LOWER MERRIMACK RIVER LOCAL ADVISORY COMMITTEE
MINUTES
March 24, 2011

Members:
✔ = present

Current:
- ✔ Kathryn Nelson (Chair) -- Nashua
- ✔ Michael Redding (Vice Chair) - Merrimack
- ✔ Karen Archambault (Secretary) – Nashua
- ✔ Nelson Disco - Merrimack
- ✔ George May – Merrimack
  Bob Robbins – Hudson
  David Scaer – Hudson

Pending Renewal:
- ✔ Jim Barnes (Treasurer) – Hudson
  Glenn McKibben – Litchfield

Associate Members:
Mildred Mugica – Nashua

Also in attendance:
- Geoff Daly, corridor resident and potential member, Nashua
- Richard Fixler, P.E., Assistant Airport Director, Engineering and Planning, Manchester-Boston Regional Airport
- John Hagopian, P.G., Environmental Compliance Specialist, Manchester-Boston Regional Airport
- Lucy St. John, Deputy Planning Manager, City of Nashua
- Tracie Sales, Water Resources Manager, Merrimack River Watershed Council

The meeting was called to order at 7:05pm in the Music/Art/Media section at the Nashua Public Library by Vice Chair Kath Nelson. Kath mentioned that David was ill and unable to attend the meeting.

Old Business

Manchester-Boston Regional Airport – Water Quality Monitoring

Mr. Fixler and Mr. Hagopian were introduced to discuss the water quality monitoring study results, completed since they last attended LMRLAC meetings in December 2009 and January 2010. They explained that a complaint about foam in the Merrimack River in 2009 led to a year-long monitoring project to determine possible impacts from runoff of deicing fluid (propylene glycol) used at the airport. The sampling effort ran from August 2009 to August 2010. Samples were taken at two outfalls: outfall #19, which discharges to the Merrimack River, and outfall #9, which eventually discharges to Cohas Brook via a swale. The samples were analyzed and a draft report of the results is now complete. The report was sent to the Environmental Protection Agency (EPA) in October 2010. The airport is awaiting a response from EPA and expects to hear from them by mid-year 2011. Mr. Hagopian handed out a couple of copies of the executive summary for members to review.

Mr. Fixler and Mr. Hagopian stated that extensive modeling was part of the study. Mr. Hagopian stated that the modeling used the worst case scenario, which assumed 100 percent of the deicing fluid reaching the river with the lowest flow of the river. Since deicing fluid is used in the winter, and lowest river flow is in the summer, this scenario should never happen.

Mr. Fixler and Mr. Hagopian described that, in addition to the year-long monitoring effort for the deicing fluid, the airport also has an ongoing monitoring effort under its National Pollution Discharge Elimination System (NPDES) Multi-Sector General Permit. Mr. Hagopian indicated the current airport NPDES permit is good for five years.

Mr. Fixler also mentioned the EPA is currently working on developing effluent limitation guidelines (ELG). The airport is waiting for feedback from regional EPA, national EPA, and release of the ELG before taking next steps.

Mr. Hagopian briefly described that the effluent limitation guidelines are based on the amount of fluid use and the number of planes. The draft ELG was released in late 2009; the EPA is still reviewing and processing the comments received in response to the draft. The NPDES Web site should include information on the status of the ELG.

Mr. Hagopian described that 98 percent of the glycol is used at the ramp and 2 percent at the general aviation area. The ramp drains to outfall #19 and general aviation drains to outfall #9. Two types of deicing solution are used: type 1 is a 55:45 water-to-glycol ratio and type 4 is 100 percent glycol; referred to as 'anti-icing'. After deicing an aircraft, anti-icing is sprayed on the wing leading edge and the top of the fuselage. The anti-icing fluid is green; deicing fluid is pink. The airport is considered a 'small hub' based on the number of aircraft operations and the amount of glycol used. The airport annually uses about 100,000 gallons of types 1 and 4 combined, on average.

