look at was to look at the data that has been produced by these expert agencies, the definitions that they have. And back into a definition and a dataset from that approach to almost look at the data that's available because I think spatially. So when they spatially show what they consider to be a beach or what they consider to the Great Lakes, it's almost more descriptive to me than the words of what is the Great Lakes?

So we started with that spatial approach and are thinking of trying to back into a definition by starting with the mapping data. I hope that helps.

MS. MURRAY: That's very helpful. And I know Alan mentioned earlier that words matter. So to your point, the definition --

MS. GOODING: They both matter.

MS. MURRAY: -- and the mapping, they need to closely integrate with each other.

I heard a couple of sentiments regarding -- one sentiment was HCAs must be grounded in science, which really resonated with me. And then, I think, Linda, you mentioned having a scientific conscience or at least consensus around some of these topics we've discussed.

So in terms of defining some of these USA and, you know, ecologically sensitive and USA sources, how does that currently -- and Bonnie, this is for anybody on the panel.

How does the simplicity and then the

complementary scientific and making sure that it is grounded in science, how do those interrelate?

MS. FREEMAN: You mean the common understanding of a phrase versus the scientific interpretation of it?

MS. MURRAY: Yes.

MS. FREEMAN: You know, that does take a bit of back and forth. It does take conversation. I know some people are tired of talking about it, but it does take some back and forth. It takes pilot tests. It takes looking at what is available there.

You know, one of the things that tied our hands back when we first defined high consequence areas was that not all the datasets that we wanted to use were digital yet. Many of them were hard copy. That's why you see the coastlines that do not have eco-USAs from the 2001 data.

You know, it's finding these areas. We're much more fortunate now. A lot, much of the environmental data, is digital. But I do

think it takes a back and forth. It takes a lot of conversations. It's not a one-to-one mesh. So you have to work to get it.

MS. MURRAY: Okay. Thank you. Sam?

MR. HALL: We have a couple of comments and one question from our web viewers. The first is from Ed Langraf, who is the chairman of CAMO, which is a consortium of pipeline operators. CAMO stands for coastal and marine pipeline operators.

Ed says a comment. Our pipeline member operators already understand the sensitivity of marine areas either inland or coastal or offshore. I don't think a lot of work needs to occur in that regard.

Many employees of our member operators live in those USA areas and their right-of-way staff work there. At CAMO we take a proactive approach to close gaps in marine pipeline safety engagements and damage prevention.

CAMO has over five environmental and NGO partners who are continually educating on

marine pipelines and having a simple, realistic definition we can relate to all of our stakeholders will be strongly advised.

The edges and interface of water and land is the most important to habitat and to protect pipelines from erosion, subsidence, et cetera. Again, I agree the simpler the definition the better. It will help us in our outreach as well. The next question.

MS. MURRAY: Thank you, Ed.

MS. HALL: Thank you, Ed, for your comment. The next question is from Morgan Powell. The question is if this whole conversation is about affecting water bodies, why are offshore pipelines not included in the HCA rules? This is from Morgan Powell with Genesis Energy, a GIS supervisor.

The question again, if this whole conversation is about affecting water bodies, why are offshore pipelines not included in the HCA rules?

MS. FREEMAN: I can take a stab at

that. So offshore pipelines are included in the HCA rules if they could affect an HCA.

And the first time around with the existing HCA definitions, it was mainly on land is where our high consequence areas are.

So now, 20 years later, we're trying to do the land interface. So we're getting a little further offshore. But, yes, offshore pipelines if they can effect a current existing high consequence area are under the integrity management rule.

MR. HALL: One last comment from Nan Gray with the Soilworks Incorporated. We've heard several comments from Ms. Gray. It's simply a comment not a question. She says the issue of a regional no-build zone for pipeline construction is appropriate for the natural, undisturbed areas that ought to be avoided.

Many of those undisturbed areas are in steep land in the Appalachian Mountains and our national forest. Just a comment.

MS. MURRAY: Okay. Thank you, Nan,

for that comment as well. Are there other comments or questions from the audience, from the webcasters? One question in the audience.

MR. REYNOLDS: Thank you. James Reynolds with the Office of Enforcement, Pipeline Hazards Material Safety Administration.

