AD HOC STORMWATER UTILITY STUDY COMMITTEE
FAQs
September 2023

STORMWATER SYSTEM

Q: What is the stormwater system?

A: The stormwater system is a collection of underground pipes that collect runoff from rain and snow, which is conveyed through increasingly larger pipes until the collected water is discharged to a river, stream, or other surface water body.

Q: What is the difference between the stormwater system and the sewer system?

A: The sewer system conveys wastewater, typically the discharges from homes and businesses that contain significant contaminants and suspended solids, such as toilet wastes, garbage disposal wastes, greases, oils, fats, and other contaminants. All wastewater needs to be treated at a wastewater treatment facility before being discharged to a surface water body. Stormwater is runoff from rain and snow. It is collected in separate pipes which discharge straight to rivers, streams, and wetlands without significant treatment.

Q: Why does there have to be two separate collection systems? Why not put the excess water right into the sewer system and dilute the contaminants before treatment?

A: It costs a large amount of money to treat every gallon of wastewater. Most of the stormwater (after the initial "first flush") is not so badly contaminated that it requires treatment to the degree required by sewage. It is much less costly over the long run to build and maintain two separate systems than to build a wastewater treatment plant large enough to handle both and to then treat both sewage and stormwater. Diluted sewage is much more difficult and costly to treat than concentrated sewage. And, sending all of our rainwater to a treatment plant would starve our wetlands and streams and worsen drought and wildfires. It would also require that we upgrade our sewer pipes to handle this combined flow, something which often results in a release of sewage into local waterways during a major rainstorm in major cities.

Q: Since we have two systems in the Town of Norwood, why do we continue to see such significant flooding in Town?

A: The existing stormwater system was originally constructed in the early half of the 20th century – at least as early as the 1930s. That system does not serve all areas of town well and is much too small in terms of pipe capacity to handle the flows that the system now experiences. The larger flows are due to expanded development of the town and increased storm intensities in recent years.

Q: Why does Norwood have such severe flooding now?

A: The volume of stormwater has increased due to development in town causing more runoff and less water to sink into the ground, and increased intensities of rain events are occuring due to climate changes. The increase in parking lots, buildings, and other impermeable surfaces removes the ability of water to recharge naturally into the ground, and the system has not been upgraded over the years and is now simply inadequate to handle the larger flows. Furthermore, this is not a "new problem," as we lost the Police and Fire Station in 1998 due to severe flooding.

Q: Where has the town seen the most severe flooding?

A: Flooding has been increasing throughout the town over the past 20 to 30 years or so. As far back as the 1980s there was significant flooding in the area of the public safety building on Nahatan Street, for example, that severely hampered the response ability of the police and fire departments and destroyed a lot of communication equipment several times. Similarly, the areas around the Norwood Central train station, along Meadow Brook, and in areas of South Norwood saw significant flooding, as these are low lying areas.

In more recent times, in spite of some earlier corrective actions taken to alleviate the flooding in those areas, increased development and increased rainfall volumes have combined to cause greater flooding in areas of residential and commercial development throughout the town. In June 2020, more than 150 households were impacted by flooding based on the grant applications received by the Town for flood relief. Most of those homes were not within a designated flood zone. Some of these households had damages in the $10,000+ range.

Q: What rivers or streams are most prone to flooding?

A: The Meadow Brook watershed, which covers from about Cotter Farm Road on Neponset St all the way to the Nahatan/Prospect St intersection and Winter St. Cemetery, down to the Norwood Hospital and meeting with the Neponset near the back of the Courtyard Marriott property, the majority of the town, has seen the most significant flooding problems due to the inability of downstream pipes to handle the upstream flows.

The Hawes Brook watershed, which covers much of South Norwood, has begun to experience greater flooding issues for similar reasons. Similarly, the Plantingfield Brook/Purgatory Brook watersheds at the north end of town have become overloaded due to development along Upland Road and Washington Street areas, including Nahatan Street and Winter Street areas. In essence, all of the watersheds in town are under stress and are showing more frequent flooding.

A link to a map of Norwood's streams can be found here.

