

CITY COUNCIL MEETING

MUNICIPAL COMPLEX, EILEEN DONDERO FOLEY COUNCIL CHAMBERS, PORTSMOUTH, NH
DATE: MONDAY, AUGUST 19, 2024 TIME: 7:00PM

Members of the public also have the option to join the meeting over Zoom, a unique meeting ID and password will be provided once you register. To register, click on the link below or copy and paste this into your web browser

https://us06web.zoom.us/webinar/register/WN_wjuJqfLJTFuR3x99ZRHf7Q

5:00PM - ANTICIPATED NON-PUBLIC SESSION IS BEING HELD IN CONFERENCE ROOM A
1. CONSIDERATION OF LEGAL ADVICE IN ACCORDANCE WITH RSA 91-A:3 II (I)

AGENDA

- I. 6:00PM - WORK SESSION – CAPITAL IMPROVEMENT PLAN PROCESS KICKOFF
- II. PUBLIC DIALOGUE SESSION [when applicable – every other regularly scheduled meeting] – **N/A**
- III. CALL TO ORDER [7:00 p.m. or thereafter]
- IV. ROLL CALL
- V. INVOCATION
- VI. PLEDGE OF ALLEGIANCE

- VII. ACCEPTANCE OF MINUTES – JULY 15, 2024

- VIII. RECOGNITIONS AND VOLUNTEER COMMITTEE REPORTS
 - A. Public Art Review Committee on Public Art at Peirce Island

- IX. PUBLIC COMMENT SESSION (*This session shall not exceed 45 minutes*) – (*participation may be in person or via Zoom*)

- X. PUBLIC HEARINGS AND VOTE ON ORDINANCES AND/OR RESOLUTIONS

Public Hearing/Adoption of Resolution:

- A. Public Hearing/Adoption of Proposed Resolution Authorizing a Supplemental Appropriation from the Parking and Transportation Fund of \$1,000,000.00 for the High Hanover Parking Garage Project (***Sample motion – move to authorize a supplemental appropriation of \$1 million from the Parking Division to adopt the Resolution as presented***)
 - PRESENTATION
 - CITY COUNCIL QUESTIONS
 - PUBLIC HEARING SPEAKERS
 - ADDITIONAL COUNCIL QUESTIONS AND DELIBERATIONS

Third and Final Reading of Ordinance:

- B. Third and Final Reading of Proposed Ordinance Amending Chapter 10, Article 5A – Character-Based Zoning, Section 10.5A43.33 regarding Building and Story Heights of the Zoning Ordinance (***Sample motion – move to pass third and final reading of the proposed zoning amendment to Chapter 10, Article 5A, Section 10.5A43.33***)

XI. CITY MANAGER’S ITEMS WHICH REQUIRE ACTION

A. CITY MANAGER CONARD

City Manager’s Items Which Require Action:

1. *Update on McIntyre Litigation
2. Adoption of Hazard Mitigation Plan
3. Adoption of Climate Action Plan
4. Request for Approval of Memorandum of Agreement with Firefighters Association of Portsmouth, New Hampshire, Local #1313
5. Request for Approval of Reclassification of Assistant Fire Chief Gionet’s Current Contract
6. *FY 2025/TY 2024 Elderly and Disabled Recommended Exemption Levels
7. Temporary Construction License for the B.P. Auger Building Company, LLC at 70 Pleasant Point Drive
8. Lease Extension for Community Campus Tenants
9. *Street Naming for 686 Maplewood Avenue
10. Middle Street Baptist Church Parking Lot Usage/Maintenance Agreement

XII. CONSENT AGENDA

(There are no items on under this section of the agenda this evening)

XIII. PRESENTATIONS AND WRITTEN COMMUNICATIONS

- A. Email Correspondence (***Sample motion – move to accept and place on file***)
- B. Letter from Alexis Mason, Portsmouth Public Media Television, Inc. requesting to re-evaluate the Cable Franchise Fee Policy (***Request presentation for September 3rd City Council meeting***)

- C. Request and Presentation from Brian Hart, Southeast Land Trust of New Hampshire regarding Proposed Conservation Easement on the 100-Acre Woods, “Cavaretta Property” (**Presentation limited to 5 minutes**) (**Sample motion – move to schedule a date for a site walk at the property on August 22nd, August 23rd, August 26th, August 27th or August 28th**)
- D. Letter from Ashleigh Tucker Pollock, The Music Hall, requesting permission to close off a portion of Portwalk Place on Saturday, October 19, 2024 for the New Hampshire Film Festival (**Sample motion – move to refer to the City Manager with Authority to Act**)

XIV. MAYOR McEACHERN

1. *Appointments to be Voted:
- Appointment of Scott Chaudoin to the Recreation Board
 - Reappointment of Deborah Chag to the Trees and Public Greenery Committee
- (Sample motion – move to appoint Scott Chaudoin to the Recreation Board and reappoint Deborah Chag to the Trees and Public Greenery Committee)**

XV. CITY COUNCIL MEMBERS

A. COUNCILOR COOK

1. Public Art Ordinance (**Sample motion – move to schedule first reading at the September 3rd City Council meeting of the ordinance changes combining the Public Art Policy, Public Art Review Committee Ordinance, and the Funding for Public Art Ordinance**)

B. COUNCILOR BAGLEY

1. Parking and Traffic Safety Committee Action Sheet and Minutes of the August 1, 2024 meeting (**Sample motion – move to approve and accept the action sheet and minutes of the July 15, 2024, Parking & Traffic Safety Committee meeting**)

C. COUNCILOR LOMBARDI

1. Blue Ribbon Committee for Historical Archives Memorandum of Understanding (**Sample motion – move to authorize the City Manager to execute a Historical Archives Memorandum of Understanding in substantially similar form to the draft included in the City Council packet**)

XVI. APPROVAL OF GRANTS/DONATIONS

(There are no items under this section of the agenda this evening)

XVII. CITY MANAGER'S INFORMATIONAL ITEMS

1. *Community Policing Facility Update
2. *Update on the Sherburne Property Request for Proposals
3. *Legislation Regarding HB1014 and State Holidays
4. *Pease Development Authority Board Meeting Verbal Update

XVIII. MISCELLANEOUS BUSINESS INCLUDING BUSINESS REMAINING UNFINISHED AT PREVIOUS MEETING

XIX. ADJOURNMENT [at 10:30 p.m. or earlier]

**Indicates verbal report*

**KELLI L. BARNABY, MMC/CNHMC
CITY CLERK**



CAPITAL IMPROVEMENT PLAN PROCESS KICKOFF CITY COUNCIL WORK SESSION

***MUNICIPAL COMPLEX, EILEEN DONDERO FOLEY COUNCIL CHAMBERS
PORTSMOUTH, NH***

DATE: MONDAY, AUGUST 19, 2024

TIME: 6:00PM

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https://us06web.zoom.us/webinar/register/WN_DWAYuO96QBizbhBeNlPPQQ

AGENDA

- I. Call to Order - Mayor McEachern
- II. Introduction and Presentation - City Manager Conard
- III. Discussion / Questions & Answers with City Council Members
- IV. Public Comment
- V. Adjournment

Kelli L. Barnaby, MMC/CNHMC
City Clerk

CITY COUNCIL MEETING

MUNICIPAL COMPLEX
DATE: MONDAY, JULY 15, 2024

PORTSMOUTH, NH
TIME: 7:00PM

Assistant Mayor Kelley moved to close the Non-Public Session and seal the minutes. Seconded by Councilor Lombardi and voted.

III. CALL TO ORDER

Mayor McEachern called the meeting to order at 7:00 p.m.

IV. ROLL CALL

PRESENT: Mayor McEachern, Assistant Mayor Kelley, Councilors Tabor, Cook, Denton, Blalock, Bagley, Moreau and Lombardi

V. INVOCATION

Mayor McEachern asked everyone to join in a moment of silence for the assassination attempt on former President Trump and the two families that lost loved ones during the attack and also expressed sincere condolences to the family of Brigadier General Pogorek who lost his life in a tragic motor vehicle accident recently.

VI. PLEDGE OF ALLEGIANCE

Mayor McEachern led in the Pledge of Allegiance to the Flag.

PROCLAMATIONS:

1. Plastic Pollution Reduction Month

Councilor Cook read the Proclamation declaring July as Plastic Pollution Reduction Month in Portsmouth and encouraged all citizens and businesses to reduce their plastic consumption and waste by choosing reusables and an opt-in versus opt-out model for single-use items. Planning and Sustainability Director Britz accepted the Resolution with thanks and appreciation.

2. Wildlife Conservation Day in Portsmouth

Mayor McEachern read the Proclamation declaring June 20, 2024, as Wildlife Conservation Day in Portsmouth by Student Mayor Sage Stubbs.

VII. ACCEPTANCE OF MINUTES – JUNE 3, 2024 AND JUNE 17, 2024

Assistant Mayor Kelley moved to approve and accept the minutes of the June 3, 2024 and June 17, 2024 City Council meetings. Seconded by Councilor Lombardi and voted.

VIII. RECOGNITIONS AND VOLUNTEER COMMITTEE REPORTS

IX. PUBLIC COMMENT SESSION

Roy Helsel expressed concern regarding individuals speeding on the heavily traveled areas of the city. He asked that more enforcement be conducted by the Police Department.

Sue Polidura spoke regarding individuals wishing to change something on their home in the historic district would need to file a certificate through the Historic District Commission. She said the ordinance states that certificates will be used by the Historic District Commission and not the Planning Department. She said if the Planning Department is issuing the certificates, it would be a violation of State law.

Esther Kennedy said she agrees with Mr. Helsel regarding speeding in the city and she feels all speed limits should be 25 mph. She spoke to a recent visit to the Public Works Department with a half truck load of wood and was told there was a \$15.00 charge for disposing of the wood. She said there should have been some communication to advise residents of fee changes.

Paige Trace spoke regarding the changes to the fee structure and whether it was brought before the Fee Committee for approval. She said residents need to be informed of fee changes.

Petra Huda spoke regarding the objective of the Historic District Commission and all members of the commission should be aware the laws outlined in the city ordinance and state. She said 2.2% of the city is made up of the historic district and asked who would determine if solar panels were visible or not.

Bill Downey (via Zoom); thanked the Council for holding the line with the times building. He said if the building is compromised it is because of neglect. He said regarding the Solar Panels Ordinance, he feels Councilor Tabor and Councilor Blalock should be recusing from the vote because of a conflict of interest.

X. PUBLIC HEARINGS AND VOTE ON ORDINANCES AND/OR RESOLUTIONS

First Reading of Ordinances

- A. First Reading of proposed Ordinance amending Chapter 10, Article 5A – Character-Based Zoning, Section 10.5A43.33 regarding Building and Story Heights of the Zoning Ordinance

Councilor Tabor moved to pass first reading and schedule a public hearing and second reading to be held at the August 5, 2024 City Council meeting. Seconded by Councilor Moreau.

Deputy City Manager Woodland provided an overview of the zoning amendments relative to properties at least one acre in size located within CD4, CD4W, and CD5 Character District and not located within an incentive overlay district. She stated the Planning Board would have the ability to grant a Conditional Use Permit to allow an additional story (up to 15 feet in height), a house or duplex building type, and/or a mixed-use building. She indicated a property owner could qualify for this additional story, often called an incentive bonus, if certain criteria are met. She further explained that a property owner could submit an application providing community space only and qualify for an additional story as an incentive bonus. She said the amended ordinance includes the following conditional language: “if multi-family dwelling units are proposed, the development shall have ...workforce housing.” Deputy City Manager Woodland said if the City Council intended to require owners of Qualifying Properties to provide both workforce housing and community space in order to qualify for an additional story, then this amendment would be appropriate.

Motion passed.

- B. First Reading of proposed Parking Omnibus Ordinance amending Chapter 7, Article III – Traffic Ordinance, Section 7.330 A. - No Parking; Article III – Traffic Ordinance, Section 7.341 - Driving on Sidewalk; and Article XI, Section 7.1100 E., Speed Limits: 25 mph – Middle Street

Councilor Cook moved to pass first reading and schedule a public hearing and second reading to be held at the August 5, 2024 City Council meeting. Seconded by Councilor Bagley and voted.

Public Hearing/Adoption of Resolutions

- C. PUBLIC HEARING/ADOPTION of Resolution authorizing a Bond Issue and/or notes of the City under the Municipal Finance Act of up to Six Hundred Fifty Thousand Dollars (\$650,000.00) for costs related to School Facilities' Capital Improvements

- **PRESENTATION**

Deputy City Manager of Finance and Administration Lunney said that the project is multi-year funded and design planning will decide where best electrical vehicle charging stations should be installed.

- **CITY COUNCIL QUESTIONS**

Councilor Cook said the Capital Improvement Plan does not have solar array on top of the school, but could it be considered during the design. Deputy City Manager of Finance and Administration Lunney responded affirmatively.

Assistant Mayor Kelley asked to take into consideration the CTE building will be going under intensive renovations. Deputy City Manager of Finance and Administration Lunney said that will be part of consideration.

Mayor McEachern read the legal notice, declared the public hearing open and called for speakers.

- **PUBLIC HEARING SPEAKERS**

With no speakers Mayor McEachern declared the public hearing closed.

- **ADDITIONAL COUNCIL QUESTIONS AND DELIBERATIONS**

Councilor Denton moved to adopt the Resolution, as presented. Seconded by Councilor Blalock.

On a unanimous roll call vote 9-0, motion passed.

- D. PUBLIC HEARING/ADOPTION of Resolution authorizing a Bond Issue and/or notes of the City under the Municipal Finance Act of up to Twelve Million Nine Hundred Twenty-Five Thousand Dollars (\$12,925,000.00) for costs related to:
- Ambulance Replacement Program,
 - Police Deficiencies and Repair Project,
 - Land Acquisition,
 - South Mill Pond Playground,
 - Additional Outdoor Recreation Fields,
 - Prescott Park Master Plan Implementation,
 - Citywide Facilities Capital Improvements,
 - Greenleaf Avenue Sidewalk,
 - Russell/Market Intersection Upgrade,
 - Fleet Street Utilities Upgrade and Streetscape,
 - Citywide Storm Drainage Improvements, and
 - The Creek Neighborhood Reconstruction
- **PRESENTATION**
 - **CITY COUNCIL QUESTIONS**
 - **PUBLIC HEARING SPEAKERS**

Mayor McEachern read the legal notice, declared the public hearing open and called for speakers.

Petra Huda said that bonds have been authorized but have gone unused. She said an update should be given on the Police Department. She spoke regarding the Russell/Market Street project asking if we are borrowing funds ahead of time and under land acquisition. She asked why funding is being requested when last year's was not spent.

Esther Kennedy said she agrees with the comments made by Petra Huda. She spoke to taxes and water/sewer bills increasing and urged the City Council to consider what projects are important.

With no further speakers, Mayor McEachern declared the public hearing closed.

