BUREAU OF ENVIRONMENT
CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting
DATE OF CONFERENCE: August 20, 2008
LOCATION OF CONFERENCE: John O. Morton Building
ATTENDED BY:

NHDOT
Alex Vogt
Bob Landry
C.R. Willeke
Carol Niewola
Cathy Goodmen
Dave Smith
Denis Boisvert
Don Lyford
Jim Kirouac
Jon Evans
Joyce McKay
Michelle Marshall
Mike Dugas
Tom Jameson
Trent Zanes

Federal Highway Administration
Leigh Levine

NHDES
Arlene Allen
Gino Infascelli
Lori Sommer
Steve Couture

NH Fish and Game
Kim Tuttle

NH Natural Heritage Bureau
Melissa Coppola

NH Division of Historical Resources
Edna Feighner
Elizabeth Muzzey

US Fish and Wildlife Service
Bill Neidermyer

EPA
Mark Kern

Army Corps of Engineers
Rich Roach

City of Rochester
Melodie Esterberg

Upper Valley Lake Sunapee Regional Planning Comm.
Nate Miller

Strafford Regional Planning Comm.
Julie Labranche
Myranda McGowan

Rockingham Planning Comm.
David Walker
Scott Bogle

CHA
Robert Faulkner

CT River Joint Commissions
Sharon Francis

Normandeau Assoc.
Al Larson
Ian Broadwater

Gale Assoc.
Armand Dufresne
Colleen Lynch

BEC Inc.
Dan Nitzsche

Nashua Airport Auth.
Royce Rankin

Friends of the Northern Rail Trail
Alex Bernhard

(When viewing these minutes online, click on an attendee to send an e-mail)

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

(When viewing these minutes online, click on a project to zoom to the minutes for that project)

NOTES ON CONFERENCE:

Finalization of June 18, 2008 Meeting Minutes

The June 18, 2008 meeting minutes were finalized.

Rochester, NHS-027-1(36), 10620D

The purpose of this meeting was to provide an overview of the Henderson Site's potential for use as the Phase 2 Wetland Mitigation site for the Rochester 10620D project and receive approval from the Resource Agencies to move forward with the design of the site.

This project involves providing mitigation for wetland impacts associated with the upgrade of the Spaulding Turnpike (NH Route 16). Impacts from the upgrade are estimated at 12.1 acres. A mitigation wetland, approximately 5.3 acres, has been designed, and construction begun, at the City Concrete Site in Rochester. A second site, the Henderson Site, has been identified as a potential site for the balance of the mitigation required for the project.

Bob Landry opened the discussion with a summary of the project. B. Landry indicated he is hoping to gain consensus from the regulatory agencies on proceeding with the Henderson Site. Ian Broadwater and Al Larson of Normandeau Associates (NAI) gave a PowerPoint presentation of the project. Hard copies of the presentation were distributed.

After a discussion of the project history, the Henderson Site characteristics were presented, which included a discussion of the mapped geology, soils, and existing wetlands. An initial investigation of the site in 2004 indicated the potential for constructing a groundwater fed wetland at the site.

The City of Rochester has received a permit to operate a new water supply well located south of the site and its drawdown of the aquifer may affect ground water levels at the Henderson Site. NAI has recommended a hydrogeologic study to evaluate the existing groundwater conditions so that this information could be used in the design of the mitigation wetland at the site. Studies performed by a consultant to the City of Rochester have suggested that the operation of the recently permitted well would induce drawdown at the site, although the well isn't planned to go on line for another couple of years. In addition to the hydrogeologic investigation, a property boundary and topographic survey, and wetland delineations are needed. B. Landry stated that NHDOT surveyors could complete the property boundary and topographic survey.

R. Roach asked if there are any planned uses for the land around the site is. These properties are owned by several landowners, including the City and Aggregate Industries. In addition, the Cocheco River at this location has been nominated for inclusion (designated) in RSA 483, Rivers Management and Protection Program, approved by the Rivers Management Advisory Committee, and sent to the Commissioner of the Department of Environmental Services for formal submittal to the General Court for the necessary legislative change.