Q: How many homes were flooded during the June 2020 flood?

A: Norwood received 151 requests for grant assistance from homeowners following the June 2020 flood. Only owner-occupied homes with documented flood related expenses and without existing flood insurance were eligible to apply.

Q: How have Town services been affected by flooding?

A: According to the Norwood Police and Fire Departments, the most significant flooding impacts on municipal services have been to public safety services. With the underpass on Nahatan Street flooding frequently, and the street in front of the public safety building on Nahatan Street flooding more frequently in the past, public safety vehicles cannot quickly or easily access much of the town. If major storms are anticipated, public safety vehicles can be temporarily staged around town, such as at the former electric company building at the corner of Railroad Avenue and Central Street, for example, or at school yards in South Norwood and similar locations. That makes it easier to get first responders to emergencies in those areas, but hampers the ability to service the whole town effectively. It also puts equipment outside, and in most cases the worst weather for outside storage, making it more difficult for the first responders to work and respond.

Similarly, with the loss of Norwood Hospital in June 2020, the Town ambulances have had to drive as far as Needham or Boston with emergency cases, delaying the time for medical treatment of patients and causing time delays in responding to other calls while the ambulances are out of town, putting the lives of Norwood residents in jeopardy. All of that extra travel also significantly increases the wear and tear and subsequent maintenance needs on the equipment. Since at least two vehicles are needed for most emergency calls, the extra travel affects more than just the ambulances and has caused significant increases in wear and tear on all the public safety vehicles. Norwood Fire Department has upgraded both of its ambulances to provide advanced life support in 2021 and 2022 to help in mitigating the longer drives.

Furthermore, it was 25 years ago that Norwood lost its combined police and fire station due to flooding. That flooding largely prompted the Meadow Brook study. Since then, the Town has lost a police and fire station, a hospital, as well as significant damage to hundreds of homes and businesses due to flooding. This does not include minor instances, which are not reported.

Q: The system has been in place for many years and we have not had to do much upgrading or rebuilding, so what is the big rush to do something now?

A: The notion that “we have not had to do much” in the past is not a valid assumption. There has been a lot of work done in various parts of town associated with new construction, rebuilding of roads (as opposed to simply repaving them), and in response to public safety concerns. The fact that we have not done much to upgrade the system over the past 20 to 30 years is exactly the reason we are now facing large expenses going forward. Moreover, further

delay will fix nothing, and will increase the costs of repairs going forward significantly, and the extent of flooding will continue to increase with each larger storm experienced in the future. Just in the last two years, Norwood has completed major flood resiliency projects including replacing a culvert at Dean Street, a bridge at Westover Parkway, and removing a failing dam at Traphole Brook, off of Sumner Street.

Q: Is the Town in compliance with all required federal and state regulations and requirements?

A: We are not in full compliance with state and federal regulations but the Committee recommendations will go a long way toward meeting these requirements. The Commonwealth has issued what is called an MS4 permit to all cities and towns in Massachusetts. That acronym stands for a Municipal Stormwater Sewer System (note that stormwater goes in drains, not sewers, so this acronym is a misnomer). These regulations require the Town to do several things: Develop a bylaw to control stormwater in town, enact regulations to implement the bylaw, ensure that all stormwater is treated to minimum degrees before being discharged to a water body, and proactively manage stormwater to minimize flooding going forward.

Norwood has enacted the required bylaw and the regulations are being developed by the Engineering Department, which is the designated Stormwater Authority.

Q: What happens if the Town does not meet the MS4 requirements?

A: The Town could be sued by the state Attorney General, fined for each day of violation, and be subjected to loss of grant funding for road work, schools, highways, and other projects.

Q: What has been done recently to start the process of rebuilding or repairing the stormwater system?