The deicing requirement falls on the airlines. A special truck is needed, often owned by the airlines. Mr. Fixler stated one possible result might be to purchase trucks which can put out both glycol and forced hot air. The forced hot air removes the snow, thus reducing the amount of glycol needed.

Jim asked whether a separate deicing area could be set aside at the airport. The response was negative; such a setup can lead to the need for more deicing since the aircraft have to move back and forth between the gate and the deicing area. Geoff asked about the possibility of a permanent station at the general aviation area. Mr. Fixler stated that was a possibility, but that area uses a small percentage of the glycol used at the airport.

Geoff asked where the glycol goes. Mr. Hagopian indicated that studies have been done, but that the studies cannot account for up to 30 percent of the glycol – it is volatile and likely evaporates in the atmosphere.

Geoff asked about the use of salts and Mr Hagopian indicated no salt is used within the fence as it's corrosive. Geoff mentioned that a mix of magnesium chloride and sugar is used at the Boulder airport in Colorado.

Mr. Hagopian indicated that pavement deicing was not included in the study. He also stated that the airport uses potassium acetate to treat the pavement, but it is expensive and thus used sparingly. Other treatments for the pavement are to initially sweep, and to use sand that is designed not to be sucked up by aircraft engines.

Nelson asked who performed the study. Mr. Hagopian replied that Smart Associates was partnered with Weston Solutions. The macroinvertebrate portion of the study was conducted by another subcontractor, and Flow Assessment Services was responsible for the monitors at the outfalls.

Kath asked for some specifics about the sampling process used and asked whether any dissolved oxygen (DO) sag was detected. Mr. Hagopian replied that only instantaneous samples were taken.

Reading from the executive summary, Kath pointed out that 6 biochemical oxygen demand (BOD) and 4 chemical oxygen demand (COD) readings exceeded benchmarks at outfall #19. Mr. Hagopian replied that the benchmarks are defined under the NPDES Multi-Sector General Permit and that the glycol usage at the airport triggers quarterly reports and sampling of those outfalls during specific storm events. If the location exceeds a benchmark, it is not a violation of the permit. It leads to working with EPA and DES to study the circumstances causing the levels and development of Best Management Practices (BMPs) to improve the levels.

Kath asked whether the river is seeing an impact from the glycol. Mr. Hagopian replied that there does not appear to be an impact on dissolved oxygen in the river. Geoff quoted from the last page of the executive summary, which encourages the airport to use glycol without the nonylphenols and tolytriazoles. Mr. Hagopian replied that those substances are not an issue.

Jim asked what the next step is and whether monitoring will continue. Mr. Hagopian replied that the study is complete; monitoring at outfalls continues in accordance with the NPDES Multi-Sector General Permit.

Kath said the executive summary indicates no foam or odor was detected. George stated there had been reports during water quality sampling of foam from Cohas Brook where it enters the Merrimack. Mr. Hagopian replied he looks at the river and outfalls and stated the foam he sees is not necessarily from the airport; Little Cohas Brook sometimes has foam in it when it enters the airport. George pointed out that the foam is a visual pollutant, and part of LMRLAC's job is to try to clean up the river. Mr. Hagopian mentioned that generally the foam is gone by the time that outfall #19 gets to the confluence with Little Cohas Brook.

Kath stated her concern is more with the DO and quoted from the executive summary that indicated it was exceeded on December 19, but the conclusion stated there is not an adverse impact. Kath asked how that conclusion was reached. Mr. Hagopian stated he will provide a copy of the modeling report to address specific questions about the modeling. Mr. Hagopian further stated the model says the DO is not a concern; the model runs several different scenarios and indicates there's not a diminishing of the DO. Kath commented that it appears there was nothing alarming, but she would like to see the full report; Mr. Hagopian offered to provide a copy. Mr. Hagopian also offered to put LMRLAC in touch with the firm that did the modeling. Mr. Fixler stated he will e-mail the executive summary to Kath so she can forward it to LMRLAC members. Mr. Fixler suggested members submit questions after reading the executive summary.

