BUREAU OF ENVIRONMENT
CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting
DATE OF CONFERENCE: October 19, 2022
LOCATION OF CONFERENCE: Virtual meeting held via Zoom

ATTENDED BY:

NHDOT
Matt Urban
Andrew O'Sullivan
Jon Evans
Joshua Brown
Mark Hemmerlein
Kate Masztal
Georgie Ravelli
Kerry Ryan
Tony Puntin
Marc Laurin
Jennifer Reczek
Hans Weber
Matt Lampron
Rebecca Martin
Tim Mallette
Dzijeme Ntumi
David Scott

ACOE
Mike Hicks

USCG
Gary Croot

EPA
Jean Brochi

NHDES
Karl Benedict
Lori Sommer
Christian Williams
Mary Ann Tilton
Seta Detzel
Kristin Duclos

NHB
Sabrina Stanwood
Madeline Severance
Ashley Litwinenko

NH Fish & Game
Mike Dionne
Kevin Newton

Federal Highway
Jamie Sikora

US Fish & Wildlife
Maria Tur

The Nature Conservancy
Absent

NH Transportation & Wildlife Workgroup
Sandi Houghton

Consultants/ Public Participants
Deb Coon
Hannah Beato
Bob Landry
Pete Walker
Greg Goodrich
Kimberly Peace
Josif Bicja

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

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Finalize Meeting Minutes

Finalized and approved the September 21, 2022 meeting minutes.

Pelham, #16145 (X-A001(151)):

Dzijeme Ntumi described the Pelham 16145 project location, schedule and purpose. She noted that the project is being coordinated with the Town of Pelham to account for two downstream bridges on Beaver Brook that have town replacement projects (Willow Street bridge replacement constructed in 2019 and a proposed new 45 ft open span adjacent to the Abbott bridge to increase capacity to help preserve the historic Abbot bridge). Approximately 10 years ago, it was determined that the NHDOT project would wait until completion of the two Pelham downstream bridge projects. The state Main Street bridge project is anticipated to be constructed in the spring of 2025. The two existing bridges are on the state red list and are immediately adjacent to each other on Main Street over Beaver Brook. D. Ntumi discussed the existing metal arch, bridge 111/090 was installed in 1988 as an overflow structure. It is in poor condition with section loss. Bridge 110/090 is a two span masonry arch bridge built in 1837 and was expanded in 1929 to make the bridge wider. Bridge 110/090 is on red list due to cracked stone masonry, section loss, exposed rebar, and spalling. D. Ntumi showed pictures of the bridges, upstream and downstream. She discussed water levels and explained that the road has had to close due to flooding concerns and that the water has risen to the level of the road many times.

D. Ntumi discussed the three alternatives being considered:
1. Bridge rehabilitation- this option would depend on historic requirements and would be completed to take the bridge off the red list. This option would not address hydraulic concerns with the existing bridges.
2. Bridge closure- this option would close bridge and the street. This option would not take the bridges off the red list and would not address hydraulics.
3. Bridge replacement- potentially replacing the two bridges with one bridge consisting of one single I beam with concrete deck. This option would address hydraulic concerns and would remove the bridges from the red list.

Tim Mallette showed an aerial map from the completed wetland delineation. He explained that a stream crossing compliant design would be a 700-foot span bridge. He noted that unique river birch are in the project area and photos upstream and downstream where displayed. T. Mallette noted that the granite arches very old (1837). He shared that there is an aggradation island between the metal arch and granite arches bridge. T. Mallette showed maps of the floodplain/floodway and explained that DOT has been cooperating with the town for 15 years and has a good partnership in place. T. Mallette noted that there is a Silver Jackets project to put in a gage near the project area. Pelham's consultant, VHB, completed hydraulic modeling for Beaver Brook. T. Mallette showed the 2D hydraulic analysis and mentioned the cranberry bog east of NH 38. He noted that there is a lot of sand moving through beaver brook. The floodplain is mixed growth and quite wide. T. Mallette explained that the VHB analysis used the USGS Bulletin 17c methods (published 2019) for hydrologic for the Abbott Bridge peak flow and low flow statistical estimates.

two-year storm 1220 cfs, 100 yr chance storm 4140 cfs values are lower than the previous 2015 estimates that used USGS Bulletin 17b but approximately 30 % higher than the 100-yr. current effective FEMA FIS.

