

Crater Lake National Park Trail Management Plan/Environmental Assessment

Virtual Public Meeting: October 13, 2021 Transcript of Virtual Meeting

Introduction

On September 21, 2021 the National Park Service (NPS) released for public review the Crater Lake National Park Trail Management Plan/Environmental Assessment (EA). The planning team held a virtual public meeting to discuss the plan/EA and solicit input on October 13, 2021 from 6:00 to 7:30 pm PDT. Live captioning for the event was provided by the Federal Relay Service. To assist with public review, the National Park Service prepared the following meeting transcript, which includes a presentation and question-and-answer session. NPS staff “cleaned up” the raw transcript provided by the Federal Relay Service by including names of NPS staff and filling in gaps that were not captured in the initial transcript.

The transcript begins soon after Sean Denniston, acting superintendent of Crater Lake National Park, began speaking. Sean introduced himself, welcomed participants to the meeting, and began to introduce others on the planning team before the recording and live captioning began.

Presentation

[Please stand by for real-time captions]

Slide 1: Welcome. Sean Denniston (acting superintendent, Crater Lake National Park) speaking.

Sean Denniston: Good evening and welcome to the Crater Lake National Park Trail Management Plan meeting. [indiscernible] ... We have Craig Ackerman and Kirsten Hardin who oversaw the management of assets at the park. Marsha McCabe, who is our chief of interpretation, education and outreach and is also our public information officer. Sean Mohren, who is currently our acting chief of resources management and fire. And Andy Hoeg, who is our trails supervisor, who runs the trails program. Also on the line tonight—I just want to acknowledge—is Jennifer Gifford. Jennifer used to be our trails supervisor here at the park. She now works at Glacier National Park, but she has been an important part of this effort and contributed so much to this planning effort over the years. Thanks, Jennifer, for joining us and thanks for all you’ve done to this point. So we also have with us our team from Colorado called the Denver Service Center. That group, they help national parks plan—conduct plans like this. So they’re going to be helping us present it tonight and helped us put the plan together.

So first off, we’re going to start with a brief presentation. As we go along, the other presenters and I will describe the images we are showing for those who might not be able to see the slides. Right now, for example, we are looking at the first slide of the presentation, which has a picture of beautiful Crater Lake and the rugged walls of the caldera. After the presentation we’re going to hold a question-and-answer session. The presentation should take about 25 or 30 minutes and that should leave us plenty of time for your questions about the plan and to discuss it. Next slide, please.

Slide 2: Some Logistics.

Thank you. So first we're going to review some logistics for tonight's meeting. WebEx is the virtual platform we're using to host the meeting tonight. It is the first time we've actually held a virtual public meeting at Crater Lake, as I mentioned, so we apologize in advance for any technical difficulties we may experience. We chose WebEx because it allows people to call in by telephone, which we thought was important. We wanted to make sure that people could join even if they don't have a computer or reliable Internet connection. Now if you've made it this far, we're going to assume things are working OK for you. But in a moment we're going to pause before the question and answer session and give you some more detail about how to communicate with us during the meeting to provide the feedback that we're looking for. Also, I wanted to highlight that we are going to be recording this presentation so that others who might not be able to attend tonight can play it back and hear the information presented and benefit from the questions you might have. Finally, the Federal Relay Service is providing real-time captioning for tonight's meeting, so if you would like to use this live captioning service, please click on the link that we are going to include in the chat now. The chat function should be displayed on the right-hand side of your screen. ... and I'm looking for that, and hopefully that will pop up for you. Next slide, please.

Slide 3: Purpose of Meeting.

The first thing we're talking about is why we are here tonight and why we are holding this meeting. The answer is that we have recently released for public review the trails management plan and environmental assessment and now are seeking your input on this plan. On this slide we're showing the cover of the plan, which has a great photo of park staff using a crosscut saw to remove a tree from a park trail. So your comments will help us ensure we have the best plan possible and we've considered everything we needed to. The plan is an environmental assessment, and we often abbreviate that "EA" for short, which means we've formatted it to comply with the National Environmental Policy Act requirements. The plan and EA is open for public comment and can be downloaded from the project website that is included on this slide. The website has a comment feature to provide direct feedback to the planning team. So we're listening and we truly want to receive your input on the plan including the alternatives. One of our team members is now going to place the link to the project website in the chat. Again, it should be on the right-hand side of your screen. Since this is an important link I also want to read this out loud in case there are people calling in by phone. That link is https://parkplanning.nps.gov/CRLA_TMP (spelling it out phonetically).

I realize that is a mouthful so you can also get there via Google. In Google if you just type Crater Lake trail management plan the project website should be at the very top of the list of results that is returned. Now once you're at that website you can navigate to the trails management plan and EA by clicking on the "documents" or "open for comment" links. Those are located on the left-hand side. If you have any trouble following this, please reach out to us. We're going to make sure you have our contact information. If you have any difficulty accessing it we can print copies for you and make sure we get it to you. Next slide.

Slide 4: Overview of Presentation.

