River Advisory Committee

April 19, 2017

1. Convene the meeting

Chairman Lionel Ingram called the meeting to order at 9:05 am in the Nowak Room of the Exeter Town Office building. Other members present: Richard Huber, Virginia Raub, Selectmen representative Don Clement, Natural Resource Planner Kristen Murphy and DPW representative Paul Vlasich.

2. Minutes of March 16, 2017 meeting

Mr. Huber corrected the minutes to read; the 5 copies distributed to the Town's respective departments was the NH Coastal Risks and Hazards Commission's final report, **Preparing NH for Projected Storm Surge, Sea- Level Rise and Extreme Precipitation.**

The Chair then called for a motion to accept the minutes of the March 16, 2017 meeting with the correction; motion carried.

3. Updates on Various River Related Items: Mr. Paul Vlasich, Town Engineer *Great Dam Project*:

Mr. Vlasich reported of the \$832,226 pledged in grants for the dam project, \$786,000 have been credited to the Town; the remainder is being invoiced or in transit. All invoices are paid; these (funds) are re-imbursements.

Mr. Vlasich continued noting the Dam project was being recognized in regional and national organizations/publications. Mr. Jake San Antonio, an engineer with the consulting firm Vanasse Hangen Brustlin Inc. (VHB) and involved in the removal phase of dam, recently had an article entitled **Engineering and Evolving Science Prove Keys to Great Dam's Removal** appear in the Boston Society of Civil Engineers Section (BSCES) February 2017 publication. As well as providing background on the dam history and events leading to the decision to remove, the article focused on the design of the stream bed to accommodate fish passage.

At a recent American Council of Engineering Companies (ACEC-NH) gathering, VHB received an Engineering Excellence Award for their role in the Great Dam Removal and Restoration project here in Exeter.

An article submitted by Public Works Director, Jennifer Perry P.E. appeared in the April 2017 magazine of the American Public Works Association (APWA); **Dam Removal: A lengthy public decision-making process leads to a successful outcome.**

Earlier in this month, the regulatory personnel met at former dam site to view the stability and functionality of the construction and to see if fish were navigating the waters. At the time there was a heavy flow and there was concern the strong flow could impede the ability of fish to navigate as no fish were seen; will need to continue to observe to ensure they can navigate through the former dam site. As part of the wetlands permit, there is the need to monitor the river bottom for 2 years and remedy during those periods of low flow, any adversarial conditions that may be impeding fish

migration. The river bottom does need to be monitored for an additional 3 years for climate conditions (for a total of 5 years.)

One requirement of the \$610,000 grant from NOAA is to provide a semi-annual report on the dam; that will be done by end of month. Also a report and invoice to the NH Conservation Commission (Moose Plate) for the \$15,000 grant funds will be done by month end.

Budget items:

One hundred twenty thousand dollars (\$120,000) was approved in this year's Town budget for continuing work on the dam project for a number of items. He has been in negotiation with VHB to perform a number of these tasks but not yet finalized.

The Letter of Map Revision from FEMA needs to be started; does have a lengthy time line to it.

There are still some items to be finalized as part of the Section 106 Memorandum of Agreement; archival storage in two places, some informative/historical markers and the design and installation of display panels.

The long term monitoring of river bottom during the summer months and additional survey work needed for the Breach Analysis of Pickpocket Dam is also included in this amount.

Pickpocket Dam:

The NH DES Dam Bureau is awaiting a survey of a breach analysis for the dam. The report draft is prepared but the VHB surveyors feel the need to verify the elevations of a number of structures downstream before submission. Although the Pickpocket Dam is now considered a low hazard dam, but pending the results of the survey work, there is the potential of it being upgraded to a significant or high hazard dam; hence additional regulations/standards may apply. Responding to Mr. Ingram's question, there is no present danger of failure. The breach analysis is *if the dam fails.*

There is a completed breach analysis for the Exeter Reservoir (on Portsmouth Ave.) not as technically intensive but is classified as a high hazard dam. So, for the report, VHB has combined the findings from the Pickpocket survey and the Reservoir analysis to create an educated guess of the consequences of dam failure. When you do an analysis, it is a best guess estimate of how it would fail.

Mr. Clement asked how far downstream must you evaluate the structures' for possible damage. Mr. Vlasich responded the surge could reach Kingston Road by the bridge (Route111) which has experienced flooding in a previous heavy storm and as far down as Court St. but the surge would not be a problem. Mr. Clement remarked a manufactured-home community in the Court St. area did experience damage in a previous heavy storm event a number of years ago.

Later responding to a question from the Chair, Mr. Vlasich said it would most likely be several months to complete all the work before the report was submitted to State.

