

- **Field Operations**

- **General**

- **Overall, the total budget is up 9.47%, labor is up 3.8%, and expenses are up 13.8%. Can you explain these increases?**

The major portion of the expenses increase is \$241,000 for construction and demolition (C&D) debris which is proposed to be offset by new revenues. Pulling the C&D out, the expenses are up 1.48% and the overall budget is up 3.55%. Increases in labor are to fully fund the existing staff at the same level of service and the now known contract rates which were just estimates in the FY 21 budget.

- **DPW Administration**

- **Can you explain the 8.21% increase for Salaries – Appointed Officials?**

The FY 21 budget is underfunded. The original request was \$199,808. Despite a very high level of performance, the Deputy Superintendent did not receive a raise in FY 21 due to the uncertainties of Covid. The overall labor liability for FY 21 is \$197,406 and the approved budget is \$189,663. The proposed FY 22 budget funds a raise for the Deputy Superintendent, the DPW Director, and the part-time stormwater coordinator.

- **Can you explain the Telephone expense line?**

When the telephone budgets were transferred to IT several years ago, for some reason there was no allocation for the cell phones. This was brought to Lincoln's attention and he said to keep it in the DPW budget.

9 lines (include 2 tablets)

- **Can you explain the Uniforms expense line of \$1,600?**

\$800 each for the Deputy Superintendent (Kelley) and the DPW Director (Diniak). Neither of us use the full amount but we do budget for it.

- **Highway**

- **Can you explain the 6.7% increase for Highway - Labor?**

The budget reflects no increase in the number of employees or number of hours. The approved FY21 number is approximately \$7,200 lower than the apparent liability. The budget was approved prior to the employee

contract being settled. The proposed FY22 budget is based on the same personnel with the approved FY 22 pay rates.

- **Are there any grant reimbursement opportunities for the \$90,000 for Federal Stormwater Compliance?**

Not that we are aware of. These are basic tasks we need to perform to simply stay in compliance with the current general stormwater permit for Massachusetts. There may be grants available in the future for stormwater improvements but for our current work plan we have not identified any.

- **Snow and Ice**

- **What are our actual expenditures so far in FY21?**

The expenditures so far are \$444,413 on a budget of \$500,000. It has been a relatively normal snow and ice season - 22 events, 33 rounds of salt, plowed six times, 34.6 inches.

	<i>Budget</i>	<i>Expended</i>
<i>Overtime</i>	<i>111,750</i>	<i>103,174</i>
<i>Equipment Maintenance</i>	<i>69,700</i>	<i>40,256</i>
<i>Equipment rental</i>	<i>123,250</i>	<i>147,442</i>
<i>Salt</i>	<i>195,300</i>	<i>153,541</i>
<i>Total</i>	<i>500,000</i>	<i>444,413</i>

Thru 3/10/2021

Salt purchased 2,870 tons. Used 2,580 tons

- **Street Lights**

- **Where do we expect FY 21 actuals to come in compared to budget?**

We have been working off a large credit on the National Grid bill for the street lights because it took them a while to credit us for the purchase of the street lights. The actual total should come in around \$1,000 based on approx. \$2,000-\$2,300 per month in electricity for the main streetlight bill. This has helped us this year but will not be available next year because all of the credits will be used up. The FY22 electricity budget is based on approx. \$2,000-\$2,300 a month.

○ **Public Grounds**

- **Forge Pond Park Other Services expense is up 22.09%. Are we getting fees to offset this expense?**

The Other Services expense reflects expected outsourced expenses. Note that the reductions to the Equipment Maintenance line offsets this increase. The only real equipment to maintain is the irrigation equipment which is now largely maintained by an outside vendor and charged to the Other Services account. The overall increase for FPP is \$150 or 0.5%

The intent is for the Recreation and FPP revolving funds to offset some of the expenses, but this is contingent on these funds actually having funds to spare. Refer to Town Manager for further comment.

