

**BUREAU OF ENVIRONMENT
CONFERENCE REPORT**

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting

DATE OF CONFERENCE: January 17, 2024

LOCATION OF CONFERENCE: Virtual meeting held via Zoom

ATTENDED BY:

NHDOT	USCG	US Fish & Wildlife
Andrew O’Sullivan	Absent	Absent
Joshua Brown		
Jon Evans	EPA	The Nature Conservancy
Mark Hemmerlein	Jean Brochi	Absent
Rebecca Martin		
Levi Byers	NHDES	NH Transportation & Wildlife Workgroup
Kerry Ryan	Karl Benedict	Absent
Chris Carucci	Seta Detzel	
David Smith	Emily Nichols	
Rhona Thomson	Mary Ann Tilton	Consultants/ Public
Curtis Morrill	Eben Lewis	Participants
Arin Mills		Leslie Merrithew
Ron Grandmaison	NHB	Gregg Cohen
Carol Niewola	Absent	Carl Gross
Jason Tremblay		Jennifer Riordan
Meli Dube	NH Fish & Game	Tom Levins
Corey Spetelunas	Mike Dionne	
Hans Weber	Kevin Newton	
Rick Dymont	Jared Lamy	
Lilah Flynn	Melissa Winters	
ACOE	Federal Highway	
Absent	Jamie Sikora	

PRESENTATIONS/ PROJECTS REVIEWED THIS MONTH: *(minutes on subsequent pages)*

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Finalize Meeting Minutes

Finalized and approved the December 20, 2023 meeting minutes.

Errol, 42751 (non-fed):

Kerry Ryan, NHDOT Environmental Manager, gave an overview of the proposed state funded bridge maintenance project, located at bridge 071/030 which carries NH Route 16 over an unnamed perennial stream in Errol, stated the existing structure is an I-beam deck constructed between 1920-1930, and is a Tier 3 crossing. Photos were shown of the surrounding area and the inlet and outlet ends of the bridge. The key points from the 2/16/22 meeting were summarized and it was noted follow up emails to the meeting between NHDOT, NHFG, and NHDES will be included with the application.

Levi Byers, NHDOT Bridge Maintenance Engineer, described the updated scope of work which includes the installation of a temporary bridge for traffic control. This will allow for single phase construction which will shorten the construction time, allow for wider traffic loads, and improve safety for trail users of the Seven Island bridge, in comparison to the phased construction which was presented at the 2/24/22 meeting. Draft impact plans, impact table, construction sequence, and hydraulics were discussed.

Andy O'Sullivan, NHDOT, asked Karl Benedict, NHDES, if the impacts where the existing concrete bottom is being removed and restoring it to natural stream would be permanent or temporary. K. Benedict stated it could be removed from the potential mitigation impact calculation if mitigation were necessary, which is not the case as was later verified by Seta Detzel. The Department will show the impacts through the channel as permanent on the plans and provide an impact/mitigation summary explaining why there is no mitigation needed based on the statements of the previous resource meeting, the incorporation of wildlife shelves that are connected to the banks, and the restoration of the stream channel by the removal of concrete bottom and stream simulation.

Karl Benedict, NHDES, requested a longitudinal profile be included in the application, details for the restoration of the area of the temporary bridge, confirm impacts to the PRA are temporary, and details for the connectivity of the wildlife shelf.

Mary Ann Tilton, NHDES, no comment

Seta, Detzel, NHDES, no mitigation is required

Mike Dionne, NHFG, no comment

Kevin Newton, NHFG, no comment

Jared Lamy, NHF&G no comment

Mike Hicks, ACOE was absent from the meeting

Jaime Sikora, not a FHWA project, no comment

Jean Brochi, EPA, no comment

Alton, 44456 (X-A005(504)):

Chris Carucci, NHDOT, introduced the project, Alton 44456. The project is located on NH Route 11 near the edge of Lake Winnepesaukee, north of Alton Bay. It is a culvert replacement project, funded under FHWA's Emergency Repair Program. The existing culvert is a 4' wide by 6' high by 84' long stone and concrete box culvert carrying an unnamed perennial stream. The history of the culvert's construction was described, as well as the storm events of July 2023 that caused structural failure of the culvert and the formation of a large sinkhole in NH Route 11. Photos were shown of the project location and damage from July 2023. The culvert walls collapsed and stone slabs fell into the culvert, blocking flow. Temporary repairs included fixing the culvert walls, removing the slabs and replacing them on top of the culvert, and installing steel plates and backfill. It wasn't possible to completely remove all fallen stone, so the culvert is still partially blocked. There is no known history of flooding and damage prior to July 2023.

The project's setting was described, including photos of the culvert inlet, inside the culvert (showing failure location), the outlet, downstream channel, sediment deposited right and left of downstream channel as a result of the July storm, and the next downstream crossing under Richardson Drive about 100 feet downstream. NH Route 11 is regionally significant and a detour using state-maintained routes would not be practical (38 miles).

