

**WAYLAND WASTEWATER MANAGEMENT DISTRICT COMMISSION  
MEETING OF 30 MARCH 2016**

**In Attendance:** Fred Knight, Rick Greene, Sam Potter, Jane Capasso

**Absent:** All Present

**Guests:** Nan Balmer, Anette Lewis, and Linda Segal

**Meeting Location: 7:30 Wayland Town Building**

**Minutes**

- 7:32 1. Call to order
- 7:33 2. Public comment - None
- 7:34 3. Introduction to five topics of interest to discuss. See notes below.  
Outline by Fred.
- 7:35 4. Rationale for Title V design flows at the Town Building and Public Safety Building.  
Discussion as to whether the municipal allocations are sufficient to cover the Library.

There is 24,000 gpd of flow for connected users.

Rick: Concerned that Fred's allocations for the Town Building (TB) may be low if we consider the following factors: An office building typically has a big auditorium, which could seat approximately 200 people. The TB has a day care center and he questioned whether there were showers for the gym (no showers).

Fred agrees with the bottom line that there is no excess capacity in the TB and Public Safety buildings. The allocation for the TB was reviewed so the WWMDC (WW) would have this on public record. All agree that the numbers for these two buildings may need more capacity in the future. Sam: We did not let Jonathan Buckman change design flow between buildings because he was getting penalized in one building and not the other. We shouldn't be treating the town differently from our other users. This could cause a problem.

Is the way we calculate design flow consistent with our rules and regulations for WW? All agree we should be looking at WW's rules. The only mention of obtaining a connection permit is in Article III Section 13: Increase to Capacity. The Library is not a new connection; they have a septic permit issued in 2004.

Whether the DEP allows the WWMDC to make new connections is another issue. The DEP letter referring to the 820 gpd for the Library says "WWMDC may move forward with the reallocation of the 820 gpd of sewer flows at your discretion." The question remains whether the letter allows WW to manage all capacity or just the 820 gpd mentioned in the letter. This deserves further scrutiny.

Rick: When new users come online, there is no process that they read our rules and acknowledge them. For example he heard at the High School the custodians were waxing the floors and pouring this into the septic system. This was damaging the membranes. Most condo owners don't know they cannot have garbage disposals.

Nan: will comment in writing after TM on this. There is room for discussion on the

capacity for the town buildings. Nan corrected her comment from last month's meeting that the Health Director is in charge of the Title V design flow and WW is in charge of monitoring the total flow. If the Board of Health (BOH) establishes a requirement higher than Title V, WW would abide with what they say. BOH AND WW are bound by Title V regulations. The only person the DEP recognizes is the BOH for discussion on Title V. Fred: The Special Act requires the BOH to determine Title V.

7:54 5. Status of aggregate Title V design flow for the Town Center.

Fred: Jane reviewed the allocation for all businesses in Town Center compared to the Building and BOH Department's records. Previously, Twenty Wayland, the TC owners, supplied this information. We are close to the limit for Title V design flow for the Town Center including the Municipal Pad and the Condominiums.

Nan: Suggested we should go to our Rules and Regulations so we know what to do and add an appeal process. Do we know the BOH's methodology? If tenants have changed, clarification is needed. The Building and BOH Departments are in general agreement that the design flow is the way it should be.

Sam: Sarki Sarkisian, Planning Department, says there is approximately 15,000 sq ft vacant in the TC according to the developer, National Development. Rick: We need to know what the correct numbers should be for the tenants that we have questions on. Orange Leaf has a lot more seats than 16. What is the process to address this? In fairness to all users, they have been assigned capacity, and they should abide by it.

Sam: Of the 15,000 sq ft vacant, design flow has already been assigned primarily as retail based on Title V regulations. The remaining capacity can be allocated, but if there is a change of use to a restaurant, reallocation is necessary. The aggregate Town Center development capacity, including condominiums and town pad, cannot exceed 45,000 gpd, and assigning new building permits has to consider this limit. Until they pull building permits, they have capacity available to use as they please. Fred and Rick don't agree. This would be treating the Town Center differently.

Fred: There are a lot of questions. We are working toward a conclusion about the TC. We need to inform National Development what the status is. Rick: For the next meeting can Julia meet with us so we can resolve how to move forward to verify the final capacities? Fred we need to finalize our Rules and Regulations, how appeals are to be treated, and how to address whether every user has a connection permit. If we want to increase capacity, how do we do it? Rick: We should have an annual process to check that the users are at their assigned Title V design flow.