- **When the fields are rented/permitted, do the fees offset the costs?**

If a detail is required for a custodian or grounds maintenance worker, the fees offset our costs.

- **Can CPC funding cover operating costs when they purchase open space?**

Refer to Chelsea. I do not believe so.

○ **Transfer Station**

- **What are the plans for the Transfer Station?**

Right now the only change to current operations is to bring C&D back as a fee for service program if the Town meeting and ultimately the Selectmen so desire. This will require a positive vote on a fee increase, a positive vote on the budget, and a policy change by the Selectmen to accept construction debris again. I take no position on this process but simply present the options for discussion.

- **Why are we budgeting \$241,200 for construction debris?**

The construction debris line item was put in to further the discussion. The Selectmen have had several discussions on this so the Town Manager is the better person to ask this question of. We understand that this is a policy discussion. On a staff level there has been some grumbling about C&D not being available by a handful of residents, but we have had very few real complaints and very little illegal dumping.

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- **Can we have a review of the Transfer Station income and net profit?**

This analysis will take some work. We will provide it at a later date.

- **With expenses up 26%, how is this sustainable?**

26% would not be sustainable. As noted above, the construction debris program was put in to further the discussion and give the Town meeting options. I believe the intent is to completely offset the cost with new revenues. Removing the construction debris budget reduces the overall TS increase to 2.59%. Note that there is roughly \$12,500 in the labor budget for non benefit eligible part time C&D attendants (3 days per week) which we feel are essential for this to work. The instability in the overall solid waste market worldwide and certainly the markets locally present a problem for sustainability.

- **Fuel Pump**

- **Facilities**

- **General**

- **Overall, the total budget is up 2.59%, labor is up 1.2%, and expenses are up 4.5%. Can you step through these increases?**

Labor increases are the result of negotiated changes in the employee contract. We have tried to absorb some of these increases in the other areas. As a reminder the budget is down one position (Deputy Superintendent).

The expenses are up 4.5% (\$70,195). This includes \$20,000 each in additional building maintenance to Sylvester School and Salmond School which accounts for 2.56% of the 4.5%. Other adjustments total \$30,195 which accounts for the remaining 1.93% of the increase.

- **Why can't overtime (at least some of it) be billed as COVID-related? This is about \$150K.**

The custodial overtime we have faced in FY 21 is largely Covid related – deep cleaning on Saturdays and support of spread out lunches in the schools. We were told this would be covered as a Covid expense but to date the adjustments have not been made.

- **With 5G roll-out, additional opportunities to place cell towers on town owner properties? Income projections?**

We do not have the staff to actively market regular cell or 5G. We have had some inquiries but they have not gone anywhere. My observations in Hanover and elsewhere have been that the carriers seem to be locating 5G equipment in areas where they expect larger groups to congregate and are branching out from there. Some communities have seen pushback about 5G from residents both for aesthetics and potential electromagnetic impacts. We have not seen this yet in Hanover.

5G has enormous potential for the Town. The Smart Cities movement allows for things like controllable street lights, traffic management (not really a concern here), real time water meter reading, better network for use by public safety, etc...

■ **Why do most facilities have individual uniform allowance entries?**

Uniforms are a contractual item for full-time employees (recently upped from \$800/employee to \$900). We could have a single line item, but if you are trying to show what a building costs to operate we felt it was best to break out the liability per building.

■ **Please explain the salaries custodian expense line and how it relates if at all to the other salary custodian lines.**

In prior years, the budget carried larger margins in each of the building budgets for vacation and sick time coverage for the full-time custodians. In addition, Covid has forced the issue of providing some level of custodial services for the Fire Headquarters. The net result has been greater use of substitute (non-benefit eligible) employees as well as greater use of the one floating custodian that we have to meet the expected need. For FY22 we have adjusted the margins in each budget and relocated more of it to the central custodian line item for ease in managing weekly payroll.