The slide we are showing now is an outline of tonight's presentation. We'll start first with a brief introduction to the park and how this plan fits into the mission of the park as well as the mission of the National Park Service. During that part of the presentation, we'll review why the park needs a trails management plan and the park's purpose, and the plan's purpose. After that we are going to present just a bit more about the planning process and how we got to this point. After that we're going to turn our attention to the plan's alternatives. We're going to look at maps and review some of the biggest actions in the plan. Towards the end of the presentation we're going to show you how to share your feedback for the plan. And there's going to be a number of ways to do that. So after the presentation (that overview I just provided), we'll have a brief information session. At that time you will be able to pose your question and provide comments either by chat or by phone, and we will answer all these questions to the best of our abilities. We're going to try to stick to adjourning the meeting at 7:30 Pacific time—people might be joining from all over—at the very latest. Now after that, if you still have unanswered questions you can pose them as comments on the project webpage and we encourage you to do so. We are really looking forward to your input on this process. Next slide.

Slide 5: 1) Introduction to the Plan. (skipped; moved immediately to the next slide)

Slide 6: Park Purpose.

So, whenever we embark on planning efforts like this we need to consider how what we are proposing fits into the broader goals of the park as well as the mission of the National Park Service. Here at Crater Lake the National Park Service preserves a unique and important landscape and we provide access to the resources here that we protect. We plan for today but also for the future. So preserving park resources and providing opportunities for enjoyment are core to our agency's mission and really to every decision that we make at Crater Lake. Now, this slide shows a photo of people hiking on a trail across the park's volcanic landscape. And it displays the text, the purpose of Crater Lake National Park, which is grounded in the park's enabling legislation. The legislation that created the park set out the overarching purpose for the park. I want to read that purpose out loud and you may find many elements of that purpose represented in the photo we're showing at the screen. Crater Lake forever preserves Crater Lake, scenic landscapes, volcanic features, and unique ecological and cultural heritage, and fosters understanding and appreciation through enjoyment, education, and inspiration. Next slide, please.

Slide 7: Purpose and Need for the Plan.

Now any time we develop a plan it's important to know what we intend to accomplish. So our planning team identified brief statements of purpose and need. The purpose is a broad statement of goals for the plan while the need highlights the underlying problems or opportunities that we are responding to. In this case, simply put, the purpose of the trails management plan is to provide high quality nonmotorized recreational opportunities while ensuring that we're preserving park resources. The plan is intended to guide trail management and investment in trail infrastructure over the next 25 years or so. The plan is needed for a variety of reasons, but certainly it is because visitor experience is being diminished by increasing crowding and congestion. This is happening throughout the park, which results in impacts to resources which are increasing in number and severity. We need the plan because existing trails and trail use are concentrated in localized areas of the park, which places stress on those resources and limits recreational opportunities in other areas of the park. And because the park lacks

comprehensive, consolidated guidance for trail management. These statements are really touchstones for the plan. Every action and the plan is aimed at meeting this purpose and these needs. Next slide, please.

Slide 8: 2) Planning Process. Sean Denniston speaking at first, then Tom Gibney, project manager, Denver Service Center.

At this point I want to turn it over to Tom Gibney, who is the project manager from the Denver Service Center that I mentioned for this trails management plan, and while I have the opportunity in this public forum I certainly want to thank Tom and the entire Denver Service Center team for all that they have done to help us develop this really excellent plan and for helping us put on this public meeting tonight. Thanks, Tom and thanks team, I'll turn it over to you.

Tom Gibney: Thank you Sean, that's very kind of you and I appreciate that very much. As Sean mentioned, my name is Tom Gibney, I am a project manager in the Division of Planning at the Denver Service Center, and like Sean I'm delighted to be here speaking with you tonight. Most people are not familiar with the Denver Service Center. We are a project management and support office for the National Park Service. We function a lot like a consulting firm and our clients are national parks and other NPS offices. So in the planning division we usually work on long-range planning projects as opposed to detailed design and construction. This trail management plan is one of those high-level, long-range planning efforts. Like Sean mentioned, it is intended to provide guidance to further develop and manage the trail system over the next 25 years or so. A few others from Denver are here on the line with us this evening, running the technology behind the scenes. On the next slide I will briefly summarize where we are in the planning process. Next slide, please.

Slide 9: Project Phases. Tom Gibney speaking.

This slide shows a breakdown of the planning process into three general phases. We are in the third phase now. In phase 1 we established the purpose, need and objectives for the project, we identified issues to be addressed in the plan, and we reached out to park partners and other groups, inviting them to assist us in the effort. These included Tribes, recreational user groups, and members of the local community. In the second phase we explored viable trail routes and we packaged those together into distinct alternatives that we could analyze. Some of those ideas came directly from you all. Your input earlier on helped shape the alternatives in this plan. Now we are in the public review phase of the project before we finalize this plan and before implementation begins. Public comment is exactly that. It's all about hearing your input to ensure that our plan is the best it can be. During this period, we encourage you to share your thoughts about the alternatives in the plan, the analysis of their impacts and any concerns and other feedback that you might have. Later on, we will show you how to provide that feedback. Next slide, please.

Slide 10: 3) Alternatives.

In a moment we will turn our attention to the alternatives. In the planning world, alternatives are different actions and strategies that are packaged together for analysis and decision-making. The alternatives represent different ways to solve the problems and meet the goals that are in the purpose and need that Sean reviewed with us earlier. Three alternatives are included in this plan and EA. There

is a no-action alternative, a preferred alternative, which is alternative 1, and another action alternative—alternative 2. Next slide, please.

Slide 11: Objectives.

