

**Public Works and Buildings Committee**  
**City Hall Council Chambers**  
**Meeting Minutes**  
**April 18, 2024, 6PM**

**MEMBERS PRESENT**

Chairman - Councilor Hamann  
Councilor Alexander de Geofroy  
Councilor Kevin Sullivan  
Councilor David Walker  
Councilor Daniel Fitzpatrick

**OTHERS PRESENT**

Councilor Matt Richardson  
Peter C. Nourse PE, Director of City Service  
Grethen Young, Deputy of Technical Services  
Dan Camara, Coordinator GIS & Asset Mgmt.  
Heidi Marshall, PE, Hoyle Tanner & Associates  
Stephen Haas, PE, Hoyle Tanner & Associates  
Shanna Saunders, Director of Planning

**MINUTES**

Councilor Hamann called the Public Works and Building Committee to order at 6 PM

**1. Roll Call**

Ms. Boisvert took the roll call attendance. Councilor Hamann, Councilor de Geofroy, Councilor Walker, Councilor Fitzpatrick and Councilor Sullivan were present for roll call.

**2. Approval of the February 22, 2024, PWC Minutes**

*Councilor Walker made a motion to accept the minutes of March 21, 2024, meeting as presented. Councilor Sullivan seconded the motion. The motion passed unanimously.*

**3. Public Input**

There was no public present for public input.

**4. Intersection Improvements - Milton Road / Salmon Falls / Amarosa Drive**

Mr. Nourse explained that this project had a Public Input Meeting on January 25, 2024. He stated that the meeting was well attended, questions and concerns were gathered. Mr. Nourse stated that a follow up public meeting was requested and that as this meeting is an appropriate venue, he sent letter inviting the January meeting attendees and abutters to attend this meeting tonight as the follow up. Mr. Nourse explained that the origins of this project date back to 2015. He stated that at that time the City completed a corridor study of the Milton Road. At that time the engineers determined that there were safety, accessibility, and corridor deficiencies from Norway Plains Road to the Milton City limits. Mr. Nourse noted that this specific intersection was noted in that study as needing improvements due to alignment, access management and curb cuts, and traffic safety. Mr. Nourse explained that this project has been in a planned future project for several years and with Sig Saur's expansion into Rochester the project has been moved up to manage the increased traffic expected with this new business in the area. Mr. Nourse noted that

the improvements were planned prior to Sig Saur, and he noted that Sig Saur is participating in the cost of the planned intersection improvement project. He stated that they will bring approximately 500 jobs to Rochester and doubling the tax value of the property. Mr. Nourse gave a brief explanation of Roundabouts in general. He discussed how they operate and why they being used so prevalently for traffic management today. Mr. Nourse describe the level of service criteria, a, b, c's use to rate intersections and explained that implementation of the round about will bring the intersection to the a, b level for the next ten years. He stated without the roundabout the level of service is currently c, and d's and Amarosa Drive leg will be an F, as in completely failed. Mr. Nourse stated that he had met personally with the abutting businesses multiple times to hear their concerns and to adjust the roundabout to best suit their needs. Mr. Nourse stated he believes he has satisfied their concerns. Mr. Nourse introduced Hoyle Tanner and Associates (HTA), Transportation Engineers, Heidi Marshall and Stephen Haas. Mr. Haas and Ms. Marshal displayed a PowerPoint Presentation and reviewed the purpose and the background of the project, existing conditions and current ratings of level of service, the future development and anticipated level of service, the alternatives that were considered, the proposed improvements, the abutter concerns and design revisions, and the next schedule and next steps. The PowerPoint is attached to these minutes and the meetings video is available on the city website at [Public Works & Buildings Committee - 4/18/24 \(telvue.com\)](https://www.telvue.com).

Mr. Nourse stated that the City of Rochester has an agreement to complete this project prior to July 2025. Councilor Sullivan asked questions regarding truck traffic into the Lamberts Salvage property. Ms. Marshall explained the types of trucks and the accommodations made for this property. Councilor Walker asked about the number of lanes in the roundabout. Ms. Mashall stated this is a one lane roundabout. Councilor Walker asked about exiting left from Cross Road onto Milton Road, is the median with raised curbs or painted. Ms. Marshall stated that it is painted as to not restrict that traffic movement from crossroad. There were several members of the public present. There were no questions or comments from the public.

**5. Discussion on Roadway Acceptance of Residential Subdivisions, featuring Directors of Planning Department and Department of Works.**

Mr. Nourse explained the roadway acceptance process has not been the subject of this Committee in many years if ever. He stated that the City's requirements for a private road to be accepted were attached to the agenda. See Attached. He stated these requirements are listed in Chapter 223 of the City General Ordinances. Mr. Nourse explained the background. He stated that over the last several years the City has had a problematic history of roadway acceptance. He stated that there were several acceptances that were not conducted per the ordinance and Department established procedures. He stated that streets were accepted after the developer defaulted on the infrastructure requirements required in the Notices of Decisions. Mr. Nourse stated that there are subdivisions that have remained in unfinished states for years due to continuing developer issues. Mr. Nourse stated that this was due in part to inadequate design review and inspection by the City. He stated that this has been corrected with the addition of staffing a inspector and an additional Assistant City Engineer at the DPW. He also stated that the amendment to the ordinance this past years placed more requirements on