■ **What is the assumption for overtime maintenance increase?**

The bulk of the maintenance OT increase is for a new standby clause in the employee contract (10 hours a week) for a maintenance employee to be available to respond to emergencies after hours, similar to the clause in water and field operations. With the loss of the deputy superintendent position we are also paying for more after-hours calls for alarms which were being handed by the deputy. These should have been handled by a maintenance employee all along anyway.

■ **Do we expect a significant savings in Electricity and Gas?**

We are still trying to quantify the impact of Covid long-term on energy costs. Last summer we did a complete third-party engineering analysis of HVAC with respect to ASHRAE (American Society of Heating, Ventilation, Air Conditioning, and Refrigeration Engineers) recommendations and made significant necessary improvements at the Middle School and Cedar as well as operational changes in all school buildings to meet these recommendations. This was a high-stakes, stressful, and unplanned somewhat costly activity to reassure the teachers union that the buildings provided sufficient airflow to return to work safely. The process did shine a light into some deep details of the operation and the lessons learned will be incorporated into our PM procedures.

The current expectations require us to exhaust more air out of the roof to maintain healthy fresh air levels in occupied spaces. This is contrary to the work that has been done over the past 5+ years to minimize the ventilation (simply to control CO2). As a result we are bringing more fresh air into the classrooms, heating it, and expelling it through exhaust fans which will likely result in higher gas and electricity charges. We are seeing some savings from solar energy contracts, but time will tell if these offset the energy losses. The wildcard is how long this extreme ventilation will have to continue. We have not had a complete heating season to offer an analysis of the impact of the changes. The benefit of the increased costs is that we have been able to bring students back to the classroom starting last September while some systems are just doing it now.

■ **What is the assumption behind not having any changes in the budget #'s for Electricity and Gas.**

We have reviewed both the electrical and natural gas budgets for all facilities and have made adjustments where we thought they were warranted. Both the electric and natural gas supply contracts are fixed for the next few years. What isn't fixed are the various delivery charges for the energy or the actual amounts that we will use.

It is unfortunately not as simple as adjusting based on a KW or therm price. The benchmarks to use in evaluating the budgets and projecting costs are all over the place (delivery costs, the general state of the economy, how cold it is from year to year, or how hot, etc...) In addition to fixed electrical and gas supply contracts, we have long term contracts for solar which is helping to stabilize the electrical supply costs in some of the facilities. These have kept some of the costs down, but also require the purchase of the power whether it is used or not. We try to look at 3 and 5 year averages of costs to project our budget.

■ **Please explain all the Building Maintenance increases.**

Center School – adjust up by \$7,730 - better match the historic averages for the school.

Sylvester – adjust up by \$20,000 – exterior painting.

MS - adjust up by \$7,000 – aging building. Judgement call.

Salmond – adjust up by \$20,000 – exterior painting, window trim work

Library – up \$2000 – better match historical numbers

○ **Town Hall**

■ **Why are custodian salaries and overtime up 30.32%?**

There is no change to the custodial hours of custodian's salary at the Town Hall. The old animal control expenses used to be carried in this budget because the TH custodian was also the ACO and this was the easiest way to manage the payroll (decision by prior Town Manager). When the function went regional, a lump sum was taken out of the regular pay custodial line but it really should have been apportioned over the appropriate salary and expense accounts. This left the TH custodian account in FY 21 short for the full-time custodian. This adjustment simply covers the cost of the one custodian plus a small sum of money for vacation coverage.

■ **Why are Town Hall expenses consistently above budget? Control issue or just normal variability?**

I assume you are looking at the overall budget history. Globally the facility department walks a very fine line between what is planned for and keeping the principal players in each department happy whether they are department heads, building principals, or even the Town Manager. We can certainly say "It isn't in the budget", but this would create a toxic environment with the departments we service. If requests are reasonable we try to make them happen.

With respect to the Town Hall, the FY20 overall expenses were up due to COVID improvements that were supposed to be CARES act improvements but which ultimately ended up budgetary improvements due to the uncertainty in funding at the very end of the fiscal year caused by the county. We also made improvements to the Selectmen's office, Assessor's office, Accountant's office, and Advisory Committee room that were not originally planned.