Before we look at those alternatives though, I wanted to mention that we also considered some overarching objectives to guide the development of alternatives and help us identify the preferred alternative, which is the one that we believe best meets the purpose and need for this plan. The objectives are contained in chapter 1 of the plan, and a few are on this slide. For instance, the trail system should offer high quality recreation for a variety of visitors and abilities during different seasons of the year. We want to provide greater connectivity between trails and between features of interest. And core to our agency’s mission is our legal requirement to protect and preserve resources. Also, we need to be mindful of the costs and maintenance requirements associated with trails. This slide contains four different images of the Crater Lake trail system. There's hikers on the popular Cleetwood Cove Trail, a trail crew working on a retaining wall, a small directional sign for hikers, and a trail crossing a green hillside. Next slide, please.

Slide 12: Project Actions.

The images on this slide showcase some points of interest and scenery that can be experienced by trail. We have a summer scene with lots of visitors at the lake near the base of the Cleetwood Cove Trail, a winter scene with footprints in the snow, and two people gazing up at a waterfall. Those are the images from this slide. The words on this slide summarize at the 30,000-foot level some of the biggest actions in the plan. For example, the alternatives propose new trails and new trail connections to disperse users to different areas of the park, including some areas that currently have few or no trails. Also, the alternatives expand allowed uses on certain trails. Many existing trails currently allow only pedestrian use. The preferred alternative proposes to expand that use on a few trails to include horses. Additionally, a couple of new trails would allow bikes in the future. Next we are going to look at maps and get into a few specifics, but in the interest of time, we’ll have to keep this very high level. Next slide, please.

Slide 13: No-Action Alternative.

So this is a map of Crater Lake that shows the existing trail network as dashed lines. This is what we call the no-action alternative because it reflects current management. On the next few slides we’ll look at two action alternatives for comparison. Next slide, please.

Slide 14: Action Alternative 1 – NPS Preferred.

This map shows action alternative 1 which is the NPS preferred alternative. Brown lines depict existing trails, purple lines are proposed new trails, and green lines are trails or roads with proposed changes in designated use. In this alternative, new trail development is mainly focused on the southern and western portions of the park to disperse visitors to areas where few trails currently exist. This would enable visitors to experience more areas of the park and also more features of interest. Dispersing use in this way should also have the added benefit of relieving some visitor crowding along Rim Drive during the summer months. Under the preferred alternative, some new trails would be added at the park’s lower elevations in areas that receive less rainfall [sic, “snowfall” intended] and therefore have a longer summer season. This is to improve year-round access and recreation. One example is the

proposed Panhandle Trail near the park's southern boundary, towards the bottom of your screen. This would be a loop trail. Another one of our overarching objectives was to provide more opportunities for short and longer distance loops. This alternative also features some new connector trails to create possibilities for longer distance backcountry loops. Next slide, please.

Slide 15: Action Alternative 2.

This map shows action alternative two. Just like the last slide, brown lines are existing trails; purple lines are proposed new trails; and green lines are trails or roads with changes in designated use. One orange line on this map depicts an underutilized trail segment that would be removed under this alternative. In total, alternative 2 introduces almost 23 miles of new summer trails with the focus on the eastern portion of the park. A big idea in this alternative is the development of the Vidae Ridge Trail and a new Rim Trail segment around the northern, eastern, and southeastern edges of the lake. This would improve nonmotorized connectivity in some of the park's most popular areas, near the rim of the caldera. And it would complete... it would form a complete Rim Trail allowing hikers to circumnavigate the lake, which is a new way to travel through the park. Next slide.

Slide 16: No-Action Alternative and Action Alternative 1 (Comparison).

This slide presents the no-action alternative on the left and action alternative 1, which is the NPS preferred alternative, on the right. In the no-action alternative, no new trails would be built. The park would maintain the existing system of designated trails, which is approximately 95 miles in length. In the preferred alternative, approximately 20 miles of new trail would be built over time and changes of use or designation would occur to approximately 9 miles of existing trail. Next slide.

Slide 17: No-Action Alternative and Action Alternative 2 (Comparison).

This slide shows the no-action alternative on the left, and action alternative 2 on the right. In action alternative 2, about 23 miles of trails would be built. And an underutilized trail, the East Bald Crater Loop Trail, would be removed. I want to mention, there are a few trails that are proposed that are common to both of those action alternatives. Those are not shown on any maps tonight, but you can review those in the plan. Now, in the interest of time, this was an extremely brief summary of the alternatives. Each is presented in greater detail in chapter 2 of the environmental assessment, and a thorough analysis of their environmental impacts is contained in chapter 3. That analysis of environmental impacts was critical in our team's determination that alternative 1—so not the one on this slide, but alternative 1—is the preferred alternative. So I would really encourage you to give the EA a thorough read, and also to explore the StoryMap, which we will introduce on the next slide. Next slide, please.

Slide 18: StoryMap.

A StoryMap is a fun, user-friendly, web-based GIS mapping tool, and we prepared one for this plan to help tell the story of the plan. You may access this StoryMap from the link that is included on this slide, which we will now send out via chat. And after this meeting I'd encourage you to browse this StoryMap on your own because it will allow you to explore the specific trail proposals in a lot greater detail. Isabelle Petersen, who has been sharing our screen tonight, is going to navigate to that StoryMap now.

StoryMap Demonstration.

