CUYAHOGA VALLEY NATIONAL PARK Cuyahoga River Restoration: Boston Mills North WEBEX Virtual Public Meeting – June 25, 2020 @ 3:00 p.m. Closed Captioning, recorded by Lynn M. Greer, Outreach Program Specialist, U.S. Army Corps of Engineers

Hello and welcome. There are some people still joining the meeting. We will begin in a few minutes.

Hello and welcome. My name is Lynn Greer, and I will be facilitating this meeting. Before we begin, I ask that all participants mute their phone line and remain on mute until we open the phone lines for questions. We will accept questions via the chat and phone but will first respond to questions entered via the chat.

To find the chat box, please use your mouse and hover over the bottom portion of your screen. A series of icons will populate. Click on the speech bubble icon and a chat box will appear on the right side of your screen. There are options to chat to everyone, the host, or a specific meeting attendee. Although my colleague Pam will be monitoring the chat box, we ask that you chat to everyone when submitting your questions. In the event we experience technical difficulties, this will ensure that other members of our team can access the questions submitted.

This is just a reminder to please mute your phone line.

This meeting is being recorded and will be posted on the National Park Service webpage.

We have some background noise. I am working to mute all lines before we begin. I'm Russ Brandenburg, the Boston Mills project manager. I'm a Senior Project Manager with the Army Corps of Engineers, Buffalo District based in Cleveland, Ohio. I've been in my current position since2016. The Boston Mills project is located on a portion of the Cuyahoga River main stem, within the Cuyahoga Valley National Park, not far from the Boston Mills Ski Area.

The Boston Mills project was brought about by a collaborative effort between the U.S. Environmental Protection Agency, National Park Service and the Army Corps of Engineers. The project is situated entirely within the Cuyahoga Valley National Park. The Cuyahoga Valley National Park has assisted with the design and will have primary responsibility for the project's longevity. The project funding comes from the U.S. Environmental Protection Agency Great Lakes Restoration Initiative or GLRI program, which is administered by U.S. Environmental Protection Agency's Great Lakes National Program Office. While we at the Army Corps of Engineers have been tasked with designing and constructing the project.

Boston Mills is part of a group of projects associated with the U.S. Environmental Protection Agency's Cuyahoga River Area of Concern; in conjunction with other projects, the construction of the Boston Mills project will assist in removing impairments along the river and delisting efforts for the greater Cuyahoga River Area of Concern. We look forward to providing you information about this environmental restoration project that we believe will provide many benefits to the Cuyahoga River and its surroundings.

Now, I would like you to meet the rest of our team.

Hello, I'm Pamela Barnes, the Public Information Officer for Cuyahoga Valley National Park. I am responsible for sharing park information and connecting with our communities through media relations, our website and social media, and park ranger staff. I'll be monitoring the chat for this meeting.

Hi, my name is Chris Davis, and I'm a biologist with the National Park Service. I've worked on a variety of restoration projects at Cuyahoga Valley National Park and other national parks across the country and my main role on this project is to serve as project coordinator for the National Park Service.

Hi I am Susan Hall, I am the park's Cultural Resources Program Manager. I am responsible for facilitating the park's Tribal Consultation program and for this project.

Bill Hunter is the Park Environmental Coordinator. I will be supporting the development of the project through the National Environmental Policy Act process and leading our work under Section 106 of the National Historic Preservation Act.

Hi. You have already met me, Russ Brandenburg, I am the project manager from the Corps of Engineers.

I'm Dan Bennett the Hydraulic Design Engineer for the project and also the technical lead for the design team. My role is to coordinate the overall development of hydraulic information and analyses as they apply to plans, specifications, design, real estate and relocation, cost and budget for the river restoration project.

I'm Katie Buckler, an ecologist with the US Army Corps of Engineers. I work with the team to gather data from the field to determine baseline ecological conditions, which helps to inform the development of restoration measures and restoration alternatives. I also assist the Park with NEPA-related components, such as ensuring that we receive the state and federal permits that are necessary to complete a project in the National Park.