- **ADDITIONAL COUNCIL QUESTIONS AND DELIBERATIONS**

Councilor Bagley said on the land acquisition item the majority of the funding is for the Bellamy Reservoir. Deputy City Manager Woodland stated that we do not have land in mind, but we are looking to keep the conservation land fund available. Planning & Sustainability Director Britz said that the fund needs to be active.

Councilor Bagley expressed a desire to remove the funding for the Prescott Park project. Deputy Finance Director Purgiel said if the funding was removed a new resolution would need to be prepared. He further stated that you have two years to spend the funding once authorized. Mayor McEachern asked what the Prescott Park funds would be specifically used for. Public Works Director Rice said \$4.5 million is to provide drainage and protect the historic buildings.

Councilor Blalock moved to adopt the Resolution, as presented. Seconded by Assistant Mayor Kelley.

Councilor Tabor stated he would recuse from voting on the motion because he serves on the Prescott Park Arts Festival.

On a roll call 8-0, motion passed. Councilor Tabor recused from voting on the motion.

- E. PUBLIC HEARING/ADOPTION of Resolution authorizing a Bond Issue and/or notes of the City under the Municipal Finance Act and/or participation in the State Revolving Fund (SRF) Loan of up to Four Million Fifty Thousand Dollars (\$4,050,000.00) related to:
- Water Storage Tanks Improvements,
 - Madbury Water Treatment Plant – Facility Repair and Improvements,
 - Fleet Street Utilities Upgrade and Streetscape,
 - DPW Complex Improvements, and
 - The Creek Neighborhood Reconstruction
- **PRESENTATION**
 - **CITY COUNCIL QUESTIONS**
 - **PUBLIC HEARING SPEAKERS**

Mayor McEachern read the legal notice, declared the public hearing open and called for speakers.

Esther Kennedy asked where we are at with the pipes under the Bellamy Reservoir.

Petra Huda said the funding authorized for the Great Bay water lines was less than anticipated and asked where the funds go.

Councilor Cook inquired about the status of the Fleet Street project.

With no further speakers, Mayor McEachern declared the public hearing closed.

City Engineer Fielder provided an updated on the Fleet Street project disruptions to the businesses and the impact to access businesses.

- **ADDITIONAL COUNCIL QUESTIONS AND DELIBERATIONS**

Councilor Bagley moved to adopt the Resolution, as presented. Seconded by Councilor Tabor.

On a unanimous roll call vote 9-0, motion passed.

F. PUBLIC HEARING/ADOPTION of Resolution authorizing a Bond Issue and/or notes of the City under the Municipal Finance Act and/or participation in the State Revolving Fund (SRF) Loan of up to Thirty-Five Million Four Hundred Sixty-Five Thousand Dollars (\$35,465,000.00) for costs related to:

- Pease Wastewater Treatment Facility,
- Wastewater Pumping Station Improvements,
- Sewer Service Funding for Sagamore Avenue Area Sewer Extension,
- Mechanic Street Pumping Station Upgrade,
- Peirce Island Wastewater Treatment Facility,
- Fleet Street Utilities Upgrade and Streetscape,
- Citywide Storm Drainage Improvements,
- DPW Complex Improvements, and
- The Creek Neighborhood Reconstruction

- **PRESENTATION**
- **CITY COUNCIL QUESTIONS**

Mayor McEachern read the legal notice, declared the public hearing open and called for speakers.

Councilor Moreau said changes will take in account for the hazard mitigation.

- **PUBLIC HEARING SPEAKERS**

Petra Huda asked why we are putting in funding for the Fleet Street utilities when the city is applying for a grant. She asked why we would bond before a design is in place and why we are asking for another \$1.9 million for the facility. She also spoke to sludge being moved from Peirce Island to Pease.

Paige Trace spoke to the sludge removal and the odor that is in the south end. She asked if the Peirce Island Wastewater Treatment Facility is at capacity.

Esther Kennedy said when the wastewater plant was built it was to last fifty years and take care of the problems that existed but there are questions now. She asked if we were at capacity and urged the City Council to ask more questions and investigate this because it is a lot of money.

With no further speakers, Mayor McEachern closed the public hearing.

- **ADDITIONAL COUNCIL QUESTIONS AND DELIBERATIONS**

Mayor McEachern said these are the funding requests for the Capital Improvement Plan projects. He stated we are applying for grants, but we must have the funding available whether we receive a grant or not. He said a treatment plant is different from building a Police Facility.

City Engineer Fielder reported that the Pease plant is at 60% capacity. He said the electrical services will need to be built up. He said the project is estimated at \$28 million and it is an old facility. He stated the project is restoring older elements and Pease was part of the valued engineering study. City Engineer Fielder said we are trucking sludge over to Pease.

Councilor Denton said in 2017/2018 Capital Improvement Plan there was a project for installing a digester for the sludge. He asked if we are still in line with the consent decree. Public Works Director Rice said the monies are for private hook ups at Sagamore Avenue for the pump systems.

Councilor Tabor asked if there is a problem surrounding our capacity at the plant. Water Director & Deputy Public Works Director Goetz said we are not exceeding capacity.

Councilor Bagley said water and sewer is based on state regulations and the plant runs 24 hours a day so there are items that need to be replaced.

Water Director & Deputy Public Works Director Goetz said regarding the Little Bay water line, last week a water supply update was provided. He said the existing values on the mains were removed and the existing pipes are in better condition than originally thought.

Councilor Moreau moved to adopt the Resolution, as presented. Seconded by Councilor Cook.

On a unanimous roll call vote 9-0, motion passed.

Public Hearing/Second Reading of Ordinances

- G. PUBLIC HEARING/SECOND READING on Proposed Ordinance amending Chapter 10, ZONING ORDINANCE – Solar Energy Panels, Article 6, Overlay District, Section 10.633.20 - Exemptions from Certificate of Approval; Section 10.633.30 – Administrative Approvals; Section 10.634.20 – Application Contents adding Section 10.634.24; Section 10.636.32 (1) – Public Hearings; Section 10.636.12 – Notice of Disapproval & Article 15, Definitions, Section 10.1530 – Terms of General Applicability

- **PRESENTATION**

Mayor McEachern read the legal notice, declared the public hearing open and called for speakers.

Planning Manager Stith provided an overview of the ordinance and spoke amendments that were proposed, and the Planning Board and Historic District Commission held a Work Session on February 21st and a report back was made to the Council on March 4th. He outlined the amendments that were made for certificate of approvals and exemptions and said there would be a letter from the architect required that the additional load of solar panels could be supported by the homes. He said we are also changing the term chairman to chair.

- **CITY COUNCIL QUESTIONS**

Councilor Bagley asked if the ordinance includes asphalt shingles. Planning Manager Stith said that it could.

Chair Ruedig, Chair of Historic District Commission spoke via Zoom said it is not clearly defined for every detail on the building but the type of detail which is particular to the building.

- **PUBLIC HEARING SPEAKERS**

Sue Polidura spoke opposed to leaving the Historic District Commission out of the decision process. She spoke of the 2% of the city which is made up of the historic district and the city needs to keep the history of the city in mind when considering the vote on this ordinance.

Petra Huda said this is putting a great deal of pressure on staff to approve these by an administrative approval process. She said you need to keep in mind what we are giving up here, 2.2% of our historic district.

Paige Trace said it is only 2.2% of the city but people come from all over to see the historic areas of the city. She stated you need to be aware of consequences and you should not override the Historic District Commission.

Esther Kennedy said it may only be 2.2% of the city but that is what people come to see in the city. She said the Historic District Commission has done their job when it comes to this matter. She said she does not understand why the City Council wants to change this process.

With no further speakers, Mayor McEachern declared the public hearing closed.

Councilor Denton moved to pass second reading of the proposed zoning amendments regarding solar energy panels, and schedule a third and final reading at the August 5, 2024 City Council meeting. Seconded by Councilor Blalock.

- **ADDITIONAL COUNCIL QUESTIONS AND DELIBERATIONS**

Councilor Denton said it the 2% of the area that is subject to climate change.

Councilor Moreau asked the City Attorney if the ordinance is in compliance with state statute. City Attorney Morrell said the ordinance has been reviewed by the Legal Department.

Councilor Lombardi said the process of administrative approval puts it in the hands of staff and the Planning Department does not have historic backgrounds, but the Historic District Commission has the training and knowledge of historic structures. He said he would vote against the motion.

Councilor Moreau said she has concerns making administrative approvals by staff and how much pressure we would put on the staff.

Councilor Bagley said that we are to set policy. He said it is not appropriate to say someone does or does not have qualifications in any area. He said he would not support the motion.

Councilor Bagley moved to amend removing from HDC preview solar energy panels flush mounted to rooftops made of materials other than slate or wood of the existing structures which do not require other alterations to existing structures. Seconded by Councilor Blalock.

Mayor McEachern asked for a legal inquiry from a legal standpoint this would obviously require another public hearing, but the natural course of business is that Council moves forward. He said this would reverse the previous amendment, which was previously made, and he is curious if we can do that.

Councilor Tabor asked if this is a motion to reconsider which would have a time limit attached to it. Mayor McEachern said that the amendment would have needed to be made at the previous meeting, therefore it is not a legitimate motion. City Attorney Morrell said that is correct, it is not timely and is out of order.

Councilor Bagley rescinded the motion and Councilor Blalock the second to the motion.

Councilor Denton said if we move to suspend the rules to reconsider the motion it could then be made and before the Council for a vote.

Councilor Blalock moved to suspend the rules to reconsider. Seconded by Councilor Bagley.

On a roll call vote 3-6, motion failed to pass. Councilors Denton, Blalock and Bagley voted in favor. Assistant Mayor Kelley and Councilors Tabor, Cook, Moreau, Lombardi and Mayor McEachern voted in favor.

Councilor Blalock spoke to request for solar panels on the St. John's Parish House. He said that the Historic District approved 54 solar panels on Chapel Street side which are minimally visible and the 48 panels for the Bow Street side were denied that were only visible from the church's parking lot. He said they're black panels going on a dark roof with non-glare finish, and it is not on the main structure. He said the church's goal was to save some money because they're non-profit and to fight climate change. He stated he feels the ordinance is still too subjective and needs to be as subjective as possible. Councilor Blalock said that solar panels protect the asphalt shingles and extends the life of the shingles. He feels having a policy which prevents members of the community from saving money and being environmentally responsible is wrong.

Councilor Tabor said the simple guidelines that we asked the HDC to develop and were implemented in the right way for St. John's request. He said the HDC decided that the solar panels on Chapel Street are minimally visible from the street.

Councilor Cook said that we have been operating under a false dichotomy that solar panels and historic preservation are two opposite sides of a debate when they are not, in fact the National Park Service guidelines for historic preservation have a whole section on placing solar panels in historic districts despite the betrayal of our Historic District Commission as opposing solar. She said they regularly approve solar panels, the HDC rarely rejects applications for solar panels, instead opting to get to yes through adjustments and proposals to help owners better preserve their structure while gaining the benefits of solar energy. She further spoke relative to this matter. In closing, she said she is a fierce proponent of climate mitigation and adaptation measures but when we create animosity and disdain in our community for values that others hold, like a love of historic preservation and a passion for preserving our history we create division and risk a backlash against the very efforts we are passionate about implementing. She said historic preservation is a major pillar in the recently adopted cultural plan and it was the most important concern of the respondents in our surveys around the Arts and Cultural priorities for the city. She said it is a priority for residents just as sustainability is also a priority. Councilor Cook said the green revolution we need is one that is inclusive of all community interests and focuses on those changes that have the most impact while supporting members of our community who need the financial help to make changes that benefit them and serve us all, that's why I'm opposing the changes.

Councilor Denton said on January 6, 2016, he spoke at an HDC meeting pushing for solar array guidelines in the historic district. He stated eight years later some guidelines from the HDC itself are in front of us for a vote. He said they are not perfect, they are not what Councilor Blalock, Councilor Bagley or myself wanted, likewise they are not what Councilor Cook, Councilor Moreau, or Councilor Lombardi is asking for but what they are is a compromise and they are far better than the status quo. He said it is progress to allow individual homeowners to do what they can to mitigate against climate change on their property and he asked everyone to please support the ordinance.

Councilor Bagley said he disagrees with Councilor Cook and Councilor Denton and feels it creates more bureaucracy and its going to discourage the adoption of solar panels. He said it is eminently important that we do things to fight climate change and here's a tool that we could have that would cost the city zero dollars. He said to do something good for the environment is worth something and I think what the Council is saying today is that that's not worth something and we value asphalt shingles higher than those things.

Councilor Blalock said to sit on the HDC and to prevent a non-profit to receive relief from their electricity bill and to be the body that is preventing that he will not support the motion.

Mayor McEachern passed the gavel to Assistant Mayor Kelley.

Mayor McEachern said people look to the Council to move the puck forward. He stated the administrative approvals are not being done. He further stated we are making small improvements and are going to continue to preserve historic structures.

Assistant Mayor Kelley returned the gavel to Mayor McEachern.

On a roll call vote 5-4, main motion passed. Assistant Mayor Kelley, Councilors Tabor, Denton, Blalock and Mayor McEachern voted in favor. Councilors Cook, Bagley, Moreau and Lombardi voted opposed.

At 9:30 p.m., Mayor McEachern called for a brief recess. At 9:43 p.m., Mayor McEachern called the meeting back to order.

Councilor Blalock moved to suspend the rules to bring forward third and final reading of the ordinance. Seconded by Assistant Mayor Kelley and voted.

Councilor Blalock moved to pass third and final reading of the ordinance. Seconded by Assistant Mayor Kelley.

On a roll call vote 5-4, motion passed. Assistant Mayor Kelley, Councilors Tabor, Denton, Blalock and Mayor McEachern voted in favor. Councilors Cook, Bagley, Moreau and Lombardi voted opposed.

Public Hearing Regarding Cable Franchise Agreement

H. PUBLIC HEARING to consider a Cable Television Renewal Franchise Agreement with Comcast (“Franchise Agreement”). The proposed Franchise Agreement is for a 10-year term beginning August 1, 2024, and ending July 31, 2034. The proposed Franchise Agreement allows Comcast to continue to serve existing and new customers without limiting competition. The City would continue to collect a 5% Franchise Fee

- **PRESENTATION**
- **CITY COUNCIL QUESTIONS**
- **PUBLIC HEARING SPEAKERS**
- **ADDITIONAL COUNCIL QUESTIONS AND DELIBERATIONS**

Mayor McEachern read the legal notice, declared the public hearing open and called for speakers. With no speakers, Mayor McEachern closed the public hearing.

XI. CITY MANAGER’S ITEMS WHICH REQUIRE ACTION

A. CITY MANAGER CONARD

1. Cable Television Franchise Agreement with Comcast

Councilor Tabor moved to authorize the City Manager to finalize and execute the Cable Television Franchise Renewal Agreement as presented. Seconded by Councilor Moreau.

Deputy City Manager Woodland reported that a public hearing is required under the law. She said a survey was conducted and we had many complaints against Comcast and continue to work with them on service matters. She said this is a 10-year agreement. Deputy City Manager Woodland advised that the FCC regulates the internet.