Thanks Isabelle. Once Isabelle scrolls down just a little bit, several tabs are going to appear at the top of the screen. Today we only have time to look at one of those tabs—the tab for Alternative 1. Again, alternative 1 is the preferred alternative. Isabelle is now going to navigate to the map of that, and zoom in on that map by clicking the “plus” button on the screen. You can do this on your own on your computer too, and when you do, you can select any of the trail segments—whether they’re existing or proposed—and the StoryMap will display some basic information about that trail segment: including its name, mileage, and proposed use. So for example, Isabelle has highlighted the proposed Union Peak to Stuart Falls Connector Trail, which would be open to hikers and equestrians and is approximately 4 miles in length. Of course, the mileage for all proposed trails is very approximate. Again, we’ve placed the link to the StoryMap in the chat. I would encourage you to explore this on your own afterwards. It’s a lot of fun and contains a lot of good information. But for now, we’re going to move on to the next slide, and pick up where we left off.

Slide 19: Visitor Use Management.

So it should come as no surprise that people use trails. That’s the very reason that trails exist. Since we know that people will use trails, it is important to proactively plan for that use to support access, protect resources, and ensure that visitors can have meaningful experiences on trails in the park. So this plan incorporates the Interagency Visitor Use Management Framework, which is a process that the Park Service uses, as well as the Forest Service, BLM, and a growing list of other agencies and municipalities. There’s a circular graphic on the right side of this slide that summarizes that framework. Key components include developing strategies for monitoring and for managing visitor use. Next slide, please.

Slide 20: Indicators and Thresholds.

The plan lays out a process for monitoring visitor use and resource conditions along trails, which would be accomplished through “indicators” and “thresholds.” Indicators are measurable items that we will track over time to see if desired conditions are being achieved. Each indicator has a minimally acceptable condition associated with it, which is called a threshold. In this plan, we commit to monitoring four indicators that are on this slide. You can read all about indicators and thresholds in appendix A of the plan. Next slide, please.

Slide 21: Visitor Capacity.

The plan also includes visitor capacity identifications for each of the new trails in the action alternatives. Visitor capacity is the maximum amount and types of visitor use that an area can accommodate while still sustaining desired conditions and desired visitor experiences. This slide shows a colorful map because in order to make this analysis manageable, we divided the trail system into five different categories, which are color-coded on this map. Generally, the visitor capacities along some of the busier trails are identified near current use levels, while visitor capacities in lesser-used areas are identified well above current levels. Overall, the visitor capacity aims to redistribute use more evenly and allows for room to grow. So if you’re interested in learning why we do this, more about these numbers, how they were calculated, and the strategies we will use to manage within the capacities, then be sure to check out Appendix B. I’m going to pass it to Sean for this next slide.

Slide 22: Trail Implementation. Sean Denniston speaking.

Sean Denniston: Thanks, Tom. I want to talk a little bit about how we're going to implement this plan since I'm sure we'll have questions about that. We have to acknowledge that not all strategies in this plan will be implemented immediately. New trail development will take place as funding, staffing, and other park priorities allow. The trails management plan is a long-range plan intended as a roadmap for the next 25 years. We fully realize the preferred alternative will take many years to complete, resulting in incremental improvements to the trail system over time. I think the other valuable outcome from this planning process are the trail standards and monitoring protocols. So this plan will also help us better take care of the park's existing trails. I want to thank you all in advance for your patience as we take care of, improve, and then work towards expanding the trail system at Crater Lake. And also to the volunteers and park partners out there. Thank you so much for your efforts in assisting and implementing this plan. We appreciate all the work you have already done for the park and will keep doing to keep Crater Lake the special place that it is. Next slide and back to Tom.

Slide 23: Next Steps. Tom Gibney speaking.

Thank you, Sean. So we are currently in the public comment period. Once we receive public comments, the planning team will analyze them to determine if we need to make any necessary refinements to the plan. Once the plan is complete, then the Park Service will select an alternative for implementation—that could be the preferred alternative, it could be another alternative, or a combination of the alternatives. Once the National Park Service confirms that the selected alternative has no significant environmental impacts, then the agency will make a final decision and release that to the public. This slide includes three pictures along its right-hand side. From top to bottom, they show a trail crew at work, a group of people on snowshoes in a lovely winter scene, and a footbridge across a small stream. Next slide, please.

Slide 24: Your Critical Role.

That brings us to the most important part of the presentation and the whole reason why we are speaking with you now: that's your role in helping with the planning effort. Next slide, please.

Slide 25: We want to hear from you!

We want to hear your thoughts about the alternatives presented. Please visit the project website and provide your comments directly on that website. A link is on this slide, which we will send out in the chat once more. Again, this is the one that Sean read earlier: <https://www.nps.gov/craterlake/plan/management>. Or you can just google Crater Lake Trail Management Plan, which might be easier. At that website you will find the complete plan, with maps and text describing the alternatives and other aspects of the plan in detail. I would really recommend that you give that EA a thorough read. A lot of thoughtful discussion and analysis and hard work has gone into it. And if you have questions, there is a very good chance that the answer might be found in that EA. We urge you to submit comments directly on the website—that just allows us on the planning team to be a lot more efficient. But there are also other ways to reach us and comment. You may mail hardcopy comments to me at the address listed on the slide: Tom Gibney, Denver Service Center, Planning Division, 12795 West Alameda Parkway, Lakewood, Colorado 80228. And you may contact me directly via email as well : tom_gibney@nps.gov

In a moment we will turn our attention to the questions that I am sure have been rolling in over chat. Next slide, please.