Hello again. My name is Lynn Greer and I am a Public Involvement Specialist with the U.S. Army Corps of Engineers, Buffalo District. I am responsible for assisting the team with public engagements and stakeholder involvement, and I will be the facilitator for this meeting.

Hello, I'm Mike Habberfield, an Ecologist with the Army Corps of Engineers, Buffalo District. I'm involved in the ecological design and stream restoration modeling for this project. My name is Andrew Hannes and I'm an Ecologist and Project Planner with the US Army Corps of Engineers, Buffalo District. My role in the project is help the team navigate the project planning process which includes identifying the problem, developing restoration alternatives to address the problem, and finally selecting a plan that best meets the goals of this river restoration project.

Thank you everyone! This is Lynn Greer again. Now that you have met our team, and before we begin our presentation, we would like to get to know you. We are going to use a polling feature and ask just two questions to help us better understand who you are and to learn how you use the Cuyahoga Valley National Park.

Once the poll appears on your screen, I ask that you click the radio button that best represents who you are and submit your answer

The poll is on your screen. There is less than two minutes for you to submit your response.

Thank you so much for participating in our first poll. Our next poll will help us understand how you use the Cuyahoga Valley National Park. Once the poll appears on your screen, I ask that you click the radio button that best represents your use of the park and submit your answers.

The poll is on your screen. There is less than two minutes for you to submit your response

There is less than one minute left in the poll.The poll is now closed and I will show the results.I will now turn this meeting over to Chris Davis with the National Park Service.

HI everyone, this is Chris Davis from Cuyahoga Valley National Park. I'm going to spend the next 20 minutes or so providing some background information on our project,

including the history of the project site; the current condition of the project area; some of the preliminary alternatives we've developed; and some of the issues we anticipate addressing.

Our restoration project will be done entirely within the boundaries of Cuyahoga Valley National Park and most of the alternatives we're considering would be completed entirely on National Park Service land. However, it's possible we may propose some work on property owned and managed by Cleveland Metroparks and will have to coordinate any such work with them.

Cuyahoga Valley National Park is located in northeast Ohio and includes about 33,000acres of federal and non-federal lands.

Twenty-six miles of the Cuyahoga River flow through the park. The purpose of CVNP is to preserve and protect "for public use and enjoyment, the historic, scenic, natural and recreational values" of the Cuyahoga Valley between the cities of Akron and Cleveland – *Public Law 93-555 (1974)*. The Cuyahoga River is the only feature mentioned by name in the park's establishing legislation.

The actual project area, as indicated on the map on screen, is located between Boston Mills Road in Boston Township to the south and Vaughn Road in the City of Brecksville to the north

The Cuyahoga River is probably most well-known for the many times it caught fire in the 1800s and 1900s. The last time it caught fire was in Cleveland in 1969, five years before the park was created. The 1969 fire helped create an environmental movement that resulted in passage of several environmental laws in the early1970s, including the Clean Water Act and the Endangered Species Act. Although the river hasn't burned since 1969, it remained in pretty bad shape for many years after the last fire with virtually no oxygen available to support fish and other creatures in many areas.

In1987, the U.S. Environmental Protection Agency designated the Lower Cuyahoga

River between Akron and Cleveland as an "Area of Concern" under the Great Lakes Water Quality Agreement. The designation included the 26 miles that flow through the park. They also identified problems associated with the river called Beneficial Use Impairments or BUIs.

The primary BUIs that continue to affect the stretch of river at the park are impaired fish populations, impaired fish habitat, and impaired populations of macroinvertebrates that live on the bottom of the river.

As shown in the photos here, the banks of huge sections of the river remain in poor condition. Hundreds of tons of soil erode into the river each year, which covers gravel on the river bottom and moves downstream to Cleveland and Lake Erie.