Access to the site was discussed. Currently, there is no access to the site other than crossing the Cocheco River. The surrounding landowners have not agreed to provide access and the only

access road to the site is privately owned. Melody Esterberg stated that there is land in a conservation easement held by the City, adjacent to the river. The city owns land west, east and south of the Henderson Site and intends to put additional areas into conservation easements. The City Planner indicated he liked the site for wetland resource protection. Rich Roach stated that the Corps would like to see a buffer around the entire site, if possible. The size of the buffer was discussed as ideally being several hundred feet wide. R. Faulkner asked if local/ City wetland ordnances provided some level of protection to the existing wetland areas adjacent to the site. M. Esterberg indicated that they might. R. Roach indicated that City should try to get the whole zone of influence of the well under protection. Buffer issues, particularly north of the site, will be pursued by B. Landry.

There was also a discussion regarding designating the area for habitat protection instead of wetland creation, as a means of meeting the intent of the wetland mitigation requirements. R. Roach asked whether this was worth pursuing. The consensus was yes. R Roach and others also indicated that it might be more beneficial if it protected open sand areas with lesser amounts of wetlands.

The presentation concluded with the Resource Agency's approval for the Department to move forward with the additional studies and design of the site.

This project was previously reviewed on the following dates: 10/20/99, 1/17/01, 7/17/02, 12/17/03, 11/17/04 & 5/21/08.

Andover-Wilmot-Danbury X-A000(219), 14823

This TE project consists of resurfacing the Northern Rail Trail between Potter Place, Andover and the Danbury Town Garage, a distance of approximately 8.3 miles.

Alex Bernhard of the Friends of the Northern Rail Trail in Merrimack County was in attendance to present the project. This Project involves grading the existing heavy stone railroad ballast to create a level surface with small windrows approximately 10' apart, compacting the ballast between the windrows, lying down 4" of stone dust and then compacting the stone dust. All work will be done within the existing right-of-way except for restoring drainage at several points along the right-of-way. He passed out maps of the project area and pictures showing before, during and after pictures of a similar resurfacing projects recently completed by his organization on the section of the Northern Rail Trail south of East Andover.

Arlene Allen asked if there were any 4th order streams near the project and A. Bernhard replied that he understood that there were none that he knew of and promised to confirm.

Gino Infascelli noted there are two designated prime wetlands in Andover that appear to be within 100 ft. of the project area and provided a GIS map after the discussion.

Tom Jameson asked that A. Bernhard check with Kevin Nyhan concerning the need to obtain a wetlands permit and A. Bernhard stated that he would do so.

This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.

Walpole-Charlestown, XA000(487), 14747

This Context Sensitive Solutions (CSS) project involves the reconstruction and associated improvements to a 3 mile portion of NH Route 12 beginning at Main Street in North Walpole, continuing to approximately NH Route 12A South in Charlestown. C.R. Willeke began by reviewing the project and giving an update on the project status. This section of NH Route 12 is located between an active rail line to the east and the Connecticut River to the west. The existing roadway has 12-foot travel lanes with no shoulders and substandard guardrail. Several sections of the roadway are also showing signs of instability and in some locations sloughing into the river.
As this project is a CSS project, the project purpose, need and preliminary design are being guided by a Public Advisory Committee (PAC), consisting of local property owners, public officials, members of NHDOT and other stakeholders. The committee has developed the following vision statement for the project:

> *"The Route 12 corridor will be safe, efficient, attractive, and environmentally sensitive, while adequately serving the needs of the motoring public, bicyclists, pedestrians and commercial traffic including rail service. Route 12 will be a wider road with adequate shoulders, appropriate guardrails, and safe passage for bicyclists and pedestrians, while providing better access and parking to enjoy the river. This project will realistically maximize the limited space available for the various modes of transportation, while preserving and enhancing the scenic qualities of the area for travelers and residents."*

From this vision statement the PAC recently developed the following four conceptual alternatives:

1) Do Nothing – This alternative would not address the current safety and roadway stability concerns.
2) Railroad as a control (avoids impacts to the railroad) – This alternative requires the roadway to be shifted towards and in some cases into the Connecticut River.
3) River as a control (avoid impacts to the river, but requires impacts to the railroad) – This alternative would require a new rail line to be constructed next to the existing railroad in order to maintain rail traffic on this active Amtrak line. The new rail line would require impacts to the steep slope to the ease of the current rail line.
4) Road Relocation (relocate NH 12 to the east side of the railroad utilizing the existing NH 12A bridge over NH 12) – This alternative would require impacts to the steep slopes to the east of the railroad as well as potential impacts to several wetlands and possible archaeological sites. Additionally, this alternative may require Route 12 to be shifted onto the existing Main Street in North Walpole in order to tie back in with the existing roadway. Main Street in this area is wider than existing NH –12(Church Street), but is a potential historic district.
5) Elevated double decker viaduct (squeeze road between the railroad and the river) – This alternative would be prohibitively expensive and since the support columns for the upper deck would have to be constructed to either side of the lower roadway, it would have a similar footprint and similar environmental impacts to option 2.