Slides 26-28: Instructions for Q&A.

But first, for those of you who are new to WebEx, we'll quickly review some controls to make sure you can send your questions to us. On this screen you'll see a screenshot of the standard WebEx set up. Notice the red box at the bottom. These are your key controls. For most of you, they should be at the bottom of your screen. Next slide.

We're going to start the Q&A with questions that come in via chat. To ask questions non-verbally, we ask that you use the chat feature to send a message to our host, Andrew. The chat feature is located along the bottom right of your WebEx window as shown in the red box on the screen. Simply click the button that says "chat" to open the window. If we set things up correctly, which I think we did, then the only individual you should be able to send a message to is our host, Andrew. He has been collecting questions shared throughout the night and consolidating those that are repeated. I'll then read those questions out loud and pass them to Sean or others who can respond. Next slide, please.

On the left side of the key controls is the mute and unmute button. This is shown in the red box at the bottom of the screen. After first reading some questions that arrive via chat, we'll turn our attention to call-in participants. So if you are attending by phone, you can unmute yourself using *6. Please remember that this meeting is being recorded and that recording will be uploaded to the project site so that others who were unable to attend tonight may receive the information we've shared with you today. If you would prefer that your voice not be recorded, then please remain muted and consider typing questions via chat. Next slide, please.

Slide 29: Questions?

We're now going to transition to the Q&A session and we'll keep this slide up during the Q&A. It looks like we have a lot of time left to answer as many questions about the plan or the process as we can before about 7:30 Pacific time, when we're going to try to end the meeting. If we run out of time, then please share your thoughts via one of the methods that I provided on the slide. Like I mentioned earlier, the easiest way to pose a question is to provide it by chat. That will go to your host, Andrew. And this allows you to be anonymous. Andrew and I are going to be working together to read out the questions that come. And then when there's a lull, then we'll turn to the call-in participants.

Question and Answer Session

OK, let's see. So, Andrew, I'm assuming that you have been gathering comments that have come in. And then I'll go ahead, and I will read these out loud. OK, so it looks like the first question that Andrew gathered from the chats is...

Question: So why is the rim trail extension dropped from the proposal. Is this to focus efforts elsewhere? Does the rim trail not meet certain needs?

Answer: The rim trail was considered because it came up in public comment as something that would be exciting and new for the park. We did look at that; we fully analyzed the alternatives with the rim

trail on the east side. As many of you know, there's currently a large section of trail on the west side of the park. We looked at how it would affect natural resources and cultural resources and visitor experiences. All this analysis, we encourage you to look at in chapter three in the document. We did identify a number of issues with the East Side rim trail. This a number of issues with the eastside rim trail including proximity to rim drive, the lack of views along much of the trail alignment - particularly the Southeast trail being pretty far away from the rim. There's a large likelihood for creating social trails which we see in many cases on the existing trails. Safety concerns along unstable slopes. Definitely one of the biggest challenges is impacts to sensitive and rare plants that occur in that high elevation environment, particularly white bark pine. It was just listed as being on the endangered species list; we're working through that right now. It makes it much more challenging. Here at Crater Lake we have a strong emphasis on white bark pine restoration. There's definitely concerns with conflicting with that major parts of what we do to protect that pine. The other issue is potential impacts to the historic Rim Road. There are portions of these trails on the Rim Road; further impacts to the unimpacted sections could be problematic. It might be a long summary, but we know there's a lot of interest in the trail, so we put a lot of effort into analyzing it. We're definitely looking for your comments on this analysis so please check that plan out and provide feedback. Question: What steps will the park take should they discover visitor impact on trails that are unsustainable and how does the park decide which impacts exceed that threshold. For example, what if equestrian waste exceeds expectations in areas that are newly available to equestrian use. Off the top of my head, I'm thinking of two people who can provide great answers to this. Maybe Jen Gibson from the park can answer that question for us or Andrew, who is the host of our meeting and works at the Denver Service Center, can answer it. Here is the question. What steps will the park take should they discover visitor impacts on trails are unsustainable?

Answer: We have to look at it not just with the new trails, but with all the trails we have in place. As Sean Denniston mentioned early with the extension of the rim trail and the social trails along there, any of the new features that we're adding – the bike trails, dog-friendly trails – any of those have potential to have an impact on resources. Generally, we learn about those impacts in several ways. We've got backcountry crews here in the park that hiked these trails regularly. They generally note things such as trash that occurs. We have our trails crew here that throughout the summer work on all the trails and note major problems. Our wildlife and botanical crews – we're in the backcountry extensively and we spend a lot of time in the front country. So usually those four groups are ones that start to recognize the problems early on. I believe, part of the plan has ways in it to look at those things and as we start to have a problem, we start looking at these issues a little bit more. Really starting to evaluate what the potential issues are and what potential solutions might be - either to mitigate those issues, like simply redirecting trails or small segments of trails, to a full on where if we saw a bad problem the park might have to have a discussion about curbing the use of trails. Other parks have created systems to limit the number of users on trails and those sorts of things. There's a host of different options we would have to evaluate, but we wouldn't do that until we started noticing potential problems.