developers to deliver a product that meets City standards. Mr. Nourse stated that soon there will be an acceptance request coming to this Committee that will be the first in many years and the first to which may meet the standards as noted in the City's General Ordinances and the individual notices of decision. Mr. Nourse stated that there will be more over the next several years as there are several subdivisions in various stages of development. Mr. Nourse stated that Director Shanna Saunders from the Planning Department is here to provide information as well. Ms. Saunders confirmed that there is one subdivision that is completed and will be coming to the Committee soon and two others that will be coming soon after. She explained that there are many others to come in the future. She stated there are approximately 20 planned subdivisions and apartment complexes in process at this time. Mr. Nourse stated that he is not expecting a decision tonight, but he wanted to gather the thoughts from the Committee on a couple of items. Mr. Nourse explained that he would like the committee's thoughts on road acceptance in general. He noted that he is not advocating either way as there are pluses and minuses to both ways, but that there are local Communities that are no longer accepting any private roads as City Streets. Ms. Saunders explained that she had worked previously in Laconia and that due to budgetary and capacity concerns alone, they no longer accept any City Streets. She explained that we are experiencing stricter regulations for stormwater and other utilities that are forcing more and more financial and maintenance responsibilities on to the Cities. Ms. Saunders stated that other than two subdivisions that pre-dated the decision, between 2004 and 2013 there were no acceptances of City Streets. The developers were aware in advance and Home Owner Associations (HOAs) were required for each development. She stated that the City of Laconia was involved in the HOA drafted agreements to ensure all issues that could arise were addressed. Councilor Fitzpatrick stated that Rochester has different types of developments, those that are intended as City Streets have retainers set aside for any defaults that the City may take to fix those defaults, and then there are developments that are proposed as private roads. Councilor Fitzpatrick asked if the Director was talking about the process to accept those that had originally been proposed as private. Mr. Nourse stated that he had misused the term private, he stated he was referring to those that are proposed to be City Streets at completion. Councilor Fitzpatrick asked if the projects that are near completion and coming to the Public Works Committee and City Council for Street acceptance in proper order for acceptance. Mr. Nourse stated that he believes that they will meet the standards prior to coming to the Committee. Councilor Fitzpatrick stated that he did not see an issue with acceptance if they meet the standards. Councilor Sullivan stated that he is open to hear the pros and cons of accepting or requiring HOAs. He asked what the City's position would be on enforcement if the HOA's failed at required maintenance. Councilor Sullivan stated he had seen Communities with failed HOAs and problems with maintenance. Mr. Nourse explained that when a City accepts a road, the burden falls on the City for maintenance. He said most of the burden is the general fund highway division as it is drainage system, plowing and pavement maintenance. He stated that there are currently about 80 stormwater ponds and drainage facilities in the City that are mostly located within private developments, that are now City accepted streets. When we accept these streets, we are accepting all of these drainage facilities as well as the streets, water, and sewer. He notes that for the most part for the past several decades

these stormwater facilities within developments have not been maintained. Mr. Nourse stated that the new budget will include funding proposals and new staff positions that will be used to get these drainage systems brought to functioning and to maintain in the future. Mr. Nourse stated that now knowing the cost of these drainage system maintenance issues, the City should be requiring HOA's to perform this drainage maintenance within these areas. Mr. Nourse stated that it is believed that the next iteration of the MS4 Permit will include language requiring the municipalities to ensure private drainage structures are maintained. Mr. Nourse stated that the next street acceptance that we are expecting had a Notice of Decision that required the formation of an HOA for amongst other things, the maintenance of the drainage system located on private property. He stated that this is recorded in the deeds and the documentation states that the individual homeowners will be held responsible for the drainage facility maintenance if the HOA were to dissolve and that the City is responsible for only the roadside drainage ditches. Mr. Nourse stated that if the maintenance is not performed the documentation includes that the City has the right to enter onto the property to perform the maintenance and will be provided with compensation. Ms. Saunders stated that it really isn't necessarily an enforcement issue, the City will be starting a relationship with the HOAs and annual reminders of the responsibility to perform the required maintenance will be sent. She stated that the reminders would include language that explains that maintenance is necessary to avoid damage to private property by flooding and groundwater concerns. Ms. Saunders stated that the City will be working to ensure that this is implemented early in the process and that the City assist in the implementation of the HOAs and wording necessary in these documents. Councilor Walker asked if we are suggesting that Ida Court and Bovey Ct which are the next streets withing the Meadow Court Development to request acceptance, have the HOA be responsible for the roads, roadside swales and any retention ponds. Mr. Nourse stated the Notice of Decision includes that the City accepts the roadway and roadside drainage including ditches and swales, however it also states that the homeowners have deeded responsibility for the treatment ponds. Councilor Walker stated that he is ok with this as long as the streets are maintained by the City. He did express concerns for failed HOAs and the maintenance if that occurs. Mr. Nourse stated that he has the same concerns, but this particular subdivision has legal documentation to ensure compliance or if failed the City can hire a contractor and bill the individual homeowners. Councilor Walker stated his preference for the City to be responsible for the schedule and billing of all the private drainage work. Councilor Hamann stated his preference for maintenance. He stated his preference for the HOAs to be responsible with the legal documentation instituted that gives the City the ability to perform and invoice the cost of the maintenance if they fail to do so. Ms. Saunders explained the process would be implemented to ensure compliance. Councilor De Geoffrey stated that he would support a position that delegates the responsibility to be directed to the HOAs, with documentation providing the ability for the City to do the work if necessary, and invoice for cost. Councilor de Geofroy stated that he did not see the need to take on full responsibility for the possibility of a few failed HOAs. Ms. Saunders stated that it has been her experience that this is rarely an issue that requires any legal action. Councilor Sullivan asked if there is information of other operations and maintenance plans that are in effect that we do have issues with. Councilor Sullivan

asked what staff preference is for acceptance of City Streets. Mr. Nourse stated that we are not trying to steer the Committee but wanted the Council to understand that there are other options and how other Communities are handling the rapid growth and increased regulatory issues. Mr. Nourse mentioned that there are other factors for consideration as well and noted that there is a development coming for road acceptance that has utilities beneath the road that are not going to be part of the acceptance. He stated that creates other problems. He stated that the Water Ordinance, Chapter 260, the highway road acceptance ordinance does not have similar language and maybe it should. He stated that you should accept all of the roadway and utilities if within the roadway, and not accept one without the other. Councilor Hamann suggested that this Committee seems to be leaning toward continued road acceptances that include utilities and roadside drainage, but also include HOAs that are responsible for other drainage facilities within the development. Councilor Fitzpatrick stated that when a developer brings a project forward that is going to be seeking road acceptance, they should be aware of all stipulations required for acceptance and that they should adhere to those prior to acceptance. He believes it is in the best interest of the City to continue to accept new streets. Councilor de Geofrey stated that he believes that the City should set high standards, ensure compliance with those standards and continue to accept new streets. He noted that the taxpayers should not be responsible for the cost of the failures of developers. Councilor Hamann stated a preference that all proposed private and proposed City Streets should be built to City standards as it is possible they will be coming to the City at a later date requesting acceptance. Councilor Fitzpatrick discussed the problematic issues for homeowners where developers that have failed to build to standards or failed to request or meet acceptance requirements. He stated that the homeowners do not get trash service or plowing, and this is a difficult situation to be in if the developer has walked away. Councilor Walker again expressed his desire for the City to maintain and bill for drainage. Councilor de Geofroy stated that the City would then be fronting the funding for all of this maintenance unnecessarily. Deputy Director Young discussed that if the City or a City Contractor, accesses these properties, via the easements, there is a history of complaints and ongoing repairs and maintenance issues due to the disruption of private property. She noted if the HOAs contract their own work, this would not be a City concern. Ms. Saunders stated that the DPW & Planning are working on developing the list of HOAs and having these documents easily available to begin the enforcement of compliance. Mr. Nourse stated that we have all of City owned land drainage facilities documented and are working on maintenance, which give us credits toward compliance on our MS4 permit and getting all of the private drainage documented and maintained will get the City additional credits. Councilor Walker mentioned maintaining sufficient surety on developments to complete projects that may be abandoned by developers. Mr. Nourse mentioned in addition to the surety prior to acceptance, there is a new warranty bond required that ensures that 2% of the entire project infrastructure value will be bonded for three years after the acceptance.