In addition, about 1/3 of the river banks at the park are dominated by invasive Japanese knotweed, which limits reforestation by native species. So, although the condition of the river has improved dramatically since 1969, it still has a long ways to go to support a healthy ecosystem at the park. There are three primary factors that contribute to the on-going degradation of the river.

The first major factor affecting the river is residential and urban development around the park. As shown in the maps on your screen, residential development around the park has nearly doubled over the past 50 years or so. All of this development creates massive areas of impermeability that prevent stormwater from filtering into the ground and force it to run off into streams and ditches. Eventually, these high flows of flashy runoff end up in the Cuyahoga River, where they continue to eat up parkland and erode river banks.

Another major factor affecting the river at Cuyahoga Valley National Park is a steady change in precipitation over the years. As you can see on the graphs on your screen, precipitation has steadily increased in our area over recent decades at a rate of about an inch a year. This means that more stormwater hits the ground every year around the park and, when that stormwater hits the asphalt associated with development in our

area, more runoff gets dumped into the river every year

The final major factor that influences river stability and habitat quality at the park is channelization of the river. Historically, the river was able to move across the Cuyahoga Valley freely. However, it's now locked in by human development.

The west side of the river is blocked by roads and a railroad track, and the eastside is blocked by the historic Towpath Trail and Ohio & Erie Canal. In addition, humans also have removed thousands of feet from the length of the river.

For example, as shown in the photos on your screen, the Summit County Engineers removed about 1,800-linear feet from the river when they rebuilt the bridge that crosses it at Vaughn Road (this site is within our project area). In addition, a large section of the river was removed south of our project area at the Village of Peninsula. So, as runoff into the river has increased dramatically over the last 50 or 60 years, the physical ability of the river to carry and slow down water has decreased.

All of these factors – and others like invasive species – have created conditions where the river is unable to adapt to current conditions that continue to impair river conditions

Accordingly, the primary purpose of our project is to address the Beneficial Use Impairments that currently degrade the lower Cuyahoga River within park boundaries (e.g., impaired fish populations, impaired fish habitat, and impaired populations of bottom-dwelling/benthic invertebrates).

This project is a high priority for watershed groups that are trying to delist the river as an Area of Concern and also for the U.S. EPA under the Great Lakes Restoration Initiative. Improving Beneficial Use Impairments at the park is essential in order to remove the Cuyahoga River from the list of Areas of Concern.

Our project will directly address Beneficial Use Impairments by improving the condition

of habitat along and within the river, reducing erosion, improving water quality, and benefitting populations of fish and wildlife in the river and tributaries.

To try to meet our purpose and need, we've developed a range of preliminary alternatives that combine different options to improve habitat and reduce erosion. Examples of some of the alternatives we've developed are presented on the next four slides.

The alternative presented on this slide would breach a natural levy south of Vaughn Road and place culverts through an old railway berm that cuts across the floodplain.

The culverts are indicated by the four orange dashes located in a line towards the center of the map. This alternative would increase floodplain connectivity by allowing the river to flood onto adjacent lands at lower flows and would improve stormwater flow and storage by creating a larger, connected floodplain adjacent to the river

The alternative presented on this slide would connect two, abandoned ox-bow channels to lengthen the river and restore wetlands.

The oxbows are represented here by the yellow-ish curves and would be connected by a new channel through the woods. This alternative would increase the length of the river, improve the condition of forests adjacent to the river, and reduce bank erosion.

The alternative presented on this slide would focus primarily on removing invasive plants and restoring native habitat along the river.

Work under this alternative would focus mostly on improving habitat and bank conditions on point bars and other areas dominated by Japanese knotweed. This alternative would improve habitat for a variety of fish and wildlife species and improve water quality by reducing bank erosion.

The alternative presented on this slide would lengthen the Cuyahoga River.