Mayor McEachern read the legal notice, declared the public hearing open and called for speakers. With no speakers, Mayor McEachern closed the public hearing.

Motion passed.

2. Request for Capital Improvement Plan (CIP) Process Kick Off Work Session

Assistant Mayor Kelley moved to schedule a work session on Monday, August 19, 2024 at 6:00 p.m. Seconded by Councilor Bagley and voted.

3. Lease Agreement with AIDS Response of the Seacoast

Deputy City Manager Woodland said that AIDS Response of the Seacoast will be transferring to Community Campus in August.

Councilor Cook moved to authorize the City Manager to finalize and execute the Lease Agreement with AIDS Response in a form similar to what is presented. Seconded by Councilor Blalock.

Councilor Cook expressed concern with the 5% increase in the lease. Deputy City Manager Woodland said 5% is what is needed for capital improvements. She also indicated that this is a longer-term lease. Councilor Cook said that this is a 5-year lease. Deputy City Manager Woodland said it is a 5-year lease, but some other leases will be for 10-years.

Motion passed.

4. Sidewalk and Traffic Easement from Saint John's Masonic Association

Deputy City Manager Woodland said that this is a new easement document.

Councilor Denton moved to authorize the City Manager to execute the Sidewalk and Traffic Signal Easement Deed with Saint John's Masonic Association to enlarge an existing easement area at the corner of Miller Avenue and Middle Street for a traffic signal light as presented. Seconded by Councilor Bagley and voted.

5. Authorization to Trade Vehicles and Equipment

Deputy City Manager Woodland explained how the Department of Public Works would like to trade in vehicles versus auctioning them. She advised the City Council that trade values offered by dealers are slightly more advantageous to the City.

Councilor Blalock moved to authorize the Department of Public Works to dispose of the used vehicles identified through the trade in process as described. Seconded by Councilor Moreau.

Councilor Cook asked if there are opportunities to change larger vehicles from gas powered too electric. Public Works Director Rice said that the electric versus gas powered for the larger vehicles doubles in price.

Motion passed.

XII. CONSENT AGENDA

- A. Request from Ashley Lyons, Chic Boutique Consignments, to install a Projecting Sign at 108 Penhallow Street (*Anticipated action – move to approve the aforementioned Projecting Sign License as recommended by the Planning & Sustainability Director, and further, authorize the City Manager to execute the License Agreement for this request*)

Planning Director's Stipulations:

- *The license shall be approved by the Legal Department as to content and form;*

- **Any removal or relocation of projecting sign, for any reason, shall be done at no cost to the City; and**
- **Any disturbance of a sidewalk, street or other public infrastructure resulting from the installation, relocation or removal of the projecting sign, for any reason shall be restored at no cost to the City and shall be subject to review and acceptance by the Department of Public Works**

B. Request from Nicole Snow, Darn Good Yarn, to install a Projecting Sign at 238 State Street (**Anticipated action – move to approve the aforementioned Projecting Sign License as recommended by the Planning & Sustainability Director, and further, authorize the City Manager to execute the License Agreement for this request**)

Planning Director's Stipulations:

- **The license shall be approved by the Legal Department as to content and form;**
- **Any removal or relocation of projecting sign, for any reason, shall be done at no cost to the City; and**
- **Any disturbance of a sidewalk, street or other public infrastructure resulting from the installation, relocation or removal of the projecting sign, for any reason shall be restored at no cost to the City and shall be subject to review and acceptance by the Department of Public Works**

C. Request from Jonathan Barachowitz, Marathon Sports, to install a Projecting Sign at 104 Congress Street (**Anticipated action – move to approve the aforementioned Projecting Sign License as recommended by the Planning & Sustainability Director, and further, authorize the City Manager to execute the License Agreement for this request**)

Planning Director's Stipulations:

- **The license shall be approved by the Legal Department as to content and form;**
- **Any removal or relocation of projecting sign, for any reason, shall be done at no cost to the City; and**
- **Any disturbance of a sidewalk, street or other public infrastructure resulting from the installation, relocation or removal of the projecting sign, for any reason shall be restored at no cost to the City and shall be subject to review and acceptance by the Department of Public Works**

D. Letter from Katelyn Moran, Leukemia & Lymphoma Society, requesting permission to hold the annual Light the Night event on Saturday, September 28, 2024 from 4:30 p.m. – 7:30 p.m. (**Anticipated action – move to refer to the City Manager with Authority to Act**)

- E. Letter from Brian Miller, New England Run for the Fallen, requesting permission to hold the 4th Annual Run on Sunday, August 18, 2024 (***Anticipated action – move to refer to the City Manager with Authority to Act***)

Councilor Lombardi moved to adopt the Consent Agenda. Seconded by Councilor Cook and voted.

XIII. PRESENTATIONS AND WRITTEN COMMUNICATIONS

- A. Email Correspondence

Councilor Moreau moved to accept and place on file. Seconded by Assistant Mayor Kelley and voted.

- B. Information provided by Joe Caldarola regarding Guidelines for Solar Energy and Renewable Energy

Councilor Denton moved to accept and place on file. Seconded by Councilor Blalock and voted.

- C. Letter from Curtis Hermann, New Hampshire Sons of the American Revolution, requesting permission to hold the Commemoration of the Bicentennial Anniversary of General Lafayette's visit on Sunday, September 1, 2024

Councilor Cook moved to refer to the City Manager with Authority to Act. Seconded by Councilor Tabor and voted.

- D. Letter from Elizabeth Bratter requesting if any of the City lands surrounding 361 Hanover Street are asked to be used or purchased, by any of 361 Hanover Street entities, please require a public hearing and notification of abutters by certified mail, of what is being proposed and public comment for consideration of the proposal

Councilor Moreau moved to accept and place on file. Seconded by Councilor Denton and voted.

XIV. MAYOR McEACHERN

1. *Appointment to be Voted:
- Appointment of Andrew Samonas as the Planning Board Representative to the Housing Committee
 - Appointment of Mary Carey Foley to the Mayor's Blue Ribbon Sister City Committee
 - Appointment of Robert F. Conard, Jr., to the Mayor's Blue Ribbon Sister City Committee

Assistant Mayor Kelley moved to appoint Andrew Samonas as the Planning Board Representative to the Housing Committee; Mary Carey Foley and Robert F. Conard, Jr., to the Mayor's Blue Ribbon Sister City Committee. Seconded by Councilor Moreau and voted.

2. Resignation:
 - Chuck Raye from the Citywide Neighborhood Committee

Councilor Bagley moved to accept with regret the resignation of Chuck Raye from the Citywide Neighborhood Committee with a letter of thanks and appreciation for his service to the city. Seconded by Councilor Blalock and voted.

3. Request for report back on Community Oyster Programs in the City of Portsmouth and identifying funding sources

Mayor McEachern said he would like a report back on funding opportunities available for Community Oyster Programs.

Councilor Blalock moved to request a report back on Community Oyster Programs in the City of Portsmouth and identify funding sources. Seconded by Councilor Denton and voted.

XV. CITY COUNCIL MEMBERS

A. COUNCILOR COOK

1. Single-Use Food Service-ware Reduction or “Skip the Stuff” Policy

Councilor Cook moved to adopt the Single-Use Serviceware, or “Skip the Stuff” Policy. Seconded by Councilor Denton.

Councilor Cook said that this was first considered as an ordinance but with some challenges we decided to make this a policy.

Motion passed.

2. Request to Establish Work Session Re: Market Square Master Plan

Councilor Cook moved to schedule a work session with the Market Square Master Plan consultants and City staff to discuss progress on planning and provide City Council input to the process. Seconded by Councilor Blalock.

Councilor Cook said the process started last spring but not all City Councilors could participate, and it is important that everyone is heard and provides input in the process.

Motion passed.

B. COUNCILOR BLALOCK

1. Sister Cities Trust Fund

Councilor Blalock moved to request that the Legal Department report back with a recommendation. Seconded by Councilor Moreau and voted.

C. COUNCILOR BAGLEY

1. Parking & Traffic Safety Committee Action Sheet and Minutes of June 6, 2024

Councilor Bagley moved to approve and accept the action sheet and minutes of the June 6, 2024 Parking & Traffic Safety Committee meeting. Seconded by Councilor Lombardi and voted.

XVI. APPROVAL OF GRANTS/DONATIONS

(There are no grants or donations on for approval this evening)

XVII. CITY MANAGER'S INFORMATIONAL ITEMS

1. Community Policing Facility Update

Public Works Director Rice advised that a report back to the City Council should be taking place in September.

2. Sherburne Property Update

Deputy City Manager/Regulatory Counsel Woodland reported there were 8 proposals received and staff has ranked them into the top 4 firms that are being interviewed. She advised the City Council that a report back will be held at the August 5th meeting.

3. South Meeting House Update

Deputy City Manager/Regulatory Counsel Woodland reported that proposals are due on July 17th and there was a good turnout at the recent open house.

4. Hazard Mitigation Plan Update

Deputy City Manager/Regulatory Counsel Woodland referred to the draft plan contained in your Council packets for review. She stated there would be a public comment period held over the next two weeks and feedback should be sent directly to Fire Chief McQuillen. She also indicated that the plan will be coming back for adoption in an upcoming City Council meeting.

XVIII. MISCELLANEOUS BUSINESS INCLUDING BUSINESS REMAINING UNFINISHED AT PREVIOUS MEETING

Mayor McEachern announced that Genevieve Aichele has been named New Hampshire's new Artist Laureate.

Mayor McEachern extended congratulations on behalf of the City Council to Assistant Mayor Kelley on her engagement.

Councilor Blalock announced that 10/11/12 Little League District Teams are headed into the District Championship Rounds.

XIX. ADJOURNMENT [at 10:30 p.m. or earlier]

At 10:35 p.m., Assistant Mayor Kelley moved to adjourn the meeting. Seconded by Councilor Tabor and voted.

A handwritten signature in black ink that reads "Kelli L. Barnaby". The signature is written in a cursive, flowing style.

KELLI L. BARNABY, MMC/CNHMC
CITY CLERK

CITY OF PORTSMOUTH, NH

Public Art Review Committee

August 9, 2024

Memorandum

To: Honorable Mayor and City Council, City Manager Conard

From: Public Art Review Committee (PARC)

Subject: Percent for Art Commission for Peirce Island

PARC recommends that the City Council vote to empower the City Manager to enter into a contract for \$140,000 with DiBari Associates of Miami, Florida to design, construct, and install its proposed public artwork on Peirce Island. The resources available for funding the artwork are from the percent-for-art proceeds from the Peirce Island Wastewater Treatment plant (capped by Council action at \$150,000). PARC will share visual representations of the proposed artwork at the August 19 City Council meeting.

DiBari Associates was selected by PARC after an open competition in response to a solicitation (see details below). PARC was impressed with the responses to the solicitation in terms of the quality and innovativeness of the bidders' proposals which were wide-ranging in concept, themes, designs, and materials. Winning features of the DiBari proposal included:

- its organic response to/respect for the natural environment of Peirce Island;
- likely appeal to children and adults and potential for interaction;
- pleasing aesthetics based on the Fibonacci sequence and spiral leaf form;
- ease of maintenance and durability of the design to be located in a harsh environment;
- professionalism and depth of technical experience of the team;
- the team's extensive track record of unique, place-based artworks; and
- responsiveness to adapting to the site.

With a stone dust path connecting to the artwork from existing paths and following the curve of the 20+ foot spiral leaf form, the location will be accessible to wheelchair users. At this point in time and in keeping with the natural environment of Peirce Island, no lighting is planned; however, if desired, solar lighting could be added along the base of the spiral.

Background

This memo describes the process of selecting DiBari Associates for the Peirce Island percent-for-art commission.

RFP process. In March 2024, PARC developed an RFP for the Peirce Island percent for art commission which was informed by input from three public information sessions which provided ideas for relevant themes. PARC identified a particular location on Peirce Island that is easily accessible from the parking lot near the pool and close to the playground, visible from many

locations, and relatively flat and open. PARC established a limit of \$140,000 for the commission, allowing \$10,000 to be left in the Public Art trust for future maintenance.

With the assistance of the City's procurement office, the RFP was widely distributed to a list of local, state, national and international artists and arts organizations. PARC allowed for a Q&A process, making responses available on the City's website to all bidders. Proposals were due on May 24, 2024. The City's procurement office received 22 responses from artists/arts groups:

- 7 were local Seacoast artists (1 withdrew before final review)
- 3 were from other parts of New England
- 10 were from states outside New England (including CA, CO, DC, FL, NM, NV, NY, TX)
- 2 were international artists

Review/selection process. The PARC committee served as the review committee with the addition of three members: Leah Woods, UNH associate professor of art and art history; Corin Hallowell, City's Parks and Greenery Foreman; and Anika Kerls, Portsmouth High School recent graduate. Committee member Beth Hartnett and City Council liaison Kate Cook were recused from voting. Reviewers individually rated proposals during the week of May 28 using [PARC criteria](#) as advertised in the RFP. The review committee met on May 30 to compile ratings and determine semi-finalists by consensus. Four semi-finalists were selected:

1. DiBari Associates, Miami, FL
2. Anasia Franco Studios, Barcelona, Spain
3. Seth Palmiter, Rockport, ME
4. Masary Studios, Boston, MA

Between June 13-17, PARC reviewers held interviews via Zoom with each team to ask questions that had emerged during the reviews.

PARC reviewers met on June 20 to make a final selection; the vote to select DiBari Associates was unanimous.

LEGAL NOTICE

NOTICE IS HEREBY GIVEN that a Public Hearing will be held by the Portsmouth City Council on Monday, August 19, 2024 at 7:00 p.m., at the Portsmouth Municipal Complex in the Eileen Dondero Foley Council Chambers, Portsmouth, NH, on a proposed Resolution Authorizing a Supplemental Appropriation from the Parking and Transportation Fund of \$1,000,000.00 for the High Hanover Parking Garage Project. The complete Resolution is available for review in the Office of the City Clerk and Portsmouth Public Library, during regular business hours.

KELLI L. BARNABY, MMC/CNHMC
CITY CLERK

LEGAL NOTICE

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KELLI L. BARNABY,
MMC/CNHMC
CITY CLERK

**CITY OF PORTSMOUTH
TWO THOUSAND TWENTY-FOUR
PORTSMOUTH, NEW HAMPSHIRE**

RESOLUTION # -

A RESOLUTION AUTHORIZING A SUPPLEMENTAL APPROPRIATION FROM PARKING AND TRANSPORTATION FUND COMMITTED FUND BALANCE FOR NECESSARY EXPENDITURES RELATED TO UPGRADES TO THE HIGH HANOVER PARKING GARAGE.

RESOLVED:

BY THE CITY COUNCIL OF THE CITY OF PORTSMOUTH, NEW HAMPSHIRE ASSEMBLED AS FOLLOWS:

THAT, the City Council has determined that the sum of up to **One Million (\$1,000,000.00) Dollars** is to be appropriated from Parking and Transportation Fund Committed Fund Balance to defray the expenditures related to upgrades to the High Hanover Parking Garage.

