

Town of Londonderry, Vermont
Williams Dam Advisory Committee
Meeting Minutes
Tuesday, July 2, 2023
Twitchell Building - 100 Old School Street, South Londonderry, VT

DRAFT

Committee Members Present: Robert Forbes, Rachel Febbie, Richard Phelan, Paul Hendler, Jim Ameden

Selectboard Member Present: None

Town Administrator: Shane O'Keefe

Community Members: Kelly Capen, Anna Stoddard, Center Merrill, Joyce Mathews, and Bruce Frauman of Gnat TV.

1.The meeting was called to order at 4:30 Pm by Phelan.

2.Additions or Deletions to Agenda (1 VSA 312(d)(3)9A)): Discussion on at the SLR Study

Febbie found it perplexing that the study read something different than what she heard the SLR engineers present to the committee the week before. She continued that the point of the study was to give the community a clear understanding of what would happen in a significant flood event upstream and downstream with removal of the dam. Phelan told Febbie she could just vote her position for repair, removal, or rehab, and Febbie retaliated with, "the committee decisions is not the finally decision, that our community will be making the finally decision, they will be looking at this data, so it needs to be clear if in a significant flood event what will the changes be upstream or at what point it crosses over rt 11."

Febbie questioned why the SLR study had made a recommendation to the Town on what to do with the dam when that was not asked of them as part of the scope of the study. She asked for an edit.

Febbie asked that the committee vote for an edit on the SLR study for the following two items: 1) needing it clarified that on a significant flood event the only changes upstream (with the removal) are to the fields across the river from Lasser's Pottery like what was said in the meeting, and 2) SLR gave a recommendation on the dam, and the committee did not asked that of them, but had asked for SLR to provide information on what would happen in a significant flood event if the dam was removed. Phelan asked the Town Administrator about the process, O'Keefe said you could make any changes you want as long as they are not engineering related.

Further discussion regarding SLR recommendation continued. Hendler felt that the recommendation was observations of what would happen if the dam was removed, and Febbie felt that SLR was just "selling dam removal, and that is what they specialize in". She said that is her interpretation. Hendler said, "we asked them what happens if the dam is removed", and she responded with "in a flooding event."

Febbie made a motion to have the recommendation removed from the study, and Ameden second it. The committee voted, and the motion passed.

3. Repair, Removal, or Rehab

There was a tremendous amount of discussion among the committee members throughout the meeting, fire safety leading the forefront, flooding, the construction of the Williams Dam, Vermont Dam Safety requirements, the “Significant Hazard” rating of the dam from the state, aesthetics, historical aspect, etc.

Phelan introduced the meeting by presenting the 3 options the Williams Dam Advisory Committee would vote on as a recommendation to give the Selectboard: repair, removal, or rehab for the Williams Dam. Phelan spoke to the audience informing them that the committee spent over a year researching and gathering data on each scenario.

Forbes made the motion to repair the dam. Ameden 2nd the motion. The motion was passed.

Discussion on the motion began....

Forbes started his conversation with his pros and cons.... “Removal does not have cost and supposedly has funding, and some people feel removal will be good for wildlife in the river.” Forbes said, “on the preservation side there is the historical aspect, the aesthetic part, in particular the Mill Pond, and I hadn’t realized at the beginning of all this that the Mill Pond was a very, very significant resource for the fire department for firefighting.”

Forbes talked about how the studies the Town had conducted say that flooding in town will not be any different, and that is in large because the dam is considered a “run of the river” dam (which means it doesn’t restrict any water flow), so the engineer models predict nothing will change. Forbes said, “time will tell... if the dam is removed”...

Forbes believes that a repair of the gate would help a lot, and doesn’t believe the quote of a million is adequate saying “come on”! He continued that there needs to be an understanding of what this dam is, how it has functioned all these years, and what the condition is over time is really important. Forbes continues we have a history of pictures of the condition of the dam for over 200 years. Forbes continues that history is a big teacher in this situation. Phelan pipes in, “we need to talk about the State”, and Forbes said, “we had the State come in after their last inspection, and they said they weren’t about to tell us to do anything with our dam.” Discussion continued regarding State guidelines between Phelan and Forbes.

Phelan went on to say, “that the Town is in a position that if the dam were to fail the Town is on the hook for it, even though I am not sure there would be any damage if it failed.” Forbes stated to have significant damage you would have to have full scale failure.