**6. Other**  
**EPA Released new PFAS Limits**

Mr. Nourse stated that he had last discussed this issue with the Committee at the April 2023 Committee Meeting. He encouraged this Committee and the City Council to go back and review those meeting minutes and video for more details. Mr. Nourse stated that after posting this Committee agenda the Environmental Protection Agency (EPA) released new maximum contaminate levels (MCLs) for six different poly and perfluoroalkyl substances (PFAS). He stated that attached to the minutes will be an email from NH Department of Environmental Services (NHDES) and a fact sheet from the EPA. The email has a graphic that shows the current MCL and the new MCL for the different chemicals known of associated with the term PFAS. Mr. Nourse stated that there are significant reductions in PFOA and PFOS, which are reduced by more than two-thirds from the previous MCL level and there are new regulations for PFNA, and PFHxs. He also noted that there is a new level set for HFPO-DA (GenX chemicals) where there was no previous MCL. Mr. Nourse stated this new regulation means public water systems have 3 years to test and monitor for these contaminants. Mr. Nourse stated that he believes that we are already in compliance with this. He stated that the Water Treatment Plant (WTP) staff started voluntarily testing for 25 different PFAS compounds back in 2016. Mr. Nourse stated we are looking to verify that with NHDES. Mr. Nourse stated that public water systems with detects above these limits will have 5 years to implement solutions to reduce levels to compliance with new MCL's. He stated that PFOA & PFOS are the most prevalent compounds found in the water and are the drivers for these reduced rates. NHDES estimates that the lower PFOA & PFOS regulations will result in more than double the violations in the State of NH if corrective actions are not taken. Mr. Nourse explained that NHDES needs to adopt rules that are no less stringent than these new EPA standards and they could make them even lower. Mr. Nourse discussed the health and financial implications of these regulations nationwide and locally (see attached fact sheet). He also reminded the Committee that the WTP test results to date for PFOA & PFOS have been compliant with current NH Drinking Water Rules, but they are hovering around the new limits set by EPA, and have been slightly below and slightly above the four parts per trillion (4.0 ppt) new EPA limit. Mr. Nourse mentioned that NH is participating in a nationwide legal suit against 3M & Dupont. He stated that NH is unique as the Department of Justice can make claims on behalf of public water systems. Mr. Nourse stated that funds obtained from these suits will go to the NH Drinking Water, Groundwater Trust Fund, and there will be an Emergent Contaminant Fund. He stated that these funds may be leveraged by the City to treat manganese and PFAS Treatments. Mr. Nourse stated that the State has limited funding for these now and waiting for these funds could be problematic given the 5-year window for the implementation of solutions. Councilor Hamann asked about testing intervals. Mr. Nourse referred to the fact sheet and stated quarterly. Councilor Hamann asked if new regulations would include the small water systems. Mr. Nourse stated that yes, they would be included. Councilor Sullivan ask that the Director confirm that these regulations are specific to Water Treatment and have no over lap with the large expenses the City has been discussing for the treatment of Wastewater for nitrogen and phosphorus. Mr. Nourse stated that is correct this is on the drinking water side. He did note for information that the new wastewater permit does require that we test for PFAS (40) at the influent, the effluent and in the sludge at the Wastewater Treatment Plant

(WWTP). Councilor de Geofroy asked the risk in waiting for a possible windfall of funding from the 3M / Dupont lawsuit. He asked if there was a possibility of being reimbursed retroactively for the cost incurred once the settlement was reached. Mr. Nourse stated that this has been part of the discussions. Mr. Nourse stated as he has previously reported to the Committee, the City is in design engineering process at the Cocheco Well for Manganese and PFAS upgrades using the previously awarded American Rescue Plan Act (ARPA) Grant. He noted that the construction for the Manganese Upgrades will likely be Fourteen million (\$14M) and likely will be more than twenty million dollars (\$20M) to do both PFAS and Manganese. He stated that these must be done in series, you must take the manganese out before you can filter for PFAS. Mr. Nourse stated that it is a very big investment to keep the Cocheco Well online. He stated that he has discussed the pros and cons of this and there may be a decision point in the future. Councilor de Geofroy asked if the sampling compliance is determined per test or is there a rolling average. Mr. Nourse stated he believe per the fact sheet it is per any one sample. Mr. Nourse states that he has made as much noise as he can with the regulators, but his concern remains that these levels are so low that the results can be influenced by the equipment used to produce the water. He stated that when NHDES does the rule making he hopes this can be considered as PFAS is virtually everywhere.

**Strafford Square Roundabout** – Mr. Nourse informed the Committee that construction is set to resume with the final wear course of pavement, line striping, landscaping and the flagpole will go in. Councilor Hamann asked if there would be directional arrows within the traffic lanes inside the roundabout. Mr. Nourse stated he would check the plans.

**Storm Clean Up** – Councilor de Geofroy complimented the DPW Staff for their excellent job on plowing and storm cleanup for the recent storm. Mr. Nourse stated he would pass this along to the crew. Councilor Hamann and Fitzpatrick stressed that they too was proud of our City Staff for the storm efforts.

**Councilor Hamann adjourned the meeting at 7:19 PM.**  
**Minutes respectfully submitted by Ronda Boisvert, Admin2 DPW.**

# Milton Road (NH 125) at Salmon Falls Rd/ Amarosa Dr Intersection Improvements

Public Works Committee Meeting – 4/18/24



# Department of Public Works Overview



**Peter Nourse, PE**

Director of City Services

City of Rochester

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# Agenda



- Introductions
- Purpose & Background
- Existing Conditions & Traffic
- Alternatives Analysis
- Proposed Improvements
- Abutter Coordination
- Schedule & Next Steps
- Q & A



**Heidi Marshall, PE**  
Project Manager  
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**Stephen Haas, PE, PTOE**  
Senior Transportation Engineer  
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# Purpose & Background