Linda Segal: Conservation regulations were also added with the intent to save water. The later rules are more explicit.

8:09 6. Comparison of 2004 and 2016 Proposals to connect the Library to WWMD

Fred compared the 2004 and 2016 proposals to show there is a fair amount of consistency between the two proposals. The original proposal was only partially carried out. Refer to the table in the notes below. In 2004 a request was made that the Library get connected and a permit was approved from the WWMD to do this. The Library connection was assigned 500 gpd based on double water use. A privilege fee was assigned of \$50 per gpd. The only thing done was to run the pipe under 126/27. Article 19 at the ATM, allows for more allocation to be assigned. This accommodates an existing or larger Library. The total cost to the Library is \$56,000 based on what

was charged to Wayland Commons. The Library should budget for operating costs for FY 2018. The 2016 proposal will be up for vote at the ATM. (Note added after meeting: Article 19 passed.)

Sam started reading his comments for the ATM on the Administrative Consent Order (ACO) and the Commission's opinion of the library article. Fred feels there is too much detail for the TM floor, and we should say as little as possible. The issue will be about the ACO and the cost if we do this. Fred suggested alluding to the discussions we have had that there are many possibilities - such as condominium's doubling and additional restaurants going in the TC. Flow from Library is tiny compared to the WWMD total of ~76,215 gpd. The DEP letter dated February 29, 2016 says WW "may move forward with the reallocation of the 820 gpd of sewer flows at your discretion." The letter also states the risks and WW is aware of them. Rick is not convinced that we won't have a problem. The agreed upon response at the ATM is the risk is nearly nonexistent that the ACO will be triggered. We will never exceed 30,000-33,000 gpd at any point. We have a 10,000 gpd buffer.

Rick: What if in 5 years, we are stable at 30,000 gpd and we have another flood or leak? If we get to 60,000 gpd we may be at risk. Sam and Fred don't think we will come close to a 3-month average that will trigger the ACO. Rick: Businesses could change and use more capacity increasing flows. Based on Fred's calculation, under item number 8 below, WW will not come close to triggering the ACO number even if a flood occurs. Rick: The Commission should consider these things so we don't jeopardize the ACO.

8:32 7 Method on issuing future building permits should include wastewater considerations  
See number 5 above.

8:45 8. What if...? Robustness of WWMD against hypothetical changes in Title V design flows  
for WWMD users.  
See number 6 above.

9:00 9. Update on accounting of betterment funds

Mark Abrahams of the Abrahams Group prepared a proposal and a cost estimate of \$10,000 for accounting work requested by the Commission. Specifically, what are the inflows and outflows? We also need clarification on how the PILOB can be used (e.g., to pay down debt). Currently, the PILOB cannot be used to pay down debt per the Auditors and Brian Keveny. Sam would like an amendment to this agreement to specify the use. Commission agrees \$10,000 seems very high. Fred will find out more on the PILOB.

The Abrahams Group proposal is too inclusive and the Commission feels number 2 is not necessary. Sam would like a reclassification of the balance sheet accounts.

Nan: She has someone in her office that could do this. WW would need to provide account quotes, Sam's concept, and an outline so Nan's person could do this. Brian can only give us info based on accounting rules. Abrahams is looking at it from a management perspective. Sam suggested pursuing it with Mark Abrahams and to get a new quote. Sam will have an estimate for the next board meeting.

- 9:05 10. Approval of extra hours worked by Jane Capasso per request from the Personnel Board.

Jane prepared a schedule of hours worked at home from June, 2015 to February, 2016 using emails she sent. Jane worked 80.5 hours that were not on her timesheet. This topic came up when Fred went to the Personnel Board to ask for more than 19 hours per week that Jane would be allowed to work. Money is available in WW's contingency fund to cover this. Per John Senchyshyn, Human Resources Director, in the future Jane will try to work 19 hours per week and no working at home. If overtime is needed, Jane will discuss priorities with Fred. The Personnel Board has approved this, and John will figure out payment. Rick made a motion to approve payment of Jane's extra hours as outlined above, seconded by Sam with a vote of 3-0.

- 9:10 11. Topics not reasonably anticipated by chair 48 hours in advance of the meeting, if any.

Capital Bond Account – Ben Keefe will complete the punch list, which has an estimated cost of \$40K. There will be approximately \$160,000 remaining in this account which may be transferred to the Town's general fund for other departments to use for capital improvements. Wastewater has two to three years to use these funds for capital improvements related to the treatment plant. Rick: Can we go back and retroactively pay for the blowers that were replaced in prior years? This needs to be researched. If the remaining money goes back to the Town, Wastewater's users need to be made whole because they paid for this as part of the betterment. Sam: Best thing would be for the remaining money to go to the general fund then back to Wastewater to make the users whole. The Town is in the process of hiring a bond counselor to review this.