THAT, to meet this appropriation, the City Manager is authorized to transfer these funds from Parking Fund Committed Fund Balance.

APPROVED BY:

DEAGLAN MCEACHERN, MAYOR

ADOPTED BY CITY COUNCIL

**KELLI BARNABY, MMC/CNHMC
CITY CLERK**

SECTION 7.14-AMENDMENTS TO BUDGET AFTER ADOPTION

No appropriation shall be made for any purpose not included in the annual budget as adopted unless voted by a two-thirds (2/3) majority of the Council after a public hearing held to discuss said appropriation. The Council shall, by resolution, designate the source of any money so appropriated.



DATE: 7/29/2024
TO: Peter Rice
COMPANY: City of Portsmouth
ADDRESS: 680 Peverly Road
CITY/STATE: Portsmouth, NH
COPY TO: Paul Henry, Joe Almeida
FROM: Haritos, Nicholas
PROJECT NAME: Hanover St. Garage Repairs 2022-2024
PROJECT NUMBER: 16-003129.01

Walker Consultants is providing construction administration services for the Hanover St. Garage Restoration Project as part of the restoration design and construction services in accordance with our current agreement with the City of Portsmouth, New Hampshire. The project work scope includes concrete floor repairs, ceiling repairs, expansion joint replacement, structural steel repairs, traffic coating application, stair tower repairs, façade repairs and other miscellaneous items. The contract was originally bid and awarded to the contractor, Structural Preservation Systems (SPS), in February 2022 at a total value of \$6,298,192.00 for the three-year project.

The project work was bid based on a three-year construction period on a unit price basis. Walker estimated repair quantities for each Work Item in 2021 based on conditions observed in the field during the design of the repair documents. The contractor provided unit prices for Work Items to be completed in each year of the project with an opportunity to adjust the unit pricing in subsequent years to account for inflation and other factors including labor and material increases. Project work has been ongoing since July 2022 and is currently scheduled to be completed in February 2025. To date, the contractor has completed \$4,020,327.31 of work, and based on estimated quantities of work remaining, Walker estimates there is approximately \$3,382,325.24 of work remaining to be completed. This brings the total estimated project value to approximately \$7,402,652.55 which is \$1,104,460.55 above the original bid value.

In summary, there are three primary causes for the additional costs of approximately \$1,104,460.55 to the project which are material and labor cost inflation, additional scope of work added to the project by the City of Portsmouth, and unforeseen conditions that were uncovered during construction. The contractor has recently submitted change orders for material and labor inflation costs that are above and beyond what they currently included in their original bid price. The total value of the added costs to the project for this is \$312,374.53.

Approximately \$287,218.06 of the additional project costs are a result of added scope from the City of Portsmouth. After the project was bid, the City of Portsmouth requested that the garage entry/exit from Hanover St. was reconfigured to improve traffic flow and safety within the garage. This work included removal and replacement of concrete curbs, installation of a new doorway opening through the High St. stair, installation of a decorative pedestrian fence system, and installation of new curb ramps as required to facilitate ADA pathways. The replacement of the vertical fire standpipe system was also an additional scope item added to the project by the City of Portsmouth. The vertical standpipe system was observed to be in good condition at the time of Walker's field visit during design, but the City Fire Department requested that the vertical standpipe was replaced in conjunction with the ongoing replacement of the horizontal standpipe included in the project scope.

The added costs to the project as a result of additional scope of work added by the City of Portsmouth and the contractor's labor and material inflation account for \$599,592.59 of the total added cost to the project of

\$1,104,460.55. The remaining \$504,867.96 of cost added to the project is attributed to unforeseen conditions that were uncovered during construction. Examples of unforeseen conditions that were uncovered during construction are as follows:

- Walker issued the Construction Documents for the project, which included the estimated quantity for each Work Item, in January 2022. Walker estimated the project unit quantities based on field visits to the site during design and based on historical data for escalation and growth of repair sites over a multi-year period. The work item quantities for the concrete floor repairs have exceeded the estimated quantities provided as part of the base bid for the project which is a large contributor to the added repair costs to the project.
- Broken and damaged steel reinforcement was exposed during concrete removal of floor slabs.
- Deteriorated concrete and reinforcement were uncovered at the concrete column piers following removal of the surrounding asphalt that was beyond the limits estimated by Walker.
- Broken prestressed cables were uncovered during concrete floor and ceiling repairs which require specialty structural repair.
- Heavily corroded steel beams and columns were exposed following removal of rust and paint by the contractor which requires custom structural repairs.

The total added cost to the project for unforeseen conditions and escalation of repair quantities is approximately 8% of the total contract value. This cost increase is within the range of what would be considered industry-standard for a large, multi-year repair project as the typical construction contingency for a project of this size ranges between 5-10%.

Please let me know if you have any questions or would like to further discuss.

Regards,

WALKER CONSULTANTS

Nicholas C. Haritos Jr.

Nicholas C. Haritos Jr., P.E.*

Restoration Consultant

*ME

ORDINANCE #

THE CITY OF PORTSMOUTH ORDAINS

That Chapter 10, Article 5A - Character-Based Zoning, Section 10.5A43.33 regarding Building and Story Heights of the ZONING ORDINANCE of the City of Portsmouth, be amended as follows (deletions from existing language **stricken**; additions to existing language **bolded**; remaining language unchanged from existing):

Section 10.5A43.30: Building and Story Heights

10.5A43.33 For a **development with a mix of residential and non-residential uses** located within a CD4, CD4W, or CD5 **Character District** that is not located in an incentive overlay district and that contains at least one acre of lot area, the Planning Board may grant a conditional use permit to allow an additional **story** in height (up to **15 feet**); ~~for a houses, or duplexes, building type; and/or a mixed-use buildings where the building type is otherwise permitted by this Ordinance and,~~ if all of the following requirements are met:

- a) **Community Space** – The development shall have at least 50% of the property assigned and improved as a **community space**. Given the large scale of the development, the **community space** shall include a Plaza or Square of at least 5,000 sq. ft. per acre **and any combination of the following**; a **Pedestrian Passageway**; a **Wide Pedestrian Sidewalk**; ~~and/or a Pedestrian Arcade;~~ **and a Pocket Park**; a **Playground**, or a **Public Observation Deck**, **as further described and depicted in Figure 10.5A45.10**. Such **community space** shall count toward the required **open space** listed in Figures 10.5A41.10A-D (Development Standards). The size, shape, location and type of the **community space** shall be determined by the Planning Board and be based on the proposed land use and the **size and location of the buildings within the development**, and the **adjacent uses and public amenities**.
- b) **Workforce Housing** – ~~If multi-family dwelling units are proposed,~~ **†The development** shall have either: 1) 10% of any proposed for sale **dwelling units within a development shall be workforce housing units** (affordable to a household with an income of no more than 100 percent of the area median income for a 4-person household); or 2) 5% of any proposed for rent **dwelling units within a development shall be workforce housing units** (affordable to a household with an income of no more than 60 percent of the area median income for a 3-person

household). Any **workforce housing units** shall be at least 600 sq. ft. in **gross floor areas** and be distributed throughout the **building** wherever **dwelling units** are located.

- c) Calculations for **workforce housing unit** requirements shall be rounded to the nearest whole number, with 0.5 and below being rounded down.
- d) The proposal is consistent with the findings, goals, and objectives of the **Portsmouth Master Plan**.

The City Clerk shall properly alphabetize and/or re-number the ordinances as necessary in accordance with this amendment.

All ordinances or parts of ordinances inconsistent herewith are hereby deleted.

This ordinance shall take effect upon its passage.

APPROVED:

Deaglan McEachern, Mayor

ADOPTED BY COUNCIL:

Kelli L. Barnaby, City Clerk



CITY OF PORTSMOUTH

City Hall, One Junkins Avenue
Portsmouth, New Hampshire 03801
kconard@cityofportsmouth.com
(603) 610-7201

Karen S. Conard
City Manager

Date: August 16, 2024

To: Honorable Mayor McEachern and City Council Members

From: Karen S. Conard, City Manager

Re: City Manager's Comments on City Council Agenda of August 19, 2024

VIII. Recognitions and Volunteer Committee Reports:

A. **Public Art Review Committee Report on Public Art at Peirce Island:**

Attached please find a memorandum from the City's Public Art Review Committee regarding proposed public art on Peirce Island.

X. Public Hearing and Vote on Ordinances and/or Resolutions:

A. **Public Hearing and Adoption of Proposed Resolution Authorizing a Supplemental Appropriation from the Parking and Transportation Fund of \$1,000,000 for the High Hanover Parking Garage Project:**

The Hanover Garage is in year three of a three-year construction project which is scheduled to be complete in August of 2025. This renovation project addresses maintenance to ensure continued use of the garage and improve its aesthetics. [Attached is a memorandum from the City's design engineer Walker Parking](#), which summarizes work to date and the need for additional funding. Based on Walker's memorandum, [an additional \\$1 million in funding is needed to complete the project](#). The additional funding need is due to material and labor prices which per contract are adjusted annually for unforeseen conditions encountered during construction and additional work in support of pedestrian access and traffic flow improvements requested by the City. This request includes an additional \$937,400 for known items and \$62,600 in contingency.

The following is a summary of project costs to date and projected costs to finish:

- Original Contract Sum: \$6,298,192
- Change Orders to Date: \$167,052
- Current Contract Sum: \$6,465,244
- Forecast to finish: \$937,400
- Recommended Contingency: \$62,600
- Final Contract Amount: \$7,465,244

The proposed funding source is the Parking Division's fund balance, which was established to offset the loss of revenue due to construction and to provide contingency money for project costs.

Currently the Parking Fund balance net of FY24 and FY25 budget appropriations is \$3.3 million. The use of an additional \$1 million would leave a balance of \$2.3 million.

I recommend that the City Council move to authorize a supplemental appropriation of \$1 million from the Parking Division fund balance and adopt the resolution as presented.

B. Third and Final Reading of Proposed Ordinance Amending Chapter 10, Article 5A – Character-Based Zoning, Section 10.5A43.33 Regarding Building and Story Heights of the Zoning Ordinance:

At the June 3, 2024 City Council meeting, staff brought an amendment to [Article 5A Character-Based Zoning, Section 10.5A43.33](#), seeking clarification from Council on the original intent of this zoning amendment adopted by Council in August of 2023. The amendment pertains to properties that contain at least one acre in size and are located within CD4, CD4W, and CD5 Character Districts and are not located within an incentive overlay district. These properties, through a Conditional Use Permit, may add a story (up to 15 feet in height), a duplex or house building type or a mixed-use building in exchange for providing 50% community space and workforce housing. As currently written, the language could be interpreted to allow the incentive of an extra story for a mixed-used development without residential units by providing only the community space requirement and no workforce housing.

The Council affirmed its intent that only mix-use buildings with residential units that include both workforce housing and community space are entitled to receive the incentive provided in Section 10.5A43.33 and referred an amendment clarifying its intent to the Planning Board.

The Planning Board held a public hearing on June 20, 2024 and did not receive any public comment on the amendment. The Board approved the amendment that clarified the ordinance consistent with the Council's intent and made additional, minor non-substantive edits to further clarify the ordinance language beyond what was referred by City Council.

The Planning Board also had discussion about the 50% community space requirement in Section 10.5A43.33(a). Some members thought this requirement would deter applicants from using the incentive because of the percentage of community space required.

The Board did not make a recommendation to the Council on this issue but wanted the Council to be aware of its concerns and discussion on this matter.

The City Council held a Public Hearing and Second Reading at the August 5, 2024 City Council meeting.

I recommend that the City Council move to pass third and final reading of the proposed zoning amendment to Chapter 10, Article 5A, Section 10.5A43.330.

XI. City Manager's Items Which Require Action:

1. Update on McIntyre Litigation:

City Attorney Morrell will give a verbal update on the McIntyre Litigation at this evening's meeting.

2. Adoption of Hazard Mitigation Plan:

At the July 15th City Council meeting, the City Council accepted the draft Hazard Mitigation Plan for a period of public comment. That period has closed and [the attached document](#) reflects any public comment, comment from Council, NH Homeland Security Emergency Management and FEMA. I am requesting the City Council adopt this Plan at this evening's meeting.

The Portsmouth Hazard Mitigation Plan Update represents the collaborative effort of City staff listed on page 5 of the document to produce the [document attached](#) in an expedited fashion due to funding delays at the State level and the imminent expiration deadline for our existing Plan. This Plan Update will serve to assist the City in reducing and mitigating future losses from natural hazard events, identifying specific natural hazards impacting Portsmouth, and outlining existing and future natural hazard mitigation efforts.

History shows that hazard mitigation planning and the implementation of risk reduction activities can significantly reduce the physical, financial, and emotional losses caused by disasters. Putting this Plan into action will be an ongoing process that may include initiating and completing mitigation projects and integrating mitigation strategies into other community plans and programs. Monitoring the Plan's implementation helps to ensure it remains relevant as community priorities and development patterns change, and will be an ongoing process.

Under Federal Legislation, state, tribal, and local governments must develop a Hazard Mitigation Plan as a condition for receiving certain types of non-emergency disaster assistance through the Hazard Mitigation Assistance Program.

It should be noted that while there are many potential mitigation strategies contained herein, this Plan is a document for planning purposes only and can be amended by the Council and funded appropriately, or priorities can change, and projects can be shifted and changed based on our needs at the time.

Fire Chief McQuillen will be available for any questions that may arise at this evening's meeting.

I recommend that the City Council move to adopt the Hazard Mitigation Plan as presented.

3. **Adoption of Climate Action Plan:**

I am pleased to [present the final draft of the comprehensive Climate Action Plan, Portsmouth's Climate Future](#). This plan acts as a visionary roadmap for addressing the most pressing environmental challenges of our time and promoting sustainability in our community.

Portsmouth's Climate Future is the result of extensive research, consultation with experts and community stakeholders, and careful analysis of the latest scientific data. It outlines a range of ambitious yet achievable actions that will help the City reduce its carbon footprint, adapt to the impacts of climate change, and protect the health and well-being of its residents.

Some of the key initiatives outlined in the Plan include:

- Expanding renewable energy generation and energy efficiency measures in city buildings, vehicles, and infrastructure;
- Promoting the use of electric and low-emission vehicles, as well as alternative modes of transportation such as biking and public transit;
- Planting trees and greening public spaces to absorb carbon dioxide and improve air quality;
- Developing green infrastructure solutions to manage stormwater runoff and reduce flooding;
- Promoting waste reduction, recycling, and composting to reduce greenhouse gas emissions from landfills;
- Supporting local food systems and sustainable agriculture to reduce transportation emissions and improve food security; and
- Engaging with the community and stakeholders to raise awareness about climate change and the actions we can take to address it.

The City of Portsmouth is committed to implementing the actions outlined in the Climate Action Plan and will be partnering with local organizations, businesses, and community groups to make it a reality. While municipal operations contribute to our local emissions and environmental health, the community impact is far greater and more complicated.

