BUREAU OF ENVIRONMENT CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting

DATE OF CONFERENCE: June 21, 2023

LOCATION OF CONFERENCE: Virtual meeting held via Zoom

ATTENDED BY:

NHDOT	NHDES	The Nature Conservancy
Matt Urban	Karl Benedict	Absent
Andrew O'Sullivan	Mary Ann Tilton	
Mark Hemmerlein	Chris Williams	NH Transportation &
Jim Commerford	Kristin Duclos	Wildlife Workgroup
Rhona Thomson		Absent
Kirk Mudgett	NHB	
Arin Mills		
Anthony Weatherbee	•	Participants
Jason Ayotte	NH Fish & Game	Kimberly Peace
Dillan Schmidt	Mike Dionne	Michael Leach
David Scott	Kevin Newton	Rene LeBranche
		Jenn Riordan
ACOE	Federal Highway	Tom Levins
Mike Hicks	Absent	Stephen Haas
		Chris Fournier
USCG	US Fish & Wildlife	
Gary Croot	Absent	
EPA		

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

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Finalize Meeting Minutes

Finalized and approved the May 17, 2023 meeting minutes.

Auburn, 29316 (Non-Fed):

This is the 1st presentation at the Natural Resources meeting. Rene LaBranche introduced the Stantec project team to the meeting attendees, and noted this project is being presented on behalf of the Town of Auburn then began the presentation regarding Auburn 29316 — Bridge Replacement Project Griffin Mill Road over Sucker Brook (aka Maple Falls Brook). He reviewed the existing condition of the site:

- In village of Auburn
- Sucker Brook (Tier 3 Stream) and listed waterbody subject to SWQPA (Shoreland)
- Not located in a FEMA area
- NHB indicated plant species at the lake shore.
- Constructed around 1850 and superstructure rebuilt/repaired in 1991 with steel girders and wood deck and curb utilizing the existing stone abutments.
- Single Lane 12.3 feet wide
- Clear span 23 feet and overall length of 29 feet
- Closed (2017) Residents and Emergency Services access from Route 121

Rene continued with site background information for the project noting:

- Local officials, residents and Historical Society consider the existing stone abutments historic.
- The Griffin Mill site has historical significance to the Town.
- The Griffin family has lived on the site for nearly 200 years.
- Griffin Mill Site included:
 - o Grist Mill 1826 1835
 - o Edge Tool Shop 1835 1863
 - Unique Spiral Vent Water Wheel
 - o Saw & Grist Mill 1863 1881
 - Clark Brook Gauging Station 1938

An aerial view of the location and photos of the inlet and outlet were presented along with photos of the existing bridge. Rene noted the existing bridge is on the State's Municipal Red List and was closed in 2017. The inspection indicated significant sectional loss of the existing steel girders at the abutments. The current configuration of the bridge does not meet the current stream crossing guidelines. The bridge would service two residential lots. Griffin Mill Road is a Town road.

Rene gave an overview of the current project status:

- Wetland Delineation and Functional Assessment completed in June 2022
- Design to consider retaining existing historic abutments.

- Draft engineering bridge design completed to identify preliminary wetlands and shoreland impacts.
- Geotechnical Report complete
- Preliminary wetlands impacts total to less than 1,200 SF (temporary and permanent)
- Preliminary Shoreland Impacts total to less than 9,800 SF (temporary and permanent)
- NHB does not have concerns.
- Anticipate Wetland and Shoreland application submission in Summer 2023

The preferred alternative cross section graphic was presented being:

- Timber beams with a timber deck 40' span x 14' wide (single lane) set on cast-in-place concrete footing/abutments;
- Bridge to span and retain existing historic abutments;
- 10% 12% Increase in area under the bridge above the 100-year flood elevation (however, not a FEMA area);
- Design minimizes wetlands and stream impacts.

Support of the preferred alternate was received from the Board of Selectmen, Griffin Mill Road Residents, Manchester Water Works, and the Auburn Fire Department.