A: In 2004 a study of the Meadow Brook watershed was conducted to determine how best to alleviate the flooding in front of the public safety building. About 10 major projects were identified during that study to alleviate most of the major flooding occurring at that time in the watershed. Of those, only one or two small projects have been completed; notably a larger pipe was installed from behind the shopping center opposite the public safety building, down to Hennessey Field, through Hennessey Field into Murphy Field, and then into Meadowbrook east of Pleasant Street. That system has already begun to show signs of inadequacy due to the increased flows from further upstream, which is why the area flooded once again in June of 2020 and August of 2023. The Meadow Brook drainage study was subsequently updated in June 2022 by Stantec.

The need for significant work has been identified and the Ad Hoc Stormwater Utility Study Committee was formed in late 2021 to help determine the best approach to funding future

projects. A report to the Board of Selectmen was made following three public hearings, multiple meetings of the committee and concerted effort of public officials and committee volunteers.

The Meadow Brook Study is the beginning of addressing the problem comprehensively. From an Engineering perspective, this is the body of work that has to occur first, because all water drains to the Neponset River. Over time, utilizing the funds from the stormwater fee, we will be able to do further studies throughout the Town to address flooding in other important areas.

Q: Why is the Town establishing an enterprise fund and what does that mean?

A: An enterprise fund is considered the best practice in fund balance (municipal) accounting for fee based services, this ensures that the fee collected for stormwater is segregated and pays for stormwater expenses. It is both a tracking mechanism as well as practical matter to ensure stormwater costs are all booked in one location and the revenue offsets those costs. This is the norm in Massachusetts and how we already handle water and sewer expenses in Norwood.

Q: How is the system maintained now and what will change in the future?

A: The DPW currently maintains the existing stormwater catch basins and drains. New work is also done through the DPW on an emergency basis only, since all non-emergency projects require Town Meeting approval. The maintenance work generally involves cleaning catch basins and drain pipes on a regular basis, sweeping certain streets prone to contaminant accumulations and sand buildup in the winter, and fixing broken pipes as they are identified.

With the implementation of the recommended Enterprise Fund, all of the activities associated with the stormwater system will be moved out of the DPW budget, and will be managed by the Stormwater Enterprise Fund.

MEADOW BROOK/HENNESSEY FIELD/MURPHY FIELD PROJECTS

Q: What actions have been taken by the Town in response to the 2004 Meadow Brook Study?

A: A drain pipe behind the shopping center on Nahatan Street opposite the Public Safety building was enlarged a decade or so ago, and a large detention basin was constructed behind the new public safety building when it was constructed. Those projects did not eliminate the flooding problem along that section of the system, but it did reduce the severity at that time. Subsequently, storm intensities have increased due to increased moisture in the atmosphere and storms moving slower across the region. The pipes downstream of that fix are too small, and there is a need to reduce the magnitude of sudden inflows to the Neponset River from Meadow

Brook to reduce flooding further along the Neponset. The Meadow Brook drainage study was subsequently updated in June 2022 by Stantec.

Q: Why is the Town prioritizing the Meadow Brook watershed?

A: The Town is not just looking at the Meadow Brook watershed isolation, but rather this is one of our highest problem areas with multiple municipal and community assets being flooded and destroyed over the past few decades in this exact area. We have a duty to protect Town infrastructure so that taxpayers are not repetitively replacing the same buildings and equipment time and time again. We commissioned a study of the Meadow Brook watershed in 2004 in response to these critical losses. The Meadow Brook encompasses the areas of the highest flooding in town. We have made strides with other areas of town as well. One example is the detention basin land in Cooper Park to help mitigate flooding in South Norwood that will be installed as part of the new park.

In order to evaluate and compare reasonable options for funding projects of any kind, it is necessary to use large numbers so that the comparisons will be rational. The Meadow Brook Study, while 20 years old, was a convenient source of reasonable real numbers with which to make the comparisons of fees under the various funding options. That study did not include all areas of town and there is no attempt in the work of the Ad Hoc Committee to suggest otherwise. Much more work needs to be done to evaluate all the watersheds in town and to potentially re-prioritize projects from some of those other areas ahead of some of the Meadow Brook projects. That additional study work will require a proposal by the Public Works Department (or the new Enterprise Fund) to Town Meeting for approval.