## Purpose

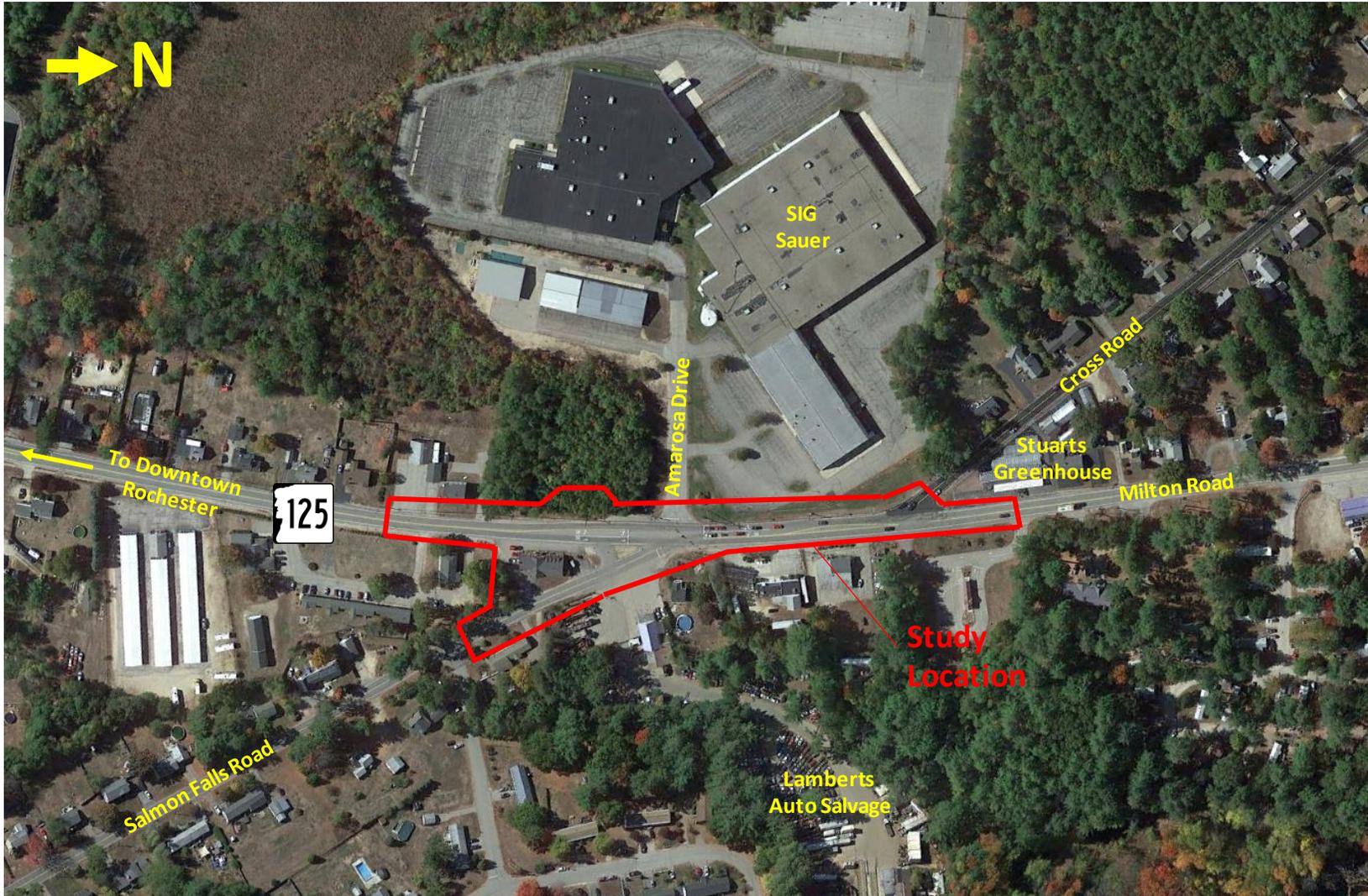
Improve traffic operations and safety at the intersection, while also supporting the needs of planned development

## Background

- 2020 Capital Improvement Plan
- 2022 Intersection Improvement Study
- 2023 Preliminary Intersection Design



# Existing Conditions and Traffic



9,000 Per Day

11 Crashes (2018-2020)

Overall LOS C/C (2022 AM/PM)  
(LOS D for NB/EB/WB)

- 25° Intersection Skew
- No Pedestrian Accommodations
- No Left Turn Lane to Cross Road



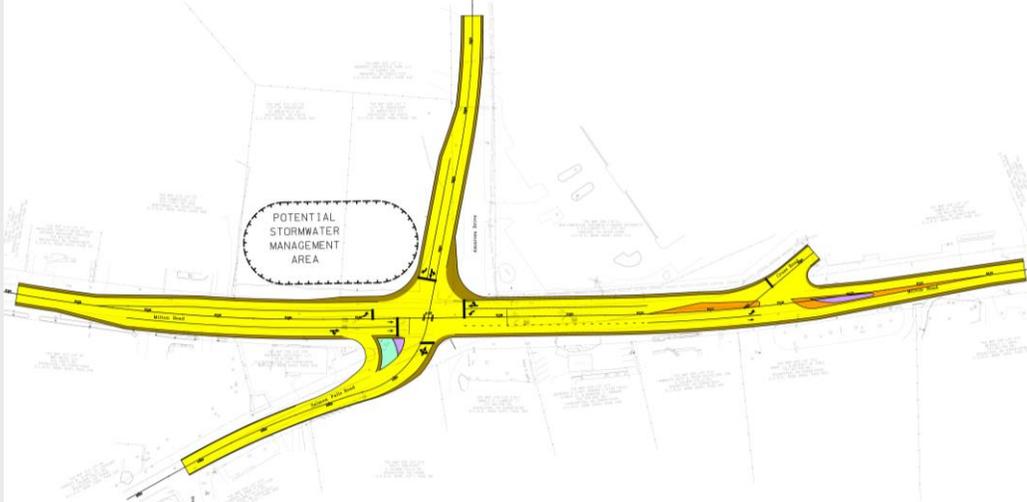
## Planned Development

- Sig Sauer – 475 employees in next 5 years
- 318 new trips during peak hour of generator
- = 23% of existing PM peak intersection volume



## 2032 Build With No-Mitigation

- Level of Service (LOS) – C (AM/PM)
  - LOS D during peak shift change
  - LOS F for Amarosa Approach
- PM NB Queue – 550 to 1,130 feet
- Crash frequency anticipated to increase