Rene turned the presentation over to Mike Leach and a layout plan of the preferred alternate with the anticipated wetland impact areas hatched/screened was presented. Mike Leach discussed the project impacts being:

- Wetlands impacts total to less than 1,200 SF (temporary and permanent) with most of the impact to stream banks.
- Maintaining existing opening for aquatic passage.
- No changes or impacts to the existing stream bottom material.
- Slight increase relative to the 100-year storm capacity for Sucker Brook due to design width
- Unchanged depth of water through opening under normal flow conditions to maintain aquatic passage.
- Minimizes wetland impacts to the extent practical

A layout plan of the preferred alternate with the anticipated shoreland impact areas hatched/screened was presented and Mike discussed the project impacts being:

- Preliminary Shoreland Impacts total to less than 9,800 SF (temporary and permanent)
- Most of the impact area is for dewatering and staging and the areas could be reduced.

A color plan was presented of the entire work area that provided a visualization of the stream limits, wetland limits, roadway improvement limits, proposed riprap, and the 100' prime wetland buffer line.

Mitigation for the project was presented and noted as:

- Maintaining existing opening for aquatic passage.
- No changes or impacts to the existing stream bottom material.
- Slight increase relative to the 100-year storm capacity for Sucker Brook due to design width
- Unchanged depth of water through opening under normal flow conditions to maintain aquatic passage.

• Minimizes wetland impacts to the extent practical.

At this point, the presentation was opened to questions.

Karl Benedict of NHDES stated this project should be reviewed for compliance with the stream crossing rules and section 904.09 alternative design requirements. Karl asked if the existing water velocities necessitated the proposed riprap, and if the limit of the proposed riprap could be minimized or revegetated. Rene noted the design will be reviewed relative to the riprap.

Kevin Newton of NH F&G did not have and comments since the NHB noted the project did not have any species under their jurisdiction.

Michael Hicks of USACE had no comment on the presentation.

Jean Brochi of the EPA had no comments on the presentation.

Gary Croot of the USCG had no comments on the presentation.

James Sikora of FHWA had no comments on the presentation.

NHB was not present during the meeting.

Auburn, 44167 (X-A005(339)):

Jim Commerford (hydraulics engineer, NHDOT Bureau of Highway Design) introduced the federally funded culvert replacement project in Auburn. Rhona Thomson (NHDOT Bureau of Environment) began the presentation by going over the area's natural resources.

The project is located just east of Lake Massabesic in Auburn. The project consists of replacement of a 60" corrugated metal pipe culvert that carries an unnamed stream under NH Route 121 into Lake Massabesic. Route 121 provides access to 101 and then I-93. Running south, it goes through Chester, Hampstead, and Plaistow, then runs into Massachusetts. Lake Massabesic is a water supply reservoir for the City of Manchester, and it's owned and operated by Manchester Water Works. A dam at the southwest end controls the lake level.

The 60" corrugated metal pipe culvert is 41' long and runs along a flat slope. It lies within a 312 acre watershed. The stream it carries is a tier 3 stream because of its location in a FEMA floodplain. There are no designated rivers in the area and no known previous wetland permits. The project area lies within the Massabesic Lake protected shoreland buffer, and Manchester Water Works owns the surrounding land.

There are a number of rare and/or protected species in the vicinity of the project area, mostly associated with Lake Massabesic and the sandy pond shore system. After coordination with NHB, no concerns were identified regarding impacts to plant species as a result of the project. Fish and Game recommendations will be incorporated into design and construction. The project area is located where Northern Long Eared Bats are not likely to occur.

Looking at pictures of the inlet and outlet side of the culvert, you can see Lake Massabesic is backing up through the culvert into the upstream wetland system. This backwater extends about 600 feet upstream, and at the time of the pictures, the water surface is only about two inches over the flashboards, so this is representative of the normal condition. Also shown in the pictures is the aging state of the headwalls and wingwalls – slanting, loss of material, rocks beginning to slip and fall into the river. Additional rocks have fallen in that are lower on the wall, closer to the water surface.