For the Abbot Bridge under Old Bridge Street, the VHB analysis predicts that once the bridge is constructed, the 100-yr. water surface upstream of the Abbot bridge will decrease approximately 3 feet at the 100-yr. storm event. Even with 30 percent increased flows in the area since the FEMA model was developed, the actual flood flows after construction of the replacement alternative would be below current effective regulatory estimates.

T. Mallette shared a profile showing the energy loss at the two downstream bridges and the subject Main Street bridge. He explained that there is a 100-year design target water elevation of 130.50 just upstream of the Main St. Bridge alternatives in order to meet DOT standards for new construction. The existing 100-yr. water surface upstream of Main Street is 133.0. He noted that in the existing condition a 100-year event causes overtopping, which requires road closure. The replacement 100-foot open span alternative would allow sediment transport and would not overtop at the 100-yr. chance event (4140 cfs).

T. Mallette described the 2-year storm profile and explained that the replacement alternative would result in a slight decrease upstream of the crossing of about 0.3 feet. The two-year storm interval is used to represent more 'normal' conditions. T. Mallette showed the SMS 2D hydraulic model. He explained that there would be a relatively minor change in water elevation of a couple 1/10ths of a foot within the well-defined channels between the existing and replacement alternative for season type flows.

Rebecca Martin described the natural resources in the project area. She showed pictures of the wetlands that might be impacted by the project and explained that the wetlands in the project area are prime wetlands. She also explained that the Wetland Permit Planning Tool indicates that the project area wetlands are floodplain wetlands adjacent to a Tier 3 stream, so they are Priority Resource Areas. R. Martin explained that the replacement alternative would likely increase impervious area in the project area. Depending on the size and impacts of the project, MS4 and Alteration of Terrain requirements may apply. Therefore, stormwater treatment would likely be needed for the replacement alternative. Beaver Brook is subject to the Shoreland Water Quality Protection Act. R. Martin noted that the Federally listed Northern Long Eared Bat could be in the project area and the project is anticipated to qualify for the FHWA FRA FTA Range-wide Bat Programmatic Agreement, which is currently being revised with USFWS. There are also state protected species in and near the project area, including Northern Black Racer, Wood Turtle, Spotted Turtle and Blanding's Turtle. Rare plants in and near the project area include Bird-foot violet, Bulbous bitter-cress, Meadow garlic and River birch. An exemplary natural community, Swamp white oak floodplain forest, is also present. R. Martin stated that there was no Essential Fish Habitat in the project area- following the meeting, R. Martin was informed of an issue with the NOAA Essential Fish Habitat viewer reporting tool and has subsequently confirmed that Beaver Brook in Pelham is Essential Fish Habitat for Atlantic Salmon and an assessment is anticipated to be necessary for the project. The Wetland Permit Planning Tool indicates that there are no Eastern Brook Trout and no Cold-Water Fisheries in the project area. The crossing is located between a Prioritized Habitat Block and a predicted Wildlife Corridor, so

accommodation for wildlife passage should be considered for the design. There is Town of Pelham Conservation Land located south of the intersection.

Karl Benedict noted that there was a lot of information and that the background research for the project is extensive. He sees the hydraulics and presence of the natural community as the main issues. K. Benedict noted that it seems likely that the project will pursue an alternative design (Env-Wt 904.01) and will need to take into account natural community. He suggested that two dimensional plans showing the existing and proposed replacement alternative elevations compared to the location of the natural community, as well as overlapping with the prime wetlands would be helpful. DES would also look at water elevations upstream and downstream of the crossing. He needs to think more about the project. K. Benedict will need to evaluate the difference between existing and proposed conditions and consider if the proposed would be detrimental to the natural community. He also noted the presence of the PRAs.

Seta Detzel explained that she is working on the two Town downstream bridges. She is the wetlands regional reviewer. The Abbott bridge project is being reviewed by S. Detzel. DES had learned that there are significant NHB natural community concerns in this area and S. Detzel will be sending out a Doodle poll to dig in and hear about requests from NHB that should be considered for both bridges. S. Detzel will be considering the analyses and how the two bridge projects taken together will impact natural communities. S. Detzel was happy to hear that Town's consultant analysis was being taken into consideration by NHDOT.