George expressed interest in seeing the results in the macroinvertebrate portion of the study, which is not yet complete. Kath mentioned the Upper Merrimack River LAC (UMRLAC) has a macroinvertebrate sampling program and it will be interesting to compare their data to the airport study data. Mr. Hagopian indicated he had asked at the UNH Stormwater Center what affects macroinvertebrates; 'salt' was the response, which isn't used at the airport.

Mr. Hagopian briefly described the macroinvertebrate collection process. Four rock baskets were connected to an anchor and left in the river for a couple of months. The baskets were then removed from the river and the contents put in sample jars for study.

George asked whether the airport had looked into glycol recovery vehicles. Mr. Fixler replied that the airport hopes to stay away from that approach, citing concerns about trucks driving around the airport in poor weather and the possibility of hitting aircraft. Mr. Fixler and Mr.

Hagopian commented that deicing is used just when it's precipitating out, and mentioned that there is defrosting solution that is used when it's not precipitating. The airport has looked into recycle/recovery of the glycol, but it wasn't worth the while and recycled fluid is not currently legal for use in the US.

Mr. Hagopian again stated that the airport is waiting to see where the regulators want the airport to go with this. Mr. Fixler stated there is money in the capital budget to do something next year.

Kath asked whether Mr. Fixler and Mr. Hagopian could come back to update LMRLAC, perhaps when the DES and EPA comments are back. Mr. Fixler suggested LMRLAC check back with the airport in the fall.

Mr. Hagopian speculated that the airport will have to do something about odor and foam and suspects the DO will not be much of a concern. He stated the airport has never seen fish kills at the outfalls. Mr. Fixler mentioned that the airport would like to reduce the amount of glycol used and look at options for addressing foaming and odor, speculating that perhaps undersurface oxidizers would be involved.

Mr. Hagopian indicated the airport had tried a substance similar to room deodorizer as an odor treatment, and found that the deodorizer includes glycol as an ingredient.

Mr Fixler offered to bring in a consultant to discuss the study results in more detail. Kath suggested LMRLAC use e-mail first and resort to bringing a consultant in only if the questions cannot be addressed in an e-mail exchange.

Kath thanked Mr. Fixler and Mr. Hagopian for coming to speak with the LAC.

Merrimack - Proposed PSNH Thornton and Eagle Substations
Nelson stated the Merrimack Planning Board approved the project with several conditions. The applicant has to return to the Planning Board for review of their conditions. Michael took the copy of the Shoreland application and will send comments to Kath, who will then circulate the comments for review. The Shoreland permit date is March 2011, so LMRLAC may still have an opportunity to comment on it. Kath stated that the Alteration of Terrain permit was approved.

Geoff mentioned the stand of hardwoods that would be affected by the project. Kath asked Michael to check the application to see if anything had been relocated.

George asked about the mitigation for the project. Nelson stated that the Merrimack Conservation Commission has a list of mitigation sites and has a site in mind for mitigation for this project – it's on a tributary of the Merrimack but is not within the corridor. Nelson also pointed out that the Merrimack Conservation Commission would like the mitigation funds spent within the town.

Kath suggested LMRLAC have a policy discussion as a group to figure out the LAC's point of view on mitigation within the corridor vs. within the affected town. George suggested that NRPC has some information about good sites. Kath agreed, and suggested that 603b funds could be used to put the list together, and the list could be submitted to the state to be added to the list of potential Aquatic Resource Mitigation (ARM) sites. Members expressed concern about applicants paying into the ARM fund which can take the money out of the town. Michael pointed out that applicants can only use the ARM if there are no other options.

New Business
No new permit applications have been submitted for LMRLAC to provide comment on within the corridor, but Kath mentioned that LMRLAC had received a copy of an application for a project in

Hooksett. George suggested LMRLAC could still comment. Kath agreed, but expressed concern about the added expense to the applicant when LMRLAC has no jurisdiction. Michael took the application to look it over.

Kath asked for ideas on how LMRLAC could find out more about the Alteration of Terrain permit application in Bedford, for a 908,700 square foot disturbance to construct a Market Basket. Jim suggested that the Bedford Town Hall would have information on the project.