More pictures are shown of the culvert inlet and outlet, noting wetland delineations – the lacustrine system coming up to the culvert outlet and the scrub-shrub wetland on river right looking downstream. Looking upstream, there is a riverine system coming into the inlet and an emergent palustrine wetland on river right.

More pictures showing existing conditions include a picture showing a high rust line in the interior of the pipe, indicating normal water surface elevation; another photo of the upstream adjacent emergent palustrine wetland; and roadway pictures, noting that there is bike and pedestrian traffic on the roadway that follows the lake shoreline. The roadway profile is very flat.

Three reference reaches were taken upstream of the crossing. Each of these were still within the influence of Lake Massabesic backwater, with bankfull widths of 19, 16, and 8 feet, for an average of 14.3 feet. The stream was identified as a Type E stream, and typical of Type E streams is a high entrenchment ratio due to the high floodplain widths and a flat topography outside the banks. For the purposes of the stream crossing rule compliant span calculation, using the entrenchment ratio provided of 2.2, the calculation works out to 14.3 x 2.2, for a span of 31.5 feet. We will round to 32 feet for analysis. The substrate throughout the reaches was sandy-silty material and generally very fine.

Zooming out to a project overview, this is a federally funded culvert replacement through DOT's CRDR (Culvert Replacement/Rehabilitation and Drainage Repair) program. The proposed advertising date is February 20, 2024, with construction anticipated during low flow/lake level period in late summer to fall. There is one overtopping incident known, from the Mother's Day Floods in 2006. This was largely due to Massabesic Lake overtopping its banks and flooding the roadway. The culvert is in very poor condition; numerous sinkholes have appeared within the past year and been repaired by District, so this is a high priority. If the culvert were to fail, there is no suitable detour for traffic.

The existing site plan is shown, including the 100 year floodplain and private abutter whose leach field would be impacted by a wider-span alternative.

Inflows were looked at two ways, using Streamstats rural equation flows combined with the USGS National Urban Equation to better account for development within the watershed. A Basin Development Factor of 2 was used. The 50 year flow is the design flow, which worked out to be 152 cfs. A HydroCAD model with Curve Number methodology was also used, a deterministic model based on specific watershed parameters. This gave higher flows and will be what is used for design. At 50 years, we have 209 cfs. Analysis indicates the existing 60" CMP has a capacity of about 150 cfs, overtopping at about a 10 to 25 year event, which is largely due to Massabesic

Lake level coming up high. The normal Massabesic Lake water surface elevation is 250.0 at the flashboards at the dam. The estimated 50 year flood level is 251.5 (ft, NAVD88).

Numerous alternatives were considered. Alternative 1 would be a bridge with a Stream Crossing Rule compliant span of 32'. The cost estimate is over \$2,000,000 for this structure, not including right-of-way impacts, acquisitions, design engineering, etc. If selected, the project would be delayed 3-5 years or more for re-design and securing funding under a different program. The second alternative would be slip lining with a 54" smooth bore liner inside of the 60" CMP. A separate critter crossing culvert would be located in the palustrine wetland above the normal water elevation for terrestrial passage. This would be able to meet similar capacity to the existing culvert and would cost around \$315,000. Alternative 3 is an embedded box culvert, a hydraulically sized structure with a 9' span. It would be embedded with stream simulation material and would cost around \$677,000.

The preferred, proposed design is a 6' high by 9' span box culvert with approximately 2' of embedment, leaving a 4' x 9' clear opening. It will maintain the same alignment as the existing culvert, and it will match the existing stream channel elevations. The existing slope, from upstream of the culvert to downstream going into the lake, is about half a percent. It is proposed to increase the length from 41' to 45' on the inlet side to allow for a bike and/or pedestrian crossing. This wider span would reduce the potential for clogging and debris. The proposed invert elevation is 247.0 ft.