Resources in the area are relatively few. No impact is anticipated to protected shoreland, FEMA mapped floodplains, prime wetlands, contaminated soils, conservation lands, invasive species, or priority resource areas. No plant, wildlife, or exemplary natural community records were identified as a result of the NHB DataCheck. The project is not within the likely range of Northern Long-Eared Bat or Small Whorled Pogonia. There is potential for the need of tri-colored bat review if it is listed this year. Regarding cultural resources, a Request for Project Review was submitted to NHDHR in December 2023. It was noted that NHDHR would concur with a "No Historic Properties Affected" finding, due to storm damage impacting the stone box culvert's historic integrity. No water quality concerns are anticipated. LRS would be stockpiled within project limits and reused on embankment slopes. A map was presented showing that highest ranked wildlife habitat is present at both the inlet and the outlet of the culvert.

It was described that wetlands were delineated in August and extended in December. Wetlands include a few non-jurisdictional areas, the stream, and one adjacent wetland on the inlet side. The stream is tier 3 by drainage area, 660 acres. It has a low slope and is a type E stream. Average reference reach values were shown, and a compliant span was calculated to be 20'. A revised LIDAR boundary was submitted to Streamstats based on LIDAR and field review. Design flows for alternatives analysis are based on Streamstats revised flows, with $Q_{50} = 347$ cfs and $Q_{100} = 426$ cfs. At high flows there is potential for flooding private property to the west of project area. The prior capacity of the culvert was just over a Q_{50} , with headwater equal to the bypass elevation. The low pavement elevation of the property to the west, the Mt Major Storage Area, was used for alternatives evaluation, as it is lower than the bypass elevation.

The NH Route 11 profile was then shown, showing the existing culvert as well as the hydraulic design size. Impacts were shown to demonstrate differences between having the road closed versus keeping the road open during construction. The 4' span and 9' span alternatives would not result in significantly different impact areas. The stream profile was also shown, including existing and proposed conditions.

Alternatives were described, including repair, which is not considered to be a practicable long term solution; replacement in the same location, same length, with similar invert elevations (which would include downstream sediment removal, as would all the other alternatives); a hydraulic size culvert with a 6' rise and 9' span; a bore and jack with a 104" diameter circular pipe, which would allow the road to stay open; and a compliant span 20' bridge. The hydraulic size and bridge alternatives would increase flow to the downstream culvert, which is already undersized. Replacing in kind would cause only a marginal increase in flow. Any larger structure would require replacing the downstream private crossing.

Replacing in kind with the road open would have a longer construction duration, 5 months, and a higher cost at \$1,500,000. Closing the road would require concurrence from the Town of Alton, and would take 3 months with a lower cost at \$940,000. Impact plans were shown for each of the closure options, with similar size of impact area for the two options. The hydraulic size alternative with road open option would cost \$1,762,000 and take 5 months, and the road closed option would cost \$1,265,000 and take 3 months. The hydraulic size circular pipe would not require road closure and would cost around \$1,620,000; however, this alternative is unlikely to be selected due to higher impacts (permanent stream realignment and access roads). A compliant span bridge would meet all stream crossing rules and hydraulic requirements and would cost \$2,700,000. This alternative is unlikely to be selected due to significantly higher costs and impacts.

For the larger size alternatives, the downstream culvert would need replacement and the roadway elevation would need to be raised to prevent bypass. The 8'x'4' box would be replaced with a 9'x6' box, and the road grade would be raised by 1.5'.

In summary, the project is scheduled to advertise in November 2024 with construction in the 2025 season. The preferred alternative will likely be to replace in kind or with a hydraulic size precast box culvert; either would be an alternative design due to the previous history of flooding.

Impacts for the NH 11 Crossing (for the likely alternatives):

Less than ½ acre disturbed area

Less than 5,000 SF tree clearing

Permanent stream: 10 LF at inlet and outlet (less than 500 SF total)

Temporary Stream: 30 LF at inlet and outlet (less than 1,500 SF total)

Temporary Wetland: 1,000 SF or less at inlet (PFO1E)

A wetland seed mix will be used to restore jurisdictional areas.

Vegetation that is cut in temporary impact areas will be allowed to re-establish naturally.

Other Impacts:

Any alternative would include downstream sediment & debris removal, with about 10,000 SF disturbed area, 100 LF temporary stream impact, and no tree clearing.

Upsizing of the downstream culvert and raising the grade of Richardson Dr would require about 8,000 SF of additional disturbed area, less than 500 SF stream impacts, and no tree clearing.

Agency Member Comments:

Karl Benedict, NHDES: It sounds like you're still working through what the final alternative proposal will be?

Chris: Yes, 4' span or 9' span.

Karl: And that consideration includes the downstream box that it sounds like you're looking into a little bit further. We would be looking at alternative design, as you've identified, with hydraulic sizing downstream obviously being a component of this. As far as the downstream impact areas, most of the downstream work is out of jurisdiction, it looks like, above top of bank; we would support that. I appreciate the slide specifically that shows the alternatives. I think that's a helpful way to progress forward. I don't have too much more at this point – any specific questions? You're on track as far as the downstream limitations and considerations.

Chris: With the replace in kind alternative technically increasing the flow to the downstream structure a little bit, my estimation was one inch in change in 100-year flood elevation would not be significant enough to violate the rules on not increasing frequency of flooding. We may need a little more documentation on other impacts, but it's relatively small.

Karl: Yeah, you're on track with that. We need to justify whether or not there are going to be issues based on that – will there be significantly more downstream erosion, etc. Sounds like you're already hitting on it. As far as that being a question, we would just need to address it with legitimate backup.

Andy O'Sullivan, NHDOT: Was the downstream structure put in by town of Alton?

Chris: No, it was a private owner.