Tim Mallette noted that the latest information regarding the proposed Abbot Bridge berm from Quantum and VHB is included. DOT and Pelham have been closely coordinating. T. Mallette note that, from an engineering perspective, it does not seem that there would be much change to the seasonal water level as a result of the replacement alternative at Main St. The wider span would change the stream crossing, but seasonal flow is contained by the Beaver Brook channel. He understands that DES would like to look at some overlays, but noted that they won't see any dramatic change for season water surfaces. The crossing is not like a big wetland pond. He noted there is a few feet change at the 100-year storm, but for seasonal runoff the water level will change a couple tenths of a foot.

Seta Detzel noted that at the follow up meeting there will be conversation about the sensitivity of the natural community.

Sabrina Stanwood confirmed that she thinks it would be helpful to discuss at the future meeting.

Lori Sommer noted that it was a really good presentation. She said that due to the presence of PRAs, mitigation will be required. Due to the prime wetlands, the team will need to focus on functions and values of the system and show there is no net loss. She noted that this is an important corridor for wildlife and plants as well. There is a need to focus on not having an impact to those species. She recommended that we highlight that the water level change under normal conditions would be small. If changing wood turtle habitat- there is a need to think about impacts. L. Sommer noted that when considering water quality treatment, show there is no significant net loss of values. She noted the need to address Env-Wt 700. NHDES will be concerned about how the flood map will be revised and what the community will do for that

revision. L. Sommer recommended considering how the map revision will be carried through with the local community.

Mike Dionne noted that Fish and Game is concerned about how surface water elevations will change upstream as most of the species noted are dependent on the prime wetland.

Gary Coot- noted that since Beaver Brook is not a navigable water, the Coast Guard does not have any requirements.

Jeannie Brochi noted the mitigation process and considering functions and values of the wetlands.

Jamie Sikora commented that he has no real concerns. It is helpful to know USCG does not consider this a navigable waterway.

Maria Tur recommended considering that the wood turtle, Blanding's turtle and spotted turtle are currently on the USFWS workplan and they are on the 'priority at risk' listing work plan for decision to be made about listing in Federal Fiscal Year 2024. She noted that NLEB are proposed to be up listed to endangered. M. Tur noted that the Little Brown Bat decision about listing is anticipated to come in this year and that USFWS has proposed to list the tri-colored bat under the Endangered Species Act. She recommended reviewing how the change to a single span would impact the turtle species and what could be done as part of mitigation to improve access and crossing for turtles.

Sabrina Stanwood noted the importance of water staying in the basin and not getting pushed out very fast for the extremely rare river birch. She recommended planning for severe storms and climate change and asked if and how the project is being designed for more severe storms.
Tim Mallette noted that changes are more to do with the accuracy of the modelling than with climatic change. He said that there have been some droughts in recent years. The team is designing for over 30% increased runoff above the FEMA profiles.

Loudon, #40632 (X-A004(442)):

Kate Masztal provided an overview of the proposed project and location. She described the intersection of NH Route 106 at South Village Road and Chichester Road and explained that the project extends from the bridge over the Soucook River to Hemlock Hill Drive, 0.78 miles. The project area is rural and forested with residences and commercial properties. This project has become a standalone project at the request of the Town of Loudon, and the design team did go to public officials meeting. A public hearing is not anticipated for the project as no right-of-way impacts are planned. K. Masztal noted that the goal of the project is to improve safety and capacity of the intersection. There are long delays for the sides roads in the existing condition and drivers trying to enter NH Route 106 will take narrow gaps in traffic.

K. Masztal described the options for the intersection, which include no build, roundabout, and signalization. She explained that a roundabout is not preferred due to traffic control needs for special events at the NH Motor Speedway nearby on NH Route 106. K. Masztal noted that traffic volumes do warrant a traffic signal and that option would require widening. No major changes to

drainage in the project area are proposed. The signal option with widening would extend existing culverts as they are in good condition and there would be significant construction concerns and cost for replacement. K. Masztal described traffic flow in the existing condition and provided more detail about the proposed design alternative, which would widen NH Route 106 by as much as 26 feet to allow two through lanes in each direction. Minor widening is also proposed on the intersection side roads and exclusive right turn lanes. K. Masztal showed anticipated impacts and impacts to wetlands proposed for the signal option. The total proposed impacts to wetlands is 3050 square feet. K. Masztal explained that water treatment is proposed due to an increase in impervious area and she showed two potential swale locations. K. Masztal explained that ditch lines would need to be reestablished for the roadway widening.