Through joint efforts between the municipality and the community, and a commitment to both short and long-term actions, we can make Portsmouth's Climate Future a reality. The content of this Plan is meant to be reviewed and updated periodically, depending on our progress towards net zero emissions, changing laws and policies, new technology, and other relevant developments.

The responsibility of enacting this Plan and monitoring our progress lies with our community, our elected leaders, and our City staff.

I recommend that the City Council move to adopt Portsmouth’s Climate Future: A Roadmap to Net Zero Emissions and Climate Resilience as the City’s Climate Action Plan and commit to the goals and strategies set forth within this document as presented.

4. **Request for Approval of Memorandum of Agreement with Firefighters Association of Portsmouth, New Hampshire - Local #1313:**

Please find attached a memorandum from the City’s Labor Negotiator, Tom Closson, regarding a proposed Memorandum of Agreement (MOA) with the Firefighters Association of Portsmouth, New Hampshire – Local #1313.

I recommend that the City Council move to approve and accept the proposed MOA with the Firefighters Association of Portsmouth, New Hampshire – Local #1313 as presented.

5. **Request for Approval of Reclassification of Assistant Fire Chief Gionet’s Current Contract:**

Please find attached a memorandum from the City’s Labor Negotiator, Tom Closson, regarding a reclassification of Assistant Fire Chief Gionet’s current contract.

I recommend that the City Council move to approve and accept the proposed reclassification as presented.

6. **FY 2025/TY 2024 Elderly and Disabled Recommended Exemption Levels:**

Annually, the City of Portsmouth reviews income and asset levels for the elderly and disabled exemptions and makes recommendations as to these levels pursuant to RSA 72:37-b and RSA 72:39-b.

This year, the City Council adopted resolution #1-2024 which increased the income levels for qualifying elderly taxpayers and resolution #2-2024 which increased the income levels for qualifying disabled taxpayers as follows:

- Single \$54,000
- Married \$70,793

No adjustment was made to the asset limit of \$500,000.

At this evening’s meeting, Assessing Director Rosann Lentz requests a review of the exemption levels for both the elderly and disabled exemptions towards the finalization of the FY 2025 / TY 2024 revaluation. The last time these levels were reviewed and changed was after the FY 2020 / TY 2019 revaluation.

Current Exemption Levels:

- Age 65 to 74 \$235,000
- Age 75-79 \$285,000
- Age 80 + \$335,000
- Disabled \$235,000

Currently, exemption levels represent forty-nine to seventy percent of the FY 2024 median assessment which was \$482,000.

FY 2024 Percent of Exemption Level to Median Assessment (\$482,000):

- Age 65-74 49%
- Age 75-79 59%
- Age 80 + 70%
- Disabled 49%

Review of current exemption levels indicate a decline in the tax relief benefit of the elderly and disabled exemptions due to the real estate’s market appreciation throughout the City. Upon completion of the FY 2025 / TY 2024 City-wide revaluation, current exemption levels will be between thirty-one and forty-five percent of the median single-family assessment which is estimated to be \$750,000.

FY 2025 Estimated Percent of Exemption Level to Median Assessment (\$750,000):

- Age 65-74 31%
- Age 75-79 38%
- Age 80 + 45%
- Disabled 31%

In view of the change to the median single family assessed value for FY 2025 and, to maintain assessment to exemption levels in comparison in prior years, it is recommended to adjust the exemption levels as follows:

Exemption Category	Current FY 24 Exemption Level	Recommended Exemption Level FY 25	Difference	% of Rec. Exemption Level to Est. FY 25 Med. Single Family Assessment of \$750,000
Age 65-74	\$ 235,000	\$ 375,000	\$ 140,000	50%
Age 75-79	\$ 285,000	\$ 450,000	\$ 165,000	60%
Age 80+	\$ 335,000	\$ 525,000	\$ 190,000	70%
Disabled	\$ 235,000	\$ 375,000	\$ 140,000	50%

The above recommendation will avoid a decline in tax relief for those approved for the elderly and disabled exemption.

Any adjustment if approved would be for assessments as of April 1, 2024, for the FY 2025 / TY 2024 tax bill.

City of Portsmouth Historical Comparison of Exemption Levels:

Fiscal Year	Tax Year	Median Assessment	Age 65-74	Age 75-79	Age 80+	Disabled	% of Median Age 65-74	% of Median Age 75-79	% of Median Age 80+	% of Median Disabled
2025 (Rec.)	2024	\$750,000.00	\$ 375,000	\$ 450,000	\$ 525,000	\$ 375,000	50%	60%	70%	50%
2025(No Chng.)	2024	\$750,000.00	\$ 235,000	\$ 285,000	\$ 335,000	\$ 235,000	31%	38%	45%	31%
	2024	\$482,000.00	\$ 235,000	\$ 285,000	\$ 335,000	\$ 235,000	49%	59%	70%	49%
	2023	\$480,100.00	\$ 235,000	\$ 285,000	\$ 335,000	\$ 235,000	49%	59%	70%	49%
	2022	\$478,050.00	\$ 235,000	\$ 285,000	\$ 335,000	\$ 235,000	49%	60%	70%	49%
	2021	\$470,900.00	\$ 235,000	\$ 285,000	\$ 335,000	\$ 235,000	50%	61%	71%	50%
	2020	\$470,900.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	27%	37%	48%	21%
	2019	\$424,200.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	29%	41%	53%	24%
	2018	\$410,800.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	30%	43%	55%	24%
	2017	\$347,600.00	\$ 120,000	\$160,000	\$ 200,000	\$ 100,000	35%	46%	58%	29%
	2016	\$345,800.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	36%	51%	65%	29%
	2015	\$319,100.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	39%	55%	71%	31%
	2014	\$316,650.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	39%	55%	71%	32%
	2013	\$314,450.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	40%	56%	72%	32%
	2012	\$313,800.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	40%	56%	72%	32%
	2011	\$312,800.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	40%	56%	72%	32%
	2010	\$297,000.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	42%	59%	76%	34%
	2009	\$297,250.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	42%	59%	76%	34%
	2008	\$295,600.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	42%	59%	76%	34%
	2007	\$294,050.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	43%	60%	77%	34%
	2006	\$257,950.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	48%	68%	87%	39%
	2005	\$256,900.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	49%	68%	88%	39%
	2004	\$254,050.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	49%	69%	89%	39%
	2003	\$226,300.00	\$ 125,000	\$175,000	\$ 225,000	\$ 100,000	55%	77%	99%	44%

I recommend that the City Council move to schedule a Public Hearing and Adoption at the September 3, 2024 City Council meeting on the elderly and disabled exemptions recommended exemption levels for FY 2025 / TY 2024 pursuant to RSA 72:37-b and RSA 72:39-b.

7. Temporary Construction License for the B.P. Auger Building Company, LLC at 70 Pleasant Point Drive:

The B. P. Auger Building Company, LLC (a/k/a Auger Building Company) (“Licensee”) is making improvements to property owned by Katara, LLC at 70 Pleasant Point Drive, shown on the City of Portsmouth Assessor’s Map as Tax Map 207, Lot 15 (“Property”). Licensee is constructing a residence and has a request to locate a dumpster on the dead-end portion of Pleasant Point Drive. Licensee has an existing encumbrance permit (ENCM 24-66) for use of the dumpster on the right-of-way that expires on August 20, 2024. The License Area is 176 feet and is depicted in [Exhibit A attached to the license](#). Licensee has requested to continue to use the dumpster from August 21, 2024 to December 31, 2024, for a total of 133 days. Because the request for the encumbrance extends beyond 30 days, Licensee has requested Council approval of a license.

Encumbrances for longer than 30 days are subject to the City Council’s policy entitled “License Fee for Encumbrance of City Property”. Under this policy, a daily fee of \$0.05 per square foot of encumbered City property would be assessed for 176 square feet for a daily fee of \$8.80 x 133 days for a total license fee of \$1,170.40.

The Legal, Planning and Public Works Departments have reviewed and approved [the form of the attached](#).

If the Council agrees to grant a temporary construction license to encumber a portion of the dead-end portion of Pleasant Point Drive for construction associated with property located at 70 Pleasant Point Drive, an appropriate motion would be:

Move that the City Manager be authorized to execute and accept the temporary construction license to encumber the dead-end portion of Pleasant Point Drive as requested.

8. Lease Extension for Community Campus Tenants:

The City purchased the Community Campus, property located at 100 Campus Drive, Portsmouth, New Hampshire (“Property” or “Community Campus”) on March 14, 2022 from the Foundation for Seacoast Health (“Foundation”). As was required by the terms of the Purchase and Sales Agreement, the Foundation assigned its interest in its Lease Agreements with all the tenants of Community Campus to the City by entering into Assignment and Assumption Agreements on March 14, 2022. Because the term of the assigned Lease Agreements for three of the tenants (Seacoast Outright, Krempels Center and Child Advocacy Center of Rockingham County, Inc. (“CAC”)) was set to expire on December 31, 2023, the City Council approved an Amendment to the Lease Agreements to extend the term by six months on December 18, 2023. The term expired on June 30, 2024 and the City and Seacoast Outright, Krempels Center and CAC sought to extend the lease term for two more months until August 31, 2024 in order to give the parties time to negotiate new Lease Agreements. The City Council approved the Extension of Amendment to Lease Agreement for all three tenants on June 17, 2024.

The City is also finalizing new lease terms and final plans for the Community Daycare Center, Inc., d/b/a Seacoast Community School. The lease for the Seacoast Community School expires on December 31, 2024 and the City is still working with the school to finalize its lease terms and plans for its reconfigured leased space. The City and Seacoast Outright, Krempels Center and CAC have agreed to extend the existing lease terms for another three months (September 1, 2024 through November 30, 2024) in order for the City to have time to finalize lease terms and plans with the Seacoast Community School and to present all Community Campus leases to the Council at one time.

I recommend that the City Council move to accept the [Second Extension of Amendment to Lease Agreements with Seacoast Outright, the Krempels Center and Child Advocacy Center of Rockingham County, Inc.](#) to extend the lease terms through November 30, 2024 as presented.

9. Street Naming for 686 Maplewood Avenue:

The property owners of 686 Maplewood Avenue where a new six family home condominium development is being constructed are requesting approval to name the private street Eden Lane.

The Department of Public Works has reviewed the request of Eden Lane with the State e911 and they have no objection to the name. Additionally, there are no duplicate names in this zip code.

I recommend that the City Council move to authorize the use of Eden Lane as the private street name for the development at 686 Maplewood Avenue.

10. Middle Street Baptist Church Parking Lot Usage/Maintenance Agreement:

Since 2013, the [Middle Street Baptist Church](#) has leased seventeen (17) spaces to the City for the purposes of allowing certain Library staff the use of these space during Library business hours. The [amended Agreement](#) presented for Council’s review and approval this evening increases the number of parking spaces in the Middle Street Baptist Church lot to twenty (20) for the use of both Library and Middle School staff. The Middle Street Baptist Church invoices the City for the annual fee of \$1,000. It should be noted that the Middle Street Baptist Church Parking Lot is one of the few parking lots in the City that has not been privatized. The term for this Agreement had historically been for one year. However, in 2022, after consulting with the Church and for ease of administration, the City Council amended the Agreement to an indefinite term, with either party having the right to terminate upon 30 days written notice. The Legal Department and the Middle Street Baptist Church have reviewed and approved the [attached Agreement](#).

I recommend that the City Council move to approve the Middle Street Baptist Church Parking Lot Usage/Maintenance Agreement as presented.

XIII. Presentations and Written Communications:

C. Request and Presentation from Brian Hart of Southeast Land Trust of New Hampshire Regarding Proposed Conservation Easement on the 100-Acre Woods “Cavaretta Property”:

The City of Portsmouth has 1,469 acres of conserved land in 59 distinct tracts which amounts to about 15% of the total land area of Portsmouth. Out of 1,469 acres, 679 acres (46% of all conserved land) are City-owned. There are a number of ways in which the City is able to protect conservation land including grants, donations, City funds and the use of the City’s Conservation Fund.¹

The Conservation Fund has been used to protect properties such as:

- The Sagamore Creek Headlands Parcel an 11 acre parcel along Sagamore Creek which the City acquired in fee, for conservation, in 2003;

¹ Conservation Fund is revenue generated when land is taken out of Current Use. According to City Resolution #5-1995:

II. The City Treasurer is hereby authorized and directed to place all revenues collected under the Land Use Change Tax into a Conservation Fund which shall accumulate from year to year, to be used by the City as directed by the Conservation Commission with the approval of the City Council for acquisition, preservation, maintenance, accessibility and linkage of open space and for administration of its programs to accomplish these purposes.

- The Maxam property consisting of 27 acres of conservation land acquired in 2007 which is owned in fee by the City with the Conservation Easement held by the Southeast Land Trust;
- An Island in Sagamore Creek, just under an acre, acquired in fee in 2011 using Conservation Fund money; and
- A 2.8 acre parcel on Lois Street was acquired in 2019 for conservation and is held in fee by the City.

In terms of ongoing efforts, the City's 2020 Open Space plan identifies 33 parcels for conservation acquisition. The Conservation Commission selected 15 of these parcels for further evaluation and protection, one of which was the Cavaretta property, which was identified as a high priority. While commissioners reached out to the property owner, there was little interest from the owner to sell the property at the time of that effort in 2021. The Commission continues to work towards identification of additional properties for conservation and has been investigating ways to engage with property owners. The biggest challenge is finding a seller who is willing to put some or all of their property into conservation.

The Conservation Fund currently has \$1.2 million in funds deposited due to lands reverting from current use and an additional \$1 million in funds which were authorized in the last two budget cycles. The Southeast Land Trust will present to you at this meeting on the Cavaretta property which has taken a dedicated effort to reach an agreement to sell a Conservation Easement on the property. This conservation opportunity represents the largest unprotected property in the City.

Mr. Joseph Cavaretta currently owns the parcel at 820 Elwyn Road in Portsmouth – also known as the 100-Acre Woods, which is approximately 98.50 acres of land (of which 4.5 acres will be excluded from the easement for Mr. Cavaretta's dwelling) consisting of a residential structure and associated outbuildings. This property abuts the Elwyn Park and Woodlands neighborhood as well as the Rye Elementary School.

The Southeast Land Trust (SELT) is a local non-profit which conserves and stewards land in Rockingham and Strafford counties. [SELT has been working with Mr. Cavaretta for over a decade to find an opportunity to put a majority of this parcel into conservation.](#) The proposed conservation easement area would include 94 acres of forest, wetlands, and farmlands.

The two parties involved in this easement, SELT and Mr. Cavaretta, have come to an agreement and SELT is now in the process of raising funds to support the conservation of this land (excluding Mr. Cavaretta's current home and a small surrounding area). Members of SELT are here tonight to provide details on the property and the opportunity for conservation that Mr. Cavaretta has provided. After hearing about the project and attending a site walk of the property, the Conservation Commission has voted to support this project at their special meeting on July 17, 2024. [This support includes a recommendation to financially support the conservation easement contract with Conservation Fund money.](#)

To better familiarize the City Council with the property, potential easement language, and conservation benefits of this location, a site walk requested by SELT prior to any final decisions on financial support. SELT is available on the following dates as a starting point but will work with the City to schedule a different time if none of the following work: August 22nd, August 23rd, August 26th, August 27th or August 28th. This site walk shall include staff, City Councilors, SELT, and any other interested parties and shall be held prior to the September 3, 2024 City Council meeting.

