Minutes approved with corrections at November 15, 2018 River Advisory meeting

River Advisory Meeting

August 23, 2018

1. Convene the meeting

Chairman Richard Huber convened the meeting at 3:05 pm in the Nowak Room of the Exeter Town Office Building. Other members present were Rod Bourdon, Lionel Ingram, Virginia Raub, Selectboard representative Donald Clement and Town Engineer Paul Vlasich.

2. Minutes of June 21, 2018 meeting

Noting no corrections or additions, the Chair entertained a motion to accept the minutes of the June 21, 2018 meeting as presented; seconded by Mr. Bourdon. Motion passed unanimously with Mr. Ingram abstaining.

Although not on the agenda, Mr. Huber recognized from the audience Mr. Bob Glowacky, executive producer at Exeter TV. Mr. Glowacky spoke of a "little piece of grass" on the north side of the String Bridge, just before the entrance to The Mill complex, where he stood when filming the fish migration this past spring. He found it an excellent spot to view the fish as they collected there in the pools before starting their journey upstream. He thought an interpretive sign at that spot would be informative and bring people to the River. He wondered if it was something the River Advisory Committee (RAC) might consider sponsoring as it isn't really in the purview of the Exeter TV department to do so. He was unsure of the ownership of that area but after viewing property maps, thought it was perhaps Town land. He felt with some upgrading and placing such a sign listing the species of fish found in the waters, their habits etc. it would make an excellent viewing area for the general public.

Mr. Clement, and from the audience, Mr. Dan Jones a real estate attorney who had done previous work for the Town on river side parcels, discussed possible ownership of the land. Mr. Clement felt perhaps start with the Planning Department to determine ownership and possible restrictions on that spot. The general feeling was it was worth pursuing. Mr. Glowacky thanked the committee for allowing him to speak and will keep the group advised as he gains more information.

He also added with the RAC being a co-sponsor of the First Annual Alewife Film festival held back in May, they would be interested to know most of those films shown that night as well as the documentary on the Dam removal project may soon be viewed on Exeter TV (exeternh.tv) as soon as September when their new broadcast equipment is installed and operating. He also mentioned the Town will no longer be using Town Hall Streams for televised Town meetings and events. Exeter TV will be assuming that role with their upgrade. All three Town channels may be viewed on demand online 24/7. He did add the 2017 meetings have been uploaded and may also be viewed at that website so they have not gone away. He agreed to notify the committee when all this happens.

3. Update on Various River Issues

Referencing projects previously presented to this committee, Mr. Vlasich led off with the status of the reclassification of the Pickpocket Dam as a High Hazard dam by NH DES Dam Bureau. In the

letter of deficiency to the Town announcing the new classification, they listed a series of requirements/tasks to be done to bring it into compliance.

There are four tasks the Town must complete and submit to DES to be in compliance.

- The Town's Emergency Action Plan must be updated
- More information/explanations needed on the breach analysis initially presented to DES
- The need to evaluate a base storm event. A base storm analysis must be prepared using as a model event a 2 ½ times the 100 yr. flood event. (The Great Dam analysis was based on a 50 yr. storm event)
- Modify existing dam fixtures/structures for stability

All the tasks were incorporated into a funding proposal and placed in the Capital Improvement Program (CIP) for 2019 for consideration. Working together, DPW and the consultants determined a $400,000 figure would accomplish the tasks. With the CIP projects just being heard by the Planning Board any final determination of what task(s) will be undertaken is somewhat premature.

As for the Great Dam projects, he was pleased to report all the historic and cultural improvements remaining to be accomplished for the Section 106 requirements for the Great Dam project are complete.

- By design, the penstock and headworks (of the Great Dam) were preserved and have been visible all through the removal process
- The outdoor informative sign is installed near the Great Bridge
- The archival information found by the consultants was given to the Exeter library and the Exeter Historical Society.
- The etched glass of dam-in-place panel is installed at the river-facing window in the library. Under optimal viewing angle/conditions you can get a flavor of what the dam looked like before the removal. The interpretive panel is in place on the exterior wall next to the glass panel.
- Framed historical photos (9) are in place in the stairway/hall and the interior of the library

Also, during the first week in September, surveyors will be at the River/dam site for year two of the annual/ 3 year monitoring program as stipulated in the a wetland permit but will be extended out an additional 2 years as a condition of accepting grant funds from another source. Following their work a report will be generated and sent to the wetlands bureau.

Responding to a request for questions, Mr. Ingram asked if the two properties noted in the Pickpocket Dam breach analysis are driving the scope and cost of this project in the tasks for compliance. And if so could these funds not be used to "protect" these structures at a reduced cost. Mr. Vlasich responded it is not only these two structures but also other mobile homes at another location downstream that are also listed in the analysis. DES wants to validate the stability of the structures even if water does not reach the interiors of the first floor. This will be addressed in the additional information provided in the breach analysis as requested by DES.