It is important to note that even though the first 10 years' worth of projects are based on the Meadow Brook study, there are other projects down the road that will pinpoint flood mitigation efforts in many other Norwood neighborhoods. The other areas prone to flooding that we will be addressing in the future are:

1. Dean St at the Dean St Railroad Bridge ($325,000 currently appropriated)
2. Robinwood Rd between Wedgewood Drive and Old Farm Rd
3. Heaton Ave and Baker Ave
4. Pleasant St near the Certainteed Roof Shingle Plant
5. Devon Rd between Croydon Rd and Inverness Rd

Q: Why are the Hennessey Field/Murphy Field/Meadow Brook channelization projects so important now? Why not focus on smaller, less expensive projects, first?

A: One of the primary concepts in flood abatement is to optimize the downstream system before adding more flows to the upstream system. Adding more water into an already overloaded pipe simply exacerbates the existing flooding from that pipe and further endangers the entire system infrastructure.

Working on smaller projects first would only move the flooding around. This will not actually reduce the amount at all, until the downstream system is large enough to handle the additional flows.

Our infrastructure and topography is such that water flows in the direction of Hennessey Field, and so a critical detention basin was proposed and recommended for that area by Stantec in 2004. Without the basin, the rest of the Meadow Brook Project does not work and flooding will continue unabated.

Q: If there is already a pipe under Hennessey Field and Murphy Field, why can't you just replace that pipe with a bigger one?

A: That is, in essence, what is proposed. The existing pipe could not be made large enough to serve the purposes of short-term stormwater storage and long-term flood attenuation. By forming a detention basin from the existing lowlands along the edge of Hennessey Field, both objectives can be met. An enlarged pipe would discharge to the northern end of the low area and out the southern end. During most rain events, the flow would be a stream along the bottom of the basin. Only in major, sudden events, such as in June 2020 and August 2023 would there be any filling of the basin above the pipes. There would be additional overflow protections to prevent current flooding that occurs in the neighborhood of Hennessey and Murphy Fields and along Meadow Brook to the Neponset River. The Meadow Brook channel would also be modified to carry the maximum allowable excess water to the Neponset as quickly as possible. That would also reduce the flooding in the detention basin as rapidly as possible; ideally within about 24 hours of a major storm event.

Q: Why can't you put the detention basin at Froggy's Pond or under Murphy Field?

A: Froggy's, located at Hawthorn's Swale, presents several challenges, the main one being that it could only hold about 1 million gallons of water, while the actual storage number needed is just under 10 million gallons. It does not even remotely meet the capacity requirements. Furthermore, there is groundwater under Froggy's, so there is no possibility of digging deeper to create additional capacity. Finally, the significant work that would need to take place at Froggy's while accounting for the groundwater in place would be complex, costly, and not yield a perceptible difference in stormwater outflows. The infrastructure to reroute and carry stormwater flow to Froggy's would be significant and costly even if the capacity was there.

Based on conceptual estimates in the 2004 study, alternative options of using underground storage tanks at Murphy Field are in the order of 5 to 10 times more expensive than the Hennessey Basin.

The original Stantec study indicated that these areas would not have the adequate capacity to detain stormwater from the major storms sufficient to reduce flooding in this area. In addition,

subsurface detention chambers are more expensive than retaining water above ground. Exposing the stormwater to daylight and fresh air at Hennessey Field will also help improve water quality entering Meadow Brook.

Q: Will the proposed detention basin result in additional flooding in the Hennessey Field neighborhood or downstream of there?

A: No. That would be counterproductive. The basin would be designed to release water at flow rates at or below the existing flow, and channel maintenance in Meadow Brook will reduce the potential for localized flooding from blockages such as downed trees.

Q. How will the Town ensure that the new basin is safe for residents?

A: The concept designs that have been shown to date are just that: Concepts. There has been no substantive design completed for those projects to date. When that work starts, probably in the spring of 2024, the DPW and Town officials are expected to hold a series of public meetings to explain the design details to all residents of the town. Special notice is expected to be given to nearby abutters of the project before such meetings, as well as making sure that residents who are non-English speaking and in populations that are less likely to be able to respond to flooding (e.g. having alternative places to stay, insurance for damaged property, etc) are included. The purpose of those meetings will be to provide opportunities for residents to provide guidance on how to make the project safer for residents, blend into the existing environment of the field, and provide enhanced recreational opportunities for everyone.