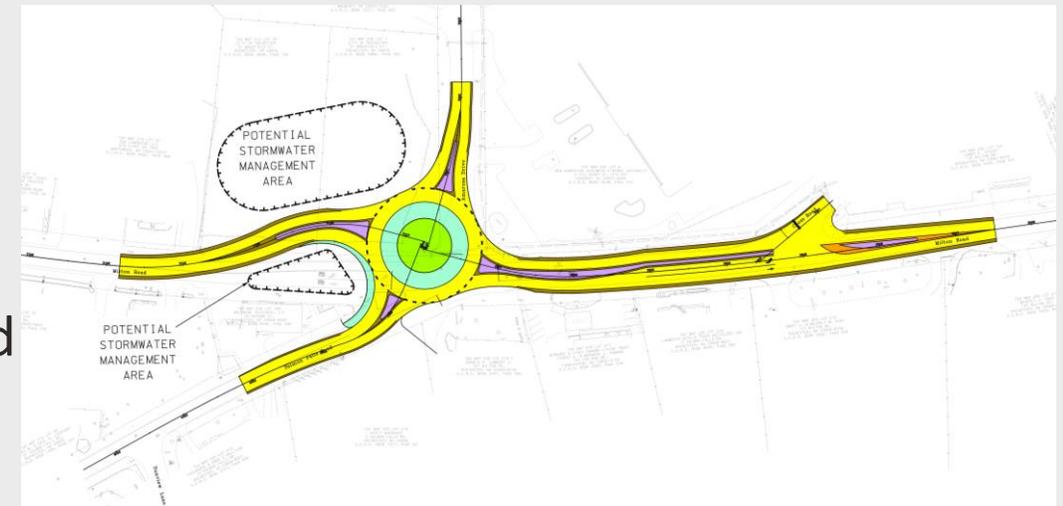
## Re-Aligned Signalized Intersection

- Reduced Skew Angle
- Requires 2<sup>nd</sup> NB Thru Lane
- 2032 LOS C – AM/PM
- Reduced Queue Lengths

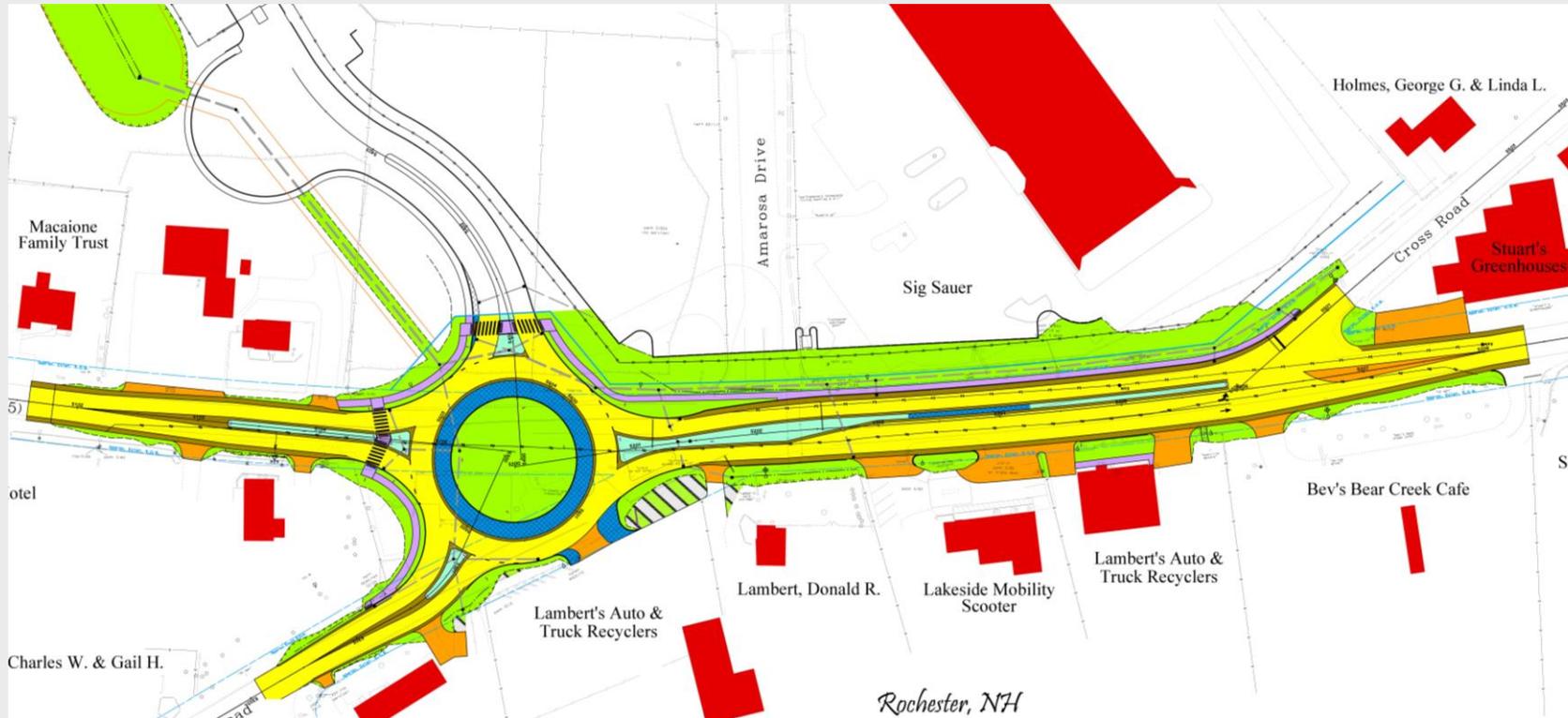


## Single-Lane Roundabout

- 2032 LOS A/B – AM/PM
- 20% - 40% Crash Reduction Anticipated
- Reduced Queue Lengths



# Proposed Improvements



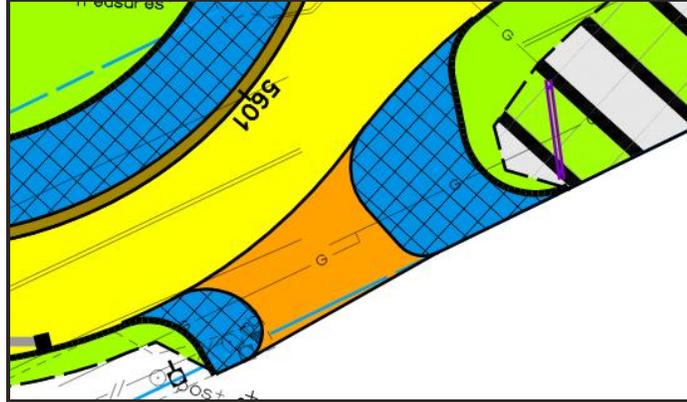
- 170' dia. Single-Lane Roundabout
- NB Left Turn Lane to Cross Road
- Raised Median & Splitter Islands
- New Sidewalk along West Side
- Accommodation for Large Vehicles
- 350' Grass Swale for Improved Water Quality