Rich Roach and Kim Tuttle indicated that it would be their preference to stay away from the river. K. Tuttle also indicated that this area has a large population of Dwarf Wedgemussels and a high potential for Bald Eagle activity.

C. Willeke noted that if the roadway was shifted to the east of the existing railroad tracks, there are still several properties to the west of existing Route 12, to which access would still need to be maintained. In order to maintain this access, a portion of the existing Route 12 may need to remain open to local traffic.

C. Willeke noted that regardless of the alternatives developed at this point in time, the slope stability of NH 12 in the North Walpole area just north of the Len-Tex corporation may require the NHDOT to impact the Connecticut River either proactively or reactively.

Mark Kern asked if it would be possible to eliminate this section of Route 12 and divert traffic onto Interstate 91 or US Route 5 in Vermont. C. Willeke indicated that there are few locations to cross over the Connecticut River in this area and some of these have low clearances, making it difficult for truck traffic. This would also add substantial travel time between North Walpole and Charlestown.

Sharon Francis from the Connecticut River Joint Commissions (CRJC) noted that this section of NH Route 12 is designated as a National Scenic Byway. The scenic nature of this section of the roadway is extremely important to the community who see this project as an opportunity to improve the Scenic Byway. S. Francis also noted that this section of the river is of value to the Silvio O. Conte National Fish and Wildlife Refuge as it contains a large population of Dwarf Wedgemussels. Given the sensitive nature of the CT River in this area, she requested that natural stream channel designs be used for bank stabilization rather than standard riprap designs.

Melissa Coppola indicated that the NH Natural Heritage Bureau Review conducted for this project did not include impacts to the hillside to the east of the railroad. She indicated that should there be anticipated impacts to this area, further coordination with the Heritage Bureau would be necessary.

Beth Muzzy asked what historical and archaeological investigations had been completed to date. Joyce McKay indicated that Lisa Mausolf had completed a survey of the Sullivan County Railroad Corridor. This survey indicated that the railroad corridor is a potentially eligible historic district, but that there were no individually eligible structures within the project area (either on the railroad or adjacent to the roadway). A copy of the District Area Form for the railroad corridor will be submitted to NHDHR as soon as it is available. J. McKay also indicated that a Phase 1A archaeological study had been completed within the project area. This study indicated that there were approximately 14 archaeologically sensitive areas within the project area (both to the east of the railroad and to the west of the existing roadway). Once a preferred alternative has been chosen, a Phase 1B archaeological investigation would be conducted on the affected sites.

This project was previously reviewed on the following date: 4/18/07.

Bedford-Manchester-Londonderry, DPR-F-0047(001), 11512

This is a follow up from the June 18, 2008 meeting at which the representatives of Ballinger Properties, Morgan Hollis and John O'Neil, requested approval to modify parts of the land preserved to satisfy part of the wetland permits. The requests were:

- Repair ,enlarge and upgrade an existing stormwater detention pond on parcel 1069. This property contains a wildlife corridor easement purchased by the Department in association with the Manchester Airport Access Road project.
- Construct a new stormwater detention pond on parcel 5002 within the above noted wildlife corridor easement.

Subsequent to the previous meeting, several Natural Resource Agency representatives met at the subject location, on July 10, 2008, to view the proposed work on the detention ponds. After the field review, those in attendance at the field review met on July 17, 2008 to discuss their findings. It was determined that the work proposed is not consistent with the easement language. The property owner can repair and maintain the existing detention pond, and create a smaller outfall to this pond on parcel 1069. The property owner cannot however construct a new detention pond within the protected wildlife corridor on parcel 5002.