Andy: Is it feasible for DOT to replace that, or no?

Chris: We're not clear on the implications of being able to do that.

Andy: You're doing a file review now, correct?

Chris: The file review may be important, there's a chance I missed something on the drainage area and the flows are less than we expect, but we want to make sure we have our issues figured out before we proceed. We'll have to talk to our directors and our front office for direction on which way they want to go – do we want to get into downstream mitigation, or do we want to go with the replace in kind which would not require touching that culvert?

Andy: Okay, thank you.

Mary Ann Tilton, NHDES: Thank you for the presentation. It was good to hear the backgrounds on the impacts and the costs. I have no further comments.

ARM Program, NHDES: This is Emily, are there PRAs upstream or downstream of the crossing?
Chris: No, it's not a mapped 100-year floodplain, so I assume the upstream adjacent wetland is not considered a PRA. In any case, it would only be a temporary impact for the likely alternatives.

ARM Program: It's difficult at this time without knowing which alternative will move forward, but mitigation will be dependent on the design.

Kevin Newton, NHFG: No questions at this time, thank you.

Jared Lamy, NHFG: From a fish habitat perspective, we'd be in favor of increased hydraulic capacity, but we understand if not possible.

Jamie Sikora, FHWA: It's been a while since I've handled ER projects and will defer to the Department at this point and further review, but if you had to upsize and address the downstream culvert as mitigation, even on private property, it would probably be eligible under the program. I realize that DOT would have to match 20% of the cost. Can you clarify, the original box culvert was constructed in the 1800s? And this flood caused the failure, no preexisting conditions?

Chris: Yes, it was part of an old railroad corridor. They did a good job building then. When route 11 was constructed, the railroad had been abandoned and they just filled over it.

Jamie: I would also keep in mind that the ER program has been updated, I'm not as familiar, but you want to try to address this in the long term because future damage at this location might not be eligible. In the past, we used to go back and fund the same areas. Just something to keep in the back of your mind.

Jean Brochie, EPA: No comments on this.

Sunapee, 44438 (X-A005(529)):

The roadway repair project is located along NH-11 in the Town of Sunapee and along a segment of roadway approximately 2.5 miles west of I-89 Exit 12. The project is located at very top of the Tucker Brook stream watershed. Although there are no proposed impacts to stream resources as part of the project, water from the adjacent wetland flows into Tucker Brook, travels approx. 4.4 miles where it enters the Cold River. The Cold River then flows approximately 2 miles and enters Sunapee Harbor. Historic topographic maps and plans show NH-11 was re-aligned to the current location about 1939, from a more southern alignment. The 1939 plans show removal of muck was required for construction of the new roadway alignment, and the adjacent wetland was bisected at that time. The adjacent land area is rural and mainly undeveloped/forested, with utility lines paralleling the road nearby and no conservation lands.

Arin briefly described the project is a result of systemic roadway settlement over multiple years, with a major roadway failure during the summer 2023 major rainstorm events. A lane closure was implemented, and jersey barrier installed to maintain 2-way traffic by utilizing the existing passing lane through this high traffic volume road. The barriers and lane shift remain today and will remain until the repair is complete.

Wetlands were delineated adjacent to both sides of the NH-11 by DOT, both PFO and PEM wetland types and a short intermittent stream (R4) (wetlands #1-4, as shown). Existing closed drainage pipes adjacent to the project area was also shown. Photos were shown of all adjacent wetlands.

Curtis noted the underlying issue is a large muck deposit under the roadway shoulder at maximum depth of around 30 feet. Curtis noted that early alternatives investigated included a reinforced soil slope, grout injection, and roadway realignment. These were not further developed based on challenges identified during preliminary assessments. The alternatives that progressed to further evaluation are unsuitable soil removal and replacement, ground improvement, and timber pile stabilization (preferred). Curtis noted that the removal and replacement option would be the standard approach, however given the depth of removal necessary, excavation support and the excavation limits extend further into the wetland causing greater impacts to wetland resources. The ground improvement option is not proposed based on constructability, limited contractor availability, and voids in the embankment. The preferred alternative is also a more typical construction methodology, and less likely to require additional encroachment into the adjacent wetland during construction.

Curtis described the proposed project to address the failure and roadway reconstruction. Use of sub-surface timber piles will be used to stabilize the roadway and shoulder. Embankment material will be replaced, and new structural box material will be installed. The existing roadway will be re-established in the existing footprint with temporary roadway widening to maintain 2-way alternating traffic throughout construction. Plans were shown of the proposed slopelines relative to the adjacent wetlands, to include the temporary lane shift during construction. A figure showing the preliminary timber pile, transfer pad, sub-surface muck, groundwater level, ROW and bank establishment. A plan showing the typical remove and replace alternative depicts a much larger wetland impact and was part of the preferred alternative decision. Preliminary impacts for the preferred timber pile roadway stabilization will result in an estimated 2,700 SF of permanent wetland impacts and 3,760 SF of temporary impacts for traffic diversion and installation of erosion control measures.

A basic construction sequence and project timeline was presented: Construction Start Spring 2025. Install erosion controls, construct widening to the NW and shift traffic, construct timber piles, transfer pad, embankment and roadway base and selects, return traffic to existing and remove widening, final paving, revegetate and remove erosion controls. The project anticipates to be completed in one construction season.