This led to a brief discussion about whether LMRLAC would want to pursue expanding its range to cover the towns between UMRLAC's jurisdiction and LMRLAC's current jurisdiction; specifically, Manchester, Bedford, and Hooksett. NRPC could use a 604b grant to help LMRLAC expand its Designated River segment. Nelson commented that those towns are not within NRPC. Kath replied that the grant is for NRPC to assist LMRLAC, which is within its scope. Members agreed this could be a discussion item with NRPC.

Merrimack – Proposed YMCA near Horseshoe Pond
Kath read from a letter dated February 7, 2011, which indicated DES had not received enough information on the project. Nelson stated this is the Manchester YMCA project near Horseshoe Pond, and the wetlands permit is for the Naticook Brook crossing needed to access the parcel. A new set of plans is coming to Merrimack. In the letter, DES requests that the applicant send a copy of the application to LMRLAC, but LMRLAC did not receive it. Kath will contact the Wetlands Bureau at DES stating that LMRLAC has not received anything on the project and requesting a status.

General Discussion
Elections
The following slate of officers was proposed:

Char	Kath Nelson
Vice Chair	Michael Redding
Secretary	Karen Archambault
Treasurer	Jim Barnes

Members unanimously approved the proposed slate of officers. Kath will contact DES so applications can be sent to her rather than to Bob. Jim mentioned that the bank account needs to be updated to put his and Kath's names on the account.

Local Updates
Nashua - Monitoring wells at Millyard Cotton Mill site
Geoff asked whether LMRLAC had received notification of a problem at the Cotton Mill site in Nashua, where monitoring wells were not being monitored properly. Geoff indicated that plumes of #2, #4 and #6 oil were detected. Geoff had contacted Mike McCluskey in the Waste Management division at DES, who said he would notify Geoff of the proper contact person for the project. Ms. St. John commented that the Cotton Mill project had come before the Conservation Commission and the Planning Board; the Conservation Commission was pleased that improvements were being made to the site. Ms. St. John offered to talk to Deb Chisholm, Brownfields Coordinator for Nashua. Geoff indicated he had already spoken with her.

Nashua - Monitoring Wells at Keyspan Site on Bridge Street
Geoff asked what was being monitored that now requires monitoring wells on the north side of the river at the site. It was also mentioned that monitoring the site to determine what was happening is preferable to not doing anything at all. Ms. St. John stated that the project was submitted to the NCC for review. Information included in the NCC application packet is available for review at City Hall. Kath asked Ms. St. John to keep LMRLAC informed. Ms. St. John mentioned that she reviews the LMRLAC minutes and forwards them to others in City Hall

as may be relevant. Kath asked if LMRLAC could get an update from Tom Galligani, Economic Development Director in Nashua, on the status of the project at the confluence of the Nashua and the Merrimack Rivers.

Nashua - Conservation Easements
Ms. St. John mentioned that Nashua is looking at trails in the City and that the Conservation Commission has formed a trails subcommittee. The Nashua River Watershed Association conducted a study for the City from 2009-2010 reviewing the conservation easements areas, and Nashua is now looking at what can be done with some of the areas.

Kath introduced Tracie Sales, Water Resources Manager at the Merrimack River Watershed Council. Tracie briefly explained that the MRWC performs water monitoring, and mentioned that the MRWC has a Nashua project planned if they can get funding for it.

Upcoming Meetings
Kath stated William Keating, City of Nashua Wastewater Project Engineer, will attend the April 28 LMRLAC meeting to discuss Nashua's Combined Sewer Overflow (CSO) project.

Jill Longval, Environmental Planner at NRPC, will attend the June 23 LMRLAC meeting to discuss some grant or funding opportunities.

Meeting adjourned 9:00pm.

Next meeting is currently scheduled for Thursday, April 28, 2011, at 7pm at the Nashua Public Library.

Respectfully submitted,
Karen Archambault
secretary