Town Hall is an old building. Things come up to the basic infrastructure that must be addressed immediately. The budget book tries to document these unexpected expenses so they won't necessarily skew future budget requests. These include electrical and boiler repairs in FY 17 that blew the building maintenance line, elevator repairs in FY 19 which impacted equipment maintenance, touchscreen kiosks in FY 18, AC expenses in FY 19 and elevator expenses in FY 20 that impacted other contracted services. Our general philosophy, right or wrong, is to not let these one-time expenses skew the budget request.

- **Police Station**
- **Fire Stations**
- **Nextel Tower**
- **Cedar School**
- **Center School**

- **Why are Center School expenses (\$201.0K) so much greater than Cedar School (\$134.5K) despite being a new facility? Is this mainly electrical? If so, why?**

Center School is a bigger building and more complex than Cedar. The biggest difference is the electrical costs (approx \$80,000 per year higher). Center has a much more sophisticated HVAC system and has cooling systems and motors that Cedar does not have. Cedar is a very traditional unit ventilator based system.

- **Sylvester School**

- **Can you explain the \$20,000 Exterior expense?**

This was added by the Town Manager to add a source of funds for maintaining the curb appeal. The intent is to paint. At a minimum this will be all the wood around the front entrance. The window frames are capped so they should be good. If funds are left, we will address the trim at the roof line.

- **Middle School**

- **Can you explain the 56% increase in Other Contracted Services - MS (\$2,400 in FY20 to \$10,000 in FY22)?**

The OCS numbers in the Middle School have been running higher than the budget the past few years (FY 20 - \$11,670, FY 21 – \$10,897.) This is an adjustment to better match the historic trend.

- **Why is this year's OT at the Middle School running so much over compared to the other schools?**

The OT increase this year is entirely Covid related. This is largely the cost of heavy cleanings on Saturdays. There are more custodians at the Middle School than the elementary schools and the school is simply harder to keep clean. This is partially a result of the higher scrutiny of the space by the employees, the age of the building, and the kids in the building. The expectations are higher.

- **High School**
- **Salmond School**
 - **Can you explain the \$20,000 expense for Other/Exterior? This seems to be the cause for the 48.4% increase for Salmond Expenses and the 138% increase for Salmond Building Maintenance.**

This was added by the Town Manager to add a source of funds for maintaining the curb appeal. This will be a little more tricky than Sylvester as the windows are old. We will start with the trim and cupola and proceed to the windows if possible.

- **Highway Garage**
- **Cemetery Garage**
 - **Cemetery garage up 38%?**

Don't understand the question. The garage budget is only up 5.35%: The only adjustment is \$165 to the gas account

- **Administration**
 - **Can you explain the \$6,500 telephone line item?**

When the telephone budgets were transferred to IT several years ago, for some reason there was no allocation for the cell phones. This was brought to Lincoln's attention and he said to keep it in the DPW budget.

15 lines

- **Senior Center**
 - **Can you explain the telephone line item?**

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This is the monthly Comcast bill (approx. 450 per month). The telephone budget went to IT but the internet budget never did, probably because we didn't equate cable with telephone. We have no objection to moving this to IT.

- **Library**
- **Stetson House**
- **Maintenance**

Building	Sq Ft	Budget	Cost/sq ft
Town Hall	17,406	136,133	7.82
Police Station	11,704	145,533	12.43
Fire Headquarters	13,234	57,760	4.36
Cedar School	62,677	327,519	5.23
Center School	97,099	457,415	4.71
Sylvester School	33,210	42,200	1.27
Middle School	133,700	587,793	4.40
High School	157,000	735,874	4.69
Salmond School	13,195	121,100	9.18
Senior Center	7,300	63,840	8.75
Library	17,195	96,160	5.59
Highway Garage	6,800	24,145	3.56

General operation costs for all major buildings. This does not include maintenance or administrative expenses which have not been apportioned.