Arin reviewed the wildlife resources. NHB23-2391 with no recorded occurrence of T&E species. USFWS Northern Long-Eared Bat concluded no effect. No predicted or confirmed Priority Resource Areas (PRA) or stream impacts. Both NH Fish and Game habitat corridor and habitat ranking maps were depicted, with no impacts from the proposed project. No FEMA Floodplain,

Designated River, and Conservation Lands are within the project area. Section 106 for historic resources is still underway, although no adverse effects is anticipated based on preliminary cultural review. Arin explained that a few stone walls were observed near the project limits, but impacts will be limited or walls will be avoided in final design.

Arin provided a summary of the Principal Functions & Values evaluation for wetland #1: Floodflow Alteration, Sediment/Toxicant Retention and Nutrient Removal. She described the proposed design is least impacting to wetland (avoid & minimize) It was determined no net loss to Functions & Values as a result of the project. A permitting summary where the project is Minimum Impact (Env-Wt 407.03) with 2,700 SF permanent. Temporary impacts of 3,760 SF for installation of erosion control measures and temp. traffic diversion. No mitigation per Env-Wt 313.04(a)(1): <10,000SF perm impacts & < 5,000 SF ACOE threshold and Env-Wt 313.04 (b)(3) where all temp impacts will be restored with seed mix.

A basic project timeline with Alternatives Analysis in-process, Preliminary/Final Design in Spring 2024, Application Submission anticipated Spring 2024, Advertise in January 2025 and construction starting 2025. It was noted the project does have FHWA funding.

Karl Benedict (NHDES) appreciated presentation of the alternatives analysis for the project. He did comment the project would be classified as minor (not minimum) based on the cumulative permanent and temporary impacts greater than 3,000 SF. Andy O'Sullivan (NHDOT) noted the temporary impacts are partially for installation of erosion control measures around the work area, and impacts will be minimized during construction. Curtis M clarified the plans shown for timber pile are preliminary and impacts may be lessened in the final design. Karl B requested specification of the seed mix in the application as to support temporary impacts, Andy O said that can be provided.

Seta Detzel (NHDES) confirmed no mitigation based on impacts.

Kevin Newton (NHF&G) had no wildlife comments and suggested construction in dry part of summer season for protection of amphibians, if possible. Andy O said DOT would evaluate and accommodate, if feasible.

Jared L (NHF&G), Jamie S (FHWA) and Jeannie (USEPA) had no comments.

Lebanon Municipal Airport (3-33-0010-073-2023):

Introduction:

Andrew O'Sullivan started recording and invited Stantec to speak. Leslie Merrithew and Gregg Cohen (Stantec) were in attendance as presenters, and were supported by the Lebanon Municipal Airport Manager, Carl Gross, and representatives from NHDOT Aeronautics Division, Carol Niewola and Rick Dymant.

Project Description:

Noting that this was the project's fourth time in front of this interagency group, Stantec gave a brief overview of the safety improvements project:

The proposed project consists of a series of federally funded airport safety improvement projects at the Lebanon Municipal Airport including the extension of Taxiway 'A', Runway 36, the relocation of several taxiway stubs, the relocation of the Localizer Antenna and Distance Measuring Equipment, airspace obstruction removals and associated grading, stormwater, and electrical improvements.

Wetland Grading/Fill Impact Presentation:

Stantec presented a figure showing the grading and tree removal impacts and described the original 96,512 SF (2.21 AC) grading/fill wetland impacts that were identified in the wetlands permit application in June 2023. Stantec summarized the results of USACE's Approved Jurisdictional Determination (AJD) received on January 3, 2024 resolving that wetlands F, G, H, and I are not subject to CWA jurisdiction and are therefore not subject to federal review or federal compensatory mitigation. The project grading/fill impacts identified within these wetlands measure 64,709 SF (1.48 AC).

Stantec summarized a request sent to NHDES via email on January 9, 2024, asking for a review of these same wetlands under RSA 482-A:3 paragraph IV.(b) which notes that "*man-made nontidal drainage ditches legally constructed to collect and convey stormwater and spring run-off may be maintained, repaired, replaced, or modified as necessary to preserve their usefulness without a permit*".

Stantec advocates that wetlands F, G, H, and I are nontidal drainage ditches that were legally constructed to collect and convey stormwater and spring run-off, and therefore should not be considered jurisdictional by NHDES for the purposes of calculating the amount of wetland impacts to be mitigated.

Discussion:

Andy went down the list of attendees for their comments/questions.

Karl Benedict (NHDES, Public Works Supervisor) – No comment.

Mary Ann Tilton (NHDES, Wetlands Assistant Bureau Administrator) – NHDES has met on the Airport's request for the agency to evaluate Wetlands F, G, H, and I. NHDES's current position is that these wetlands continue to be jurisdictional under State law and will require mitigation.

Stantec requested more information on why the wetlands were not considered under the RSA and Mary Ann noted that it was not demonstrated how the project would preserve the usefulness of the wetlands that are being replaced and/or modified.

Stantec noted that the project is recreating substantially more new swales and ditches than are being impacted, and Wetland F's Function and Values will be left largely intact. Stantec also stated that the functions of these four wetlands are to act as ditches and conveyances for stormwater and spring run-off.

Seta Detzel (NHDES, Wetland Mitigation Specialist) – Would like to understand where in the application it says that these wetlands are ditches and where Stantec shows. This might help clarify the Airport's request and NHDES could take another look at whether the removal of these wetlands would require mitigation.