I recommend that the City Council schedule a date for a site walk at the property on August 22nd, August 23rd, August 26th, August 27th or August 28th.

XVII. City Manager's Informational Items:

1. Community Policing Facility Update:

City staff are prepared to share a verbal update regarding the proposed Community Policing Facility project.

2. Update on the Sherburne Property Request for Proposals:

I will provide a verbal update on the status of the Sherburne Property project.

3. Legislation Regarding HB1014 and State Holidays:

In response to recent State Legislation regarding the naming of State Holidays, I will provide a brief update on the City's plan to address this subject matter.

4. Pease Development Authority Board Meeting Verbal Update:

I will provide a verbal update on this matter following the Pease Development Authority's recent Board Meeting on August 15, 2024.



City of Portsmouth, NH Hazard Mitigation Plan Update 2024

Adopted by the Portsmouth City Council on
August 19, 2024

Prepared with the Assistance of the



**This project was partially funded by
New Hampshire Homeland Security and Emergency Management**

CERTIFICATE OF ADOPTION

WHEREAS, the City of Portsmouth received funding from the NH Office of Homeland Security and Emergency Management and assistance from Rockingham Planning Commission in the preparation of the Portsmouth Hazard Mitigation Plan Update 2024; and

WHEREAS, several public planning meetings were held between April 2024 and August 2024 regarding the development and review of the Portsmouth Hazard Mitigation Plan Update 2024; and

WHEREAS, the Portsmouth Hazard Mitigation Plan Update 2024 contains several potential future projects to mitigate hazard damage in the City of Portsmouth; and

WHEREAS, a duly noticed public meeting was held by the Portsmouth City Council on August 19, 2024 to formally approve and adopt the Portsmouth Hazard Mitigation Plan Update 2024.

NOW, THEREFORE BE IT RESOLVED that the Portsmouth City Council:

- The Plan is hereby adopted as the official plan of the City of Portsmouth;
- The respective individuals identified in the mitigation strategy of the Plan are hereby directed to pursue implementation of the recommended actions assigned to them;
- Future revisions and Plan maintenance required by 44 CFR 201.6 and FEMA are hereby adopted as part of this resolution for a period of five (5) years from the date of this resolution;
- An annual report of the progress of the implementation elements of the Plan shall be presented to the City Council by the City Manager/Emergency Management Director or the Emergency Management Coordinator.

NOW, THEREFORE BE IT RESOLVED that the City Council adopts the Portsmouth Hazard Mitigation Plan Update 2024.

IN WITNESS THEREOF, the undersigned has affixed his/her signature and the corporate seal of the City of Portsmouth on this _____ day of _____.

Mayor

Public Notary

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ACKNOWLEDGEMENTS

The City of Portsmouth extends special thanks to those that assisted in the development of the Hazard Mitigation Plan Update 2024 by serving as members of Natural Hazards Mitigation Committee:

Karen Conard, City Manager/Emergency Management Director, City of Portsmouth, NH
William McQuillen, Fire Chief/Emergency Management Coordinator, City of Portsmouth, NH
Jason Gionet, Assistant Fire Chief, City of Portsmouth, NH
Mark Newport, Police Chief, City of Portsmouth, NH
Mike Maloney, Deputy Police Chief, City of Portsmouth, NH
Peter Britz, Planning Director, City of Portsmouth, NH
Kate Homet, Associate Environmental Planner, City of Portsmouth, NH
Peter Rice, Public Works Director, City of Portsmouth, NH
Brian Goetz, Deputy Public Works Director, City of Portsmouth, NH
Eric Eby, City Engineer, City of Portsmouth, NH
Erich Fiedler, Engineering Supervisor, City of Portsmouth, NH
Sean Clancy, Assistant City Manager for Economic and Community Development, City of Portsmouth, NH
Kim McNamara, Health Officer, City of Portsmouth, NH
Ellen Tully, Welfare Director, City of Portsmouth, NH
Joanna Diemer, Administrative Assistant, City of Portsmouth, NH
Monte Bohanan, Director of Communications, City of Portsmouth, NH

Appendix O lists additional people that participated in the Plan Update 2024 process.

The City of Portsmouth offers thanks to the NH Homeland Security and Emergency Management and FEMA for providing funding and technical assistance with the development of this Plan Update.

In addition, special thanks are extended to the staff of the Rockingham Planning Commission for professional services, process facilitation, and preparation of this document.

EXECUTIVE SUMMARY

The Portsmouth Hazard Mitigation Plan Update 2024 (herein after, the Plan), was compiled to assist the City of Portsmouth in reducing and mitigating future losses from natural hazard events. The Plan was developed by the City of Portsmouth Hazard Mitigation Committee, representatives of the business community, academia, and organizations assisting vulnerable populations, and the Rockingham Planning Commission. The Plan Update identifies specific natural hazards impacting Portsmouth and outlines existing and future natural hazard mitigation efforts.

The following natural hazards are addressed:

- Flooding
- Hurricane and High Wind Events
- Severe Winter Weather
- Wildfire and Conflagration
- Earthquakes
- Coastal Storms
- Extreme Temperatures
- Drought
- Climate Change
- Infectious Disease

The list of critical facilities includes:

- Municipal facilities
- Communication facilities
- Fire stations and law enforcement facilities
- Schools
- Shelters
- Evacuation routes
- Vulnerable Populations

The Portsmouth Hazard Mitigation Plan Update 2024 is considered a work in progress and should be revisited after every natural hazard event to assess whether the existing and suggested mitigation strategies are successful. Copies are available in the City Manager's Office and the office of the Emergency Management Coordinator, and a copy will remain on file at the Rockingham Planning Commission. A copy of this plan is also on file at the New Hampshire Homeland Security and Emergency Management (NHHSEM) and the Federal Emergency Management Agency (FEMA). This plan was approved by both agencies prior to its adoption at the local level.

CHAPTER I - INTRODUCTION

Background

The New Hampshire Homeland Security and Emergency Management (NHHSEM) has a goal for all communities within the State to establish local hazard mitigation plans to reduce and mitigate future losses from natural hazard events. The NHHSEM outlines a process whereby communities throughout the State may be eligible for grants and other assistance upon completion of a local hazard mitigation plan. A handbook entitled *Hazard Mitigation Planning for New Hampshire Communities* was created by NHHSEM to assist communities in developing local plans. The State's Regional Planning Commissions are charged with providing assistance to selected communities to develop local plans.

The Portsmouth Hazard Mitigation Plan Update 2024 was prepared by participants from the City of Portsmouth Hazard Mitigation Committee with the assistance and professional services of the Rockingham Planning Commission (RPC). The City's Hazard Mitigation Committee included representatives from all City departments, academia, local businesses, and organizations assisting socially vulnerable and underserved members of the community. The Plan serves as a strategic planning tool for use by the City of Portsmouth in its efforts to identify and mitigate the future impacts of natural hazard events. Upon adoption of this Plan by the Portsmouth City Council, it will become an appendix to the Portsmouth Emergency Operations Plan.

Methodology

The Rockingham Planning Commission (RPC) organized the first Plan Update meeting with the City Manager/EMD, Emergency Management Coordinator, and department heads from the City of Portsmouth on April 18, 2024, and June 26, 2024. Updating the Plan was on a very accelerated timetable, resulting in a draft Plan going to the City Council on July 15, 2024, within three months of funds being awarded to the City. The Emergency Management Coordinator and RPC solicited information for the Plan Update from local officials, academia, organizations assisting vulnerable populations, and residents throughout the Plan development process. Notice of the Plan Update process was posted on the City's website. RPC staff kept communities in the region informed of the Plan Update process and requested feedback at monthly Commissioner meetings which involve members of Planning Boards, Boards of Selectmen, and Conservation Commissions in surrounding towns. In addition, RPC staff working in the abutting towns of New Castle, Greenland, Newington and Rye shared information on the Plan Update and provided opportunities to comment on regional mitigation strategies.

The City's Hazard Mitigation Plan Update 2017 served as a starting point for discussions on hazards impacting the city, as well as discussions on mitigation strategies. The 2017 Plan has served as a reference for local land use regulations and policies, development of the City's Capital Improvement Plan and department budgets and has been referenced in several reports and policies including extended flood hazard areas and climate resiliency initiatives. The city continues to actively work on hazard mitigation and several new initiatives have been completed or are underway since the 2017 Plan Update and this work has been documented in this Plan Update.

Step 1 – Form Committee

A Committee comprised of the City Manager/EMD, Fire Chief/Emergency Management Coordinator, Assistant Fire Chief, Director of Communications, Police Chief, Deputy Police Chief, Planning Director, Associate Planner, Public Works Director, Public Works Deputy Director, Public Works Engineering Supervisor, City Engineer, Economic Development Manager, Health Officer, and Welfare Director was established to work with staff from the Rockingham Planning Commission to update the Plan. RPC staff informed local officials of surrounding communities of the plan update at monthly meetings of RPC Commissioner. Assistance with Plan development was provided by staff from NH Homeland Security and Emergency Management and FEMA.

Step 2 – Public Outreach and Stakeholder Involvement

RPC staff worked with the Emergency Management Coordinator on meaningful community engagement and public outreach about the Plan Update process to residents, local businesses, academia, organizations supporting socially vulnerable populations, and Emergency Management Directors in the abutting municipalities of Newington, NH, New Castle, NH, Greenland, NH, and Rye, NH. All these stakeholders were provided with an opportunity to comment on the draft Plan and contribute updated information.

Public notices about the Plan Update meetings were posted on the city website and social media to inform viewers and followers about the plan update process and to solicit review and comment on the Plan. The City Council held a publicly posted meeting on July 15, 2024, and met with the Emergency Management Coordinator to discuss the draft Plan and solicit their feedback. The meeting was open to the public, broadcast live and recorded, and posted on the City’s website for viewing. Notice about the Plan Update process was also posted on the Rockingham Planning Commission’s website and published in the RPC’s monthly newsletter. The newsletter is distributed to local officials in the 27-town RPC region. RPC and the Emergency Management Coordinator worked with the City’s Economic Development Director to directly seek input from the business community and with the director of the Housing Authority to ensure the needs of Housing Authority residents were represented. Representatives from the school district were also invited to participate in the Plan Update process. Comments on the draft Plan were received from one City Council member regarding the impacts of flooding on roadways, and this information was incorporated into the Plan and used to develop a new mitigation action.

RPC staff facilitated the Plan Update Committee meetings, guided the plan update process, and prepared the Plan Update in close consultation with the Plan Update Committee. Appendix O documents the individuals and organizations involved in the Plan Update as well as the public outreach materials distributed by the City of Portsmouth and the Rockingham Planning Commission.

Step 3 – Identify Natural Hazards Impacting Portsmouth

The Committee reviewed the list of natural hazards impacting Portsmouth that were included in the 2017 Plan and added Infectious Disease to the list of hazards impacting the community.

Step 4 – Identify Critical Facilities and Areas of Concern

The Committee identified facilities and areas considered to be important to the City for emergency management purposes, for provision of utilities and community services, evacuation routes, and for recreational, historical, cultural, and social value. Participants in the Committee identified areas where damage from past natural disasters have occurred and areas where critical man-made facilities and other features may be at risk in the future for loss of life, property damage, environmental pollution, and other risk factors. RPC generated a set of base maps with GIS (Geographic Information Systems) that were used in the process of identifying past and future hazards.

Step 5 – Identify Existing Mitigation Strategies

After identifying critical facilities in Portsmouth, the Committee and RPC staff reviewed the City's existing mitigation strategies relative to flooding, hurricane and wind events, severe winter weather, wildfire, earthquake, drought, extreme temperatures, climate change, and infectious disease. This process involved reviewing the City's Hazard Mitigation Plan Update 2017 and resources listed under Step 7.

Step 6 – Identify the Gaps in Existing Mitigation Strategies

The existing strategies were then reviewed by the RPC and the Committee for coverage and effectiveness, degree of completion and the need for improvement.

Step 7 – Identify Potential Mitigation Strategies

A list was developed of additional hazard mitigation actions and strategies for the City of Portsmouth. Natural Hazard Mitigation Plans for other communities in the region were utilized to identify new mitigation strategies as well as the following relevant resources:

- 2013 FEMA Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards
- 2013 City of Portsmouth Coastal Resilience Initiative report
- 2015 City of Portsmouth Climate Change Vulnerability Assessment
- 2015 City of Portsmouth Climate Resilience Evaluation and Awareness Exercise Tool and Report
- 2016 New Hampshire Coastal Risks and Hazards Commission Report
- 2017 City of Portsmouth Hazard Mitigation Plan Update
- 2017 Prescott Park Master Plan
- 2018 Climate Adaptation and Resilience Checklist and Guidance
- 2018 City of Portsmouth Historic Resources Climate Change Vulnerability Assessment and Adaptation Plan
- 2019 New Hampshire Coastal Flood Risk Summary
- 2020 City of Portsmouth Open Space Plan
- 2022 Seacoast Transportation Corridors Vulnerability Assessment
- 2023 State of New Hampshire Hazard Mitigation Plan Update
- 2023-2028 City of Portsmouth Capital Improvements Plan
- 2024 City of Portsmouth Zoning Ordinance
- 2024 City of Portsmouth Emergency Operations Plan
- 2024 State of New Hampshire Priority Climate Action Plan
- 2025 City of Portsmouth Master Plan

- NH Coastal Adaptation Workgroup reports
- Portsmouth Smart Growth reports
- Portsmouth’s Climate Future reports

Step 8 – Develop the Action Plan

The proposed hazard mitigation actions and strategies were reviewed, and each strategy was rated (good, average, or poor) for its effectiveness according to several factors (e.g., technical, and administrative applicability, political and social acceptability, legal authority, environmental impact, financial feasibility). Each factor was then scored, and all scores were totaled for each strategy. Strategies were ranked by overall score for preliminary prioritization then reviewed again under Step 9.

Step 9 – Determine Priorities

The preliminary prioritization list was reviewed to make changes and determine a final prioritization for new hazard mitigation actions and improvements to existing protection strategies. RPC staff also presented recommendations sourced from the resources listed in Step 7 for review and prioritization by the Plan Update Committee.

Step 10 – Develop Implementation Strategy

Using the chart provided under Step 9 in the handbook, an implementation strategy was created which included person(s) responsible for implementation (who), a timeline for completion (when), and a funding source and/or technical assistance source (how) for each identified hazard mitigation actions. Whenever the Master Plan or Capital Improvement Plan (CIP) are updated the Portsmouth Hazard Mitigation Plan Update 2024 shall be consulted to determine if strategies or actions suggested in the Plan can be incorporated into the City’s future land use recommendations and capital expenditures.