These findings were reconfirmed by those present. The Resource Agency representatives also noted that any repair and maintenance work on the existing storm water detention pond would require the appropriate wetland permits and the approval of the easement holder (NHDOT). An outfall that has minimal impacts would be considered for approval. It was questioned how the drainage could be engineered at this time for the future development of the properties. The current site approvals are for the gravel operations only. When the property is redeveloped, permits would need to be reapplied for the proposed use.

This project was previously reviewed on the following dates: 11/14/96, 4/16/97, 5/28/97, 8/20/97, 12/16/98, 1/20/99, 10/20/99, 12/15/99, 2/16/00, 3/22/00, 6/14/00, 3/21/01, 4/18/01, 1/16/02, 8/21/02, 6/18/03, 3/24/04, 7/21/04, 9/15/04, 10/20/04, 12/15/04, 9/21/05, 3/15/06, 5/17/06, 8/23/06, 3/19/08 & 6/18/08.

Andover, 14679A (Non-Federal)

Wendy Johnson gave a brief recap of this project which involves replacing an existing 48" corrugated metal pipe (CMP) culvert that carries Mitchell Brook beneath NH Route 11/ US Route 4 to the east of North Street in Andover. The subject culvert can pass a maximum of approximately 140 cubic feet per second (CFS), which is slightly less than the 5-year storm (Q5). The intent of this project is to replace the existing culvert with a structure that can pass approximately 375 CFS (approximately Q25).

At the April 16, 2008 Monthly Natural Resource Agency Coordination Meeting, the Department presented two alternatives, twin 5' diameter concrete pipes or one 9' wide by 6' tall concrete box culvert. With both options, the length of the culvert(s) would be reduced from 70' to 60'. Although the Department's preferred alternative was the twin 5' pipes, the Resource Agencies previously indicated they preferred the box culvert option.

W. Johnson indicated that additional examination of both alternatives had found that they would both require about the same property and wetland impacts. She also noted that the box culvert alternative would cost at least 50% more than the dual pipe option. FHWA has confirmed several times that the only Federal funding for this project would be in the form of Emergency Relief funds, equal to the cost of replacing the existing 48" pipe in kind. Any additional work or upgrades would not be eligible for Federal funding. Given the current fiscal constraints and the additional costs associated with the box culvert option, the Department would still prefer the dual pipe option.

Gino Infascelli asked if the Department had determined what the size of the downstream railroad culvert is, and if it has been the source of some of the flooding. He also noted that depending on the size of the railroad culvert, the proposed structure could create problems downstream. W. Johnson indicated that the size of the railroad culvert has not yet been determined, but she would find out as soon as possible. (*It was later determined that the downstream railroad structure is a bridge, approximately 100' long with approximately 10' of freeboard.*)

G. Infascelli asked if this project was near any of the Andover prime wetlands. Jon Evans indicated that this had been reviewed at the previous meeting and that the nearest prime wetlands were outside the project and would not be impacted by the proposed project.

Bill Neidermyer and Rich Roach asked why the proposed project would not pass the Q50, as they believed this was the current design standard. W. Johnson indicated that a design of this magnitude was beyond the scope of this project as it would require more property and wetland impacts and would be substantially more expensive. J. Evans noted that although the proposal may not be ideal, the dual pipe option would improve conditions from those that exist today.

R. Roach indicated the agencies would not look fondly upon the dual pipe option and would probably require an Individual Permit.

The project will be reviewed again once more information is gathered and the Department moves forward with a design for permitting.

This project was previously reviewed on the following date: 4/16/2008.

Bedford, 13527 (Non-Federal)

This project was previously presented at the April 18, 2007 Natural Resource Agency Meeting. The project involves the replacement of NH Bridge No. 189/121 carrying US Route 3 over the F.E. Everett Turnpike (F.E.E.T), just south of the NH Route 101 and I-293 interchange. Associated approach work includes widening U.S. Route 3 to 4-lanes. Previously it was noted that off-line construction would be likely, but the location was not determined at that time. Current plans are to construct the new alignment to the north of the existing structure as there is limited right-of-way to the south and the existing structure needs to be maintained until the new bridge can be opened to traffic. A longer span is anticipated to accommodate potential widening of the F.E.E.T.