Stantec advised that they would be found in the Wetland Scientist's report included in the permit application and will send the page details to the group for their review.

Seta noted that it would be helpful if Stantec could also provide a description on how we are preserving usefulness in another way on this project. Stantec agreed.

Stantec noted that time is of the essence, as we are required to have permits in hand as soon as possible to be eligible for this year's federally funded AIP program. This is a multimillion-dollar safety improvement project that is important for the region and we have already experienced a one year delay due to the lengthy permitting process. Anything the agencies can do to assist with the project obtaining the permits would be very much appreciated.

Emily Nichols (NHDES, ARM Fund Program Manager) – Supports comments that Mary Ann provided.

Kevin Newton (NHFG, Wildlife Biologist) – No comments.

Stantec requested if there were any updates on the status of the NHFG 1004 Fis consultation application, which was submitted on November 21, 2023. Kevin will check with his colleagues and get back to Stantec.

Jared Lamy (NHFG) – No comments.

Jamie Sikora (FHWA) – No comments.

Jean Brochi (USEPA) – Confirms that the USACE AJD was sent to Stantec on January 3, 2024 via email by Taylor Bell. Notes that Stantec also requested an AJD on another wetland, Wetland M, which the Corps disagreed with and was not included in the current AJD.

Stantec agreed that they are not asking NHDES to evaluate Wetland M at this time. We would like to focus the agency's review on Wetlands F, G, H, and I.

Andy asked if there were any further comments or discussion. Nothing further from the group.

Andover, 40392 (X-A004(384)):

Jenn Riordan (GM2) explained that the project was last presented in 2019 and that the preliminary design has been completed and final design is ongoing. The wetlands permit application is expected to be submitted in April 2024. The project involves the replacement of the bridge that carries US Route 4 over the Blackwater River in Andover. The existing structure is a through-plate girder bridge with a 70-foot span. It was constructed in 1933. The bridge is currently on the State's Red List and has previous occurrences of roadway flooding. During large

storms, water overtops the banks of the Blackwater River and floods the section of Route 4 near the bridge. The existing bridge does not accommodate the 100-year storm event. Rehabilitation of the existing bridge is not feasible due to the condition of the existing structure.

The project proposes the replacement of the existing bridge with a 104-foot span bridge (101-foot clear span) that will convey the 100-year storm with 1-foot of freeboard. New abutments will be constructed behind the existing abutments. The existing abutments will be cut at the ground level and stone will be placed at the edge of the channel for scour protection. A farm access driveway in the northwest bridge quadrant will be relocated further west. The bridge will be closed during construction and traffic will be detoured. The bridge will be widened 8 feet and approximately 500 feet of roadway widening will occur at each end of the bridge. The roadway will also be raised 4.5 feet near the bridge and there will be an increase in new impervious surface of approximately 6,325 SF. The project is subject to Alteration of Terrain requirements, so a stormwater treatment swale is proposed in the northwest quadrant of the bridge. Temporary and permanent easements will be required.

The following project alternatives were evaluated:

- Bridge Rehabilitation – Not feasible due to poor condition of existing bridge.
- Bridge Replacement with a 101-foot clear span – This is the proposed action.
- Stream Crossing Rules Compliant Structure with 172-foot span – Not practicable at existing location due to cost and impacts to adjacent properties.
- Traffic Control Alternatives
 - Accelerated Bridge Construction with bridge closure and detoured traffic – This is the proposed action.
 - Offline temporary bridge – This would result in a larger amount of wetland & watercourse impact.

Environmental resources include prime wetlands in the northwest and southeast bridge quadrants. All wetlands within and adjacent to the project area are Priority Resource Areas (floodplain wetlands adjacent to a Tier 3 stream). The crossing of the Blackwater River is a Tier 3 crossing. The river is subject to the Shoreland Water Quality Protection Act and is listed as a Class A water. The river was determined to be non-navigable by the US Coast Guard and is mapped as Essential Fish Habitat (EFH) for Atlantic salmon. An EFH assessment was completed in 2023 and NOAA responded that the project as proposed would avoid and minimize impacts to EFH. The project is also located within a Drinking Water Source Protection Area and a Zone A floodplain.

A determination of No Historic Properties Affected was received. No evidence of archaeological resources is present and the existing bridge is not eligible for the National Register of Historic Places. Conservation land (town-owned easement) is located southwest of the crossing and temporary and permanent easements will be required.

Federally-listed species include northern long-eared bat and monarch butterfly. A Not Likely to Adversely Affect determination was received under the FHWA Programmatic Biological Opinion. Tree removal during the bat inactive season is proposed. The most recent NHB report did not contain any state-listed species. Brook floater was listed on a previous report and a survey in August 2022 was completed. No brook floater mussels were found and NHFG

consultation was completed in 2022. NHFG recommendations regarding the project have been included as environmental commitments.

A stream crossing assessment was completed using a combination of bathymetric survey, LiDAR elevation data, and field observations. Field measurements were not able to be taken due to the width and depth of the river. The Blackwater River is a Type E stream at the crossing and downstream of the bridge and a Type F stream upstream of the bridge. The average bankfull width is 78 feet, meaning a stream crossing rules compliant crossing would be 172 feet (2.2 x BFW). A 172-foot span is not practicable due to property impacts and cost. A longer span bridge would also have additional wetland impacts. The proposed 101-foot span meets all items in Env-Wt 904.07 and 904.09 except the span requirement. All requirements under Env-Wt 904.01 will be met.