# Abutter Coordination & Design Revisions

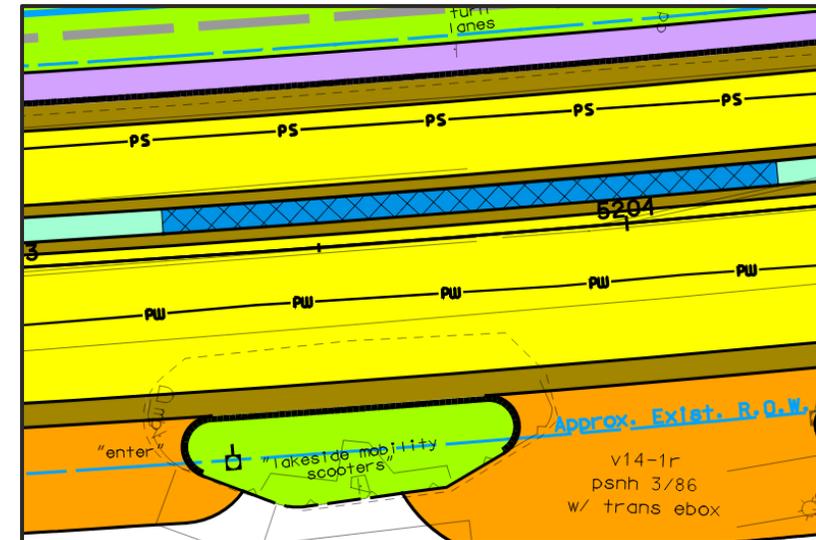
## Coordination Meetings

- Stuarts Greenhouse
- Lamberts Auto & Truck Recyclers
- Lakeside Mobility Scooter
- O'Sullivan, Cassandra & Anna
- Sunset Village Motel
- Sig Sauer Inc.

### Widened Truck Apron At Lamberts

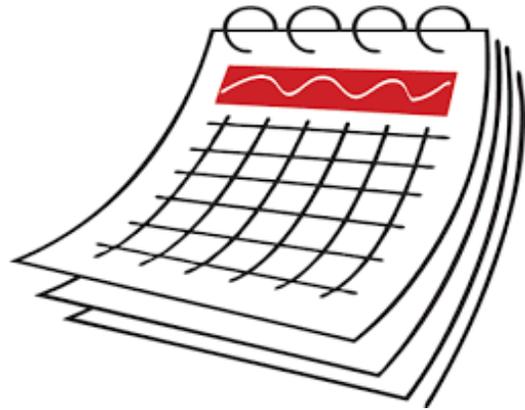


### Widened Flush Median at Lakeside Scooter



### Drive Revisions at O'Sullivan

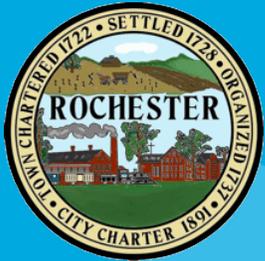




## Schedule

- Preliminary Design: 2023
- Public Meeting: January 2024
- Final Design: Winter - Summer 2024
- ➔ • Public Works Committee Meeting April 2024
- Advertise: Fall 2024
- Construction: Fall 2024 to Summer 2025

Thank You!



**Peter Nourse, PE**

Director of City Services

City of Rochester

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**HOYLE  
TANNER**

**Peter Nourse**

**From:** Kernen, Brandon <Brandon.M.Kernen@des.nh.gov>  
**Sent:** Wednesday, April 10, 2024 1:39 PM  
**To:** Kernen, Brandon  
**Subject:** FW: New Federal Regulations for PFAS in Drinking Water of Public Water Systems - NHDES 4-10-24 Update

**Caution:** External email.

Good afternoon.

Today (April 10, 2024), the United States Environmental Protection Agency (USEPA) has established federal drinking water regulations for six poly- and perfluoroalkyl substances (PFAS). As shown below, the standards are more stringent than the standards adopted in rule by NHDES in 2019 and the New Hampshire Legislature in 2020 (see <https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>).

Chemical	Current NH Standard	New Enforceable Federal Regulation (Maximum Contaminant Level (MCL))	Maximum Contaminant Level Goal (MCLG)**
PFOA	12 ppt	4.0 ppt*	0
PFOS	15 ppt	4.0 ppt*	0
PFNA	11 ppt	10 ppt	10 ppt
PFHxS	18 ppt	10 ppt	10 ppt
HFPO-DA (GenX chemicals)	None	10 ppt	10 ppt
Mixture of two or more: PFNA, PFHxS, HFPO-DA, and PFBS	Not Applicable	Hazard Index of 1	Hazard Index of 1

$$\text{Hazard Index} = \frac{[\text{GenX}_{\text{water}}]}{[10 \text{ ppt}]} + \frac{[\text{PFBS}_{\text{water}}]}{[2000 \text{ ppt}]} + \frac{[\text{PFNA}_{\text{water}}]}{[10 \text{ ppt}]} + \frac{[\text{PFHxS}_{\text{water}}]}{[10 \text{ ppt}]}$$

Where  $\text{GenX}_{\text{water}}$  = monitored concentration (ppt) of GenX Chemicals  
 $\text{PFBS}_{\text{water}}$  = monitored concentration (ppt) of PFBS  
 $\text{PFNA}_{\text{water}}$  = monitored concentration (ppt) of PFNA  
 $\text{PFHxS}_{\text{water}}$  = monitored concentration (ppt) of PFHxS

\*The federal MCL proposed for PFOA and PFOS is 4.0 ppt, meaning any result above 4.05 ppt would exceed the federal MCL.  
 \*\*Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety and are non-enforceable public health goals.

These standards apply to all community water systems (public water systems that supply water to the same population year-round) and non-transient non-community water systems (public water systems that regularly supply water to at least 25 of the same people at least six months per year). The standards do not apply to transient public water systems (water systems that provide water to 25 or more people for at least 60 days per year, but not to the same people and not on a regular basis).

The most important aspects of the new federal PFAS drinking water regulations being adopted by USEPA are that the federal regulations require that within five years, applicable public water systems comply with a lower concentration

limit for perfluorooctanoic acid (PFOA) of 4 nanograms per liter (parts-per-trillion – ppt) compared to New Hampshire’s limit of 12 ppt; and a lower concentration limit for perfluorooctane sulfonic acid (PFOS) of 4 ppt compared to New Hampshire’s concentration limit of 15 ppt. PFOA and PFOS are frequently detected in the drinking water obtained from public and private water supply sources. It is estimated that lowering the drinking water standard for PFOA and PFOS to 4 ppt will more than double the number of sources (approximately 180 additional sources) of drinking water for public water systems that will eventually incur drinking water quality violations if corrective action measures are not implemented.