Forbes feels with the nature of this dam, and the design of this dam, they do not have a good understanding of what this dam is, he says, “if you fix the gate that is the first repair, and then you evaluate if any other repairs are needed to be done to the dam. I don’t think you rebuild it even.” Forbes talked about believing “the dam being a pile of large boulders and rocks, that some of leakage in

front of the dam is changing all the time, not all of them, some of it is big enough that it dates back to these earlier 1800/1900 pictures, what I believe that happens is in high-water events or storm events silt and residue gets washed in among the rocks and eventually it works its way out and you see all this leakage (Bob produced an example of a picture from the cover of the SLR study, then showed a picture he took that day, and a 1800 picture, and compared those two and the pictures are identical)". Forbes says, "the point is they did not study the construction of the dam, and did not understand it fully, and are making assumptions". Phelan asked Forbes what he is recommending on the repair. Forbes answered that you start with repairing the gate so you can reduce the water level then you can do a more in-depth study to get an understanding of what is the dam and what is behind it and what improvements need to be made if any. Forbes mentioned new technology that could solidify the dam to make it solid that would stop leaking and taking on silt. Phelan said, "well if that is the case then there is a cost to repair". Forbes said, "absolutely I don't think that there is any question there is going to be some cost, and I am in support of that, I am a taxpayer. I feel the dam has value especially in terms of the fire department, aesthetic value, and is historical, and not everyone will agree." Phelan agreed with everything Forbes was saying, but felt the cost was the problem. Forbes feels cost estimates given, and the proposal moving forward are all based on assumptions, Forbes said "as far as the DuBois and King study saying it is backed by silt is wrong—you can not have it entirely backed by silt and have it leaking 3/4 of the way down. They do not have an understanding of what the structure is."

Hendler added he agreed with Bob, "you can not make heads or tails of the dam of the leaks", but did want to note there was a pre flood report and post flood report, and the post flood report pointed out there was new damage to concrete and that the gate showed deterioration.

The discussion moved to committee member, Londonderry's Fire Chief Jim Ameden. "I keep running through my mind how this whole comment about taking out the dam doesn't cost anything, well it could cost us the whole village, and no matter what anyone says the Mill Pond is our main water source for the village of Londonderry. He noted that the Planning Commission's proposed Zoning Bylaw document had .25 acre zoning and 40 foot tall buildings in the center of town, and it is my understanding that this is what the Town wants to proceed too. First of all we don't have a fire truck to fight fires that tall, we don't have municipal water system to fight that, it could cost lives to lose that pond. Everyone keeps saying we can put a pipe in that river when we lose the pond, well look at that river today, you can see every rock in it. How much water do you think you are getting out of that river today? You need that storage (mill pond). You can ask any fire chief in this country what they would rather have: a pipe in a river or a large pool of water, they would all want a large pool of water, and I keep hearing people write this off as nothing, I keep hearing we can use private ponds in the area. Say it's January when most house fires are ... You have to go to this house, and it may not be plowed or sanded, and then maybe it is 1/2 acre behind the house or maybe it is clogged or jammed. We have proven it (how effective the Mill Pond is), we have saved buildings in this town with that Mill Pond, we are able to pull a truck up to any section of that pond, you could pull up 5 trucks on Vermont Route 11, and put pipes into the pond and pump water all night. Losing that pond you are not going to replace it, yes you can put something else in there, and you can call that your water supply, but it not going to be the same, and it is not going to provide the same protection to this town, to say it is not going to cost anything to tear that out is a huge misconception. We don't know what it is going to cost because this town hasn't been here without that dam, the dam was put in and the village was built around it or because of it, so tearing it out is not a simple decision. It shouldn't be a simple decision and it should not be based totally on cost." Ameden continued to talk about cost, and feels that the numbers given this far have just been speculation," we haven't actually had anyone come in and look at it, and dig into it, and say this is how the gate is constructed, and this is what it is going to cost to fix the gate, we need real life numbers".

Febbie speaks up and says I believe we should recommend doing the repairs in phases, phase 1 fixing the gate, and see what we actually have and what else may need to be repaired.

Phelan pointed out that the Selectboard can do whatever they want, and Ameden said, “we can’t control that, we are just here to make a recommendation, and hopefully they put it to a town vote, and that is why it is important we have all this information we are representing now for the town people to hear, and not just the Selectboard, so people understand where we are coming from.” Ameden goes on to say it is not just historical or aesthetic, but a life safety issue.

Continuing on about the life safety issues, Febbie talks about all the research she has done, and one phone call she had with someone from the Army Corps of Engineers who spoke of his town that does not have a viable water source, and how they just know if their houses catch on fire it burns to the ground, they just know that as a community their house will burn down because they do not have a viable, water source for fire safety. Ameden says, “that’s not even the issue, but the lives that are in those houses are”.