Permanent wetland impacts are proposed from roadway widening and slope work. The largest portion of prime wetland impact will result from relocating the farm field access. Watercourse impacts will result from the placement of stone for scour protection, water diversion, and construction access. A total of 9,335 SF (256 LF) of permanent impact and 1,332 SF (213 LF) of temporary impact is proposed. This includes 4,430 SF of permanent prime wetland impact and 3,339 SF of permanent non-prime wetland impact. No loss of wetland functions is anticipated as the impact areas are small relative to the overall wetland system.

Mitigation will be required for the proposed impacts to the PRA wetlands and Blackwater River. Approximately 7,769 SF of permanent impact is proposed to PRA wetlands, which will involve a proposed payment of approximately \$36,919 to the ARM fund. In addition, an ARM fund payment of approximately \$82,520 is proposed to mitigate the watercourse impact. The design will improve hydraulic capacity, aquatic organism passage, and geomorphic compatibility by lengthening the span, however the project involves >200 LF of watercourse impact from the placement of stone riprap.

The meeting was then opened for comments and discussion.

Karl Benedict (NHDES)

- Asked about coordination with the local conservation commission regarding prime wetlands. Correspondence with the conservation commission will be necessary to determine that there will be no loss of functions and it would be best to have the correspondence done before application submittal.
 - Meli Dube (NHDOT) added that an initial contact letter was sent to the Andover Conservation Commission, and they were invited to the public information meeting and public hearing. A copy of the permit package will be sent to the conservation commission.
- Suggested checking on time-of-year restrictions for EFH in the USACE NH General Permit, regardless of the prior NOAA coordination and approval of project.
- Anti-degradation standards (0 NTU, no mixing zone) need to be met for Class A waters. Coordination with NHDOT's Water Quality Program is recommended during permitting process.
- The project appears to meet the criteria for Env-Wt 904.09 and Alternative Design is not needed if engineer can certify the anticipated improvements at the crossing. It may be

considered self-mitigating if natural streambed simulation can be used instead of the stone riprap and if a wildlife shelf can be incorporated.

- Andrew O’Sullivan (NHDOT) asked if a wildlife shelf is possible and if streambed simulation could be used.
 - Tom Levins (GM2) mentioned that a flatter area is proposed near one of the abutments. This could potentially be utilized as a wildlife shelf. Riprap at the edge of the channel is necessary for scour protection near the abutments. The center of the channel will be natural material.

Mary Ann Tilton (NHDES)

- Reinforced the prime wetland discussion regarding correspondence with the conservation commission. Recommended looking at the October 2023 rule change regarding mitigation (Env-Wt 803.01).

Seta Detzel (NHDES)

- Questioned if the project is self-mitigating if riprap extends beyond the existing abutments. Cross-sections would be helpful. Permanent impacts to prime wetlands and PRAs from roadway widening and farm drive relocation require mitigation.

Kevin Newton (NHFG)

- Asked if brook floater was the only record on the NHB report.
 - Jenn Riordan – The most current NHB report had no records. A previous report had brook floater.

Jared Lamy (NHFG)

- No comments.

Jamie Sikora (FHWA)

- No comments.

Jean Brochi

- Asked if EFH consultation with NOAA is complete.
 - Jenn Riordan confirmed that it was completed. NOAA responded that the project as proposed is not anticipated to adversely affect EFH.

Nottingham, 40612 (Non-fed):

Jenn Riordan (GM2) introduced the project which involves the replacement of the NH Route 152 bridge over the North River in Nottingham. The existing bridge is a reinforced concrete jack-arch structure with a 17-foot span. It is on the State’s Red List and does not convey the 100-year storm. The project proposes to replace the existing bridge with a 30-foot span bridge. The new bridge will convey the 100-year storm. The bridge will be widened 2 feet and the project will also involve 200 feet of roadway widening at each end of the bridge. Approximately 2,600 square feet of new impervious surface (pavement) is proposed. The project is not subject to AoT requirements (under 50,000 square feet of disturbance). Temporary and permanent easements will be required.

Bridge rehabilitation is not feasible due to the deteriorated condition of the existing bridge. Replacement with a NHDES stream crossing rules-compliant structure (66-foot span) was evaluated. This alternative is not practicable due to cost and impacts to wetlands and adjacent properties. Several traffic control alternatives were evaluated during preliminary design. Closing the bridge and detouring traffic during construction is proposed. Phased construction would maintain one lane of traffic but would require additional widening and more impacts compared to bridge closure. Construction of a temporary bridge would allow the roadway to remain open, but would result in greater impacts.

Priority Resource Area wetlands (floodplain wetlands adjacent to a Tier 3 stream) are located at all four bridge quadrants. The North River is a Tier 3 crossing, has a Protected Shoreland, and is a Designated River (as part of the Lamprey River watershed). Water quality treatment is not required since the project involves less than 50,000 square feet of disturbance. Public water supply wells are located to the south of the project. Recommendations from the NHDES Drinking & Groundwater Bureau were reviewed during design. Under proposed conditions, runoff from the roadway will generally be directed away from the wellhead protection areas.