Q: Would construction of a basin at Hennessey Field involve blasting?

A: Should blasting be required, it will become clear during the design phase. If blasting is needed, steps such as the use of blasting mats would be taken to minimize the risks from noise and vibration to the neighborhood, and any property within 250 feet of blasting would be eligible for pre-blast surveys so that any damage could be documented and addressed.

Q: There are several very quiet, enjoyable trails and lots of interesting vegetation throughout Hennessey Field now. Would those be lost as a result of the proposed project?

A: There will likely be some disruption to the trails and vegetation during construction. A portion of the park may be converted from a forest habitat to a meadow habitat, featuring pollinator plantings and a stream. Grasslands, once common in New England, are now rare. Historically, Native Americans would create controlled burns to clear forests for farming and grazing for animals. Beaver dams also created grasslands behind their dams, which also doubled as detention basins for rainfall. In the mid 1800s, 75% of New England was cleared for crops and pasture. Now, about 65% of New England is forested, with much of the rest being developed.

The stream through the basin bottom and the surrounding pollinator habitat will provide an ecosystem for birds of prey such as American Kestrels and red-tailed hawks to hunt for small mammals, and butterflies and other pollinating insects, such as Tiger Swallowtails, Monarchs, and Fritillaries, to feed on wildflower nectar. All animals in the area will benefit from the open water channel, and converting a pipe into an open channel will also encourage recharge of the water into the ground, making it more available for use by plants and trees.

The detention basin design will likely include additional walking trails which may be more accessible to people with disabilities than those which are currently available. Public input on the design of these is requested and welcomed.

There have been communities in Massachusetts where a large detention basin was recently completed that did not require the removal of significant existing vegetation. The spot remains a wooded area, now surrounded by a new berm to contain the flood water before it discharges to an existing drain system.

Q: Are there any rare or endangered plants or animals in Hennessey Field?

A: No. There are many unique, beautiful, and valuable plants and animals living in the park. However, there are no known rare or endangered plants or animals there. Many of the plants in the park could be cultivated in your own backyard! Plants that have been mentioned as occurring in Hennessey Field and being potentially rare include ghost pipe and Jack/Jill in the Pulpit. These wonderful plants are not rare in Massachusetts, and occur in several other parks and properties in town. Known rare plant and animal habitats in Norwood are shown on this map.

If you believe you have discovered a rare plant or animal in the park. you can alert the Conservation office (conservation@norwoodma.gov) or the state's Natural Heritage Project (NHESP).

Construction at Hennessey Field would likely require review from the state under the Massachusetts Environmental Policy Act, so NHESP along with other state environmental agencies would review the project before construction.

Q: Will construction of all the Meadow Brook Study projects solve the flooding problems in Norwood?

A: No. That study looks at only one of the three main watersheds in town and none of the smaller ones. There will be additional studies needed to figure out how to resolve all of the flooding issues in town. Those projects only solve part of the problem.

FINANCING QUESTIONS

Q: Why are these projects so expensive?

A: It takes a lot of time and labor hours and materials to construct projects of this magnitude. Equipment costs per hour are necessarily high because the equipment used is expensive. The larger the equipment, the higher the cost, but the faster the project is done. The large diameter pipe and ancillary structures necessary to carry the large volumes of stormwater are very expensive. Labor costs are going up everywhere, as well, and all that machinery requires skilled operators to run it. Material costs are always going up, as may have been noticed by trips to the local home improvement store or nursery. Those increased costs flow to the Town as well as to individuals. Lastly, underground construction within streets that already have a large number of existing pipes (wastewater, gas, electric, etc.) can be very complex and time consuming which in turn leads to higher costs. It is also noted that the longer we wait to get started, the higher the costs are likely to be.

Q: Why can't we get these projects done with state and federal grants?