- **Water**

- **General**

- Overall, the total budget is up 2.45%, labor is up <1%, and expenses are up 4.3%. Can you step through these increases?

Proposed Labor Budget

	<i>FY 21</i>	<i>FY 22</i>	<i>Difference</i>	<i>% Change</i>
<i>Water Admin</i>	398,938	406,984	8,046	2%
<i>Treatment</i>	773,392	790,854	17,462	2.25%
<i>Distribution</i>	616,528	608,240	-8,288	-1.3%
<i>Labor Total</i>	<i>1,788,858</i>	<i>1,806,078</i>	<i>17,220</i>	<i>1%</i>

Proposed Expense Budget

	<i>FY 21</i>	<i>FY 22</i>	<i>Difference</i>	<i>% Change</i>
<i>Water Admin</i>	78,100	85,975	7,875	10%
<i>Treatment</i>	1,039,910	1,032,583	-7,327	-1%
<i>Distribution</i>	341,625	403,425	61,800	18.1%
<i>Exp. Total</i>	<i>1,459,635</i>	<i>1,521,983</i>	<i>62,348</i>	<i>4.3%</i>

The changes are largely discussed in detail below. Generally, though:

Within administration there are some small increases for cloud services and for increased mailings that have taken place over the past few years, some of which will continue.

Treatment costs are down, consistent with reduced demand.

Distribution budgets are up reflecting a desire to increase activity in meter replacements, hydrant maintenance/replacements, valve maintenance/replacements, and leak detection.

○

- Between Water Administration and Water Distribution, there is ~\$225K in overtime? Can this be reduced? Would it be better to hire another 1-2 people?

I believe the question probably should have been between water treatment and water distribution the overtime budget is \$225K (\$90,000 for WT, \$137,000 for water distribution).

Some of the OT covers long-time weekly contractual standby payments for water distribution and water treatment employees (total of 2 employees, 10

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hours each per week) to ensure after hours availability (\$23,000 in each of the two divisions). Each of the 11 paid holidays also provides for 8 hours of standby pay for one employee in each of the water divisions (\$4,000 in each of the two divisions)

Within water treatment the overtime budget covers shift coverage on the holidays (typically 3-4 employees per holiday). Half of the holidays are time and a half. Half are double time holidays. Finally, about a third of the treatment OT budget is for unexpected emergencies requiring extra coverage.

Within water distribution, the primary other uses of OT other than standby are general OT (\$62,000) (water breaks, after hours calls for service), water restriction patrols (\$14,700), and flushing (\$30,000). Some after hours calls and water restriction patrols could be handled by an additional employee, but these are sporadic and adding staff doesn't make sense.

■ Can you speak about water main breaks in FY21 and how these can be prevented?

The water break history in FY 21 has not been any different than any other year, nor is our leak history inconsistent with the experiences of other towns. What has been different is that we saw fewer breaks in January and more in February this year. We attribute this to a relatively mild January and a colder February.

Despite the thought by some that we should be doing wholesale replacement of mains, the data does not necessarily support spending the cost to do so. A preliminary estimate for just cast iron main replacement is \$27-\$33 million. With over 500,000+ feet of water main, a certain percentage of breaks and leaks is expected. While certainly a nuisance, the failure of 20-30 feet out of 500,000 feet of pipe is pretty good. Some of these failures are just bolts on old tapping saddles and repair clamps that have rotted away. Some are small radial cracks caused by shifting soils.

Break History

Year	Main Breaks	Service Leaks
2013	3	0
2014	19	5
2015	19	7
2016	11	6
2017	11	5
2018	17	11

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2019	17	14
2020	7	15
2021	14	1

Note that the service leak statistics have only recently been properly documented

Distribution of Breaks by Month (2013-2021)

January	34
February	23
March	8
April	1
May	2
June	1
July	6
August	10
September	6
October	8
November	7
December	12

- **Are there ROI benefits to accelerating the meter upgrades even if it has a negative short term impact on budgets?**

We recognize that meter replacement is an ongoing expense that will never end. While meters may have a life span of 15-20 years, they really should be on a 10-year replacement schedule due to battery life, technological advancements, regulatory factors, etc... Rather than having a capital replacement program as some towns do we have it as part of the operating budget.