The entire project is located within a Zone A floodplain. The property on the west side of NH Route 152 is LCHIP-funded conservation land (easement is held by Society for the Protection of NH Forests). For Section 106, a finding of No Historic Properties Affected was received. The bridge is not eligible for the National Register of Historic Places.

Federally-listed species include northern long-eared bat and monarch butterfly. A No Effect determination was received for northern long-eared bat. Various species were included in the NHB report. A survey for climbing hempvine was completed by FB Environmental in 2023. The plant was not found in the project area. Consultation with the NH Fish & Game Department (NHFG) occurred during preliminary design. Several recommendations were provided by NHFG and these were incorporated into the project. The Nature Conservancy put wildlife cameras at the site to collect data on wildlife movement near the bridge.

A stream crossing assessment was completed using a combination of field observations and desktop analysis (LiDAR data). The depth of the river and adjacent wetlands made access difficult. Measured widths were consistent with field observations. The numbers were also compared to predicted values using the NH Regional Hydraulic Curves. Overall, the values and general characteristics of the North River are typical for a Type E stream. The bankfull width was determined to be approximately 30 feet. Using this width, the stream crossing rules compliant span would be 66 feet (2.2 x BFW). This span length is not practicable due to impacts to adjacent properties and cost. It would require raising the road and would also increase the amount of permanent wetland impact. The proposed 30-foot span bridge meets all requirements of Env-Wt 904.01 and meets all requirements of Env-Wt 904.07 and 904.09 to the maximum extent practicable (meets everything except span requirement).

Approximately 2,939 SF (182 LF) of permanent wetland and stream impact and approximately 1,902 SF (74 LF) of temporary wetland and stream impact is proposed. This includes approximately 538 SF of permanent impact and approximately 669 SF of temporary impact to PRA wetlands. Wetland impacts will result from the construction of the new bridge abutments and there is a small amount impact (160 SF) from roadway slope work. Permanent stream

impacts will result from constructing the new bridge abutments, placing stone for scour protection and the wildlife shelf, and minor grading within the stream channel. Temporary impacts will result from stream diversion and access during construction. Other project alternatives (66-foot span bridge, phased construction, and temporary bridge during construction) would have a greater amount of wetland and stream impact.

An ARM fund payment of \$2,787 is proposed to mitigate for the 538 SF of permanent PRA wetland impact. The stream impacts are assumed to be self-mitigating since the design is an improvement to hydraulic capacity, aquatic organism passage, and geomorphic compatibility. Less than 200 LF of stream channel and bank impact is proposed.

The meeting was then opened to comments and discussion.

Karl Benedict (NHDES)

- The project appears to meet Env-Wt 904.09.
- Asked if bank linear footage was included in impact calculations. Suggested showing top of bank (TOB) and ordinary high water (OHW) overlaid on plan.
 - Jenn Riordan (GM2) responded that the bank linear footage was included. There is no bank impact area since there is no defined bank, only floodplain wetland (TOB and OHW are the same).
- Asked about a restoration plan for the temporary bridge.
 - Jenn Riordan clarified that a temporary bridge is not proposed. This was evaluated as an alternative traffic control measure. The proposed project involves closing the bridge and detouring traffic during construction.
- Asked if streambed simulation can be included. Need to see a cross-section of the proposed riprap in the channel. Could stream simulation be incorporated on top of the riprap?
 - GM2 will look into this and address in the Wetlands Permit application.

Mary Ann Tilton (NHDES)

- Agree with Karl's comments. No additional comments.

Seta Detzel (NHDES)

- Asked what several of the lines on the wetland impact plan represent.
 - There was discussion between Andrew O'Sullivan, Tom Levins, and Jenn Riordan. The final plans should clearly indicate the proposed bridge abutments, widening, and other items.
- The project appears to meet avoidance and minimization measures and Env-Wt 904.09 and would be considered self-mitigating for the stream impacts.
- Need to breakout PRA wetland impacts separately and mitigate for those impacts.
- Final NHFG consultation may change mitigation determination.

Kevin Newton (NHFG)

- Were any new species included on the updated NHB report?
 - Jenn Riordan responded that bridle shiner was added. This is a historic record.

Melissa Winters (NHFG)

- Emphasized that NHFG should be contacted when a new NHB report is requested or if listed species are observed at sites. Rare species occurrences must be reported to NHFG, along with photos to assist in species identification.

Jared Lamy (NHFG)

- No comments

Jean Brochi (EPA)

- No comments

Hampton-Portsmouth, 26485A (X-A005(269)):

Christine Perron provided an overview of the project, which addresses the second segment of the 9.6-mile Hampton Branch Rail Corridor. The first segment (7.9 miles) was addressed under NHDOT project Hampton-Portsmouth 26485. The current project, 26485A, consists of approximately 1.7 miles beginning at the north side of Drakeside Road in Hampton and continuing north-northeast to the Hampton/North Hampton town line.

The project is being designed by GPI and MJ is completing the environmental review. The purpose of the project is to improve the condition of the trail to accommodate bicycles and pedestrians. This segment of the rail corridor was purchased from Pan Am Railways for the purpose of creating a recreational trail. The rail corridor is currently being used for recreation informally but does not have a consistent surface or width, has two unsafe bridge crossings, and has flooding and drainage issues.