Two years of lake level data was obtained from Manchester Water Works, showing that water withdrawals lower the lake elevation in late summer and fall. 2022 was a drought year, and water elevation got down to proposed invert elevation of 247.0 in September and October. In the previous year, water was backwatered through the culvert throughout the whole year.

For temporary bypass and water control, a cofferdam will be placed upstream, directing water to a 36" diameter temporary bypass pipe which will be located on the edge of the palustrine wetland. Water will be pumped into the pipe during low flow conditions. A sump will be installed to pump to dewatering bags located on the opposite side of the abutting driveway.

Permanent wetland impacts on the inlet and outlet side are due to construction of the wingwalls and headwall and grading the stream channel to match the existing elevations. On the inlet side, there are additional impacts to widen/lengthen the culvert 4 feet, including pushing the embankment out, which may impact the emergent palustrine wetland. Temporary impacts are required for access, water control, and water diversion. Most work will be done from the roadway, with single-lane traffic.

Limits of permanent impacts extend about 9' upstream and 5' downstream of the existing culvert, with the total permanent impacts equaling 607 square feet/57 linear feet. Limits of temporary impacts are 45' upstream and 38' downstream of the existing culvert, equaling 2,659 square feet and 221 linear feet. Total proposed combined impacts are 3,266 square feet.

In summary, with permanent square foot impacts being under 5,000 square feet and permanent linear foot impacts under 200 linear feet, no mitigation is anticipated to be required. We are proposing to permit as an alternative design per the requirements of Env-904.10, since the

proposed structure does not meet the span requirement. The proposed culvert meets the remaining general design criteria under 904.01 and complies with the provisions of 904.07 to the maximum extent practicable. The proposed culvert would substantially improve hydraulic capacity and connectivity, aquatic organism passage, sediment transport, and geomorphic compatibility.

Karl Benedict stated that the chosen alternative and alternative design preparation make sense. He asked to verify whether the stream was calculated as tier 2 or tier 3, since the watershed size makes it a tier 2 but it's on the edge of a 100 year floodplain.

Jim Commerford clarified that the watershed area would make it tier 2, but proximity to the 100 year floodplain combined with the identified species would make it tier 3.

Karl agreed and thanked Jim for the verification. His next comment was to ask whether wetland impact area 2 (upstream of the culvert) is accurately classified as palustrine emergent versus riverine? The lake level is 250 and the wetland area seems to be within that. The photos also show it within lake level. He requested to please verify whether impact area 2 is palustrine emergent or riverine. If these are PEM wetlands adjacent to a tier 3 stream, it could be a priority resource area, and permanent impacts would require mitigation just for those permanent impacts. So it would be helpful to dial that in relative to what the classification is, and note potential for priority resource area based on that.

Kevin Newton stated that coordination with Fish and Game was initiated a little over a month ago and it looks like DOT has incorporated Fish and Game comments on this.

Mike Dionne had no additional comments, other than appreciating the upgrade to this culvert.

Mike Hicks (ACOE) suggested making sure that NLEB analysis was done after April. A new procedure came out through IPaC, so he commented to make sure the new D key was used.

Andrew O'Sullivan stated that Jean Brochi from EPA was not on the call. Gary Croot (USCG) was on the call and didn't have any concerns with the crossing. Jamie Sikora (FHWA) was not on the call. NHB had a conflict and could not attend the meeting, but no concerns were identified with earlier coordination.

Dover, 41824 (Non-Fed):

Jenn Riordan (GM2) introduced the state funded project and provided an overview of the environmental resources and anticipated impacts. The project involves the proposed rehabilitation of the two bridges that carry NH Route 16 (Spaulding Turnpike) over the Cocheco River in Dover. Bridge No. 106/133 carries the northbound lane and Bridge No. 105/133 carries the southbound lane. Both bridges were constructed in 1957 and were rebuilt in 1991. They are currently on the State's Red List and are in need of repair. Proposed work includes the replacement of the superstructures, bearings, and expansion joints and repair of the existing substructures. Each bridge has three piers. The abutments are located above the bank. No new, permanent structures or riprap are proposed in the river.