The new federal PFAS drinking water regulations also include lower standards for perfluorohexane sulfonic acid (PFHxS) and perfluorononanoic acid (PFNA) than what New Hampshire has adopted as a standard. However, these contaminants generally co-occur with PFOA and PFOS and the new federal standards will likely only cause a few additional water systems to be out of compliance. Similarly, the PFAS drinking water regulations establish standards for hexafluoropropylene oxide dimer acid (HFPO-DA, commonly known as GenX Chemicals) and perfluorobutane sulfonic acid (PFBS). New Hampshire does not have standards for these two compounds. While public water systems in New Hampshire currently do not have to test their drinking water for HFPO-DA and PFBS, hundreds of water systems have tested their drinking water sources for these compounds and NHDES has coordinated the sampling and testing of drinking water from thousands of private wells for these compounds. The testing results show that these compounds very likely will not occur at levels that will violate the new federal standards. The new federal PFAS drinking water regulations allow water systems three years to implement water testing for all of these new standards and two additional years (for a total of five years) for remediation of any exceedances.

The final federal PFAS regulation was just released this morning, and NHDES has not had a chance to thoroughly review it. A general summary of how and when the new regulations will impact NHDES and water systems from a regulatory standpoint based on our initial understanding is provided below:

- 1)**NHDES Rulemaking:** NHDES will need to adopt rules that are no less stringent than the new federal PFAS drinking water regulations within two years. The rules will not only include MCLs and MCLGs, but also parameters around the frequency and type of testing that must occur as well as specific requirements pertaining to public notification of violations.
- 2)**Water System Sampling:** Applicable water systems will need to complete initial monitoring to comply with the new federal PFAS drinking water regulations within three years. Water systems in New Hampshire have completed initial monitoring for PFAS dating back to 2019/2020 to comply with New Hampshire’s drinking water standards. Water systems that completed testing for all analytes covered by USEPA Methods 533 or 537.1 as recommended by NHDES in 2019 may have the data needed to satisfy the initial monitoring requirements of the new federal PFAS regulations. Water systems that only analyzed for the four PFAS (PFOA, PFOS, PFNA and PFHxS) that New Hampshire regulates will have to complete initial monitoring for HFPO-DA and PFBS even though these compounds very likely will not occur at a concentration that will exceed the new federal drinking water standards.
- 3)**Water System Public Notification:** Applicable public water systems will need to notify the public if finished drinking water exceeds the new federal PFAS drinking water regulations within three years. The notification to the public will not specifically be required and enforced by NHDES until its rulemaking (described in item 1, above) is complete. However, public water systems already have PFAS results for PFOA, PFOS, PFNA and PFHxS and can notify the public in the near future. NHDES will follow-up this email in the near future with recommended notification language for water systems that elect to notify the public sooner than required by the new federal PFAS regulation.
- 4)**Water System Drinking Water Quality Compliance and Violations:** Applicable public water systems will need to comply with the new federal PFAS standards for the six PFAS within five years. Public water systems that produce drinking water that will exceed the federal drinking water standards may implement corrective action sooner than five years to protect public health and avoid violations of the federal standard and the associated public notification requirements.

The new federal PFAS drinking water standards are estimated to collectively cost water systems over \$200M to implement initial corrective action measures and then tens of millions of dollars in annual operation and maintenance costs. While we are in year three of a five-year temporary surge in federal funding to address drinking water infrastructure and emerging contaminants, and the state has dedicated significant resources to address PFAS, undoubtedly water systems and their ratepayers will be impacted. NHDES is committed to helping water systems comply with the new federal PFAS regulations and will provide assistance to address technical and financial challenges that the water systems will face. NHDES has already commissioned a study for southern New Hampshire where there is a high density of small standalone community water systems that exceed the new federal PFAS regulations to assess the feasibility and interest from water systems and municipalities in regional solutions to address PFAS contamination.

In the near-term, I encourage you to review materials on USEPA's Final PFAS National Primary Drinking Water Regulation website (<https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>). Additionally, USEPA is holding three informational webinars for communities, water systems, and other drinking water professionals about the final PFAS drinking water regulations. These webinars are scheduled on April 16, April 23, and April 30, 2024 (see <https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas> - two thirds of the way down the webpage). The webinars will be similar, with each intended for specific audiences.

NHDES will have additional information on the new federal PFAS drinking water regulation in the coming weeks/months. No immediate action by water systems is required at this time. If you have questions or recommendations on how NHDES can better assist water systems with understanding and complying with the new federal PFAS drinking water regulations, please contact me at 603-271-1168 or [Brandon.Kernen@des.nh.gov](mailto:Brandon.Kernen@des.nh.gov).

My colleagues and I understand the incredible amount of work that is being asked of water systems and the associated community of managers, engineers/consultants and water system operators on so many fronts. We are grateful for your tireless work and collaboration to protect public health.

Thank you.  
Brandon Kernen  
Administrator – Drinking Water and Groundwater Bureau,  
New Hampshire Department of Environmental Services

Brandon Kernen, Administrator - Drinking Water & Groundwater Bureau | NHDES | 603 271 1168 (o) | 603 677 2478 (c)

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## PFAS National Primary Drinking Water Regulation

### Introduction

Safe drinking water is fundamental to healthy people and thriving communities. President Biden believes that all people in the United States should have access to clean, safe drinking water. Since the beginning of the Biden-Harris Administration, EPA has been delivering on the promise to protect communities from the harmful effects of toxic substances, including carcinogens. PFAS are a series of man-made chemical compounds that persist in the environment for long periods of time. They are often called “forever chemicals.” For decades PFAS chemicals have been used in industry and consumer products such as nonstick cookware, waterproof clothing, and stain resistant furniture. These chemicals have been important for certain industries and uses. And the latest science shows that these chemicals are harmful to our health.

PFAS exposure over a long period of time can cause cancer and other serious illnesses that decrease quality of life or result in death. PFAS exposure during critical life stages such as pregnancy or early childhood can also result in adverse health impacts. EPA’s responsibility through the Safe Drinking Water Act is to protect people’s drinking water, and the Biden-Harris Administration is taking action to protect public health by establishing nationwide, legally enforceable drinking water limits for several well-researched PFAS chemicals and reduce PFAS exposure for approximately 100 million Americans served by public drinking water systems.

### The Rule

As the lead federal agency responsible for protecting America’s drinking water, EPA is using the best available science on PFAS to set national standards. PFAS can often be found together in water and in varying combinations as mixtures. Decades of research shows mixtures of different chemicals can have additive health effects, even if the individual chemicals are each present at lower levels.