- 9:12 12. Calendar: upcoming meetings and events, including hearings. Commissioners will attend the Annual Town meeting on April 10th, 11th and 12<sup>th</sup>. Tentative meeting for April 27, 2016. Monthly meeting will be May 11, 2016. (Note added after meeting: Next meeting is now 18 May 2016.)

- 9:14 13. Public Comment

Anette –Comparison of 2004 and 2016 proposal. 2004 the letter is for incremental pieces. The sewer line to the building and connecting plumbing would occur in FY2017. These are not WW's costs; they are Library costs.

The Public Safety building should not be classified as an office building because they have truck washing, which is supposed to go to a tank and not in the Wastewater system.

Linda Segal – Thanked Jane for all her hard work. The Commissioners and all in attendance agreed.

- 9:16 14. Adjourn

## Notes for the March 30, 2016 WWMD Meeting from Fred Knight

### 1. Rationale for Title V design flows at Town Building and Public Safety Building

Some consideration has been given to whether the Town Building and Public Safety Building are assigned reasonable Title V design flows, resulting in two opinions: keep the allocations as they are to not open up a call by other WWMD users for review of their allocations or reduce the allocations because of less-than-50% water use. I argue here that the allocations are in line with other entities in the WWMD and should remain as is. Inherent in this opinion is that these buildings are essentially office buildings and, with modifications for under-utilized areas, should be treated as such.

Here is the argument for the Town Building. Per the town's GIS web site, the area of the Town Building is 57,000 sqft. The portion that is offices is all but the gym (8000 sqft) and the large hearing room (7000 sqft). Thus, applying the Title V rule of 75 gpd/1000sqft for an office building, I estimate a Title V design flow of  $(57000-8000-7000)/1000*75 = 3150$  gpd. This is actually a bit larger than the 3000 gpd currently assigned, but essentially the same.

Now, if we were going to use the alternative (cf., 310 CMR 15.203(6)) of 200% water usage, the Title V design flow would be  $981 \text{ gpd} * 200\% = 1962$  gpd. However, this method is not justified if the building falls under a stated category, namely an office building. Retaining the 3000 gpd design flow, the water usage is 33% of Title V design flow. In fact, this ratio is about the same as the aggregate of all WWMD users, namely 27,490 gpd water use in FY2016/Q2 for 72,828 gpd aggregate Title V design flow or 38%. In other words, it appears that many users' water use is below 50% of Title V design flow—with an average of 38%. Hence, not only is treating the Town Building under the catch-all rule not justified, but the actual water use is similar to the average user in the WWMD.

Likewise for the Public Safety Building, the GIS-specified area is 24,700 sqft. I estimate the portion that is not offices to be the garage (~5000 sqft) and jail cells (~1000 sqft). Thus, applying the Title V rule of 75 gpd/1000sqft for an office building, I estimate a Title V design flow of  $(24700-5000-1000)/1000*75 = 1403$  gpd. This is actually a bit larger than the 1100 gpd currently assigned. As with the Town Building, treating the building under the catch-all rule is not justified.

Overall use by WWMD condo owners is relevant. There are over 70 2-bedroom condos in the WWMD. Each is assigned 220 gpd of Title V design flow, but there is a wide range of water usage, from 25 to 288 gpd or 27% to 131% of Title V design flow. So there is, indeed, a wide range of water use. However, taken in aggregate, all the condos have a 31% average water use as a fraction of Title V design flow. In words, it appears that the catch-all rule is quite conservative. If it weren't, then I would expect the average water use to 50% of Title V design flow—but it's 31%, on the average.

In summary, the Town Building and Public Safety Building should be treated as office buildings, as long as the non-office areas are subtracted. I have shown here that doing this results in Title V design flows above what is now in place, and there is not a justification in lowering them.

One more note. This is the opinion of the WWMD chair, alone. The WWMD will discuss this on 30 Mar 2016.

### 2. Status of aggregate Title V design flow for Town Center

TBD after consultation with the Town Administrator.