Phased construction is proposed to maintain traffic. The project area extends approximately 1,400 feet to the south and approximately 1,100 feet to the north for traffic control measures, which will include median cross-overs. The bridges will be widened from 37'-9" to 40'. This will require minor roadway widening at each bridge approach to match the existing pavement to the wider bridges. Temporary impacts in the river are anticipated for construction access to perform the bridge work. Construction will occur in phases over three seasons.

Final design is expected to begin in August or September 2023, with the wetlands permit application being submitted in fall 2023. The project is scheduled to be advertised for construction in winter/spring 2024 with construction starting in late summer 2024.

Wetland resources include the Cocheco River (channel and banks), which is a Tier 3 crossing, NH Designated River, and has a Protected Shoreland. Two intermittent streams are located north of the bridges and will not be impacted by the project. A wetland is located southeast of the bridges. Temporary impacts to this wetland and the river are anticipated for construction of the access road.

GM2 initiated coordination with the Cocheco River Local Advisory Committee and will be sending updated project information.

Several impaired waters are located within the project area and nearby (Cocheco River, Indian Brook, and Berry Brook). The project is within a MS4 area. Net increase in impervious surface is estimated at 2,322 square feet. The total area of disturbance is 25,484 square feet (0.59 acres). This includes the temporary traffic control areas in the median. No stormwater treatment is currently proposed. No new drainage or modifications to point source discharges are proposed. Even though the total area of disturbance is less than 1 acre, a Construction Stormwater Pollution Prevention Plan (SWPPP) will be included in the environmental commitments due to the adjacent watercourse.

The NHB report included American eel (state-listed special concern). The USFWS IPaC report included northern long-eared bat and monarch butterfly. A No Effect determination was received for northern long-eared bat. The anticipated federal listing of tri-colored bat is being kept in mind. Tree clearing restrictions may be used to address USFWS requirements. The Cocheco River is designated as Essential Fish Habitat (EFH). An EFH assessment will be completed during the permitting phase.

The Dover Community Trail crosses under the bridges on the north side of the river. The City asked to be kept informed of any trail closures during construction. Conservation land is located northeast of the project area but no impacts are anticipated. There is a Zone A floodplain along the Cocheco River. The floodplain is contained within the river through the project area and doesn't extend beyond the channel. The US Coast Guard was contacted and responded that the river is non-navigable in the project area. The project is in a coastal zone community but no coordination is anticipated to be required under the Coastal Zone Management Act since the project is not federally funded and is expected to be covered under a USACE Section 404 General Permit. Invasive species are present throughout the project area. An invasive species management plan will be included in the environmental commitments.

Temporary impacts to the Cocheco River channel and banks are anticipated during construction. An access road, causeway and crane pad will be required on each side of the river to conduct the bridge repair work. Cofferdams will be used to dewater the work area and direct river flow to the opposite side of the channel. A causeway is needed due to shallow bedrock in the channel. A trestle can't be used since there isn't enough soil to ensure pile stability. The causeway will consist of rock placed on geotextile fabric and will be removed after construction. The temporary fill will be in place for no more than one construction season. In-water work is expected to take two seasons (one for the northbound side and one for the southbound side). Total impacts are estimated at 21,452 square feet and 693 linear feet (summarized below).

The project will be a Major Impact and will fall under Env-Wt 904.09 (rehabilitation of a Tier 3 crossing).

	Causeway / Access Road	Dewatering	Total
Bank	457 SF / 113 LF	205 SF / 238 LF	662 SF / 351 LF
Channel	7,093 SF / 109 LF	13,075 SF / 233 LF	20,168 SF / 342 LF
Wetland	622 SF	0 SF	622 SF
		Total	21,452 SF / 693 LF

The meeting was then opened for comments and discussion.