With respect to ROI, it isn't clear what that return is short of increased efficiencies in meter reading and future opportunities for early leak detection in homes. We do not have evidence that 15 year old meters are any less accurate than 10 year old or 5 year old meters, but meters are supposed to be either replaced or tested after 10 years. The older meters have fewer electronics, if any, so they are still functional. The newer meters have a battery that diminishes over time so it is more critical to replace them on a shorter time schedule.

Accelerating the program would create a bubble of meter replacements in a particular year that would create a hardship in a future year. Our preference is a goal of 500-600 meters a year on a continuous basis.

- **Why are 1/3 of meters >20 years old?**

There are a number of reasons, including access to people's homes, but the dominant reason is that prior field staff was not effective in executing the meter replacement program and as such meter replacement lagged. The current water distribution foreman and his staff have embraced and accelerated the program. The problem now is restricting their progress so as not to over expend the allocated funds and to not have a large amount of meters that need to be replaced in any given year.

- **Are rates sufficient to cover operating costs and ongoing infrastructure improvements and replacement costs? Should there be a 2-3 year temporary surcharge to raise funds?**

Per Board of Selectmen policy rates are going to be reviewed annually to ensure that they are adequate to meet the budget and conservation goals. The better question to ask is should capital improvements be accelerated? If so, at what level and how – through budget lines or through outsourced activities? What is reasonable and what can the community afford?

- **Water Administration**

- **Can you explain why General Expenses and Billing Expenses are both up >7%; why?**

General expenses – *Other services line item is up about \$4,200 on an original budget of \$6,300. We have been experimenting with some cloud based subscription services.*

Billing expenses:

Equipment maintenance down \$4,260

Postage up \$4,020

Printing and stationary up \$3,915

- **Please explain the increase for Other expenses.**

As described in the last question, the increase reflects our experimentation with cloud based databases and rented cloud storage.

- **For Water Billing Expenses, can we move more towards online and cut printing, postage and material expenses (450-5342, 5345 and**

5450)? Are there staffing savings with a more robust online presence?

We are moving slowly towards more online services, but there are also costs associated with these services (both direct and indirect). We believe any savings in staff time would be minimal as we would still have to respond to customer service inquiries and still manage the whole process of collecting meter readings, processing them, and creating the billing file. The time to print and stuff bills is pretty minimal – roughly 175 man hours a year (\$3,800). The value in moving on-line is convenience for a certain percentage of the population, but we also service a significant percentage of people who prefer to do business in a classic manner. We have made some changes recently to streamline operations and are looking at additional changes to offer email based billing. As existing staff retire out we will likely downsize a bit.

- **Under water billing, since 2009 “actual” has consistently been more than “budgeted.” Most recently underfunded by between \$6,000 and \$11,000. Should we be increasing that budget amount?**

We don't believe an increase is needed yet. Some of this expense was associated with extra mailings required due to the disinfection byproducts. Some of the expenses are extra office supplies. Some DPW administration expenses have shifted to water slowly over time.

- **Can you explain why printing expense has doubled from \$3,500 to \$7,415; why?**

The printing expenses have been under budgeted for several years, largely due to increased mailings. The FY 22 number is a recalibration of the cost.

- **Why is the custodian cost carried in the Water budget and not in the facilities budget, as they are for all other town buildings?**

A 30 hour per week is covered in the water budget to clean the common areas of the three treatment plants as well as the office and bathrooms at the operations center. The employee is supervised and managed by the facility operation. An alternate would be to bump the facility budget up to show the cost there and increase indirect water costs to pay for it.