A: To a certain extent we can – and are – doing just that. The first phase of the first project is being funded through an existing grant and a second one is in the works. The Planning Department and DPW will continue to seek grants going forward to minimize the actual costs borne by the residents and businesses in town. We actually are using a considerable amount of federal money-to the tune of more than $4 million towards the total amount of the work. We also received $432,000 recently from the state and are seeking an earmark from our Congressional delegation. Despite these dollars, there is no state or federal funding available remotely close to the total amount required. We will continue to seek all available funding through any means to reduce and defray the cost to taxpayers.

Q: If I only have a few square feet of impervious area on my small lot. Why should I be paying for companies with large parking lots?

A: It is perhaps a misnomer to assume that stormwater is a problem solely caused by larger impervious lots. The road system in town, for example, is used by everyone, and is a significant impervious surface. Furthermore, the damage from storms is more likely to impact residential properties than larger retail stores with larger lots.

However, the fee structure will allow a resident to pay comparatively less than a larger commercial property, as it will charge lots with impervious areas greater than the average household lot a larger fee calculated by dividing the actual square feet of impervious area on the larger lot by the average area of the household lot and increases the fee to those with the larger lot by a multiple of the household fee. That increases the fee to those with large impervious areas and reduces it to those with smaller impervious areas. In addition, reductions and

abatements for homes with unusually small impervious areas or families with demonstrated difficulty paying the fee are expected to be part of the fee structure. We want to ensure a fair amount is paid by residential property owners and larger commercial property owners are paying according to their impact on the system.

Q: If we are already maintaining the current system through the DPW and then get charged a fee for the same work, aren't we being charged twice through taxes and a fee for the same work?

A: No. The work currently done by the DPW would either remain there and be paid for through taxes, or moved to the new Enterprise Fund and paid for through the new fee. Those costs would not be paid through both mechanisms. The Committee has recommended that those costs be removed from the DPW budget and added to the Enterprise fund budget for clarity, ease of bookkeeping, and avoidance of double-dipping. The Water and Sewer Department is an Enterprise Fund.

At the end of the day there needs to be funds to pay for the work required to improve our system; an increase in taxes would likely cost residential property owners more than a stormwater fee which is set at a fixed amount. In addition, the state's property tax limitations would require a cumbersome process to absorb through taxes as opposed to a fee, a fee allows us to charge the user based on their impact to the system (i.e. residential home owners would pay less), and allows us additional options to offset low income homeowners fees. It is similar to water and sewer, we could charge zero for water and sewer and include it in tax bills but water/sewer is paid based on usage, not value. Stormwater should be the same, total impact to the system versus just valuation.

Q: Why not just continue to fund these projects through the normal budgeting process like we have always done?

A: Projects of this magnitude require the Town to issue bonds to finance the work. The amount of money a town can bond at any given time is limited by its ability to raise enough money through taxes to pay the debt service costs (principal plus interest) and by the bond rating that determines the interest rates the Town would have to pay. If these projects were funded through the normal tax rate, there would be very little ability to pay for any other projects like schools and roads for up to 30 years while these projects were being done, even if taxes were raised the maximum amount (2.5%) every year.

To complete the projects currently on the docket would absorb all current and projected capital spending for more than a decade at least. That means in that time period we would not be able to make any significant building repairs, bridge repairs, purchase needed equipment, etc. This would create an additional backlog of repair projects, equipment needs, and possibly even be

dangerous as we would have no funds available for years until we reach the required amount in the capital budget.

Q: If we can't use the annual budget process, why not do a debt exclusion override to pay for the projects all at once?

A: That plan has two major drawbacks. The first is that towns are not allowed to borrow money through bonding until they are ready to use it. The estimates for the costs of these projects are only estimates and the borrowing cannot occur until the actual costs are known. That means there would be a need for a new debt exclusion override almost every year for the next 10 years and by then more projects would be identified causing a continuous override need every year. That creates the second problem which goes back to the ability of the Town to raise enough money through taxes to pay the debt service and creating a significant increase in debt service costs not necessary under an enterprise system.

Q: Why is the fee system better than the other options for funding?