K. Masztal described and showed photos of the four wetland areas in the project area. Wetland A is a small manmade wetland, Wetland B is a seasonally flooded, vegetated wetland where a culvert crosses under NH Route 106, and Wetlands C and D are seasonally flooded wetlands connected by a 25 feet deep 24 inch RCP beneath the roadway. There are no priority resource areas in the project area and there are some invasive species. The Soucook River is just south of the project limits. K. Masztal discussed water quality and explained that the signal with widening disturbs more than 100,00 square feet and would add around 61,500 square feet of impervious area. The signal and widening alternative includes a plan to capture ant treat just over 100,000 square feet of area to satisfy AoT rules. K. Masztal showed the proposed areas for stormwater treatment. The northern swale would outlet to the Soucook River. The second treatment area proposed is in an area where the culvert is the outlet of a closed drainage system to a NJDA.

Rebecca Martin described the rare, threatened and endangered species review for the project. The USFWS Official Species List for the project area included the Northern Long Eared Bat. The project does not anticipate impacts more than 300 feet from the roadway and therefore, should be eligible for the FHWA, FRA, FTA Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat with active season tree clearing. Two state listed turtle species were on the NHB report for the project area, wood turtle and Blanding's turtle. There is no essential fish habitat in the project area. The NH Aquatic Restoration Mapper shows no cold water fisheries and no eastern brook trout in the project area. There is a predicted prioritized habitat block around the Soucook River at the southern end of the project. The southern part of the project area is in the 100-year floodplain near the Soucook River. R. Martin noted that there is unofficial conservation land at the northern end of the project, the Pelham Town Office and Recreation Area.

Karl Benedict noted that the design team should discuss avoidance and minimization with narrative in the wetland permit application. He recommended discussing how avoidance and minimization will be accomplished. He asked if any consideration has been made relative to the steepening of slopes and reducing impacts. K. Benedict commented that it looks like the proposed impacts are minor.

K. Benedict commented on the water quality treatment swale near the intersection, he noted that it may have jurisdiction since the water connects downstream and said that he generally would question that it is a NJDA. He noted that the BOE Wetlands Program should confirm that this is non-jurisdictional as indicated in the wetland delineation report if NHDOT is proposing surface

water to be used as stormwater treatment. K. Benedict inquired if there are any stream channels in the project area and if there was a vernal pool assessment recommended for the project area.

Lori Sommer noted that she has the same comments as K. Benedict and NHDES will be looking for F&G recommendations for the turtle species in the project area. She also noted that the NH General Permit now includes mitigation for impacts over 5,000 square feet with a prefer for in lieu fee (ARM Program).

Mike Dionne noted that in addition to Blanding's and wood turtle, there is smooth green snake in the project vicinity and brook floater in Soucook River.

Andy O'Sullivan noted that the project does not include impacts in the Soucook, and so would have no effect on the Brook Floater.

Gary Croot noted that the Soucook River is not considered navigable, so the USCG has no requirements.

Jeannie Brochi had no comments.

Maria Tur noted that her comments are similar to the Pelham project (the project presented immediately before Loudon). The turtles are on the USFWS listing plan, a determination is expected soon for the Little Brown Bat, and USFWS has proposed listing for the tri-colored bat.

Jamie Sikora noted that he has no concerns, this is a pretty straightforward project.

Maddie Severance commented that NHB does not have any concerns about this project. There are no rare plants or communities in the area.

Sugar Hill, #24218 (X-A004(971)):

Kimberly Peace (Hoyle Tanner) introduced the project that proposes an offline replacement of the Crane Hill Road Bridge over the Gale River in Sugar Hill, NH. The Crane Hill Road Bridge, constructed in 1928 and rehabilitated in 1960 and 1976, is a 108'-0" long single span high Warren Truss bridge with an 18'-0" travel way width and 12'-0" vertical clearance. Due to the deteriorated condition of the bridge, rehabilitation and replacement alternatives were studied and based on the purpose and need of the project, public input and financial constraints, the preferred alternative is to replace the existing bridge 50' upstream of the current location. The recommended replacement structure consists of a prefabricated steel truss bridge. This truss type is similar in appearance to the existing structure. The replacement bridge will have an 18' travel way width and 108'-0" long span to match existing bridge width minimize environmental impacts and meet Streeter Pond Rd intersection geometric requirements. The new bridge is proposed to be constructed 50' upstream/south of the existing bridge in order to maintain traffic over the existing bridge during construction, minimize construction costs and duration and not increase flooding to nearby properties. The bridge is also proposed to be raised vertically approximately 2' in order to provide freeboard during design flood events.