My question is to Mr. Erol. In response to something that Mr. Jacques said. Mr. Jacques indicated that he doesn't believe that redefining these definitions of USAs would post any serious economic impact on the pipeline industry. I just wondered whether you concur with that analysis, and Mr. Jacques feel free to respond to Mr. Erol.

And also a question for Mr. Carl. I understand that you're saying a lot of this information is not shared with the public. And I wonder if you can appreciate the sensitivity of some of this information should it fall in the hands of unscrupulous characters. Thank you.

MR. ROTOLO: First, I'd like to clarify that I didn't say it wouldn't have any

impact. But what was said was not impact as far as new pipelines per se. But it will have an impact on the number of miles that would have to be assessed.

So it would have an impact, but just not very many new pipelines we don't think would be introduced in Louisiana into the integrity system. But it would definitely have an impact on the amount of mileage that has to be assessed.

MR. ALAVI: Could you repeat the question, please?

MR. REYNOLDS: Whether or not you believe a redefining of USAs would have an economic impact on the pipeline industry, your particular company?

MR. ALAVI: Okay. Economic impact. So if you define everything as an HCA, it becomes a different priority in scheduling. So basically they become immediate over 60 days or 180 days. And if they are immediate, then you need to shut down your pipeline, and you need to go fix to this location and fix the repair.

But most of the cases those -- and I'm not the least bit concerned because the regulation didn't spell like what is upper boundary, what is down boundary. There are some gray areas that most of the un-injurious. So they don't really fail.

When we do our analysis, it is basically finding an element of our analysis, we find out that their life of asset is, like, 500 years based on those anomalies and where we need to go now shut down the line and need to go repair them immediately.

MR. WEIMER: I think the second question was for me about whether there was stuff that shouldn't be publicly available. And certainly we agree with that.

I think sometimes it's overblown and too much stuff is not publicly available. I think often people think that a terrorist or people that want to do harm have to be complete morons because for the most part you can find that stuff anyway. And there's probably better

targets than pipelines and those types of things.

So I think more information should be publicly available. But there's certainly clearly things, you know, culturally sensitive sites, you can't make those available. So certain drinking water sources probably make sense.

Certain pipeline attributes, you know, we had a big fight. We were on the opposite side of the press in Washington State because we didn't think that, you know, the exact location of farm taps and valves should be publicly available on mapping sites.

So, you know, it's a fine line to draw. But for the most part, I think a lot of the USA type information, population areas, some of those are already available.

We would benefit by making those more available so people that really understand those areas, local governments in particular, could verify that they are being defined correctly.

MS. MURRAY: Thank you for that. We

have another comment.

MR. LESNIACK: This is kind of an overarching comment and it follows on what Carl is saying. You know, my experience as a local government official is that, you know, for example, the population data that the companies use is based on census data.

Well, that can be as much as 10 years or more out of date. And, for example, there's a pipeline that's being proposed for Central Texas. Well, they didn't know that in this county where they're going through, there's 5,000 new homes permitted within a mile of that pipeline. They didn't know that. And they didn't come and ask.

And I think this is true also for the ecological data, the drinking water protection data that the regulations should require that the operators confirm the data with local government officials where that's appropriate.

And I think population data is one. Drinking water protection zone data is one. In a lot of cases, the ecological data is one. And I

don't think that that would be overly burdensome for a pipeline that's going to be in place for 50 to 100 years for it to have an operator to contact the people on the ground that will have much more accurate data, especially the population data. In rapidly growing areas, ten year old data is useless.

MS. MURRAY: Thank you.

MS. FARRELL: Linda Farrell, Pipeline Safety Coalition. To follow-up on what Chuck said, we had a technical assistance grant through PHMSA in Chester County, Pennsylvania. And what we did was we created a protocol that we recommended for operators who wanted to come through Chester County with proposed new infrastructure.

And in this case, the operator had a proposed plan that would have gone through a part of Valley Forge National Park that had been extended. And the operator didn't know that that part of Valley Forge Park had been extended as a federal landmark.

By coming to our county planning commission, they had, as Chuck said, they had the data from the ground up. And we showed them a map and said, hey, this is a really bad idea for you to come here because this is now National Park territory.