- **Water Treatment**

- **There is close to \$300K in Water Treatment electricity costs. Is this an opportunity to go solar? What is status of wind turbine? If not fixable, cost to decommission?**

Electricity is one of the largest costs in water treatment representing the cost to move 500 million gallons of water from the ground, through the treatment plants, and to the customers taps. While solar can provide some reduction during the daylight hours, we run 24 hours a day so electrical costs are always going to be a factor. We do purchase significant amounts of solar power and assign it to variety of Town buildings. This power is purchased at a discount rate. The mechanics of balancing which accounts get the credit for the power further complicates the energy picture across the facility and water operations.

With respect to the wind tower, it appears that the cost to repair will exceed the insurance settlement. In addition, as I have reported before, the available wind does not seem to be what was predicted so the cost of operations exceeded the savings. We will likely have to decommission the turbine at some point. We do not have a cost. We remain hopefully that the tower itself may have some value as a communication platform.

- **Nice to see a fairly flat expenses request, but why not higher – reflective of more investment – given our ongoing water quality problems? What would it take to fix this water quality problem?**

The balance of investment goals versus what people are willing to pay is a both a policy and a philosophical decision. How much is too much...or too little? We could use some guidance to help craft both long and short term plans. Each hydrant replaced is about \$1.00-\$1.25 per customer. Each gate valve a little less (\$0.60 to \$0.85 per customer). Each residential water meter \$285 - \$300). Each foot of water main replaced is \$350-\$400 per foot if outsourced, a little less if done in house. What is a reasonable annual investment per household?

The question asks about water quality problems. The water leaving the treatment plants is about as good as the technology is capable of doing and certainly meets all current standard. As we have stated before, we are aware of sporadic seasonal discoloration which we believe is a localized sediment issue in the distribution system and hence a flushing issue. If this is a town-wide problem we are not getting the data. Our complaints are minimal. The color complaints have gone down dramatically since we have switched to an aggressive flushing program. As I have stated on the Town meeting floor, we followed engineering

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advice as we understood it with respect to flushing and it was inadequate. Once we made the decision to go back to increased flushing velocities, the first season of increased flushing expelled a lot of sediments. Since then, complaints are down and the time it takes to flush has decreased because pipes are cleaner.

In addition to increased flushing velocities, the new water distribution foreman has spent a significant amount of his personal time to checking gates to make sure that they are set as he wants them, both during flushing and after. Operationally the distribution system has improved dramatically.

We are concerned that recent changes to federal and state regulations regarding maximum levels of PFAS contaminants could be a game changer. If detected in the supply, the costs to treat could be enormous. Prior tests have all been non-detect. The newer testing requirements are a thousand times more sensitive (parts per trillion). A large number of public water supplies are expected to detect PFAS chemicals at the lower detection levels.

- **At Beal and Broadway WTP's there are line items for the VPN/internet connection. Why is this not under the IT budget? I thought we were centralizing all of the technology? At Beal, the budgeting for this is up 50% from \$6k to \$9k. The increase at Broadway is not as significant.**

The telephone budgets were moved to IT. The cable and VPNs were generally carried in the other contracted services budgets so they stayed with DPW. I am not opposed to handing these off to IT. They are a critical piece of our operation though and IT needs to treat them as such.

- **Why doesn't Pond WTP have this as a line item?**

This is just an oversight. We are paying the Comcast bills out of the Pond Street other contracted services account.

- **Employee overhead—training is up 50%. Can you discuss this? Is this due to new testing methods.**

Training is up because we have been developing employees to obtain necessary licenses both in water treatment and water distribution.

Once employees become licensed, they have annual training requirements to maintain their licenses. Finally, we have also been emphasizing training as part of our emergency response planning as required by EPA and DEP.

- **Why are there line items for four septic pump outs per year at Beal and Broadway?**

Both plants are located close to wells and have tight tanks for bathrooms and lab waste that require regular pumping.