A: The fee system is a function of the proposed enterprise fund. The creation of an enterprise fund allows the fund to raise money through bonding outside the regular Town bonding limits because the specific fees are a dedicated revenue source to pay for the debt service. Each project requires Town Meeting approval before being implemented so the residents retain control of the fees going forward and there should always be enough money available to keep the debt service costs as low as possible.

The fee to the average residential taxpayer would be less than the tax increase from a debt exclusion. Furthermore, the funding will only go to stormwater, and cannot be diverted in the future to other uses.

Q: What prompted discussion of a fee?

A: Stormwater management costs a lot of money. The construction of new pipes and culverts, drainage basins, and similar facilities are necessary and the cost to maintain the existing and new facilities is high. There is a limit to the number of ways to pay those costs. The approach to continue to try to fund this work through the normal budgeting process has clearly not worked well for the past 20 years or more and is unlikely to work well going forward. That is due to the limits placed on borrowing that the Town can undertake in any fiscal year and the increase in property taxes that would result if the limits were exceeded.

Consequently, a different approach was seen as needed. The General Manager convened a volunteer group of citizens to examine how best to fund these costs within current State regulations and Town financing capabilities. Among those options is the imposition of a user fee based on the use of the stormwater facilities by various properties in town. The Committee has

recommended that mechanism due to significantly lower costs to homeowners and a reduction in negative impacts on the ability of the Town to borrow money at advantageous rates going forward.

The Town commissioned the firm CDM Smith to do an analysis on different ways to fund stormwater projects, including within the budget, having a debt exclusion override, and ultimately through fees. The analysis showed that communities nationwide are going towards the enterprise fund as the way to finance these projects since it is the cleanest and most equitable way of funding them. Stormwater Enterprise Funds are the fastest growing type of fund in Massachusetts, and possibly nationwide. It will be handled similarly to the type of fund Norwood has for its Water and Sewer Enterprise Fund.

Q: Do other towns do this? What do their fees look like?

A: Other towns do this regularly for stormwater management. The Committee has evaluated a lot of data, most provided by our consultants, along with additional data from published online resources. In particular, Dedham, Milton, and Braintree were discussed at a recent Selectmen's meeting. Charts showing the comparative rates for each of those towns and the proposed fee for Norwood are attached to this document in the appendix. The proposed Norwood fee should be significantly lower for Norwood residents than those charged in neighboring towns. The estimated fees for various properties in Norwood are shown in the following table.

ESTIMATED ANNUAL COSTS FOR STORMWATER WITH ENTERPRISE FUND FEE ALL SUGGESTED COSTS INCLUDED			
CATEGORY	ERUs	FY 2025 COST EST.	FY 2029 COST EST.
Single family home with up to 3,400 sf impervious area	1	$54	$147
Multi-family residence property with about 34,000 sf of impervious area	10	$540	$1,470
Multi-family apartment complex with about 340,000 square feet of impervious area	100	$5,400	$14,700
Medium sized commercial property with about 40,000 square feet of impervious area	11.76	$635	$1,739
A commercial property dominated by a parking lot with about 191,000 square feet of impervious area	56.18	$3,029	$8,258
A large commercial property with about 760,000 square feet of impervious area	223.53	$12,045	$32,859

Q: Why are these projects so expensive?

A: These are larger, complex, construction projects in a community that is fully built out with significant infrastructure which adds to the complexity of design requirements. Furthermore, there are significant environmental requirements that factor into the design and construction that must be included to meet EPA and DEP regulations. This ultimately delivers a better product, though it certainly comes at a cost.

Q: How would a stormwater fee ensure that properties with a lot of impervious surfaces pay more than residences with far less impervious surfaces?

A: Under the statutory framework established by the state most residential units will pay a single fee with commercial properties assessed based on total impervious surface, thus ensuring equitable distribution of the fee.

Q: What is the difference between the way a tax increase would be calculated and the fee proposed here would be calculated?