No wetlands impacts have been identified within the project area, but the increased length and width of the pavement for this project would increase the impervious surfaces. Currently there is 2.7 acres of pavement and the proposed design has 4.5 acres of pavement, an increase of 1.8 acres. Rough calculations of the drainage show the existing Q10 to be 15 cfs with the proposed design having a Q10 of 24 cfs. The drainage is currently sheet flow, but the new design will include curbs and sidewalks, necessitating the installation of a closed drainage system.

J. Kirouac noted that both ends of the proposed bridge will be constructed on ledge and the eastern end of the bridge is the high point of the project area. This prevents easy construction of a detention pond in the immediate vicinity of the bridge. He also mentioned that much of the area surrounding the project is either currently developed, or is in the process of being developed. This limits the availability of land to purchase for stormwater treatment. The Department is currently surveying the land to the northeast of the bridge to determine if it might be a good location for stormwater treatment. J. Kirouac is working on possible drainage plans and has requested comments and suggestions from the Resource Agencies. He noted that Lowes/Target to the southwest of the project area has some stormwater treatment facilities as does the new hotel on the southeasterly side.

J. Kirouac noted that there is a brook to the north of the work area that runs thorough a 72-inch pipe under Interstate I-293. R. Roach noted that this stream may already be distressed and J. Kirouac noted that it goes through the Manchester Country Club area. J. Kirouac also noted that development has been proposed for the property on the northwest quadrant of the bridge, across the street from Lowes. He indicated that, if possible, the Department might work with the prospective developer to construct a joint drainage system. A public hearing will be held this fall.

Rich Roach noted that the Department should be looking for land now for water treatment. Lori Sommer noted that the town should be looking at a comprehensive plan for drainage for any new development. Gino Infascelli noted that the project needs to meet the Alteration of Terrain rules. This will be presented again as drainage plans are finalized.

This project was previously reviewed on the following date: 4/18/07.

Strafford Regional Planning Commission Metropolitan Plan

The Strafford Metropolitan Planning Organization (SMPO) Natural Resources Chapter of the Metropolitan Transportation Plan outlines a conceptual framework for complying with the new requirements of the federal law *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU) regarding consistency between transportation improvements and State and local planned growth and economic development and environmental and natural resource protection. Specifically, the Chapter addresses changes relating to mitigation of environmental impacts and collaboration among federal, state and local interests.

First, mitigation should incorporate a range of opportunities that address impacts with focus on treating resources in a holistic manner to achieve maximum protection of ecosystems. Loss of natural resources should be considered when no feasible alternatives exist, and any resulting

impacts should be avoided, minimized and mitigated to the full extent possible. *Compensatory mitigation* shall include the restoration, establishment, enhancement, or in certain circumstances preservation of wetlands, streams or other aquatic resources for the purpose of offsetting unavoidable adverse impacts.

Mark Kern recommended that mitigation opportunities be located on existing conservation lands, used as a method to extend existing protected areas or to strengthen protection and conservation of natural resources.

Leigh Levine, recommended that communities prepare a list of mitigation projects, including locations of failed and/or undersized culverts and flood prone areas. He also noted that these improvement project lists could be presented at a Natural Resource Agency Coordination meeting for review and comment by agency staff.

To further fulfill the requirements of SAFETEA-LU, the Strafford Metropolitan Planning Organization will strive to develop strategies that encourage collaboration across municipal, regulatory and social boundaries to achieve regional and local transportation and natural resource goals. The SMPO strategies will focus on problem solving to expedite solutions, minimize the costs of conflict and competing interests, and increase public participation and awareness. The primary goal of the SMPO strategy will be to strengthen the link between transportation planning and natural resource protection, management and planning in the region.

The Chapter also includes an overview discussion and statistical information about natural resources in the SMPO region.

Rockingham Regional Planning Commission Metropolitan Plan

David Walker, Senior Transportation Planner with the Rockingham Planning Commission introduced himself and Scott Bogle, also a Senior Transportation Planner with the RPC. Walker explained that Federal Legislation requires that the Metropolitan Planning Organization (MPO) Transportation Plan (Plan) address the issue of environmental impacts with a generalized discussion of potential mitigation activities and that the MPO must "consult" with appropriate local, state, and federal agencies and plans regarding environmental resources.