- **Water Distribution**

- **Actual expenses have exceeded budget for last 5-6 years. Why is this? Is the FY22 budget sufficient?**

The actual expenses have exceeded the budget for the past 5-6 years because the distribution budget was reduced to help alleviate expected increases in treatment costs while still holding the water rate down as best we could.

- **Why is labor flat, but all other expense areas up double digits? Given frequent water main breaks and annual water bans, shouldn't more investment be made in infrastructure especially relating to leaks?**

We believe distribution labor is adequate to meet the operational needs of the system. The price of distribution commodities and in some cases and distribution services has increased at a much higher pace and the goals of the department have been more aggressive. This is why expense increases exceed labor increases.

The budget has increased with respect to detecting and fixing leaks. This has had a positive impact on water demand. We are currently doing full leak detection surveys of the system twice a year. Most systems do it once a year. We don't believe surveying three or four times a year will be possible with the limited number of firms doing quality work, nor will it likely make much of a difference.

We also do interim listening surveys of hydrants and services with our own staff. The next step in leak detection will be to utilize drive-by meter reading to detect leaks in customers' homes (predominantly toilet leaks and perhaps leaky irrigation systems).

DPW Questions for 3/10/21 AdCom Meeting

Annual water bans will always be necessary because a certain percentage of the population believes a green lawn is their right, despite the fact that supply is limited.

- **Please explain the increase in the Mains and Valves Program.**

We have had some tricky water main repairs over the past few years that have required the rental of an excavator. I am hoping to provide a bit of a cushion to do this should it become necessary. In addition, the water distribution foreman has expressed a desire to do some additional valve replacement. The stepped up flushing program has revealed some valves that may not have not been working properly for some time. Given the increase in production and capabilities by this crew I want to beef up this program a bit.

- **Please explain the increase in the Water Management Program.**

We assume you mean meter management program. Changes in the water distribution crew over the past 3-4 years have resulted in dramatic increases of both productivity and capabilities. The water distribution crew is proving they are capable of changing a higher number of meters each year than they previously had done. Our thought in FY 21 was to do 400 with our crew and outsource 100. The crew has proven they can do 700 or more if they really work at it. Our goal has been 500-600 (10% of the installed base each year). The requested budget projects 600 meters at an anticipated cost of \$300 per meter plus \$20,000 for some of the larger more expensive meters.

Once the residential units of the mall redevelopment come on line, they will be providing a fixed number of meters for us each year for several years (I believe the number is 150 a year) which will help reduce our costs.

- **Please explain the increase in the Leak Detection Program.**

We are required to perform leak detection surveys twice a year as part of our water management act administrative consent order. Increasing leak detection frequency has allowed us to find and fix leaks sooner, reducing our waste and our unaccounted for water. A benefit of the stepped up leak detection has been reduced demand which has helped reduce costs in the water treatment budget.

- **Why is phone/internet are under water and not IT?**

DPW Questions for 3/10/21 AdCom Meeting

These items just slipped through the cracks and can certainly move to the IT budget.

- **Can you explain why budgeting is increased for multiple departments: hydrants, mains & valves, and leak detection?**

General comment is that we had minimized distribution in past years to soften some of the increases in treatment. This was needed as there were so many unknowns with disinfection byproducts that we were beefing up the treatment budget to cover operating costs. Now that this is behind us we are backing off treatment a bit and shifting some focus back to water distribution.

We are at a point with a good staff where we can invest back into the distribution system. Staff has become more proactive in assessing the equipment, looking for leaks, and building work lists. This should have been happening all along but the right personnel just weren't in place. As such, I have proposed additional funds for valve replacement and hydrant work.

Distribution equipment is designed to last a long time. Capital plans always seem to focus on water main replacement. We believe there is an equal if not greater return on investment in investing in valves and hydrants.

- **Warrant Article 16. Dump/Plow Truck – Appropriate Funds/Free Cash**
 - **Can you explain the need and the cost of delay?**

***** REFER TO MEETING *****

- **General/Other**