Town of Exeter, N.H. River Advisory Committee Nowak Room October 17, 2019 Final Minutes

1. Convene the Meeting

Chairman Huber convened the meeting at 3:00 pm, October 17, 2019. Members present constituted a quorum and included Richard Huber, Chairman; Virginia Raub, Conservation Committee; Carl Wikstrom, Water / Sewer Advisory Committee (W/SAC;) Kathy Corson, Exeter Select Board; and Terrie Harman. Members absent included Dan Jones, Rod Bourdon, Lionel Ingram and Warren Biggins.

2. Minutes of the September 19, 2019 River Advisory Committee Meeting Chairman Huber noted the misspelling of Carl Wikstrom's name on Line 2 of the Minutes. Chairman Huber called to pass the Minutes as amended for correct spelling. All were in favor with Ms. Corson abstaining.

3. Update on Various River Related Items (Paul Vlasich) Chairman Huber reported that although Mr. Vlasich was unavailable to attend the meeting, he would be happy to answer any future questions about the Pickpocket Dam Breach or the Emergency Management Plan via email. There were no current updates on those issues.

Chairman Huber next referred to the Committee's future role to host a public forum to discuss Pickpocket Dam and the expected time-line for planning purposes in advance of anticipated Warrant Articles on the March ballot. Ms. Corson, Select Board, replied that first the Budget Recommendations Committee would review the issues to be passed to the Select Board for consideration. Any potential public meetings would not occur before January. However, Ms. Corson continued, various concerns may delay management meetings due to recent budget increases and potential resident concerns. Ms. Corson felt that the Town's "needs" and "wants" must be assessed because the Pickpocket Dam project may be unaffordable. Ms. Corson related, supported by Mr. Clement, Budget Sub-Committee Member from the audience, that the recent \$54 million Water& Sewer Treatment Plant along with a potential 7% total increase including 14% apportioned to the water budget and possible 48% proposed budget increase for sewer were enormously impactive for families. Especially for the 70% of residents directly impacted by the sewer budget. Ms. Corson hesitated to commit resources to the Pickpocket Dam project prior in light of these concerns. Ms. Corson said that as a Town, inclusive of resident opinion, decisions to prioritize projects would be made. Mr. Clement added that the topic of a Capital Improvement Plan totaling more than \$300 thousand was discussed at a recent Budget Sub-Committee meeting to obtain an

analysis and recommendation to address the deficiencies of the dam. This involved plans to either retro-fit, improve and repair the dam or altogether removal of the dam: a study of their options and ramifications. The process could take 12-18 months suggesting that the RAC role to host a public forum lay well into the future. Ms. Corson concluded by saying that although costs for sewer have increased and will continue incrementally as the bond is re-paid, the result clearly shows "a cleaner Great Bay and that the Town of Exeter is recognized as a leader - as a least polluting town in NH and that the left-over sludge, [from the plant] converted to methane, serves to power UNH."

4. Presentation by Melissa Paly, Piscataqua Waterkeeper

Chairman Huber introduced Melissa Paly who reminded the Committee of her previous presentation on the health of Great Bay, some of the water quality trends and work happening around the estuary. In this presentation titled, "Reflections on the Water: Exeter-Squamscott River Advisory Committee," Melissa Paly intended to focus on specific issues the RAC might consider and where the greatest opportunities lay. The presentation may be viewed on-line by visiting Exeternh.tv - On Demand – River Advisory Committee 10/17/19 at approximately 22:30 minutes into the meeting. In summary, Ms. Paly identified the Great Bay estuary as an interconnected system of 7 rivers that flow through 52 communities in two states. The rich, unique habitat where fresh and salt waters converge was recognized by the U.S. Environmental Protection Agency (EPA) as one of 28 estuaries of national significance. A collaborative group called the Piscatagua Region Estuaries Partnership (PREP) formed to study the health of this system, funded by the EPA. Two foundational species, eelgrass and oysters, were discussed at length due to their important inherent roles of filtering nitrogen and pollutants from the water and especially, their observed loss or decreased existence in previous years and their renewed presence in recent years. Although steps have been taken to reverse the decline or loss, 12:16 indicators show negative or cautionary trends as compared to 4:16 positive indicators according to the 2018 State of Our Estuaries Report from PREP. Please review the presentation for these indicators. In summary, Ms. Paly stated, "nutrient loading is a critical stressor [...] since 2012 improvements made, nutrients remain a high concern particularly during rainy years where more runoff leads to increased nutrient (nitrogen) loading. The estuary contains three times more nitrogen than it should in order to be healthy."