Natural and Cultural resources presented and reviewed at the meeting include the bridge's status as National Register eligible, conservation land that is abutting and within the project limits, the federally-listed Northern long-eared bat and the state-listed species Faxon's hawthorn and Loesel's wide-lipped orchid.

Following the presentation questions and comments were received. Karl Benedict (NHDES Wetlands Bureau) asked if a planting plan would be provided for the bank area where the bridge will be removed. K. Peace indicated one would be included with the wetland permit application. K. Benedict asked if the project would meet Env-Wt 904.07 and not require an Alternative Design. Josif Bicja (Hoyle Tanner) stated that the project will likely require an Alternative Design due to not being able to meet NHDES entrenchment ratios and bankfull width requirements although the Stream Crossing Worksheet has not been finalized. K. Benedict stated that it appeared that if they are not met it would not be by very much. J. Bicja explained that the replacement bridge could not be longer than what is proposed due to the proximity to the nearby Streeter Pond Intersection and its steep grade. Increasing the span length would locate the east abutment closer to Streeter Pond Rd, steepen the approach grade and increase impacts to nearby properties. K. Peace noted that the existing bridge is almost spanning bankfull width and does not appear to be a constriction to the stream width.

Lori Sommer (NHDES Wetlands Bureau) asked if there will be impacts to conservation lands. K. Peace stated that the project has not gone through NEPA yet but that this issue will be resolved during that evaluation. J. Bicja stated that the Town has already started coordination on the conservation easement on the Ski Hearth Farm property, and they are aware of the project. L. Sommer stated that if there is a conservation easement and there will be any taking of land for the project, then more than just coordination will be required. It is possible that a new deed, survey, and review by the Department of Justice will be required. L. Sommer also asked that a wildlife shelf be considered when designing the new bridge layout.

Mike Hicks (USACE) asked if a representative from the Coast Guard is present. This was confirmed by Gary Croot representing USCG. K. Peace asked M. Hicks about THPO Coordination for permitting for the newly recognized Wapanoag Tribe. M. Hicks stated they are working on what the procedure will be. Information will be provided at a later date.

Gary Croot (USCG) stated that the US Coast Guard does not consider the Gale River navigable and therefore no USCG Permit will be required for the project and has no further comments.

Maria Tur (USFWS) stated that she endorses what Lori said about a wildlife shelf.

Jamie Sikora stated he was looking for the USCG response, removing the bridge will affect a 4(f) resource and he would like more information from M. Hicks on how USACE will coordinate with THPO. J. Sikora stated that because NEPA comes before wetland permitting, should tribal coordination be a part of NEPA, that would mean that FHWA would do the coordination.

Madeline Severance (NHB) acknowledged that per coordination with Hoyle Tanner, surveys for the protected plant species are scheduled for June/July. Nothing is needed until the surveys are completed.

The project is scheduled to be presented at the November Cultural Resources Meeting to address the replacement of a National Register-eligible historic bridge.

Newington-Dover, #11238 (NHS-027-1(37)):

The Newington-Dover, General Sullivan Bridge (GSB) Project (the Project) involves replacement of the historic GSB superstructure. The presentation included a design update and summarized findings of the review under the National Environmental Policy Act (NEPA), which concluded when FHWA issued a combined Final Supplemental Environmental Impact Statement (Final SEIS) and Supplemental Record of Decision (SROD) in February 2022.

The Project Team is advancing design of the replacement superstructure. The GSB has been closed for several years due to safety concerns. A temporary pedestrian detour is in place along the northbound Little Bay Bridge (LBB). The old GSB truss superstructure will be advertised for sale and reuse, per the executed Section 106 Memorandum of Agreement. The new superstructure will be installed on top of the existing stone piers, which are to be reused. The southern abutment in Newington will be replaced entirely, and the Dover approach span will be kept. No permanent impacts will occur below the highest observable tide line (HOTL). Temporary impacts will occur within construction areas due to the stone fill causeways (approx. 13,460 SF total based on current design), and the trestle deck and piles (deck is approx. 33,640 SF total, with piles about 250 SF). Similar trestle and causeway infrastructure was in place during construction of the new southbound LBB. The trestle will not extend within the 200 foot navigational channel.