According to studies completed by the Army Corps, the Cuyahoga River in the project area should be about 2,800 feet longer than it currently is in order to reach a more-stable state called dynamic equilibrium.

In this condition, the river would continue to meander naturally but would have better balance between erosion and deposition at the park. Under this alternative, we'd also create "backwater wetlands" in old sections of the river.

As shown on this slide, so far, we've identified six areas where we could lengthen the river. If we created meanders at all six sites, we'd add approximately3,000 feet to the river's length.

Under all alternatives, we'd manage invasive plants and restore native forest in all work areas.

In order to identify potential issues associated with the alternatives, we completed an Environmental Screening Form that considered a variety of topics.

Based on this preliminary review, it looks like we should be able to use an Environmental Assessment to evaluate environmental effects under the National Environmental Policy Act. So far, the biggest issue we've identified seems to be potential effects on archeological resources.

As shown on this slide, we have a lot of work to do over the next few months.

Due to COVID-19 concerns, we've had to change our schedule a little but have continued coordination with interested groups during the pandemic. We've already coordinated extensively with the Ohio State Historic Preservation Officer and have reached out to Tribal contacts to begin identifying issues of historic importance.

We've also had conversations with the regulatory branch of the Army Corps of

Engineers related to wetland impacts and benefits and will continue to talk with other agencies and groups over coming months.

If all goes well, we're hoping to complete our Environmental Assessment by the end of 2020.

So far, we've identified 13 topics or issues that seem to rise to a high-enough level to include in our Environmental Assessment.

The first topic we identified was "riparian forest", which should expand and improve under our project. As I mentioned earlier, more than two thirds of river banks at the park are unvegetated, highly eroded and/or dominated by Japanese knotweed. Only about 13 percent of river banks at the park support native, riparian forest.

Hopefully, this project will extend the reach of those areas, which will also benefit wildlife at the park. In particular, we've identified "migratory songbirds" and "aquatic invertebrates and fish" as topics of interest.

Providing additional forest cover along the river will provide better corridors and nesting habitat for migratory songbirds

In addition, native forests along the riverbanks would contribute leaves and other organic matter to the river and decrease bank erosion, which would provide more food and shelter for aquatic invertebrates. In turn, fish would benefit from healthier populations of insects and better nesting habitat.

Finally, depending on the timing of construction, our project could affect the federally listed Indiana bat and northern long-eared bat.

For now, it appears we'll be able to do work when these bats aren't present in the project area.

Assuming that's true, our project would benefit bats by providing them better places to roost and forage along the riverway.

We'll also complete surveys for freshwater mussels before starting our project with particular interest in finding rare mussels.

However, based on previous surveys at the park, we don't expect to find any species of interest in the project area. In the end, our project should improve habitat for both bats and mussels at the park.

As mentioned previously, all alternatives would include activities to manage non-native, invasive plants in restoration areas.

The primary species of concern would be Japanese knotweed and phragmites (common reed).

We'll actually begin managing these species this summer as part of the park's routine maintenance program and will try to focus some effort on areas that might be part of our river-restoration work. We then would continue to manage these species at these sites in future years.

Concerning wetlands, depending on the alternatives selected, our project could restore more than ten acres of wetlands at the park.

We're currently working with the Regulatory Branch of the Army Corps of Engineers on wetland permitting and it appears our project should qualify for a Nationwide Permit 27 that covers habitat restoration.

Since one of our alternatives focuses on rebalancing the length of the river, we've also identified "riverine geomorphology" as a potential topic of interest.

If implemented successfully, that alternative should drastically reduce the amount of erosion and sedimentation leaving the park and working its way to Lake Erie.

In addition to natural resources, a variety of cultural resources are present in the project area, including historic buildings, districts and archeological sites.

The historic Towpath Trail and Canal are located on the east side of the river and the historic Valley Railway are located on the west side of the river. All of these features are designated historic properties and are included on the National Register of Historic Place.