I would direct the commentor and others on the line today to one of our appendices in the document. That's the appendix for monitoring, related to indicators and thresholds that I talked about earlier in the presentation. Our visitor use management specialist played a role in leading us through this

planning exercise and writing that document. >> I'm Andrew White. I'm hosting some meetings. I work at the Denver service Center and focus on visitor use management and had a role in the development of appendix A in the plan that's related to monitoring and indicators. To the point made in the comment about the presence of waste, there is an indicator specific to the presence of waste. An indicator is a commitment to monitor and keep track of what's going with waste, waste increase over time. Identifying a threshold of where the increase will be too much, and if we see it we identify specific management strategies we take to address these issues whether we have new appendages. Check out Appendix A, which has a lot of those management strategies. A little bit of this gets into appendix B for capacity where if we start to see impacts of visitor use the management strategies will follow our identified. - >>Thanks for that insightful question.

Question: A question has come in via chat: Will more trails mean more visitors will stay in the park long, so result in more people overall and not necessarily resolve crowding, let me read that again. Will more trails mean that more visitors will stay in the park longer, resulting in more people and not necessarily resolving crowding. I am wondering if maybe Sean Denniston might like to respond to this.

Answer: I think one of the issues that we experienced at Crater Lake is a real focused interest on certain activities. In the context of trails, Cleetwood Trail – the lake trail, trails in the immediate vicinity of the highest visitor areas, so the trail is called Discovery Point Trail right there near Rim Village. And then there's a little less use on other trails that are close to those locations that are longer, but a little less used. We kind of look at that - that's where the main interest is. You can look at the other trails in the park and the use is pretty significantly lower. What we tried to do with this plan is create new trail options that are more diverse than what is in the existing trail system. To create an opportunity for people to move away from the highest visitation use of the trails to different levels they might be interested in. Certainly, it's possible that that might be the effect that people who want to have all the experience in the park might stay longer. But our observations are that most of our visitors are relatively short-term visitors who are there for a compressed period of time; they are there to see the lake. We hope these additional trails will allow them to - while there is a high visitation time in the rim village - have different positive opportunities in the park and then be able to perhaps revisit the busy trails during that shoulder time in the morning or evening so that they get to have the full Crater Lake experience. The cool thing about this plan is it offers monitoring opportunities so that as we start to engage and develop these trails we were going to see what happens. A part of this plan is monitoring the use of existing trails and watch what happens. As we expand out and change the trail system around, we'll be able to see what effect it's having. That's been our thinking for a long time - as we begin to implement the plan we were going to see the effects of that implementation. That's my answer for that.

Question: A question along the same line as the last one – will more trails to new places truly spread out the trails or will most people still want to go to the best known and popular locations that exist now. >>I'll answer. If Craig is on the line, I think he's been involved for many years with visitor use planning and might have some observations on that

Answer: >>Although there's never a precise way we can predict a response to this, we know there's additional demand being expressed anecdotally by visitors to get out and see some of these areas that are not highlighted right now in the park. We tell people it's a national park because there's more to it

than the lake itself. It's a place of great geologic resources and a place that has wonderful forests. We are looking in this trail management plan to open up some of those areas. One that's very near to the heavily used Cleetwood Cove Trail is Mazama Rocks. We think we're going to disperse people into those areas and get them off the road and out of their cars on to the east rim section of the park which is very lightly visited right now except for by motor vehicles. An example of that is that in 2010 we developed a short trail – an out-and-back trail of about one mile - to a feature called Falls in the Pinnacles road area. That feature was never accessed by park visitors; it was known to park staff. Once we put that in it immediately became a very popular trail and we saw many cars parked there were now experiencing this easy family and trail out to a very scenic spot – a very wonderful feature of the park that is now one of the highlights of the park for visitors. So we think that if we particularly highlight destinations that have some interest on these trails it will stimulate interest and disperse people. We know they will never be completely dispersed away from rim village, that's pretty much the focus of people's visit. We're confident enough that Crater Lake is a special enough park with enough natural features that we can generate some interest and move people out of these busy areas.

>> Thank you for that answer. I think this might be a good question for Sean.

Question: the long term implementation for the proposed plan relies on extensive impact monitoring. Where will the funding for that additional monitoring come from?

Answer: >>The keys to the monitoring protocols is that they are straight forward and implementable; they are not complex. They are basic things, such as looking at fixed locations, change in trail width, social trailing. So they can be simply by hiking the trail. It's an insightful funding. Monitoring is a difficult thing to fund from budget which is how we typically develop new trails. But the park is made a commitment to provide support from base operations to make this a priority. Fortunately, there is multiple groups in the park that have been expanding – Sean mentioned – their use of the trail system for backcountry surveys and wildlife. We do backcountry trail patrols. It's an 'it takes a village effort' so by piggybacking on existing work that's being done in the park where people are on trails and they can fill out this information while hiking - that's an opportunity for us to collect information. Where we don't get to areas, we can support the park trail crew to make that a priority to monitor. The other thing we talked about earlier is that we've got great partners in this park and a lot of people who really want to help us. A friends group, equestrian groups, hiking groups – terrific supporters of this program that we can leverage. It's a multi-prong approach; like I said it'll definitely take a village and support from everybody. Fortunately for all the things we have to do this is kind of a fun thing to do, because you get to go hike the trails. I'm optimistic that because of that we can have some success collecting data over time. >> May I jump in and add an addendum? Sean very importantly mentioned the factor about partners. One of the great things we have in one of our groups is the capacity to do fundraising. We have floated the idea to our capital-funding raising partner, the Crater Lake Trust, of eventually long-term working on an endowment program that is a 'trails forever'-type endowment that allows us to fund not only maintenance, but also monitoring of trail impacts. While that's not a certainty, it's a project in which they've expressed a great deal of interest. There's a lot of preliminary feasibility looking into that it that would be something the public would generally support because it's been supported at national parks across country from Acadia to Yosemite. If we could get an endowment that would be off the government books and something that is self-perpetuating in perpetuity. We