### 3. Comparison of 2004 and 2016 Proposals to connect the Library to the WWMD

It turns out that the WWMD in 2004 earmarked 500 gpd for the Library, but the Library was never connected, due a variety of circumstances (e.g. operational on-site septic system, 2010 flood, lag in capital funding). The only thing that was done in 2004 was to run a connection stub under

the Rts 27/126 roadway. As is the case for the 2016 ATM, a privilege fee or PILOB is requested by the WWMDC. Here is a tabular comparison of the 2004 proposal between the Library and the WWMDC and Article Z in 2016

| Date                      | 2004   | 2016  |
|---------------------------|--|---|
| <b>Proposal</b>           | WWMDC to Library with partial funding at 2004 ATM  | Library Trustees to Town in Article Z for 2016 ATM  |
| <b>User</b>               | existing Library at 5 Concord Road   | existing and expanded Library at 5 Concord Road   |
| <b>Design Flow</b>        | 500 gpd  | 820 gpd   |
| <b>Primary cost basis</b> | Privilege Fee based on original betterment for WWMD users (circa 1999)                                 | Payment in Lieu of Betterment (PI-LOB), equivalent to Selectmen's payment for other Town Design Flows at Town Building, Public Safety Building, and Municipal Pad |
| <b>Cost</b>               | \$25,181   | \$53,490  |
| <b>Cost in \$/gpd</b>     | \$50   | \$65  |
| <b>Associated costs</b>   | \$11,950 for piping under Rt126/27<br>~\$10,000 plumbing in Library                                    | FY2017 operating cost, ~\$2000, assume no flow until after FY2017, assume use of on-site leaching field in FY2017   |
| <b>Total Initial Cost</b> | \$11,950 for piping under Rt126/27 in Article 14 of 2004 ATM;<br>remainder (~\$38,000) not implemented | \$56,000 for 2016 ATM Article   |
| <b>On-going costs</b>     | Based on current operating expenses for being part of the WWMD   | In FY2018 and beyond, based on current operating costs of WWMD users  |

- Method on issuing future building permits should include wastewater considerations

To be provided by the Town Administrator

- What if...? Robustness of WWMD against hypothetical changes in Title V design flows for WWMD users

The following shows that there is a **Hefty Margin** for WWMD Discharge to Sudbury River, even if hypothetical (read: unlikely) changes occur.

As a follow-up to our discussion at the 9 Mar 2016 WWMDC meeting, I thought I would estimate some extraordinary and hypothetical increases in flow to the WWMD to illustrate the current hefty margin for WWMD discharge to Sudbury River relative to DEP ACO, which allows 41,600 gpd in a 3-month average, and NPDES permit, which allows 52,000 gpd in an annual average.

As an example, let's consider the conversion of the Town Building into condos. Here, I assumed the building of 57,000 sq ft, less the gym at 8000 sqft, less the large hearing room at 7000 sqft, converted to 1000-sqft condos. Numerically, we have:

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+57000 sqft = building area per gis web site
- 8000 sqft for gym
- 7000 sqft for large hearing room
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42000 sqft
Assume 42 condos @ 1000 sqft
      220 gpd Title V design flow, est. 110 gpd actual flow
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4620 gpd increase actual flow to WWTF, 42 * 110 gpd
2000 gpd = all other connections, incl. Town office new bldg
24000 gpd = current flow
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30620 gpd = total flow
41600 gpd = threshold to trigger TB leaching field

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So, the Town Building converted to condos would add an estimated 4620 gpd of actual flow, but the aggregate flow is not even 73% of the DEP threshold. The town offices would be relocated I assume and also connected. To emphasize, the increment in wastewater usage if the Town Building were to be converted to condos still leaves the total flow significantly below the DEP's ACO threshold.

I tried to hypothesize other additions, namely double the restaurants at the Town Center (which triggers the TC owner to build a leaching field) , connect all other users, and add an expanded library.

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24000 gpd = current flow
2000 gpd = all other connections, incl. Town office new bldg
4620 gpd = condo conversion, actual flow to WWTF, 42 * 110 gpd
8975 gpd = DOUBLE the total flow of all restaurants at Town Center
500 gpd = estimated flow from an expanded Library at current site
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40095 gpd = total estimated flow
-4995 gpd = average flow accommodated by required leaching field at TC
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35100 gpd = net flow to the WWTF
41600 gpd = DEP's threshold to trigger TB leaching field
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6500 gpd = remaining margin below DEP's ACO threshold
16900 gpd = remaining margin below NPDES permit

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In summary, I cannot fathom a scenario when we would trigger either the DEP's threshold for building an additional leaching field at the TB, or get close to the NPDES permitted value or the ultimate capability of the WWTF.

I would be happy to calculate increases for other scenarios.