Pete Walker (VHB) summarized environmental concerns documented in the Final SEIS.

› **Blue mussel shellfish (*Mytilus edulis*).** On the Dover side, there is a blue mussel shellfish bed adjacent to the GSB that will sustain temporary impacts due to the stone fill causeway. Blue mussel populations appear to have rebounded since the previous impacts from the causeway that led out to the trestle that constructed the SB LBB.

› **Atlantic sturgeon (*Acipenser oxyrhynchus ocyrhynchus*) and Shortnose sturgeon (*Acipenser brevirostrum*).** The National Oceanic and Atmospheric Administration (NOAA) concurred that the project "may affect but is not likely to adversely affect" Atlantic/shortnose sturgeon critical habitat.

› **Northern Long-eared Bat (*Myotis septentrionalis*).** Minor tree clearing in Hilton Park will be needed for construction staging. There is no evidence of NLEB roosting on the GSB. US Fish and Wildlife Service (USFWS) Section 7 finding of "May affect—likely to adversely affect."

› **NHNHB Review.** Field work conducted by Amy Lamb, NHB, confirmed the absence of Prolific yellow-flowered knotweed (*Polygonum ramosissimum* spp. *prolificum*) and Smooth black sedge (*Carex nigra*). Cliff swallows (*Petrochelidon pyrrhonota*) do not currently nest on the GSB. According to GRANITView mapping, eelgrass (*Zostera marina*) beds are distant from the GSB Project work area; therefore, no impacts are anticipated.

› **Water Quality.** The surface area of the replacement bridge superstructure will be less than that of the existing GSB. Both the curb-to-curb and out-to-out distances will be reduced, effectively reducing impervious surface area. There will be a decrease in the amount of impervious area and related stormwater volumes discharged to the Little Bay compared to existing conditions.

Permit applications are anticipated to be submitted in December 2022 / January 2023. The GSB Project will be advertised for construction in August 2023, with construction anticipated to start in the winter work window of 2023/2024. Full project completion is anticipated in the summer of 2026 with removal of the trestle during the winter / spring work window of 2026.

Discussion Notes

Karl Benedict (NHDES) asked whether cofferdams are proposed to be installed. NHDOT does not intend to use coffer dam during installation of the causeway. This is due to the lack of overburden in this section of Little Bay caused by the high velocities seen during the tidal action. The material to be placed will be washed stone on a geotextile fabric.

Mark Hemmerlein (NHDOT) asked about the use of stone causeways. Jennifer Reczek (NHDOT) and Greg Goodrich (VHB) clarified that the stone causeway is proposed due to the clearance issue the contractor designed and built trestle. Eliminating the causeway section in favor of a trestle would be problematic for a number of reasons. The construction platform and access will need to reach an elevation of 16 feet, similar to the trestle elevation used during the LBB construction. This elevation of the trestle deck surface allows for passage of the tidal flow below the low steel elevation of the trestle. The stone causeway impact will be reviewed to decreased more if possible. Stone fill to access the trestle avoids the need to excavate the Dover bank. The trestle depth is about 7 feet, (including the trestle decking, stringers, and headers). The trestle will need to be substantial to support cranes and other construction needs. The trestle height will be above the existing pier caps on the Dover side, and slightly below the existing pier caps on the Newington side. There is low clearance to the trestle (6 feet or so) from mean high water.

Pete Walker noted that the proposed footprint of the causeway section is smaller than what was previously proposed and reviewed during compilation of the SEIS. Blue mussel populations seemed to have persisted in this location, even with the previous impacts from the LBB causeway. Karl Benedict asked about what could be done to lessen impacts to the mussel beds. Compensatory mitigation could be needed. Karl asked whether the old staging area in Newington could be used to limit clearing. Greg Goodrich responded that the new southbound LBB was built on the old staging area. The BMP in Newington between Shattuck Way and the south abutment will be avoided.

Kristin Duclos (NHDES) asked about the duration that the causeway will be in the water. Due to in-water work windows, construction cannot be completed in one season. Therefore, the causeways and trestles will be in place for two- and one-half years (fall/winter of 2023 to winter/spring of 2026). NHDES indicated that they would not consider the stone fill causeways and trestle pilings to be temporary impacts if they are in place for two years. Michael Hicks

(USACE) agreed that the trestle piles and causeway impacts are to be considered permanent for mitigation purposes.

