Office of the City Manager
City Hall • 375 Merrimack Street • Lowell, MA 01852
P: 978.970.4000 • F: 978.970.4007
www.LowellMA.gov

Bernard F. Lynch
City Manager

In CC packets 5/21/09 by D Ingalstom

MEMORANDUM

TO: Mayor Edward Caulfield
And
Members of the Lowell City Council

FROM: Bernard F. Lynch, City Manager

DATE: May 18, 2009

SUBJECT: **MOTION OF 5/12/09 BY COUNCILOR ELLIOTT**

"REQUEST THE CITY MANAGER TO REPORT ON THE CONCLUSIONS AND FINDINGS OF THE FLOOD WORKING GROUP FROM NOVEMBER 2008 TO MAY 2009".

The establishment of the City Manager's Flood Working Group stemmed from discussions with the City Council and Flood Subcommittee to bring together city staff, representatives from the flood impacted neighborhoods and Congresswomen Tsongas' office. The initial intent of the group was to provide a forum with open lines of communication to facilitate discussion of the flooding issue and to seek solutions and/ or remediation. City departments represented include the Manager's Office, Engineering, DPW, Wastewater, Legal and Historic and also included two representatives and an alternate from the Beaver Brook and Clay Pit neighborhoods.

From the initial meeting it was clear that the key issue in the larger discussion of area flooding was the Flashboard System being utilized on the Pawtucket Dam by Enel North America. FERC had requested that Enel North America meet with stakeholders to discuss the flashboard system. The working group provided an expedient forum to accomplish this. As a result other stakeholders were brought in, including the National Park Service and Enel. Subsequently, another resident from the neighborhood joined the group. I utilized the Engineer's Office to coordinate the meetings and provide an agenda.

At the meeting on February 2, 2009 developed a summary of the pros and cons of the alternatives to the flashboard system at the Pawtucket Dam. The summary was discussed at subsequent meetings. The pro/con summary is attached with the 4' board with a 1' add-on

clearly preferred. The National Park Service and the neighborhood representatives do not support the inflatable crest gate system.

A goal of the working group was to assure that FERC was aware of the issues residents of the Clay Pit Brook neighborhood were having with Enel's control of the Pawtucket Dam. This has been accomplished. FERC has communicated regularly with city staff on this topic. Many residents from the Clay Pit Brook neighborhood have submitted comments through the official FERC process. In addition, on March 13, Congresswoman Tsongas' office coordinated a meeting with representatives of FERC, US Army Corps of Engineers, Enel, city leaders, and residents. In this forum, all groups presented their case. Attendees felt it was a productive session.

At the last meeting of the task force on April 30, members were provided copies of letters from the City to both Enel and FERC. As of May 15th, FERC has not responded to the letter from the City regarding the motion of the City Council relative to the Wang agreement. However, FERC did send communication to ENEL approving the thrust of the Wang agreement by allowing the installation of the 4' boards now and another foot of flashboard on 7/1/09. Also, as of May 15th, ENEL has not responded to the City's letter relative to monitoring.

No further meetings of the City Manager's Flood Working Group are scheduled at this time. If you have any further questions, please do not hesitate to contact me. Thank you.

Flood Working Group Participants

Peter Aucella	NPS
Megan Beauregard	BHI
Paul Belley	Resident
Ted Davis	NPS
Lisa DeMeo	City Engineer
Jon Dollard	BHI
Deb Forgione	Resident
Bob Gagnon	Resident
Tim Ignacio	Resident
Bob LaRochelle	BHI
Bernie Lynch	City Manager
Brian Martin	Congresswoman Niki Tsongas' Office
TJ McCarthy	Asst. City Manager
Chuck Parrot	NPS
Dave Redding	NPS
Eric Slagel	Asst. City Solicitor
Steve Stowell	Lowell Historic Board
Mark Young	Executive Director, LRWWU

Flashboard and Flood Protection with Enel

Monday, February 2, 2009
3:00 PM
Mayor's Reception Room
City Hall

Alternative: Wooden Flashboard - 4' plus 1' (60" pins embedded 6")	
Pro	**Con**
System proven to work	Operator safety (maintenance)/Risk reduction
Will meet Wang Agreement	Introducing plywood to environment
Keeps historical integrity	Inconsistent failure
Manpower & knowledge to make it work	Plywood would keep water level higher than boards
Process exists to prevent incorrect pin placement	Less head
Track record (150 years) of flood protection	Fish passage issues
Trash removal by hand	Maintenance costs
NPS runs tours to see it	
No flooding since 4/07 (w/current pin design)	
Allows ice to form (frazzle ice)	
Erosion will not scour	

Alternative: Wooden Flashboard 5' (66" pins with 6" embedded)	
Pro	Con
See other Wooden alternative	Cannot meet Wang Agreement
	Boards fail upon refill
	Manually remove trash
	Erosion issues downstream (Enel asked for independent confirmation)
	Taller pins causes increased stress on capstones

Flashboard and Flood Protection with Enel

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Alternative: Inflatable Crest Gate (rubber bladder)	
Pro	**Con**
Humanly controlled (automated) water level	NPS & Lowell Historic Board opposed due to historic preservation issues
Lawrence Dam takes 30 min. to inflate/deflate	Ability to pass trash
Lower maintenance costs	Maintain 92.2' elevation at all times regardless of upstream conditions
Optimal electric generation for a body of water	Unknown environmental impacts of the compressed air system
Fish passage improved	Residents feel they are better off under current system
Ability to lower river levels in advance of high water	Tourism re: dam would diminish
Ability to meet Wang Agreement	Difficulty in visually affirming gate level
Allows ice to form (frazzle ice cannot form)	Relying on relationship w/Enel (trust)
Reduces stream bank erosion	Need for an O&M agreement w/City
Increased revenue	Water level can be intermittent (not 'all or nothing')
River elevation more stable for upstream recreation and municipal functions	Humanly controlled water level (trust issues)
Minimize trash blocking gates	Boat procedures need to be developed
Boat procedures already in place	