Mr. Clement stated the 2019 CIP program has just started to be discussed at the Planning Board level. All these questions will be discussed as it makes its way through the budget process.

4. Nitrogen Control presentation

Before introducing the guest presenters, Mr. Vlasich recounted the development of a Nitrogen Control Plan (NCP) is part of a requirement accompanying the Administrative Order on Consent (AOC) that accompanied the permit for the design and construction of the wastewater treatment plant (WWTF) back in 2013. This facility is designed to remove a specific amount of nitrogen from receiving waters but additional measures are required to deal with stormwater runoff from the land (non-point source pollution) to reach a target goal of 3 mg/l of total Nitrogen (TN) removal before entering Great Bay. This cannot all be done by WWTF hence the need for a Town wide action plan to address a number of contributing pollutants.

The Town has been working with consultants Wright- Pierce and Horsley Witten on what are the components of non-point source pollution, how they work together and some costs of treating such. An initial presentation of this report was presented to the Selectboard in July to get some idea on how to proceed; this committee will hear that presentation. The Selectboard will hear the updated plan again in September with comments included that were received from the Board and also this committee. The report must be finalized and sent to EPA by the end of September.

Mr. Vlasich introduced Mr. Edward Leonard of Wright Pierce and Ms. Renee Bourdeau of Horsley Witten. Prepared handouts of their PowerPoint presentation entitled **Town of Exeter Nitrogen Control Plan** were provided to the members to accompany their presentation.

Mr. Leonard led off with an over view of the plan: why required, context of and goals. The report will also cover N control measures, alternative analysis preformed and the next steps. He added this is opportunity to take questions from this group to take back to the working group.

This document will also identify base-line loading, goals, list measures the Town has implemented since the 2013 agreement and serve as an action plan to get to those goals in the next five years. In 2023, there will be an Engineering Evaluation report to determine if appropriate measures undertaken have made progress to the goals. The report will demonstrate if these efforts should be continued or does the data and trends suggest modification/revision. The methods of monitoring will also be outlined.

The NCP focuses on nitrogen as it contributes to a host of environmental factors relating to Great Bay. Being a salt water estuary excess nitrogen increases algae, reduces water clarity, light penetration, dissolved oxygen and creates loss of habitat in the Bay. These are not the sole factors but do significantly contribute to the overall health of the Great Bay.

Nitrogen comes from natural sources as well as human activities. The pollutants i.e. wastewater, fertilizer run off, septic systems, leaf litter, agricultural activities and atmospheric sources are considered Input Loads. How they ultimately get to the Bay, be it by WWTF's, groundwater, surface runoff, precipitation or stormwater is classified as Delivery Method. For this plan the focus is on delivered mode as that is of importance to EPA.

The coastal watershed for Great Bay includes forty two towns in New Hampshire and ten towns in Maine, nine major river basins and eighteen treatment facilities within the member towns. The entire watershed encompasses about 1000 square miles. Exeter itself lies in four watersheds, the largest being the Exeter/Squamscott River watershed. Several of the graphs displayed pie charts with the amounts of N delivered to Great Bay and the percentages of such each of the member towns and communities contributed. But again there are sixteen other communities from the

Exeter/Squamscott watershed that contribute "loads" into this watershed so they will need to be players in this plan too. All of the contributing towns are also upgrading their treatment facilities

Ms. Bourdeau stated her presentation will focus on measures to be taken to move forward with addressing the non-point source pollutants. In a slide listed Nitrogen Management Measures, strategies were listed for dealing with nine identified sources of pollutants. Included but not limited to, were agricultural management, residential fertilize management, enhanced street cleaning program and leaf litter collection, advanced on-site septic systems, extension of sewer service and management stormwater practices. From there it moved to four alternatives to remove these pollutants based on the assumption the WWTF if upgraded to remove 5-mg/l effluent TN. Two alternatives incorporated the requirements of the MS4 program and the MS4 program with upgrades. These alternatives were then assigned an amount of Delivered Load removed (lbs./year), percentage of reduction, total 20 year life cycle cost and an estimated cost per NPS delivered load removed ($/lbTN/year). Many calculations were incorporated into this chart. After meeting with the Town staff and officials it was decided to go with the alternative in methods that were in keeping with the MS4 requirements. Further calculations and displays were based on that scenario.

Part of the task was to determine cost effectiveness of these Nitrogen management measures based on estimated 20 year cost /pound TN removed and they were listed out as such. She remarked there may be some other benefits derived in addressing these items but focused on TN. Other scenarios/alternatives were developed based on the Town meeting their MS4 plan requirements. But she added these alternatives listed out were mainly for informational purposes.