Step 11 - Adopt and Monitor the Plan

RPC staff compiled the results of Steps 1 to 10 into a draft document for review by the Committee. The draft Plan Update 2024 was posted on the City of Portsmouth website and social media for review and comment. Stakeholders listed in Appendix O were emailed the draft Plan and invited to comment on the draft Plan and to meet with RPC staff and the Emergency Management Coordinator. Stakeholders included Emergency Management Directors in neighboring communities, academia, local businesses, and agencies serving socially vulnerable and underrepresented communities. A duly noticed public meeting was held by the Portsmouth City Council on July 15, 2024. The meeting allowed anyone to provide comments and suggestions for the draft Plan Update in person, prior to the document being finalized. After the meeting the City Council instituted a two-week comment period, ending on July 30, 2024. The draft Plan was revised to incorporate comments received and submitted to the NHHSEM and FEMA Region I for their review and comments. Any changes required by NHHSEM and FEMA were made, and a revised draft document was then submitted to the Committee for review. One City Council member had information to add to the Plan regarding the impacts of flooding on roadways and the information was added to the Plan and was used to add a new mitigation action. A public meeting was then held by the City Council on August 19, 2024, to approve and adopt the Plan. The formal letter of approval from FEMA Region 1 can be found in the Appendix. The city will post the approved Plan Update on

the Town website to facilitate continued public participation in hazard mitigation initiatives.

To track progress and update the Mitigation Strategies identified in the Action Plan, the City's Hazard Mitigation Committee will remain active and will revisit the Plan annually and after each natural hazard event. These reviews will assess the Plan's effectiveness, accuracy, and completeness in achieving its stated purpose and goals. The Emergency Management Director and Emergency Management Coordinator will coordinate Plan reviews, which will include robust public outreach and address the recommended improvements to the Plan as contained in the FEMA plan review checklist, as well as any weaknesses the city has identified that the Plan did not adequately address. The Plan will also be thoroughly updated every five years.

HAZARD MITIGATION GOALS AND OBJECTIVES

The City of Portsmouth sets forth the following hazard mitigation goals and objectives:

- Reduce or avoid long-term vulnerabilities posed by natural hazards impacting Portsmouth, including the impacts from flooding, hurricanes and high wind events, severe winter weather, wildfire and conflagration, earthquakes, coastal storms, extreme temperatures, drought, climate change, including sea-level rise and increased precipitation events, and infectious disease.
- Improve upon the protection of the City of Portsmouth's general population, the citizens of the State and guests, from all natural and man-made hazards.
- Reduce the potential impact of natural and man-made disasters on Portsmouth and the State's Critical Support Services.
- Reduce the potential impact of natural and man-made disasters on Portsmouth's Critical Facilities in the State.
- Reduce the potential impact of natural and man-made disaster on Portsmouth's and the State's infrastructure.
- Improve Portsmouth's Emergency Preparedness.
- Improve Portsmouth's Disaster Response and Recovery Capability.
- Reduce the potential impact of natural and man-made disasters on private property in Portsmouth.
- Reduce the potential impact of natural and man-made disasters on Portsmouth's and the State's economy.
- Reduce the potential impact of natural and man-made disasters on Portsmouth's and the State's natural environment.
- Reduce Portsmouth's and the State's liability with respect to natural and man-made hazards generally.
- Reduce the potential impact of natural and man-made disasters on Portsmouth's and the State's specific historic treasures and interests as well as other tangible and intangible characteristics that add to the quality of life to the citizens and guests of the State and the City.
- Identify, introduce and implement cost effective Hazard Mitigation measures so as to accomplish Portsmouth's and the States' goals and objectives in order to raise the awareness and acceptance of hazard mitigation planning.

Through the adoption of this Plan the City of Portsmouth concurs and adopts these goals and objectives.

CHAPTER II – COMMUNITY PROFILE

The City of Portsmouth is in the Seacoast region of southeastern New Hampshire. The 2022 U.S. Census estimated the population to be 22,713, with that number increasing significantly during peak periods of tourism. The median age was 42 years, and the median household income was \$91,915, higher than the statewide median household income of \$88,235. The population density was 1,448 people per square mile of land.

Portsmouth encompasses 15.7 square miles of land area and 1.1 square miles of inland water area. Portsmouth is part of the Seaboard Lowlands of New England with a landscape that is generally flat. The elevation of this region is typically less than 200 feet above sea level. As seen in Figure 1, Portsmouth is bordered by the New Hampshire communities of New Castle, Rye, Greenland and Newington. The northern border of Portsmouth follows the tidal Piscataqua River as it enters Portsmouth Harbor and the Atlantic Ocean. The towns of Kittery and Eliot, Maine are on the opposite bank. Wetlands cover 33% of Portsmouth, including the major wetland areas of Great Bog, Berry Brook, Sagamore Creek and Packer Bog.

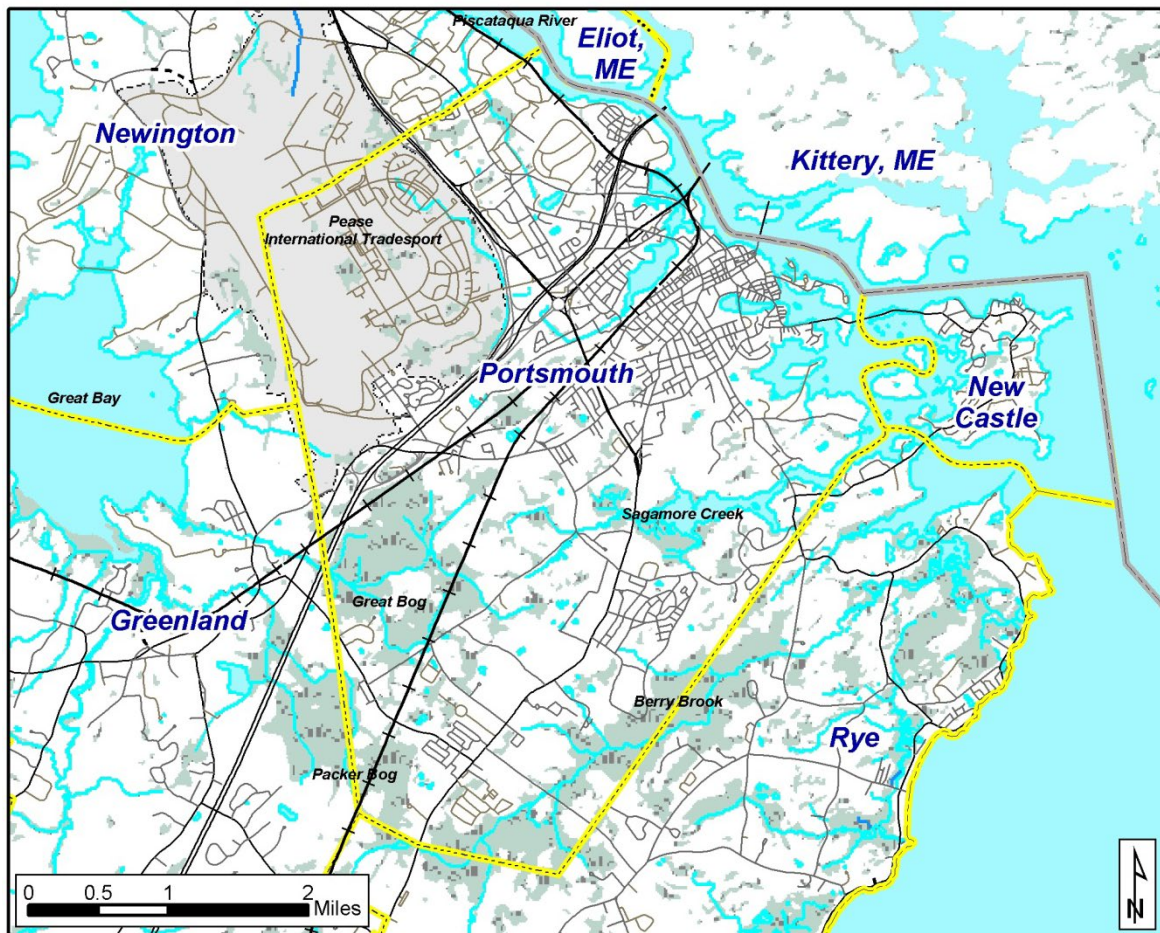


Figure 1: Location Map of Portsmouth, New Hampshire

Portsmouth's urban center is in the northern half of the city, while the southern half of the city is home to most of the wetlands. The city is served by major transportation routes, including Interstate 95, the Spaulding Turnpike, and Route 1.

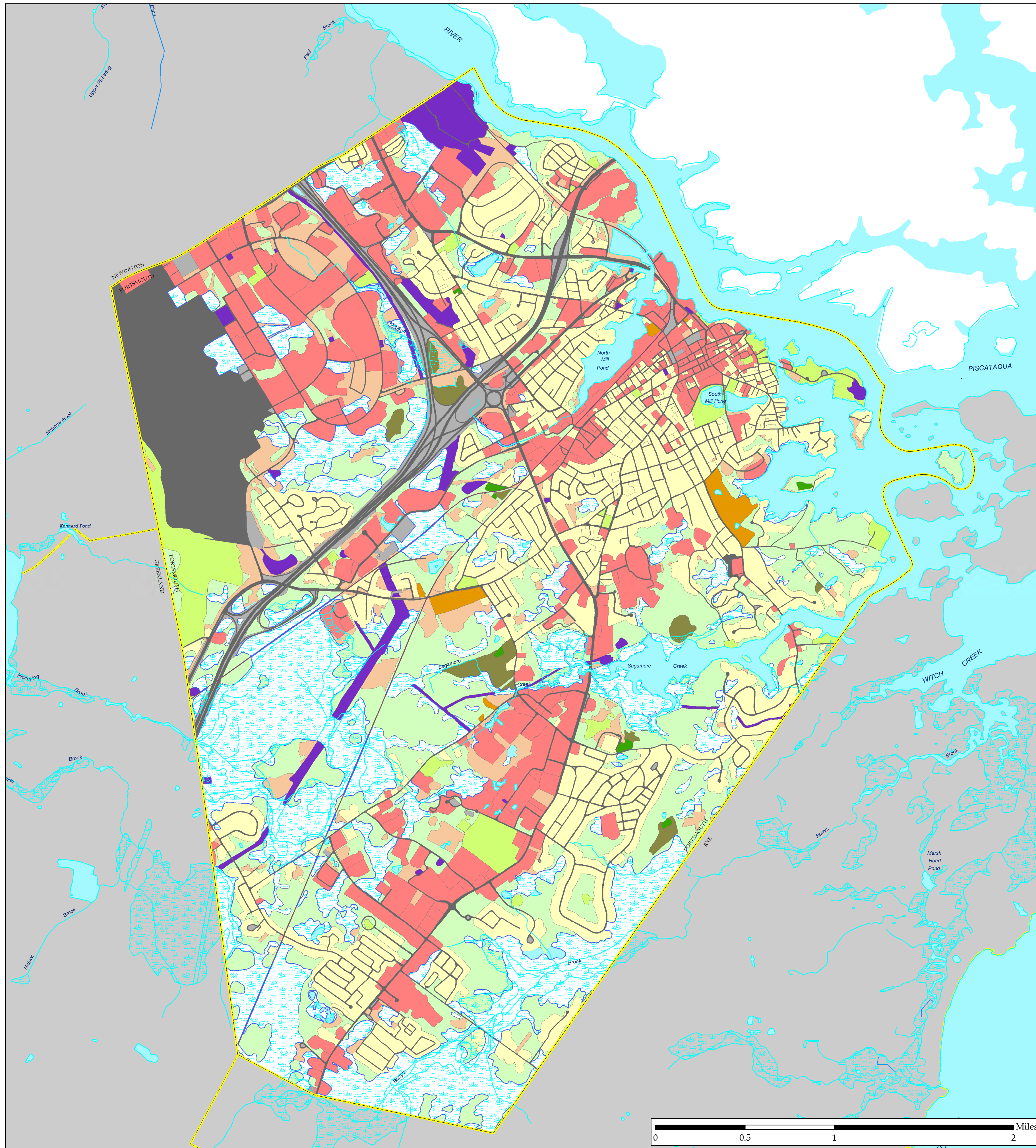
Current and Future Development Trends

Current and future development is predicated on the City's Zoning Ordinance. The city is divided into seven zoning districts encompassing residential, mixed residential business and industrial, Pease/airport, municipal, conservation, and transportation corridors, as well as overlay districts guiding development in the floodplain, historic district, downtown, airport approach, and others. Residentially zoned areas of the city comprise 34% of the City, but residents are traditionally resistant to increasing density, adding further challenges to the repurposing of commercial and industrial lands. Changes to the zoning ordinance and other land use regulations have increased flexibility in corridor areas, with a specific goal of enhancing visual character and environmental quality, as well as encouraging affordable housing and mixed-use development. Changes to the zoning ordinance have also been made to increase resiliency to rising sea-levels and an increase in extreme precipitation events through expanded stormwater management and the protection of shoreland buffers and tidal marshes.

Portsmouth contains a mix of residential, commercial and industrial land uses. Much of the remaining undeveloped publicly owned land and private land cannot be developed due to wetland restrictions. Future growth in Portsmouth will need to come from redevelopment of existing commercial and industrial areas that public or private developers can repurpose and rebuild with more density. Additionally, regulations for much of the historic downtown core and surrounding districts more closely control the forms and uses of new buildings, which limits development potential. Since the 2017 Plan Update, a great deal of new mixed-use development has occurred in the north end and the southern tier of the city along the NH Route 1 corridor. This development has been built with current building and fire codes and the associated upgrades of utilities and safety components, including low-impact development design and stormwater management based on current climate change data. While there may be an increased need for some emergency services the demand shouldn't be extreme, and the development projects are being incorporated into the City's resiliency planning and CIP process. The City has issued over 900 building permits annually since 2018 for residential and commercial construction and this pace is expected to continue with most of the new construction taking place in both the north end and southern tier.

The City has adopted and enforces land use regulations designed to mitigate hazards, including extended flood hazards areas, shoreland buffer protection, wetlands protection, stormwater and management. Portsmouth is a leader in climate change adaptation and resiliency planning in the region, assessing risks to infrastructure, historic resources, and residential neighborhoods. Despite these efforts the city's vulnerability to natural hazards may increase due to climate change and an increasing number of hazard events. Natural hazards identified in this Plan Update, as well as mitigation strategies discussed in the Plan, will be considered during local review of development proposals, development of land use regulations, infrastructure planning, as well as updates to land use regulations, the Master Plan and CIP, and the Emergency Operations Plan.