D. Walker provided background information about the Plan update that the RPC is undertaking. This is a substantial revision to condense and create a document that is easier to read, covers 2009-2035 time horizon as agreed upon in Interagency Consultation and ensures that we are meeting all Federal transportation planning requirements. Projects come from the State 10 Year Plan, corridor studies, ITS Architecture, the communities, transit agencies, as well as needs identified from the model.

D. Walker stated that the information regarding environmental mitigation in the Plan is gathered from the New Hampshire Natural Resources Network, Land Conservation Plan for New Hampshire's Coastal Watersheds, and the New Hampshire Wildlife Action Plan. Three approaches to mitigation are identified; *Avoidance of impacts* – Alter the project so an impact does not occur, *Minimization of impacts* – Modify the project to reduce the severity of the impact, and

Compensatory Mitigation of impacts – Undertake an action to alleviate or offset an impact, or to replace an appropriated resource. The common resource impacts and types of mitigation activities appropriate for each are addressed in Table 3.7 of the Plan. The RPC is working on a map that overlays project locations with natural resources to generally identify which projects may have impacts and require mitigation.

The RPC is also undertaking a new aspect to the Plan that uses the regional travel demand model to create land use scenarios that radically shift development patterns but keep the same overall levels of growth. The intent is to compare to the existing pattern and identify changes in travel patterns, volumes and mode split to see if the needs of the future transportation network change and what that will mean for identified projects. The outcome will be policies and project programming that support more compact land development with less impact on natural resources. The Current status of the plan is that the first draft was sent to this committee. The draft is being revised for the start of a public comment period on September 9th, 2008. The Plan is scheduled to be adopted by the RPC on October 8th, 2008.

M. Kern commented that they would like to see more in the Plan with regard to potential mitigation sites adjacent to existing natural or preserved areas. He also indicated that he would like to see a culvert inventory similar to what SRPC has undertaken.

Nashua Municipal Airport, AIP #3-33-0012-28-2007

Armand Dufresne introduced the project and gave a brief background. The project was previously reviewed on April 18, 2007. The Airport is currently in the process of preparing an Environmental Assessment (EA) for proposed improvements planned for the next five years as shown on the Airport's Airport Layout Plan (ALP). A. Dufresne briefly explained that the Airport has one runway (Runway 14-32) that is currently 5,500 feet in length. The runway currently does not meet FAA standards for runway to taxiway separation, runway length or Runway Safety Areas (RSAs). A. Dufresne presented the existing conditions alternative (i.e., no-build alternative) in which the runway maintains its current, sub-standard runway to taxiway separation and runway length. Under this alternative, RSAs are constructed in place to meet of the minimum FAA standards. This alternative directly impacts 11.2 acres of wetland through direct fill or grading, and impacts 23.8 acres of wetland through tree clearing. A. Dufresne stated that several iterations of development alternatives were evaluated and were available for any one who had questions about the process. The final alternative meets the FAA standards for safety, and has a total direct wetland impact of 8.8 acres, and impacts 15.3 acres of wetlands through tree clearing. A. Dufresne indicated that avoidance of wetland impacts is not possible without complete relocation of the Airport to another location, and that the Airport had minimized its impacts to the maximum extent practicable while still complying with FAA safety requirements. No additional alternatives were requested by the attending environmental agency representatives.

A. Dufresne stated that the 8.8 acres of wetland to be directly impacted through fill or grading are frequently mown and have little functional value aside from some limited flood storage. The 8.8 acres of directly impacted wetland can be mitigated in-kind on Airport property. The 15.3 acres of vegetated wetland that will be impacted through tree clearing will be maintained as a scrub/shrub wetland, and the Airport is looking at opportunities for off-site mitigation for the change from

forested wetland to scrub/shrub wetland. Rich Roach asked why the Airport is maintaining the 15.3 acres as wetland and stated that airport maintenance activities would be easier if the forested wetland areas were fully converted to uplands. Dan Nitzsche stated that the Airport intended to first avoid, and then minimize, wetland impacts resulting from these airport improvements.

Mark Kern asked for clarification on which aspects of the proposed improvements are intended for safety and which are capacity expansion. A. Dufresne stated that the runway to taxiway separation and the safety areas are safety improvements. The project also includes a 150' runway extension that is based on a safety analysis of runway length needs by existing and proposed aircraft at the Airport. A runway length analysis indicated that the aircraft using the runway require a total runway length of 6,800 feet for takeoff. The Airport, in conversations with pilots, determined that a minimum of 6,000 feet would be necessary to accommodate the current fleet. The addition of 150' of runway, and use of declared distances and a partially paved runway end safety area at the Runway 32 end will provide a total length of 6,000 feet for takeoff from the Runway 32 end, and 5,650 feet for landing on Runway 32.