A pie chart displayed the Town's load to Great Bay with the application of the WWTF upgrade and implementation of the Fertilizer Ordinance showed almost a 50% reduction in Delivered Load.

Lastly, the Next Steps screen listed assigned dates/deadlines. The Selectboard will see the report two more times in September and comments will be received from the Town until September 18. The report will be finalized and submitted to EPA by the end of September.

Mr. Huber, summarizing from Ms. Bourdeau's presentation and the material presented, stated it seems Exeter is half way there (of target delivered load) with the upgrading of the WWTF and the implementation of the fertilizer ordinance with still a ways to go but this is on the table for people to view and discuss. He then asked if this presentation could be seen on Town website. The answer was in the affirmative.

Further discussion determined there is not a definite number that is deemed to be "safe"; is somewhat of a moving target. But until science is able to determine an actual amount (of N) the approach seems to be one of caution. Mr. Leonard added by making incremental changes over a period of time you will reap benefits. However it may take decades of these improvements before the Bay is deemed healthy. Again, there will be the opportunity for cooperation from the contributing towns and referenced the cost- figure of 11 million dollars by upgrading the WWTF from 5 mg/l to 3 mg/l.

Mr. Clement noted right now the cost is being borne by the rate payers. When we get to where we need to be, he would like to see, going forward with further reduction, more emphasis on preventative measures that allows for greater participation from the members of the contributing towns. Perhaps it is the emphasis on upgrading septic systems and enhancing stormwater

management practices; measures that have a broader participation to contribute to the cost and the solution.

Mr. Ingram asked where we stand on requiring upgrades to septic systems. Presently, septic systems must meet State standards but Mr. Clement did not believe the requirements have been updated to a new level. Not all areas of State have the same soil conditions so perhaps the State should have 2 standards; one for southern portion and one for northern tier. Also, can we have more stringent standards than State standards? Mr. Clement was not sure but is something to pursue; would like to explore as part of our NCP.

Mr. Huber thanked Mr. Leonard and Ms. Bourdeau for the excellent presentation.

Later at the end of the meeting, Mr. Clement suggested if there were any comments to pass on to Mr. Vlasich so he may get them to the working group to be worked into the draft proposal for the next presentation at a Selectboard meeting.

Mr. Ingram felt very strongly it should be emphasized in the report there is no clear and definite amount for N reduction that is deemed "safe". Science has determined that N is responsible for the decline in health of Great Bay but a specific number has not been determined. Mr. Clement agreed that it is a very vague non-goal goal EPA has set.

5. Notice of vacancies in membership of RAC

Mr. Huber recognized Mr. Dan Jones in the audience who submitted an application to the Selectboard to fill a vacancy on this committee. He was interviewed by the Board and is awaiting confirmation at a scheduled Selectboard meeting.

Mr. Huber received a notice from the individual who was to be the representative from the Academy saying he would be unable to serve on this committee because of his academic case load. The Chair will contact the Academy regarding this vacancy.

The committee would still like a representative from the Water/ Sewer Advisory Committee to come to meetings.

Although there is not an official position of Vice Chair, Mr. Huber felt there should be a designee if he is unable to attend the meetings. Receiving no other offers to assume the position from those present, Mr. Ingram did agree to preside over the meetings if need be. No motion was needed as no new position was created.

6. Other business

Mr. Huber noted he did attend a previous information meeting sponsored by DES on the NH Instream Flow program. Although quite technical he did find it interesting as it outlined how the model, known as the QPPQ Transform Method will be used by the State and federal government agencies for determining historical daily stream flows at ungauged locations. A second meeting is set for August 27 in Concord that will describe the testing of the QPPQ Transform Method which he will not be able to attend but provided the announcement for any that might wish to do so.

Mr. Huber is a member of the Active Retirement Association at UNH and wished to share a program they offer; Science Thursday – What is Going On in Your Backyard? He felt the presentations were topics in areas of interest to this committee. The programs are set for four Thursdays starting on September 20 at the Durham Community Church from 10-11:30 am. The presenters are local instructors knowledgeable in their field. The website https://www.unh.edu/ara/science-your-backyard provides more information on these programs. If any member is interested to contact Mr. Huber and they may come as a guest.

With no other business, the date set for **the next meeting is September 20, 2018 at 3:00 pm**.

As for possible agenda items for the September meeting, Mr. Ingram would like to see some follow up on Mr. Glowacky's idea of a viewing spot with an interpretive sign. The idea of constructing a riverwalk was heard quite often during the removal phase and during the recent Master Plan public sessions. This seems to be more feasible and realistic than a walk way along the river.

Mr. Ingram motioned to adjourn; seconded by Mr. Bourdon. Motion passed unanimously. Meeting adjourned at 4:07pm.

Respectfully submitted,
Virginia Raub
Recording secretary