Karl Benedict (NHDES)

- Recommend water quality review through DES watershed program for causeway placement
- Deferred to Kristin Duclos

Kristin Duclos (NHDES)

- Is the Cocheco River tidal in the project area?
 - o Jenn Riordan replied no, the tidal limit is further downstream.
- Are any permanent access roads proposed?
 - o Jenn Riordan responded no. Access roads will be temporary during construction.
 - Andy O (NHDOT) confirmed no mitigation as all impacts are temporary and DES confirmed no mitigation is anticipated.

Chris Williams (NHDES Coastal Program)

• No concerns. The project as described is not subject to CZM jurisdiction.

Mary Ann Tilton (NHDES)

No concerns

Kevin Newton (NH Fish & Game)

• Time of year restrictions will be recommended for fish

• Will cofferdams increase velocity and have potential to cause bank erosion? Tom L stated work would be done during low flow and water flow is dam controlled causing water flow to be regulated. No bank erosion is anticipated.

Mike Dionne (NH Fish & Game)

- Recommended time of year restriction for in-water work is April 15th to July 1st for anadromous fish Recommend loud/impactful work be minimized during this time for herring.
 - Tom Levins mentioned that the causeway would need to be in place at the start of the construction phase (early summer) and would be in place until the fall. The full construction season is needed.
- Suggested meeting with the NH Fish & Game Marine Division to further discuss the project. The herring run has been down in the past few years and they want to protect the resource.
- Mentioned concern with velocity increases during storm events with the reduced channel width during construction. Herring move upstream through the project area.
 - Andy Sullivan suggested looking at flow data and regional curves to estimate the 2-year storm.

Mike Hicks (USACE)

- What is the magnitude of impact below ordinary high water?
 - o Jenn Riordan responded that the total channel impacts are over 20,000 square feet.
- Any special aquatic sites in project area? Jenn R responded there is not.
- Asked if plans could be provided with a brief narrative on impacts. Mike will send this to Taylor Bell (USACE) to determine if mitigation might be necessary.

Gary Croot (USCG)

No comments

Mark Hemmerlein (NHDOT)

• The plans should show the slope lines for the construction access road.

Moultonborough, 40639 (X-A004(447)):

Jason Ayotte (NHDOT) and Kimberly Peace (Hoyle Tanner) introduced the project- this is the first NR meeting for the project. NH Route 25 (Whittier Highway) is minor arterial roadway along the northwest side of Lake Winnipesaukee connecting Meredith to Ossipee through Moultonborough and Center Harbor and serves as an east-west connection between the I-93 and NH Route 16 corridors. Within the project area (Lake Shore Drive West to Lake Shore Drive East in Moultonborough) the roadway carries 16,200 vehicles per day (2020 AADT) at posted speeds ranging from 30 to 45 mph. The 2008 "NH Route 25 Corridor Study" prepared by the Lakes Region Planning Commission evaluated existing and future conditions along NH Route 25 in Center Harbor and Moultonborough, identified safety and capacity concerns and provided recommendations for vehicular and pedestrian improvements. Specific improvements were identified for the intersections of NH Route 25 with Lake Shore Drive (West) and Glidden Road. Improvements to these intersections, along with Lake Shore Drive (East) intersection and

auxiliary turn lanes for accessing the commercial driveways along the corridor have been identified to be the focus of the Moultonborough 40639 project funded through the NHDOT Surface Transportation Program (STP). Potential improvements may include intersection realignment, auxiliary turn lanes, sight distance modifications, sidewalks, driveway access management, traffic signals (if warranted); along with associated signage, lighting, and drainage improvements as required.