already have something similar to that in our Science & Learning Center endowment. By judicious use of that endowment, there would be funds available in the future from that endowment as well to do research and monitoring on the trails. So a combination of government and partnership and private endowment funds would all go towards trail maintenance and trail monitoring in the future, we would help. >>That's exciting, Craig.

Question: What about impacts to wildlife in now remote areas, such as wolves or maybe someday condors. Maybe I should extend this question to a resource specialist at Crater Lake.

Answer: I'll put it in perspective. Right now the park funds two technicians in the summer to do wildlife surveys throughout the park, including the backcountry to look at threatened and endangered species and the potential impacts we're having on them. It doesn't just focus on T&E species; it also considers species that are considered rare here that might be on the way towards listing. So we try to get ahead of the game on that to meet the mission of the NPS. Things like spotted owls, red fox, fishers, Pine Martin, wolves. We're going to continue to monitor those as a part of this plan and the overall work that were doing. Over time we will know if there have been changes of impacts from this plan. The biggest impact I see is the potential for where we know we have some of those rare species. If we start seeing a high amount of visitor use on those trails that we haven't seen that in the backcountry where our rare and threatened and endangered species occur. I'm less concerned about that in the short term. In the long term, we're going to have to monitor visitor use of our trails and if we see those thresholds reached. We're going to have to look at the potential impact it has on the species. We talked about certain scenarios such as saying if the spotted owl were in nest near the trail, we might have to potentially close that during the breeding season for that species until we can confirm they were successfully nesting or denning depending on the species.

We've got alternatives to implement to limit the impact that might have on some of our rare species.

Question: Is the bike keeping bikes out of proposed wilderness to be consistent with the Wilderness Act?

It's National Park Service policy to treat proposed wilderness – that's wilderness that hasn't received official designation - as wilderness. So in this plan this is in fact true. The bike use is pretty much remaining the same as it currently is - that's on existing park roads and existing administrative roads. The Grayback Trail actually an administrative road that we maintain as a road for administrative purposes. And the fact that it a historic road so we maintain it in its historic condition. Bikes are allowed in those locations. Any new bicycle use. In the preferred alternative, there's a trail that runs nearby the Munson Valley Road. We're talking about allowing bike use in the Mazama campground. In both cases that is outside the park wilderness. >>I will add that wilderness character is an impact topic that analyzed in this plan. You can find it in chapter 3 of the environmental assessment.

Question: How much of a threat do new trails propose in increasing the spread of exotic plants?

Answer: The science shows exotic plants in most areas come in on the basic ways – through vehicle use, through trail use, firefighting and those sorts of things. Trail use is one potential focus point for invasive species to get in the park. We have a very extensive program here being run by our botanist Jen Hooke, who has done a fabulous job over the last 10 years by developing this program and getting

us a strategy in place to deal with invasive plants. Getting all the permissions in place to use tools to treat these invasive plants and try to prevent them from spreading. The Park Service has a cyclic funding sources that we get every year; That cyclic maintenance funding source that allows us to focus treatment of invasive species on what we consider facilities. Trails are considered part of those facilities. We do have the opportunity to bring on crews each year, so any new trail that we bring in we would continue that effort on those new trails.

>> Andrew just typed 'no more questions from chat.' So, like I mentioned earlier, we started questions from chat and that's the way to stay anonymous asking your question nonverbally - but we also want to provide opportunities for people who would like to ask questions verbally. So, is there someone on the line calling in who would like to ask a question? If you'd like to ask questions verbally please raise your hand by clicking on the reaction button and then click raised hand. That's if you're participating via computer. Then we'll call on you, and you'll need to accept our request to mute. I don't see any hands raised right now. Let me know if there are any hands being raised. I'll ask - I see that there are people calling in by phone. Some of them might like to ask questions verbally. If you do, please remember that we are recording this meeting so that people who weren't able to participate can benefit from the information we shared with you and your insightful questions. We are recording. If you don't want to be recorded, please consider providing comments by chat. Is there anyone on the line calling and who would like to ask a question verbally? If so, please hit *6.

Question: Are these trails supported by the Great American Outdoors Act for enhanced park funding?