Stoddard speaks up saying “this is my biggest concern with removing the dam - you are putting a price tag on someone's home, someone's livelihood, what they have worked so hard for, you are taking a chance, for example my home, you are putting a dollar amount on my family whether or not my house could be put out. I could lose my son and husband and burn in that house, and we have to live with that consequence as a town if we get rid of that dam and our water source. That is something we, not just me, but as a whole town, loses homes and peoples’ lives for a price tag of \$900K or \$1.4 million, and we don’t even know if that is the true cost”. Stoddard mentioned how much we are spending on a community on wastewater that not everyone can even tap into, and how that doesn’t compare to the importance of saving homes and lives. She said she would do whatever it takes, whatever it cost...

Ameden said he would like to clarify one more point before they leave the subject, he said I do not want to go out and say having this pond guarantees that we don’t lose a life or house in this town, I am just saying the Mill Pond is our best option for fire safety. It is our best chance of fighting a fire.

Hendler spoke up regarding fire safety, “I am not going to suggest in any way that I am an expert in fire safety, because I am not. There are a couple of things that should be pointed out, there are engineers that said there are dry hydrant systems and cisterns that can be used and are effective. Hendler says he knows though a lot of discussion with Ameden that Ameden does not have faith in those systems, Hendler continues the most recent study suggest that with removal there will be a million gallon pond behind the dam remaining, if they are off a factor of 2 there is a half a million gallons sitting right there behind where the dam is right now, this is what they say, I am not an expert...”

Ameden responded to Hendler saying that “South Londonderry put a dry hydrant in the river, and it has been wiped out every high water event that occurs, and asked what good does that do you?”. Ameden continues that any high water event the chances are very high of losing your dry hydrant, and we are going to lose it, and then have to replace it every high water event. Ameden when on to responded to Hendler’s statement regarding the 1 million gallons of water in the pond if the dam was to be removed, Ameden said, “One fire pump pumps 1250-1500 gallons a minute, that millions gallons doesn’t last very long, especially if you consider housing if we go to 1/4 acres zoning.” Phelan agrees with Ameden that dry hydrants are not the “greatest thing in the world”, and “the one in South Londonderry has been washed away many times”. Ameden said he felt he should just let everyone know we do have a dry hydrant in this town already. Further conversation regarding dry hydrants and the difficulty of them

continued with the winter season, location, plowing, private properties, etc. Ameden stated, “if you take the pond out it will be more difficult for the fire department - if the dam comes out the riverbed will be shrunk and the access will be much harder.” Phelan pipes in that there is a problem there with access.

Forbes asked if you remove the dam, and there is a natural pond still left with x number of gallons, how long until it is filled with silt? Hendler responded that he asked that question, and they said it will not fill with silt at the same rate that we see now because the elevation will be reduced. Forbes and Hendler argued over the elevation change and where the pond would be created, and Febbie piped in, “see we are guessing on fire safety”.

Febbie mentioned a new law that had been brought up at the previous meeting, and said she had reached out to some people. She said the law is not new, but modified to include more dams that it will apply too. There are grants and loans through this program to fix dams that are emergency dams or non-emergency dams. O’Keefe said he saw it too, but said he believed it was a different kind of dam, and it was for fish, but Febbie said her correspondence had been with Ben Green, Vermont Dam Safety from a few days previous. O’Keefe said the one he read about was the Federal Government (not Vermont). Febbie said, “this opened up things for our dam.” Febbie said, “it is something new to the table.”

Hendler went on to quote a statement out of Vermont Digger that says the new laws will be enforceable to make the dam safe even if it is not imminent. He continued that whether we like it or not our dam is classified from the State as a “Significant Hazard”, and the State can enforce the Town to make whatever changes they deem necessary to repair the dam to make it safe, and if repairing is the option than we need to be prepared to know that this could happen whether it is 6 month, 3 years, 6 years from now.”

Febbie said, “we do know some of the things the State will be asking of us, and we are not going into it blind.” She recently reached out to Ben Green and asked what the requirements would be moving forward. The rules are anticipated to go into effect in July 2025, he sent her a list of things that are going to be different, yes the state can come tell us what needs to be safe, but there are guidelines the town can look at previously going into this. We are not going into it blind, we have Vermont Dam Safety as support.”

Febbie turned to the town people in attendance, and said, “I think it is important that everyone understand that this is a “significant hazard” dam, and not a “high” hazard dam, which means NO loss of life (if the dam breaches), for me that is significant, if it was loss of life I think I would be looking at the removal versus the repair differently. When we are talking about fire safety I think as a community it brings up the questions of life safety.... If the dam breaches it would be a structural loss and not life, and then we compare it to fire safety, and the importance of that, I personally do not feel like they even compare, and maybe that’s because I lost an aunt in a fire.” Febbie also talked about all the roads and houses within just a 2 miles radius of the Mill Pond. There are 40 roads just within 2 miles, you tack on 5 miles, how many people, how many residences, how many tourists are visiting and sleeping over in an Airbnb, we need to really consider fire safety. In recap, Febbie said, “I think it's important to know we are a “significant” hazard dam, which does not mean loss of life.”