Lori Sommer asked whether any tidal buffer zone impacts are associated with the new pathway. Pete Walker clarified that there are already existing pedestrian approaches on both sides of the GSB, and the temporary detour located adjacent to the NB LBB infrastructure will be removed once the new GSB bridge is opened.

Lori Sommer asked about how provisions will be handled for any loss of blue mussel bed. She also inquired about the use of Hilton Park and triggering Section 4(f). Jamie Sikora (FHWA) explained that the temporary impact to Hilton Park was previously reviewed and approved under Section 4(f). There will be temporary occupancy of Hilton Park due to staging during construction, but the temporary occupancy will not constitute a use of Hilton Park because all conditions for this exception will be met.

Michael Dionne (NHFG) asked whether the causeway would be installed during the in-water work window. Jennifer Reczek confirmed it would be. Michael Dionne noted that all anadromous fish in the Great Bay move through this restriction. Noise impacts should be avoided; piles should not be installed between March 15 - June 15. Pete Walker indicated that the SEIS contains an underwater acoustic model using NOAA's procedures. This was reviewed by NOAA, who approved the Essential Fish Habitat Assessment with no specific conservation recommendations.

Michael Dionne asked about cliff swallows at the GSB, noting there is a colony at the Scammell Bridge over the Bellamy River. He inquired if clay nests could be added to the new bridge. He was unsure whether nests were installed on the Scammell Bridge. Pete replied that, according to Pam Hunt, the colony on the GSB had been abandoned around 2012-2013.

Michael Hicks stated that the trestle pilings are structures, not fill, but will require a Section 10 permit, likely to be issued by the USCG. The causeways will require a Section 404 permit. A General Permit should apply. He inquired about the Section 106 resolution for the GSB. Pete replied that there is a new MOA in place, with mitigation stipulated for the loss of the GSB.

Gary Croot (USCG) expects to issue an amended USCG Bridge Permit, to include all three bridges. A Bridge Preliminary Navigation Determination Request was received in 2021. The Division of Ports & Harbors and Great Bay Marine were included in correspondence. USCG requests that NHDOT develop a one or two page letter identifying what has transpired and the improvements to vertical navigational clearance. Coordination during construction will be required if part of the navigational channel will be infringed upon for construction of the causeway, trestle, or bridge. USCG anticipates a minimal impact to commercial and recreational boaters, who should be able to maneuver around the infrastructure.

Mark Hemmerlein asked whether any activities require a request for a Water Quality Certificate. Gary Croot will confirm with USCG Headquarters. Gary Croot will review the FSEIS and follow up with Mark Hemmerlein.

Jean Brochi (USEPA) requested the area of impact to the blue mussel bed. VHB will follow up with the area.

Jean Brochi asked whether changes to hydrology could be cause for concern regarding erosion. No work on the piers is proposed below the HOTL. The entire steel superstructure will be removed and replaced with a new steel superstructure.

Jean Brochi also asked for confirmation as to why a SEIS was completed. Jamie Sikora clarified that the previous EIS proposed rehabilitation of the GSB, but subsequently, that alternative was determined not reasonable.

Jean Brochi questioned whether interested tribes should be notified again. Michael Hicks asked if NHDOT coordinated with the tribes. Pete Walker noted that numerous tribes were contacted during the SEIS phase; VHB maintains a list of tribes who received notification of the Project which could be provided. FHWA, USACE, and NHDOT will coordinate on practices to notify tribes.

Jean Brochi asked whether the new GSB would be highly used. Pete stated that the public has voiced strong demand for the new bridge, and that a non-motorized connection be maintained. People even used the GSB in winter prior to its closure. The 22-mile-long detour routes were assessed in the FSEIS. Pedestrian counts were taken in 2016. The findings are in the FSEIS. Jamie Sikora also mentioned the local support to expand trails and bikeways in the area.
NHB Data Check and IPaC will be re-run soon, per standard practice. Any regulatory changes surrounding the NLEB may need to be revisited.

Madeline Severance (NHB) confirmed that Amy Lamb conducted a rare plant survey in 2019 and did not find either listed rare plant species. NHB requested a finalize plan set to review erosion and sediment control for eelgrass concerns. Madeline will speak with Amy about the surveys and does not expect a new survey to be needed.