However, our biggest concern right now appears to be potential effects on archeological resources.

To address this issue, we completed a detailed study of geomorphology (land forms) across the Cuyahoga Valley in the project area and identified areas that are more likely and less likely to support archeological resources.

So, we now have a good idea about areas that might be a particular concern for archeological resources, including potential for deeply buried sites.

We'll be coordinating all of our work closely with the Ohio Historic Preservation Officer and interested tribes and plan to have archeologists on-site during construction to monitor any soil-disturbing activities.

Finally, we've identified "visitor experience" as a topic of potential interest. Cuyahoga Valley National Park has been making a focused effort recently to promote and provide recreational experiences on the river to park visitors. As mentioned before, most of the river landscape is currently in pretty bad condition and doesn't provide a great experience to visitors. We're hoping that our restoration work will have a positive effect

on the river that will be noticeable to both park visitors and wildlife

As you can see on this slide, we're hoping to complete compliance, design and then implement this project over the next year or so.

We've been working with the Army Corps for a while on this work and will begin developing final designs soon after we identify a preferred alternative and complete project compliance later this year.

If all goes well, we'll start restoration next year (2021) with a goal to complete most work by summer 2022 and then to wrap up the entire project by summer of 2024.

Soon after that, we're hoping to be part of a successful effort to delist the Cuyahoga River Area of Concern.

Thankyou Chris. Hello, this is Lynn Greer again.

We have just one more poll before we begin the question and comment session, and that is to help our team understand how you heard about this meeting. Similar to the previous polls, once the poll appears on your screen, I ask that you click the radio button that best represents how you learned about this meeting and submit your answer.

The poll is on your screen. There is less than two minutes for you to submit your response

The poll is now closed and I will show the results.

Most attendees learned of this meeting through the NPS.

That last poll concludes our formal presentation. Chris, I will turn things back over to you.

We're particularly interested in any additional questions you might have about the purpose and need of the project, as well as suggestions for additional alternatives we've

missed and/or any additional issues or impact topics that you think we should consider. We're also interested in any general comments you might have about the project.

If you do, please use the "chat" function now to relay your comments and/or questions.

If you'd like to have your input included as part of the official administrative record, please visit the NPS's website listed on this slide and enter your comments on the project's official, online tracking page by July 27, 2020. You can also submit commits using snail mail at the address provided.

The NPS will consider submitted comments through the environmental-review process and will address them as appropriate in the Environmental Assessment. With that, we'll take any questions or comments you might have

Now it is time for questions. My colleague Pam has been monitoring the chat box throughout the meeting. Pam is going to share with our team, the questions that have been received. Russ, the project manager will help direct questions to the appropriate team member. Once we work through the questions submitted via the chat, I will open the phone lines for anyone who is participating via phone only, so that you can unmute your line and ask your question.

Q1have you received any feedback from tribes? If so can you share? A1. We have contacted 30 tribes providing an invitation for consultation and have not yet received feedback. When we do we can share that information with consulting parties.

Q2. What are the different funding sources, especially local shares? What percent is federal? what is percent is non-federal?

A2. The U.S. Environmental Protection Agency has budgeted approximately \$7 million for this project using Great Lakes Restoration Initiative funds.

Q3. Have you consulted with archeologist from the Midwest office?

A3. We have recognized the potential to effect archeological resources and have done all our internal scoping with the team and the Midwest archeological center. We have developed a framework to continue to address potential impacts to archeological resources through ongoing consultation and the section 106 process.

Q4. What are the post construction maintenance requirements, specifically about invasives?

A4. The required maintenance will be alternative specific and we will detail an operations and maintenance plan that will include continued monitoring of invasive species including an invasive species monitoring plan and native planting plant for a number of years. First consideration is to identify the preferred plan and then we would work on the details need for maintenance required.

NPS has successfully acquired outside funding for 8-10 years to assist with invasive plant control. NPS is hopeful that the resources will continue to be available to help with maintenance for this project.