They thanked us. It saved them a lot of money. It saved them a lot of time. So I put that out as an example of what can very easily be done on a local basis to address a lot of the issues that we're discussing today.

MS. CROWNHEIM: I agree with what you said. Patty Crownheim, ReThink Energy NJ. I have a question. We've been talking about hazardous liquid pipelines, and I'm just wondering what are PHMSA's plans with the new high consequence areas for gas pipelines, natural gas pipelines?

MS. MURRAY: And our plans in general or as it relates to -- I'm sorry. Can you give her back the microphone? I'm sorry.

MS. CROWNHEIM: All of the above.

MS. MURRAY: Well, we have a lot of plans that are currently in the works. I don't know if it's necessarily the context of the conversation around USAs and ecologically, you know, sensitive areas and drinking water, but there's a lot of things currently underway.

We have some rulemakings that are underway that address more of the integrity management concerns around gas pipelines as well. So there's distinctly different but important requirements that we're taking a look at.

MS. CROWNHEIM: And the reason I raise the question is because it seems a lot of times that we understand the massive downstream of potential consequences of hazardous liquid pipelines. But there is a real feeling with people who work with drinking water issues that any natural gas incidents would also have devastating impact on waterways, especially since so many of them run through so many tributaries and areas.

And we would like to see -- how to put

this. We would like to see a broader understanding of those cumulative impacts and impacts of incidents with natural gas pipelines on drinking waters and on ecological areas.

MS. MURRAY: Thank you. I appreciate that. Sam, any other questions? No questions from the webcast group? Any final questions for our panelists?

Okay. Without seeing any hands, one, I want to thank the panelists again. Let's give them a round of applause for all their feedback and their expertise and thank you for sharing that with us and the PHMSA staff who also did the same.

In terms of a wrap-up, one I want to say that all of your comments are well taken. We certainly plan to take some of the things we've heard, whether it was keep it simple, make sure we understand the complexities, how to get others involved. Even the sentiment that even at the local government level there's a lot of information that help can inform how HCAs are

defined and the data that's used to make sure it's validated and it's based on what's actually in different areas.

We'll take all that feedback to heart, and we'll go back and look at some of the sentiments from the transcription so that we can help to move this along and really pick up some momentum from this point.

I think we're close and we've heard a number of things here today that will certainly help us to be able to do that.

I will say that all of the presentations that you've heard today and the conversation, including the transcript, will be available on the meeting registration page because I think there's a lot of things that we certainly want to go back and reflect on and think about and maybe do a little bit more research on and understand a bit better.

With that being said, thank you very much for your time today. Just a few logistics. If you're planning to stay for the second part,

which we will move into the pipeline awareness and engagement public meeting and you're just needing to go to lunch, we have folks in the back who are standing who can help to escort you either to my left, your right, to our cafeteria area in the east building. Or, if you're not planning to stay, we have individuals who can help you get back to security and exit appropriately. In either case, we appreciate it.

If you are a webcast viewer, when we return from lunch we will be moving into, at 1:30, our Session 3 discussion. So please be prepared to click on your Session 3 link to start that particular forum.

Anything else I'm leaving out?

MS. GOODING: I will make one last recommendation. Since the PowerPoints will all be on display, as Christie had said, the PowerPoints that I put together that reviewed the questions for consideration today have the links for downloading a lot of the GIS data that we talked about.

And I think for all the GIS folks in the room or on the webcast or if you know one, I encourage them to download that data and take a look at it. And we would really love to hear the comments on those specific datasets and definitions because that is the direction that we're looking at going in right now. And specific comments after you have some time to look into that data would be very helpful.

MS. MURRAY: All right. Well, thank you very much, everyone. And we will resume here at promptly 1:30 for the second part of our public meeting. Enjoy the rest of your day.

(Whereupon, the above-entitled matter went off the record at 11:58 a.m.)

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C E R T I F I C A T E

This is to certify that the foregoing transcript

In the matter of: Great Lakes and Coastal Ecological Unusually Sensitive Areas

Before: US DOT/PHMSA

Date: 06-12-19

Place: Washington, DC

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

Neal R. Gross

Court Reporter