Updates on other projects:

The NH Small MS4 permit has been issued (Municipal Separate Storm Sewer System) as of January 2017. The Town has been operating under a 2003 permit. The requirements have been updated

and strengthen; will require the Town to do more. On April 10, the consultant, Wright-Pierce, presented a power point to the BOS comparing the 2003 permit and the 2017 permit. (The presentation may be seen on Town Hall Streams or the written report on the Town DPW site under Stormwater reports)

Mr. Ingram asked with the increased demands on DPW is there a need to increase the staffing. Mr. Vlasich said not at this time. Although the new regulations do not go into effect until July 2018, the Department has been working towards what was anticipated to be addressed in the new standards; just more work to do before the July deadline.

Mr. Clement added that department heads, Town officials, Budget committee will be looking at this going forward and do anticipate there will be increased costs to implement plan and will be mindful.

Mr. Vlasich continued that also at the April 10, 2017 BOS meeting a Nitrogen (N) control plan was presented; how to deal with N production (stormwater runoff) for the whole Town and what can be done to attain that negotiated level of 3 mg/liter. The new wastewater treatment plant is set to soon begin construction and that should help in attaining this goal. But if not successful, there needs to be a plan submitted to EPA by September 2018 outlining on how Town is to attain that 3 mg/liter goal. This control plan is not just a Public Works task but will also affect Planning, revised ordinances, turf management and other departments/commissions. It is a tight time line. By September 2018, an implementation plan must be submitted to EPA, but by 2023 an additional report needs to be filed detailing the results of program and what progress has been made.

Up to now there has been no way of understanding or determining the nutrient levels at the outfalls. In spite of various studies/projects, there is no workable computer program right now to do the N/nutrient data calculations. It is his understanding one is to be available very shortly. It will help any town that contributes flow into the Great Bay to track in the same way. Again, Wright-Pierce is also assisting the Town in this program. It is to lay the foundation of the N control plan within 5-6 months; then the debate begins on how to tackle the N problem and what all this will mean. This is ongoing with more to come. And again, there will be a public education component of the project.

Referring to a stormwater related project entitled Nutrient Control Studies (Phase 1) that is currently underway by Waterstone Engineers with grant funding from NOAA and administrated by the Rockingham Planning Commission. The study, covering the Lincoln Street sub Watershed area, includes the outfalls down by the PEA boat launching area. It addresses controlling N runoff and how to reduce peak (over)flow during some of our storms; knowledge that can fit into a future N Control plan. A short presentation will be given to the Conservation Commission at their monthly May meeting and then a follow up meeting in June with the Commission when project work is complete detailing the findings of the report.

Phase 2 is set to start soon, again with Waterstone Engineers, and funding by NOAA and administered by RPC. (Julie LaBranche of RPC presented the scope of the Phase 2 plan to River Advisory Committee at the March 19, 2017 meeting.) Mr. Vlasich stated this plan has more of a public outreach component in it but the results/findings i.e. peak runoff strategies from the Phase 1 study will be passed on to the engineers for inclusion in the upcoming Lincoln Street Capital Improvement Project set to start in the Lincoln St./Daniel St. area by summer.

With no further questions for Mr. Vlasich, Mr. Clement added at the referenced dam site meeting it was suggested the Town post a sign up river cautioning boaters of Rapids Ahead; found that interesting.

He also commented on solar panels positioned at Pickpocket Dam by NH Fish and Game in connection with fish tubes to aid in the counting of alewives coming upstream. One of the goals of dam removal was to improve the migration of alewives upstream; no data released to date.

4. Other business

Mr. Huber and Mr. Ingram did attend the NH Setting SAIL workshop (acronym for Science, Assessment, Implementation and Legislation Recommendations) held last month and although not that well attended, did alert Great Bay communities of the \$6,500 grants available to provide assistance to help communities implement the recommendations set forth in the *Preparing NH for Projected Storm Surge, Sea-Level Rise and Extreme Precipitation.*

Mr. Huber continued, noting he attended a Clean Water meeting on April 5, 2017. He asked if this initiative was in the scope of the River Advisory Committee. Are we looking into the testing of trihalomethanes (THM's) in the municipal water supply.

Mr. Clement referenced the 1.5 million dollar warrant article passed at this year's Town Meeting for water system improvements that will address these compounds as well as a number of other items. The Town is also under orders from DES to decrease the formation of Total Trihalomethanes (TTHM) in the municipal water supply.

There are concerns the Coakley Landfill (in North Hampton/Greenland) is leaching a plume of chemical contaminants into private wells. Exeter does not have that problem. However, the Town Water Department is very vigilant in monitoring the wells on Lary Lane and at the Portsmouth Ave. plant site to meet the standards required for a municipality. Private wells are not within the purview of the Town and is unsure what testing private well owners are doing.

Mr. Clement did say the Master Plan is to address Climate Change and Climate Adaptation so did not want to impede their timeline with a SAIL grant for such. But the Town Planner is putting together an appropriate proposal. As for inventorying and prioritizing that was accomplished in a previous project and they are also finding valuable/useable information in the CAPE report that is being passed on to Town engineers.

Next meeting is set for Thursday, June 15, 2017

With no further business, meeting adjourned at 9:55 AM

Respectfully submitted,

Virginia Raub Recording Secretary