Q5. How would potential alternatives impact the ability to list the Cuyahoga as a national, wild, scenic restoration river.

A5. We have a subset of park staff working on that designation. Our biggest hinderance at this time for national designation is rip rap and other construction along the banks of the river. This project will not remove those projects. But hopefully this project will help us move further down the line for that restoration designation.

Q6. Which Tribes are you consulting?

A6. We have a list of 30 tribes. If you put your contact information in the chat box we can get that information to you. Send your information to Pam in the chat. We will also submit the answers on the NPS website.

Q7. What is the estimated project cost per foot of rive?

A7. Final cost has not been determined yet because an alternative has not been identified. the U.S. Environmental Protection Agency has budgeted approximately \$7 million for this project using Great Lakes Restoration Initiative funds. Once we have identified the alternative we will be able to identify cost.

Q8. This project should enhance river values and the conditions of the river. We will be sure to consider potential impacts and mitigate those. WSR should not change river variability.

Q9. was not sure if remeandering would effect free flowing criteria for wild and scenic rivers.

Q10. Will National Park Service be responsible for maintenance?

A10. Yes, when the Army Corps is done with construction, the NPS will be responsible for maintenance. As stated before, we will likely continue to use existing capabilities to maintain the project. We have thousands of volunteers to help with management of invasives and planting native plants.

Q11. Is that framework available for review (archeological resources)? A11. We are just initiating section 106 consultation, the agency and the SHPO have agreed to the extent of the area of potential effects and agree that there are historic properties and archaeological resources present. The agencies and SHPO are committed to ongoing consultation to avoid, minimize and mitigate any effects to these important cultural resources. We will invite consulting parties to a meeting to discuss cultural resources.

***Precip amount increase has gone up about 1 inch per decade not one inch per year.

Q12 When will the slide deck be posted to the NPS webpage?A12. We will post the recording of this presentation on the park webpage. The National

Park Service has a site that will have a page for you to comment. The link will include a copy of the presentation and then information where you can obtain the recording from today's meeting.

Q13. Will the tow path be closed?

A13. The Corps is looking at preliminary designs to determine if the tow path would be closed. It depends on what alternative is selected. Any closures will be shared with the public via notices; we will strive to minimize impacts to tow path users

Q14. Given the highly aggressive and invasive nature of Japanese Knotweed do you believe you have even a 50% chance to control knotweed without a herculean effort? A14. We have drafted an aggressive Japanese knotweed control plan for whichever alternative is implemented. The goal for the project is to reduce scour and erosion that favors knotweed. If we are able to get the river system back to dynamic equilibrium and flood regime, within a fairly rigorous 3-4 year knotweed management program, in addition to the volunteers that would assist with knotweed removal, we have a good chance of removing knotweed. We would knock down knotweed, plant native species, and return the rive to equilibrium, we can keep knotweed at bay.

There is a lot of literature regarding knotweed and we are using all our resources to implement a management plan.

Japanese knotweed and phragmites are toughest plants at the park to control. NPS has been doing this in a few areas, at pilot sites that started a few years ago and knotweed has been reduced about 5% then what is was a few years ago.

If anyone on the line would like to ask a question, please unmute your line. You may ask your questions.

Since there are no additional questions, I will turn things over to Russ and Chris for closing remarks. Russ.

I want to thank everyone for taking the time to participate, we truly appreciate all the feedback we've received today. We look forward to continuing our collaborative effort with the CVNP and feel these projects will not only benefit the CVNP, but the region as a whole.

Thanks Russ. I'd also like to thank the rest of the team that's been part of this project and presentation. And, most importantly, I'd like to thank everyone who dialed in this afternoon/evening to learn about our restoration work. We look forward to hearing from you about this and other projects at the park. Thanks again. This concludes our meeting.

Thank you for attending. Have a good afternoon.