Lori Sommer asked about the time frame for the project. Carol Niewola stated that no federally funded airport improvements could be done at the Airport until these safety concerns are resolved. A. Dufresne indicated that, prior to any construction of the runway, the Airport must first complete the EA, then acquire easements for tree clearing, complete mitigation, and finally develop a final runway design and submit for permits. Roy Rankin, Airport Manager, indicated that the runway has surpassed its design life and is in need of reconstruction. C. Niewola reiterated that, before the Airport can make any improvements to the runway, it must be brought up to current FAA standards and this is a priority for the Airport and FAA.

R. Roach asked if there is a 20-year improvement plan for the Airport. A. Dufresne stated that the EA covers all of the proposed improvements for the next five years, including the runway and taxiway shift, an expansion of the existing apron and a future T-hangar development area. The impacts disclosed are the impacts for all of those proposed improvements, not just the runway improvement.

R. Roach inquired about neighbor noise complaints. C. Niewola stated that an evaluation of aircraft noise is included in the EA. A. Dufresne indicated that the proposed runway shift relocates the centerline of the runway away from a residential neighborhood and is instead over a more commercial and industrial area in the final approach segment.

Melissa Coppola asked if there were any impacts to rare plants on the Airport as a result of the project. D. Nitzsche responded that the areas of impact were not in areas of known rare plant species. Colleen Lynch stated that, in the EA project, rare species maps were obtained from the Natural Heritage Bureau, which indicated that there were no rare species located in the area of impact.

A. Dufresne stated that the Airport met with the Nashua Conservation Commission (NCC) and its staff to discuss possible off-site mitigation for the airport improvements. The NCC indicated that its priority project is an industrial redevelopment site and brownfields project on Main Street in Nashua. The project is adjacent to the Salmon Brook and includes restoration of wetlands in the

riverine buffer. R. Roach and M. Kern indicated that the park site might not be an appropriate mitigation site for the impacts of the proposed Airport project.

C. Niewola asked for specific feedback on off-site mitigation possibilities. M. Kern indicated that the Airport is adjacent to the Pennichuck watershed, and acquisition of land to make the Pennichuck area larger may be a potential project to look into. R. Roach stated that there are several areas of conservation land near the Airport in the Merrimack, Hollis, Nashua area that are segmented and could be improved if the Airport were to acquire adjoining land. L. Sommer stated that the Airport might have an easier time finding a conservation organization to manage an easement over a parcel that is adjacent to their existing protected land. R. Roach offered the names of several contacts and property owners for Gale Associates and the Airport to contact with regard to possible property acquisition. L. Sommer recommended reviewing the online GRANIT database to identify existing conservation parcels and to look for appropriate adjacent parcels. R. Roach mentioned a property that is for sale that encompasses part of Witches Brook. Kim Tuttle mentioned that Witches Brook is a unique, high-quality trout habitat with rare plant species in the vicinity as well as uplands and wetlands. She also indicated that she would be in favor of this protection as mitigation for the airport improvements.

D. Nitzsche asked what level of conservation is preferred. G. Infascelli stated that there are guidelines for what is acceptable mitigation; mitigation ratios for preservation of land have been approximately 15:1. It was acknowledged that the wetlands being impacted are of low value and that it is probably not reasonable to provide all mitigation on the Airport property. Instead, protecting a parcel that has a higher value would be more beneficial. L. Sommer said that a 30-40 acre parcel might be more difficult for a conservation organization to manage unless it's attached to another conservation parcel. M. Kern stated that there was not a specific number in mind for the Airport's mitigation, but 15:1 mitigation is required for wetland filling. M. Kern said that the natural resource agencies were looking for a mitigation project that makes good environmental sense.

The Airport will continue to work to develop a mitigation plan, including a map of the area conservation parcels, and will move forward with completing the EA and will return to meet with the natural resource agencies in the future with additional refinement to the Airport's mitigation strategy.

This project was previously reviewed on the following date: *4/18/07*.