**In this final rule, EPA is setting limits for five individual PFAS: PFOA, PFOS, PFNA, PFHxS, and HFPO-DA (known as GenX Chemicals). And EPA is also setting a Hazard Index level for two or more of four PFAS as a mixture: PFNA, PFHxS, HFPO-DA, and PFBS.**

Chemical	Maximum Contaminant Level Goal (MCLG)	Maximum Contaminant Level (MCL)
PFOA	0	4.0 ppt
PFOS	0	4.0 ppt
PFNA	10 ppt	10 ppt
PFHxS	10 ppt	10 ppt
HFPO-DA (GenX chemicals)	10 ppt	10 ppt
Mixture of two or more: PFNA, PFHxS, HFPO-DA, and PFBS	Hazard Index of 1	Hazard Index of 1
<b>Maximum Contaminant Level Goal (MCLG):</b> The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety and are non-enforceable public health goals.		

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.

**ppt:** parts per trillion

**Hazard Index (HI):** The Hazard Index is a long-established approach that EPA regularly uses to understand health risk from a chemical mixture (i.e., exposure to multiple chemicals). The HI is made up of a sum of fractions. Each fraction compares the level of each PFAS measured in the water to the health-based water concentration.

This new rule will significantly reduce the level of PFAS in drinking water across the United States. Many states have worked to monitor for and reduce PFAS exposure in drinking water through state-specific regulations. This rule builds on these efforts by incorporating the latest science and establishing a nationwide, long-term health-protective level for these specific PFAS in drinking water. Communities and states will need to determine whether PFAS is in their drinking water and take actions such as notifying consumers and reducing the levels of PFAS, as needed.

Water systems must take action to reduce the levels of these PFAS in drinking water if the level of PFAS in their drinking water exceeds regulatory standards. Regulated public water systems have three years to complete their initial monitoring for these chemicals. Systems must include their results in their Annual Water Quality reports to customers. Systems that detect PFAS above the new standards will have five years to implement solutions that reduce PFAS in their drinking water. Water systems must also notify the public if levels of regulated PFAS exceed these new standards.

### Impacts and Costs of the Rule

People will live longer, healthier lives because of this action, and the benefits justify the costs. Once implemented, these limits will reduce tens of thousands of PFAS-attributable illnesses or deaths. EPA estimates that once implemented, this regulation will reduce PFAS exposure for approximately 100 million Americans served by public drinking water systems. EPA considered all available information and analyses for costs and benefits, quantifiable and non-quantifiable, of this rule and determined that the benefits justify the costs.

Fewer people will get cancer or liver disease, pregnant women will have reduced risks, and more and children and infants will be stronger and grow healthier. EPA calculated measurable health benefits based on fewer cancers, lower incidents of heart attacks and strokes, and reduced birth complications. These benefits are estimated to be approximately \$1.5 billion per year, and include avoided costs of medical bills, income lost to illness, and death. Additionally, EPA could not quantify all the health benefits, including developmental, cardiovascular, liver, immune, endocrine, metabolic, reproductive, musculoskeletal, and carcinogenic effects, and therefore the benefit estimates are likely greater than \$1.5 billion.

Compliance with this rule is estimated to cost approximately \$1.5 billion annually. The Biden-Harris Administration has dedicated \$9 billion through the Bipartisan Infrastructure Law to help communities impacted by PFAS pollution in drinking water. In addition, another \$12 billion in Bipartisan Infrastructure Law funding is available to communities to make general drinking water improvements, including addressing PFAS chemicals. Estimated costs include water system monitoring, communicating with customers, and – if necessary – installing treatment technologies.

### Implementation and Funding

The rule is achievable and implementable. Drinking water utilities will be able to implement these new requirements as control technologies exist and are in use today. Water treatment technologies exist to remove PFAS from drinking water including granular activated carbon, reverse osmosis, and ion exchange systems. EPA's

final rule does not dictate how water systems remove these contaminants. The rule is flexible, allowing systems to determine the best solutions for their community. Public water systems can choose from multiple proven treatment options. In some cases, systems can close contaminated wells or obtain a new uncontaminated source of drinking water.

There is unprecedented funding for drinking water systems impacted by PFAS and other emerging contaminants to provide safe water to communities. We know that PFAS pollution can have a disproportionate impact on small, disadvantaged, and rural communities, and there is federal funding available specifically for these water systems. With today's announcement of the rule, EPA is also announcing nearly \$1 billion for states and territories, through the [Emerging Contaminants in Small or Disadvantaged Communities Grant Program](#), which can be used for initial testing and treatment at both public water systems and to help owners of private wells address PFAS contamination. The nearly \$1 billion announced today is part of the dedicated \$9 billion of Bipartisan Infrastructure Law (BIL) funding for communities with drinking water impacted by PFAS and other emerging contaminants. An additional \$12 billion in Bipartisan Infrastructure Law funding is available to communities to make general drinking water improvements, including addressing PFAS pollution. This funding is available through EPA programs that are part of President Biden's [Justice40 Initiative](#), which set the goal that 40 percent of the overall benefits of certain federal investments flow to disadvantaged communities that are marginalized by underinvestment and overburdened by pollution.

EPA's free [Water Technical Assistance program](#) (WaterTA) is ensuring that disadvantaged communities can access federal funding. Too many communities across America face challenges providing safe drinking water services to their residents, and WaterTA supports communities to identify water challenges; develop plans; build technical, managerial, and financial capacity; and develop application materials to access water infrastructure funding. EPA collaborates with state, Tribes, territories, community partners, and other key stakeholders to implement WaterTA efforts and the end result is more communities with applications for federal funding, quality water infrastructure, and reliable water services. [Learn more here](#).

## Additional Resources

Learn more about water infrastructure funding opportunities by visiting EPA's [water infrastructure page](#).

If you are concerned about PFAS in drinking water, there are key actions you can take. People who are concerned about PFAS in their drinking water should first contact their drinking water utility to find out more about their drinking water, including what contaminants may be present, if the utility is monitoring for PFAS, what the levels are, and to see whether any actions are being taken.

If you remain concerned after talking to your utility, then consider using or installing in-home water treatment (e.g., filters) that is certified to lower the levels of PFAS in your water and/or contact your health care provider as well as your state or local health department. You can find more information about water filters that help reduce PFAS [here](#). If you get your water from a home drinking water well, then EPA recommends you conduct regular testing. If PFAS are found, you can take steps to lower the levels of PFAS. For more visit: EPA's website [here](#).