Answer: The Great American Outdoors Act will be funding, over the next several years, a lot of infrastructure in parks. Crater Lake National Park is not currently anticipating receiving any funding from that fund source specifically for trails. That's not entirely true. We are hopeful we might be a candidate - we might be getting GAOA funding to address the Cleetwood Cove Trail. The Cleetwood Cove Trail project, we have been working separately from the Trail Management Plan effort. But I want to say about GAOA - the park is benefiting to rehabilitate the East Rim Drive moving forward. One of the great things about GAOA - it's taking out of park funding sources a lot of infrastructure projects, which is freeing up project money that we would normally compete for in order to do trail projects. We think that the positive benefit of GAOA for us will also be that there will be more infrastructure funding to be able to utilize for the trail system. I want to pass it to Kirsten, who is our facilities manager who has been intimately involved in GAOA projects that are being proposed for Crater Lake >> Hi everyone, I'm Kirsten Hardin. We have a project that we hope will be approved for the Cleetwood Trail. It's basically rehabilitation of the trail and retaining walls that hold the trail in place. It's also fixing the marina down at the lake level. We have a high rock fall potential on that trail, so we are looking at scaling those rock cliffs so that people aren't hurt in that area. So yes, we're hoping to get a lot of money to help that trail that needs a lot of assistance right now because it's sliding down into the lake at the moment. We'd have to piecemeal that if we had other funding sources, so it allows us to transfer other dollars to trails in the rest of the part. It is helping us help all the other trails.

>> Andrew, are there any other questions that have come in by chat?

Question: What consultation has been done with the Klamath Tribes on the impacts of trail expansion? As a tribal member, visitor misuse and limited oversight of Cleetwood Cove and certain summits already negative impacting my experience as a member of the tribe. >>Okay so Sean, I'm wondering if Steve Mark is on the line? >>I'm happy to answer this. I'll also let Craig talk to it, because he's been consulting with the tribes for much longer than I have on this role.

Answer: This is a great comment, and one of the reasons why the trail plan is so important to us. It's going to give us additional tools to manage what we agree are impacts from use. When we talk about resources, one of the resources that we're committing to protecting are those cultural values that are important to the Klamath Tribes throughout the park. That's very important to us in this consideration. Throughout my involvement with this process, we've been consulting pretty regularly with the Klamath Tribes. We meet with them on a regular basis - with the Tribal Council - regarding ongoing projects in the park. This has been one that we've been giving updates on for the planning process. Right now, we are engaged in a consultation with them on the trails plan itself. We consult with the tribal chair as well as the culture and heritage group. They've all received consultation request for this stage in the process, and we plan on having an ongoing dialogue about this plan, and implementation, and everything else. With the development of these trails - this is a strategic, high level plan. When we go to develop these trails, any new development requires a complete consultation with the tribes to ensure that we're avoiding any resources for the tribal. This plan does not give the green light to do trail construction; it sets forth a strategy to what the plan looks like moving forward. Any new trail development involves extensive consultation with our tribal partners. Craig, do you want to add anything on top of that? >> Really just reiterating some things that you said. The entire purpose of this plan is so we approach the trail management aspect of our job at Crater Lake in a strategic matter. We recognize the issues we have on Cleetwood Trail and Garfield Peak Trail and the more popular trails. The intent of creating a comprehensive trail management plan is that we are looking at this in a way that we could reduce impacts overall to the park. We are working separately to look at visitor use management, which is how do we manage the number of visitors to the park. This plan is going to help us address how we manage those users who want to get out on the trails - which is a very specific subset of the overall visitation we have at the park. So, one of the concepts is to disperse the use away from areas that are currently heavily used like Cleetwood, Rim Village, the Rim Trail and Garfield peak. Giving people the opportunity to experience different areas of the park and release some of those really heavy impacts of overuse on the trail. We don't know if we'll be successful. It's a living document; we will monitor and make changes as we go along. This is not something that will lock in everything on the plan. Every action we take that is highlighted in this plan will be subject to further compliance and review, so this by no means is a clearance for us to do everything in the plan. It simply states a strategic outline of what would like to do. There will be more consultation as those projects were implemented.

>>We're coming up with less than 15 minutes in the meeting time. We've had a really productive question and answer session, but there might be more questions. This came via chat.

Question: Some of the trails in alternative 2 are along old fire roads. Wouldn't clearing these roads as class 2 trails be economical, with minimal impact?

Answer: That's a great question, and with old fire roads it's something that could definitely be true. One thing that we look at - these old fire roads, they are existing features on the landscape. So, the impact, as far as ground disturbance – this has already occurred, so there could be economics of scale. The flip side of that is that many of the older fire roads that we find in the park were not developed to any standard. We often find is that they are built on over-steep slopes. They might not have created appropriate stream crossings. There's a lot of issues with the construction because the early techniques were driving machinery through wilderness. We have a much lighter touch on the land now. It's not always the case that a road is appropriate to use for trail because of that. It really depends on the road. It's certainly possible that is the case. A part of moving forward with any consideration like that would be to go out there and to make the assessment to determine that very thing – if using the road is practical, or if it would be more trouble than it is worth because of poor alignment. That's our experience with poor fire roads.

>> We appreciate your questions if you have any general comments or questions that you don't feel like at tonight or that just aren't coming to mind right now, please go ahead and use the project website on the slide here navigate to the plant that's open for comments and provide them if there's any more questions or comments please go ahead and provide them by the project website for one of these other means by October 21. Then that way your comments can become a part of the official record and we will have those benefits of your questions to sort through to determine which ones might trigger corrections or changes to the plan. Last call for questions. >>I encourage you to go to the project website and spend some time with the trail management plan and provide your comments to us thanks for your time tonight for your great questions and support that you showed to the park service just wanting to extend my sincere thanks to everybody took time to call in and join in by computer. Thank you so much and have a great night everyone. [Event concluded].