A: A tax of any kind must be based on the inherent value, either imputed, assessed, or otherwise fairly determined, of a fixed asset. A tax is set and assessed as a percentage of that intrinsic value. What the Committee has proposed is a user fee based not on value, but on use of the stormwater system. A $400,000 house and a $1,000,000 house with the same impervious area would pay the same fee (but NOT the same tax). Properties with large impervious areas, that therefore contribute much greater volumes of stormwater to the system, would pay much higher fees for use of the stormwater system. The proposed fee would be based entirely on use by a property, as measured by the amount of impervious area on the property contributing flow to the stormwater system, not on the value of that property or the intrinsic value of the impervious areas.

PUBLISHED ANNUAL ENTERPRISE FUND FEES FOR DEDHAM, MA		
DEDHAM - RESIDENTIAL	ANNUAL FEE	ESTIMATED NORWOOD FEE
500 – 5,000 SF OF IMPERVIOUS AREA	$188	$54 - $79
5,000 – 10,000 SF OF IMPERVIOUS AREA	$508	$79 - $159
>10,000 SF OF IMPERVIOUS AREA	$1,286	$159 - VARIABLE
DEDHAM NON-RESIDENTIAL		
500 – 5,000 SF OF IMPERVIOUS AREA	$303	$54 - $79
5,000 – 10,000 SF OF IMPERVIOUS AREA	$785	$79 - $159
10,000 – 15,000 SF OF IMPERVIOUS AREA	$1,347	$159 - $238
15,000 – 25,000 SF OF IMPERVIOUS AREA	$2,087	$238 - $397
25,000 – 50,000 SF OF IMPERVIOUS AREA	$3,952	$397 - $794
50,000 – 75,000 SF OF IMPERVIOUS AREA	$6,853	$794 - $1,191
75,000 – 100,000 SF OF IMPERVIOUS AREA	$9,395	$1,191 - $1588
100,000 – 250,000 SF OF IMPERVIOUS AREA	$16,170	$1,588 - $3,971
250,000 – 500,000 SF OF IMPERVIOUS AREA	$36,688	$3,971 - $7,941
500,000 – 750,000 SF OF IMPERVIOUS AREA	$62,238	$7,941 - $11,912
750,000 – 1,000,000 SF OF IMPERVIOUS AREA	$104,150	$11,912 - $15,881
>1,000,000 SF OF IMPERVIOUS AREA	$118,687	$15,881 - VARIABLE

PUBLISHED ANNUAL ENTERPRISE FUND FEES FOR MILTON, MA		
SINGLE FAMILY RESIDENTIAL	ANNUAL FEE	ESTIMATED NORWOOD FEE
0 – 2,075 SF OF IMPERVIOUS AREA	$41	$54
2,076 – 2,675 SF OF IMPERVIOUS AREA	$57	$54
2,676 – 4,225 SF OF IMPERVIOUS AREA	$78	$54 - $67
4,226 – 8,365 SF OF IMPERVIOUS AREA	$139	$67 - $133
8,366 – 15,895 SF OF IMPERVIOUS AREA	$260	$133 - $252
> 15,895 SF OF IMPERVIOUS AREA	$533	$252 - VARIABLE
OTHER PROPERTIES		
CONDOS, MULTI-FAMILY	$238 / 100 SF	$54 / 3,400 SF
COMMERCIAL, INDUSTRIAL, OFFICE, RETAIL	$238 / 100 SF	$54 / 3,400 SF
TAX EXEMPT, MUNICIPAL, INSTITUTIONS	$238 / 100 SF	$54 / 3,400 SF

PUBLISHED ANNUAL ENTERPRISE FUND FEES FOR BRAINTREE, MA		
SINGLE FAMILY RESIDENTIAL	$60	$54
MULTIFAMILY RESIDENTIAL (1-3)	$60	$54 / 3,400 SF
MULTIFAMILY RESIDENTIAL (4+)	$60/UNIT	$54 / 3,400 SF
COMMERCIAL	$106 - $7,000	$54 / 3,400 SF
INDUSTRIAL	$68 - $7,000	$54 / 3,400 SF
TAX EXEMPT	$60 - $7,000	$54 / 3,400 SF