Ms. Paly next addressed the Town of Exeter's new wastewater treatment facility as an important step taken by the community to reduce nitrogen release. As one of 18 facilities around the watershed, significant reduction has occurred and while other towns such as Portsmouth and Newmarket are making progress, the effluence from treatment facilities overall represents only one-third of the problem. Other factors comprising the two-thirds balance involve other watershed sources such as fertilizer, septic systems, animal waste and atmospheric deposition. Ms. Paly specified impervious surfaces as good conduits for pollution runoff and noted 5 area communities as having exceeded the DES 10% rule for development as having a negative impact to the environment.

In order to reduce pollution from storm water and non-point sources, Ms. Paly recommended to the RAC that communities do the following:

- a. More land conservation
- b. Better buffers for streams and wetlands
- c. Reduce stormwater infiltration
- d. Reduce fertilizer and pesticide use
- e. Better septic codes and extension of sewer lines
- f. Education

Ms. Paly elaborated stating that storm water management could be addressed by rebuilding wetlands using wide grassy swales and directing rain water away from paved surfaces and onto grassy areas so that it can be filtered before entering storm drains. Ms. Paly reiterated the importance of land conservation but noted the areas where the RAC could directly monitor the Town's positive progress: dam removal considerations to improve habitat and water quality; promote the sustainability office in connection with the Master Plan and the Town's Nitrogen Control Plan. Ms. Paly concluded stating that the Town of Exeter already has made some great improvements and sees the RAC role as staying abreast of these initiatives would help ensure the Town continues its positive actions and meet the obligations as outlined in the 2018 PREP report. Ms. Paly urged the Committee to watch for the 2020 PREP Report.

Discussion involved the percentage of stormwater runoff from impervious surfaces and debated the cost-effectiveness of porous asphalt. They concurred that while it was cheap to install, a porous asphalt surface was expensive to maintain. In the locations where it was installed, the surface worked well but did not hold up to traffic and near constant replacement was necessary. In another example, installing the material creating permeable highways would also entail the use of a different melting system and the purchase of special snow-plow blades in addition to general maintenance requirements.

Don Clement provided information about separate studies that model the outfalls of storm water & velocities and the impact of development to different buffer areas conducted by Dr. Paul Kirshen, UNH and Dr. Rob Roseen, Waterstone Engineering respectively. Mr. Clement summarized that these data intensive models provide knowledgeable details of the impact on impervious surfaces. The information should be used by the Planning Department at some level and the DPW. Engineering staff certainly throughout their planning. The information could certainly be filtered down to Boards & Commissions.

Discussion initiated by Carl Wikstrom about the return of eelgrass in Great Bay and the time-line for recovery to a healthy system segued to a discussion of septic systems and potential solutions. Ms. Paly replied that while anecdotally, they see a recovery of eelgrass where it had been lost, such as the area just downstream of the Dover

wastewater discharge site and other locations in Great Bay since last season, they are anxious to see results near the mouth of the Squamscott and Lamprey where upgrades have been made, next season. She stated it would not be a massive rebound over the next 1-2 years, but they are cautiously optimistic to see positive results. Ms. Paly added that septic contribution (run off) was a major factor and suggested ways to reduce impact recently under consideration and approved by newly formed State Septic System Study Committee: extending sewer lines and determining how and where people will connect with the goal of connecting these with high performance systems like the one recently built in Exeter; promising technology involves "retro-fits" – such as a "sludge hammer" that creates aerobic conditions to break down nitrogen. Further discussion from Ms. Harman about animal waste revealed that approximately 10% of the nitrogen run off falls into this category but its impact remains dependent upon where it is in the watershed region – some is resultant from pet waste but another contributor remains agricultural animal waste.

5. Updates to the plan to have Mindy Mesmer of the NH Safe Water Alliance in November

Ms. Harman stated that she would ask Ms. Mesmer to confirm her attendance for the meeting scheduled for 3:00 pm on November 21, 2019.

6. Updates related to the plan to host Kevin Leonard to present details related to the Exeter Library Renovation along the Exeter River

After discussion, Ms. Corson stated that she would invite Mr. Leonard to attend a future meeting.

7. Updates Related to Our Collaboration with the Sustainability Office An update was not provided due to the absence of the Liaison.

8. Updates Related to How Our Committee Is Supporting the Master Plan Directives

An update was not available.

9. Updates Related to the Proposed River Viewing Site Near String Bridge Chairman Huber sought to review the progress of sign installation from DPW describing what viewers may hope to see but an update was not available.

10. Other Business There was no other business.

11. Public Comment There was no public comment

12. Adjourn the Meeting

Ms. Corson made a motion to adjourn the Meeting, seconded by Ms. Raub. The Motion passed with all in favor.

Respectfully submitted,

Celeste M. Camire

Recording Secretary