Febbie reiterated the new rules are anticipated to go into effect in July 2025, and reiterated her conversation with Ben Green regarding the rules changes for grant and loans for emergency and non-emergency dams.

Forbes states it is important that the community understand that the dam up until the DuBois and King study had always been rated a "low hazard" dam. It has been subjected to the new regulations and guidelines, and those were put in place and enforced. I think Rachel feels in part based on the DuBois and King study in which we have some degree of flaw with regards to the condition of the dam. It is important to know that this is a new regulation. Febbie stated that she felt it important that people know that the State made that change from "Low" to "Significant" based on the DuBois and King study and FEMA maps, so if the DuBois and King study has errors that is what we got.

Hendler believes that all cost factor needs to be considered, but also feels that it should be noted that the most recent report states that during a significant flood event downstream flooding will not change (like last July), there will be less flooding above the dam, and in these less than massive flooding event when we get overtopping on Vermont Routes 11 and 100 in all likelihood that would be eliminated except in severe flood and that should not be discounted like the same reason needing water for firefighting should not be discounted because if a road is closed and an ambulance cannot go through it that could be a life threatening thing also, and should be considered. Febbie stated "they could go around, there are other roads like Middletown Road."

Febbie talked about what we know in regard to flooding above the dam. She said at this point and after so many floods we know what houses are effected, and just recently and since Irene, people who are buying these homes above the dam are made aware those homes are flood zones, they are purchasing those properties in flood zone, it is disclosed to them. If they take out a mortgage they have to get flood insurance, so those people are making that choice to purchase knowing that the property is in flood zone. Febbie gave examples of homes sold above the dam within the last few years that were disclosed that they were located in a flood zone. Febbie continued that the recent study showed that the velocity of the river would change, and would be faster at the beginning of Edge Hill Road, and feels this will impact the first house on Edge Hill Road, and possible the second, and those homeowners did not buy their homes in flood zone, so you take out the dam and you put their homes in flood zone. Phelan mentioned erosion on Edge Hill. Febbie concluded that the Town should just be aware that if they remove it there will be impacts to new people that weren't previously impacted, whereas if we keep it, the people being impacted already know that, and bought their properties knowing that.

Ameden added that removing the dam will not solve the problem of flooding downtown. He adds that the dam does divert the water some, and it keeps it from shooting straight through the village. We have watched first hand in the last two.

Phelan added that he wants to make it clear to everyone that if we remove the dam it will not help flooding downstream.

Febbie added that while fire safety is most important, she personally feels it is special to have something in our town of historical value, and it feels like the town is disappearing and it makes her sad. She talked about how her family owned the Bacon general store years back, and how people before freezers would buy ice from the mill pond and pack it with saw dust to act as a freezer to store food. It makes her sad that it seems no one cares about this historical piece of the town.

Febbie quickly added that there is information that if the gate was operational it would help with the silt levels and that if the silt is dispersed downstream there are benefits with the minerals. She feels a repair to the flood gate would be a good first step.

Febbie asked if the public had any input. Center Merrill suggested a retention pond.

Capen asked if there is a time frame. Hendler said it would take 3 to 5 years to remove the dam. O'Keefe said there would be a series of engineering studies that need to be done.

A question regarding what the regulations are, and Hendler answered they really haven't been written yet, but just given the authority to come up with the new regulations. We will not know exactly until next July.

Stoddard said if we remove the dam we will never have it back, and that is a risk, and with the dam we know what happens. Febbie added that when she spoke with FEMA that is what they told her, the biggest risk is what you do not know, which is without the dam.

Forbes reiterates that the first step should be a repair to the gate so you have a better understanding of what needs to happen to the dam itself, then you get a number, and that goes to a town bond vote whether or not they want to spend that kind of money. You have to know what you are working with first. O'Keefe confirmed none of the current studies did an in-depth analysis of the condition of the dam, and said we haven't spent that much money on studies to this point.

Forbes made a motion to recommend to the selectboard a repair of the Williams Dam, Ameden 2nd it, it passed 3 to 2.

Febbie stated that she appreciates the Selectboard putting this committee together to do all this research, and feels the committee should present something to the Selectboard. A community member felt that the meeting was very helpful, and would like to see minutes or a summary or a presentation. A Williams Dam Advisory Committee member will present to the Selectboard on July 15, 2024.

4. Minutes were approved from the last meeting.

5. Meeting adjourned.

Respectfully Submitted,

Rachel Febbie