The project limits begin at the western intersection of NH Route 25 and Lake Shore Drive (West) that is located almost adjacent to the Center Harbor/Moultonborough Town Line, beginning 350' west of the Bean Road/NH Route 25 intersection. The project extends along NH Route 25 to 300' east of the Lake Shore Drive/NH Route 25 intersection.

Environmental concerns driving alternative analysis include Rare Species, Historic, 4(f), Wetlands, Water Quality, Protected Shoreland, Contamination and Stream Crossings were presented and discussed. The project alternatives currently designed for consideration were presented. Following the presentation questions and comments were received.

Karl Benedict (NHDES Wetlands Bureau) commented on reducing impacts to the protected shoreland of Lake Kanasatka and Winnipesaukee during design as feasible, and that wetland impacts within the ROW seem reasonable for the project and will need permitting after avoidance and minimization. Because of the potential need for mitigation for USACE impacts to wetlands over 5,000 sq ft, wetland impacts will be evaluated during design to be reduced as feasible.

Mike Dionne (NHFGD) stated the impacts to the listed species and habitat on the NHNHB Datacheck, bridle shiner and common loon, can be avoided by not directly altering the lake shore habitat, which is proposed for the alternatives presented, but any potential impacts to the lake's vegetated buffers should also be avoided. He stated that it is likely that the project will not affect nesting loons but if possible, construction near Lake Kanasatka should occur outside of their nesting season, May 1- June 30.

NHNHB representatives were not present. Mike Hicks (USACE) had no comment. FHWA had no comment. USCG had no comment.

Littleton, 43809 (X-A005(203)):

Kimberly Peace (Hoyle Tanner) introduced the project, which consists of preservation of four bridges in Littleton. The project will include: a temporary superstructure support system with temporary scour protection and a temporary roadways and causeways to access the existing piers and abutment, and rehabilitation of the concrete piers for Bridge #187/060 and #188/060 (I93 SB & NB over the Ammonoosuc River); and a temporary superstructure support system and rehabilitation of the concrete piers for Bridge #189/058 and #190/058 (I-93 SB & NB over Industrial Park Road, NHRR (ABD)) . The four bridges will be included into one combined project, which is anticipated to be constructed in 2024 and 2025, with an anticipated advertisement date of January 2024.

Environmental concerns regarding Wetlands, Protected Shoreland for a Designated River, Floodways/floodplains and Contamination were presented and discussed. Following the presentation questions and comments were received.

Karl Benedict (NHDES Wetlands Bureau) noted that coordination with the LAC will be needed for the Designated River, and that impacts to wetlands in the southwest corner of the APE should be evaluated as potential Priority Resource Areas as Tier 3 floodplain wetlands. Impacts to these wetlands should be avoided as a higher priority than non-PRA wetlands. He also noted that DES will be asking for more details on the causeway design and location in the wetland permit application.

Mary Ann Tilton (NHDES Wetlands Assistant Bureau Administrator) asked if the river was evaluated during the functional assessment as high quality wildlife habitat, and they she expected it would be given the nature of rivers and floodplain wetlands have high wildlife habitat value. K. Peace said she will review the functional assessment with the CWS and will note that and will work with design to minimize impacts as feasible.

Mike Hicks had no comments, but offered to review the plans for the causeway when they are available for evaluation for the potential need for USACE mitigation with the other USACE staff.

Kevin Newton (NHFGD) noted that any efforts to preserve or replace vegetation within the riverbanks where it will be temporarily disturbed will be an enhancement to inland fishery resources in the river.

Mark Hemmerlein (DOT Water Quality Program Manager) noted that the wetland in the northeast section of the APE was a mitigation wetland from a project in the 1990's, possibly #10208, and should be avoided. Current design plans do not show impacts to this wetland and it will be avoided.

K. Peace asked K. Benedict if the wetland permit application could address Env-Wt Chapter 500 instead of Env-Wt Chapter 900 for Stream Crossings given that the project will not affect the crossing metrics, which was agreed to as long as there as a note in the permit application to this effect.