This is one of four rail trail projects in the NHDOT Ten Year Plan that are intended to comprise the off-street portion of the NH Seacoast Greenway. The first of these projects, Hampton-Portsmouth 26485, was reviewed and permitted in 2022 and that project is now under construction. Two other segments of corridor consist of 2.3 miles between Hampton and Hampton Falls (Project 43537), and 2 miles in Seabrook (Project 42609). Each of these projects has independent utility, with access points available for each segment to be utilized on its own, and each segment is undergoing separate permitting efforts. The project being discussed today is scheduled to advertise in September 2024. The remaining two projects are not scheduled for construction until 2030 or later.

The goals for today's meeting are to get input on the proposed design and preliminary impacts and to confirm the mitigation approach that will be required.

Tim Whitney provided an overview of proposed improvements, which will consist of vegetation clearing, rail tie removal, closed system drainage upgrades, surface drainage re-grading, profile changes, providing new bridge decks on two bridges, and resurfacing of the trail surface. The final trail surface will be a 12 FT wide stone dust trail.

Drainage upgrades will include the replacement of an existing closed drainage system under the railroad that begins behind Hannaford along Route 1 and flows southerly for approximately a 0.5 mile and outlets to the west behind Depot Square. This segment of the trail has drainage and

flooding concerns where the existing closed drainage system under the railroad bed sees significant flooding during even moderate rain events. The existing system has an 18-inch clay pipe trunkline and improvised manholes and catch basins. North of the closed drainage are existing ditches that flow south and enter the closed system. Much of the surface drainage from Route 1 and the neighborhoods and businesses between Route 1 and the rail trail outlet to the existing railroad corridor and eventually enter the closed system. The detention basin that handles all stormwater from the Hannaford store parking lot and roof outlets directly into the closed system under the rail trail. It has been determined that the existing 18-inch pipe is vastly undersized. The proposed improvements will entail constructing a large detention basin to the west at the start of the closed system and an outlet control structure to a new closed system that is larger in size and runs under a drainage ditch adjacent to the proposed trail. The proposed closed system will then outlet in the same location as it does today behind Depot Square. The outlet stream and banks will be fortified with riprap.

C. Perron described the resources that are present in the project area. A delineation was completed last fall and there are palustrine wetlands and two small streams in the project. The Wetland Permit Planning tool shows a few pockets of peatland, which were not identified during the delineation. Therefore, there are no Priority Resource Areas in the project. There are no plants or natural communities of concern in the project. Wildlife species of concern that occur near the project consist of Jefferson/Blue-spotted salamander complex and spotted turtle. Consultation with NHFG will be carried out. The project requires about 3 acres of clearing. An acoustic bat survey was completed in July 2023. Once data has been analyzed, consultation with USFWS will be carried out with FHWA as the lead federal agency. Lastly, the project is located within the Coastal Zone. The need for a coastal zone consistency determination is not anticipated; input from the Coastal Program will be sought to confirm.

Preliminary impacts to jurisdictional resources consist of:

Permanent Wetland Impacts = 2,620 SF

Temporary Wetland Impacts = 5,780 SF

Permanent Stream/Channel Impacts = 90 LF

Temporary Stream/Channel Impacts = 5 LF

The first impact location is a permanent wetland impact resulting from regrading the trail at its intersection with Drakeside Road. The wetland in this location is a scrub-shrub wetland. The second location of impacts is in the middle of the project at a delineated stream where scour protection is proposed at the closed drainage outfall. The drainage outfall is located adjacent to the outlet of a granite box culvert. The majority of flow is coming out of the drainage pipe. No inlet structure for the granite culvert was observed on the east side of the trail and it appears as if the original stream has been buried, possibly relocated and/or tunneled under the existing development. The channel at the outlet has been recently disturbed by construction of a utility pipeline. Beyond this disturbance there is a well-defined stream channel.

The third location of impacts is along a large wetland system near the north end of the project. Impacts here will result from the profile raise and grading of side slopes, with impacts limited to the edge of the wetlands that are adjacent to the trail. The wetlands are a combination of emergent and scrub-shrub and much of this area has been ditched along the trail.

When the Hampton-Portsmouth 26485 project was discussed in 2022, it was noted that impacts from the rail trail improvement projects should be considered cumulatively. The 26485 project resulted in about 40,000 SF of permanent wetland impact and provided mitigation via a \$258,000 ARM fund payment. Impacts from Hampton-Portsmouth 2685A as just described will total approximately 2,600 SF of wetland impacts and 90 LF of stream impacts. Input is being sought on whether mitigation will be required for 26485A for cumulative impacts, which would equate to another ARM fund payment of approximately \$48,087.

Based on the current project schedule, the permit application will be submitted in March 2024, the project will advertise for bids in September 2024, and construction will begin Winter 2024/2025.

The following is a summary of questions and comments from attendees:

Eben Lewis confirmed that NHDES would be seeking mitigation for the 26485A project and that he would discuss the project with Emily Nichols. He commented that he didn't see any issues with the project as proposed. He noted that the stream tier where impacts are proposed should be determined and addressed in the permit application.

Karl Benedict and Mary Ann Tilton had no additional comments.

Seta Detzel agreed that mitigation would be required. She suggested looking for opportunities for stream enhancement.

Kevin Newton noted that he would be providing comments on wildlife species once consultation with NHFG is initiated.

Jared Lamy had no comments.

Jeannie Brochi commented that federal mitigation will be cumulative for the rail trail projects, so mitigation for 26485A would be required.