Map 1: 2015 Land Use, Portsmouth, New Hampshire



- Land Use 2015**
- Active Agricultural
 - Aux Transportation
 - Farmsteads
 - Forested
 - Industrial/Commercial
 - Mixed Urban
 - Open Wetlands
 - Other/Idle
 - Playing fields / Recreation
 - Railroad
 - Residential
 - Transportation
 - Utilities
 - Water

- BASE FEATURES**
- Interstate
 - US Route
 - State Route
 - Local
 - Interstate Ramp
 - Major Road Ramp
 - Political Boundaries
 - Stream or Shoreline
 - Apparent Wetland Limit
 - Intermittent Stream
 - Other Surface Water Feature
 - Wetlands (USGS)
 - Surface Water Bodies
 - Parcels

The land use delineations were determined from aerial photos. The process has been completed for various years and was last updated based on 2015 air photos. The work was a combined effort of the Rockingham Planning Commission, NH GRANIT at UNH.

Base data (town boundaries, hydrography, roads, railroads and utility lines) are taken from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the study of Earth, Oceans and Space, University of New Hampshire, Durham, NH; 1992-1999. Roads have been updated from work done by Rockingham Planning Commission and NH Department of Transportation. Partial updates have been completed through 2023.



CHAPTER III – NATURAL HAZARDS IN THE CITY OF PORTSMOUTH

Introduction

The first step in planning for natural hazard mitigation is to identify hazards that may affect the city. Some communities are more susceptible to certain hazards (i.e., flooding near rivers, hurricanes on the seacoast, etc.). The City of Portsmouth is prone to several types of natural hazards. These hazards include flooding, hurricanes or other high-wind events, severe winter weather, wildfires and conflagration, earthquakes, coastal storms, extreme temperatures, drought, and sea-level rise and increased precipitation events arising from climate change, and infectious disease. Other natural hazards can and do affect the City of Portsmouth, but these were the hazards prioritized by the Committee for mitigation planning. These hazards were considered to occur with regularity and/or to have high damage potential.

Natural hazards that are included in the State’s Hazard Mitigation Plan 2023 Update that are not included in this Plan include: landslide, subsidence, radon, avalanche, solar storm, and space weather. Subsidence and avalanche are rated by the State as having Low and No risk in Rockingham County, respectively; due to this they were left out of the plan. Portsmouth has no record of landslides and little chance of one occurring that could possibly damage property or cause injury, so landslides were not included in this Plan. The State’s Plan indicates that Rockingham County is at Moderate risk to radon and this hazard was not included in this Plan. When compared to natural hazards that could be potentially devastating to the City, such as hurricanes or natural hazards that occur with regularity, such as flooding or winter storms, it was not considered an effective use of the Committee’s time to include radon on the Plan at this time. Solar storms and space weather are rated as a low risk for all of New Hampshire. There are no significant past occurrences of impact from space weather or solar storms in the state per the State Plan Update 2023, so the Committee did not include these hazards in the Plan Update.

The hazard profiles below include a description of the natural hazard, the geographic location of each natural hazard (if applicable), the extent of the natural hazard (e.g. magnitude or severity), probability, past occurrences, and community vulnerability. Past occurrences of natural hazards were mapped on Map 2: Past and Future Hazards. Community vulnerability identifies the specific areas, general type of structures, specific structures, or general vulnerability of Portsmouth to each natural hazard. Probability was defined as high, a roughly 66-100% chance of reoccurrence annually; medium, roughly a 33-66% chance of reoccurrence annually; and low, roughly a 0-33% chance of reoccurrence annually.

Flooding

Description - Floods are defined as a temporary overflow of water onto lands that are not normally covered by water. Flooding results from the overflow of major rivers and tributaries, storm surges, and inadequate stormwater management. Floods can cause loss of life, property damage, crop damage, and water supply contamination. Floods can also disrupt travel routes on roads and bridges.

Inland floods are most likely to occur in the spring due to the increase in rainfall and melting of snow; however, floods can occur at any time of the year. A sudden thaw in the winter or a major

downpour in any season can cause flooding because there is suddenly a lot of water in one place with nowhere to go.

- **100-year Floodplain Events** - Floodplains are usually located in lowlands near rivers, and flood on a regular basis. The term 100-year flood does not mean that flood will occur once every 100 years. It is a statement of probability that scientists and engineers use to describe how one flood compares to others that are likely to occur. It is more accurate to use the phrase “1% annual chance flood”. What this means is that there is a 1% chance of a flood of that size happening in any year.
- **Erosion and Mudslides** - Erosion is the process of wind and water wearing away soil. Typically, in New Hampshire, the land along rivers is relatively heavily developed. Mudslides may be formed when a layer of soil atop a slope becomes saturated by significant precipitation and slides along a more cohesive layer of soil or rock. Erosion and mudslides become significant threats to development during floods. Floods speed up the process of erosion and increase the risk of mudslides.
- **Rapid Snowpack Melt** - Warm temperatures and heavy rains cause rapid snowmelt. Quickly melting snow coupled with moderate to heavy rains are prime conditions for flooding.
- **River Ice Jams** - Rising waters in early spring may break ice into chunks, which float downstream and often pile up, causing flooding. Small rivers and streams pose special flooding risks because they are easily blocked by jams. Ice in riverbeds and against structures presents significant flooding threats to bridges, roads, and the surrounding lands.
- **Dam Breach and Failure** - Dam failure results in rapid loss of water that is normally held by the dam. These kinds of floods can be extremely dangerous and pose a significant threat to both life and property.
- **Severe Storms** - Flooding associated with severe storms can inflict heavy damage to property. Heavy rains during severe storms are a common cause of inland flooding.
- **Sea Level Rise, Coastal Flooding, Storm Surge, and Compound Flooding** – Portsmouth’s tidal coastline along the Piscataqua River means homes and businesses, roadways and infrastructure, and critical natural habitats such as salt marsh and mud flats are at risk due to coastal flooding caused by storm surges and rising sea level. A storm surge, especially when coupled with astronomical high tides and sea level rise, presents a threat to all land areas adjacent to the marine environment. Compound flooding can occur when storm surge and heavy precipitation happen concurrently. High tide or surge water levels can impede stormwater draining, causing flooding inland. The risks of flood impacts from compound flooding in low-lying coastal areas is often much greater than from either coastal flooding or inland flooding in isolation. The city has completed several climate adaptation and resiliency initiatives to identify areas most at risk of flooding.

Research shows the climate of New Hampshire, and the Seacoast region has changed over the past century and predicts the future climate of the region will be affected by human activities that are warming the planet. Overall, New England has been getting warmer and wetter over the last century, and the rate of change has increased over the last four decades. The challenges posed by climate change, such as more intense storms, frequent heavy precipitation, heat waves, drought, extreme flooding, and higher sea levels could significantly alter the types and magnitudes of hazards faced by Portsmouth.

Location - Portsmouth is vulnerable to flooding in several locations. Generally, the city is at risk within the Flood Zones identified by FEMA on Flood Insurance Rate Maps (FIRM) as well as the extended flood hazard areas defined by the City's Zoning Ordinance. Portsmouth has three flood zones: A, AE, and O. There are also several areas susceptible to flooding that are not within these flood zones.

In addition, there are several studies completed by the city, Rockingham Planning Commission, and the State of New Hampshire that have identified areas in Portsmouth that are experiencing repeated flooding or are predicted to experience repeated flooding. These studies include the 2025 Master Plan, 2024 Emergency Operations Plan, 2023 Seacoast Transportation Corridors Vulnerability Assessment, 2018 Historic Resources Climate Change Vulnerability Assessment and Adaptation Plan, 2017 Prescott Park Master Plan, 2015 Climate Change Vulnerability Assessment, and 2015 Climate Resilience Evaluation and Awareness Exercise Tool and Report. Map 2: Past and Future Hazards highlights areas prone to flooding and other natural hazards.

The Committee identified the following areas of Portsmouth at risk of recurring flooding or the high potential for future flooding:

- North Mill Pond
- South Mill Pond
- South End
- Peirce Island
- Little Harbour
- Sagamore Creek

These areas contain significant historical, cultural, and economic development resources, including Strawberry Banke and the Historic District, and the downtown business district, which is central to the Port of New Hampshire and the region's tourism, recreation, and fisheries economy.

Extent – Portsmouth's coast is vulnerable to flooding from major coastal storms year-round. Tropical storms and hurricanes are a threat from late summer through fall. Extra-tropical storms, such as Nor'Easters, can occur in any month. These storms bring strong onshore winds, causing significant changes in the water level along the coast in addition to tides. Storm surge can result in significant flooding and damage to the natural and built environment and is exacerbated by rising-sea levels. The extent of flooding in Portsmouth can range from minimal to severe. Minimal flooding can result in high water alongside roads and in yards; severe flooding can result in washed out roads and homes and businesses isolated by high and fast-moving water. The extent of the flood zones can be seen in Map 2: Past and Future Hazards. The NH Dam Bureau reports there are three active dams in Portsmouth, listed below. Two of the dams are categorized as Non-Menace and one is categorized as Low Hazard.

Dams – The State of New Hampshire places every dam into one of four classifications, which are differentiated by the degree of potential damage that a failure of the dam is expected to cause. The classifications are as follows:

- Non-Menace structure – not a menace because it is in a location and of a size that failure or mis-operation of the dam would not result in probable loss of life or loss to property, less than six feet in height if it has a storage capacity greater than 50-acre feet, or less than 25 feet in height if it has a storage capacity of 15 to 50 acre-feet.
- Low Hazard structure – has a low hazard potential because it is in a location and of a size that failure or mis-operation of the dam would result in no possible loss of life, low economic loss to structures or property, structural damage to local or private roads that could render roads impassable, the release of liquid industrial, agricultural or commercial wastes, septage or contaminated sediment if the storage capacity is less than two-acre feet and is located more than 250 feet from a water body, reversible environmental losses to environmentally sensitive areas.
- Significant Hazard structure – has a significant hazard potential because it is in a location and of a size that failure or mis-operation of the dam would result in no probable loss of lives, major economic loss to structures or property, structural damage to a Class I or II road that could render the road impassable, major environmental or public health losses.
- High Hazard structure – has a high hazard potential because it is in a location and of a size that failure or mis-operation of the dam would result in probable loss of human life, structural damage to an interstate highway which could rend the road impassable, the release of a quantity and concentration of hazardous waste, and any other circumstance that would more likely cause one or more deaths.

Table 1 - Active Dams in Portsmouth
Source: NH Dam Bureau, June 2024

Dam Name	Dam Owner	Hazard Classification	River/Source	Height/ Impoundment Area
South Mill Pond Dam	City of Portsmouth	Low	Atlantic Ocean	13.5 feet/9 acres
Sagamore Creek Dam	Iafolla Co.	Non-Menace	Sagamore Creek	8 feet/1 acre
Homewoods by Hilton Detention Pond Dam	Doaks LLC	Non-Menace	Runoff	13 feet/0.17 acre

Probability - The probability of flooding roadways and properties from heavy rain, storm surge, rapid snow melting, and compound flooding is high, especially in the areas listed above. The NH Dam Bureau classifies one dam owned by the City as Low Hazard and two privately owned dams

as Non-Menace, as described in Table 2. The City works with dam owners and abutters to monitor dam integrity and manage water levels. The City also regularly assesses culverts to ensure integrity and the ability to pass stormwater. See Table 3, Hazard Identification and Risk Assessment.

Past Occurrence – Flooding is the most common hazard impacting Portsmouth. The City’s location along the tidal Piscataqua River increases the risks posed by climate change, including sea-level rise, coastal storm surge, compound flooding, and extreme precipitation events. Portsmouth and surrounding coastal communities experience frequent inundation of roads and properties from storm events and high astronomical tides. Several flood events have occurred since the 2017 Plan Update, including January 13, 2024, when the combination of a high tide at 9.6 feet, a storm surge of two feet, one inch of rain combined with snow melt, and 30 mph winds resulted in widespread flooding across roadways and properties in downtown and low-lying neighborhoods. Strawberry Banke Museum experienced unprecedented flooding, damaging historic buildings. Extensive coastal flooding impacted Portsmouth on December 23, 2022, when a winter storm combined with peak high tide to create a nearly three-foot storm surge. The Seavey Island tide gauge along the Maine/New Hampshire border registered the peak tide at 12.5 feet, a full foot above flood stage. Storms in July 2023 and March 2018 also resulted in extensive flooding. Several locations were identified by the Committee as areas of chronic reoccurring flooding or high potential for future flooding, as listed above and identified on Map 2 and listed above. The City has not experienced a dam failure and maintains a pro-active dam management program.

Community Vulnerability – The Committee identified several areas in Portsmouth as being vulnerable to flooding caused by heavy rains, coastal high tides, storm surge, compound flooding, snow melt, ice jams, and rising sea-level. These areas are listed above and depicted on Map 2. Closure of these roads due to high water and/or unsafe driving conditions can prevent travel to homes, schools, and businesses, and restrict emergency response vehicles. High water levels and swiftly moving water can also cause culvert failure and erosion, undermining road safety.

National Flood Insurance Program (NFIP) - In 1968, Congress created the National Flood Insurance Program (NFIP) in response to the rising cost of taxpayer funded disaster relief for flood victims and the increasing amount of damage caused by floods. The Federal Insurance and Mitigation Administration (FIMA), a component of the Federal Emergency Management Agency (FEMA) manages the NFIP and oversees the floodplain management and mapping components of the program.

Communities participate in the NFIP by adopting and enforcing floodplain management ordinances to reduce flood damage. In exchange, the NFIP makes federally subsidized flood insurance available to homeowners, renters, and business owners in these communities. Flood insurance, Federal Grants and loans, Federal disaster assistance and federal mortgage insurance is unavailable for the acquisition or construction of structures located in the floodplain shown on the NFIP maps for those communities that do not participate in the program.

To get secure financing to buy, build or improve structures in the Special Flood Hazard areas, it is legally required by federal law to purchase flood insurance. Lending institutions that are federally regulated or federally insured must determine if the structure is in the SFHA and must provide

written notice requiring flood insurance. Flood insurance is available to any property owner located in a community participating in NFIP.

Table 2: Portsmouth NFIP Policy and Loss Statistics
Source: NH Office of Planning and Development, June 2024

Policies in force	Insurance in Force	Number of Paid Losses (since 1978)	Total Losses Paid (since 1978)
<p style="text-align: center;">132</p> <p>82 Pre-FIRM policies <u>50 Post-FIRM policies</u> 71 single-family residential 15 multi-family residential 28 other residential 18 non-residential</p>	\$41,636,000	40	\$506,074

Portsmouth joined the Regular Program of the NFIP on May 17, 1982. Initial FIRMs were dated May 17, 1982, and current FIRM and FIS are dated January 29, 2021. The most recent community assistance visit was August 17, 2016.

Portsmouth has adopted and implemented substantial improvements to the City’s floodplain management regulations. The Floodplain Overlay District encompasses Special Flood Hazard Areas and Extended Flood Hazards Areas. The City’s Planning and Sustainability Department, Zoning and Code Enforcement Department, Emergency Management, Planning Board, and City Council guide development and ensure compliance and enforcement of NFIP standards. Code Enforcement oversees floodplain administration and is responsible for determining substantial improvement and damage. These determinations are made for all development in the Floodplain Overlay District that proposes to improve an existing structure, including alterations, movement, enlargement, replacement, repair, additions, rehabilitations, renovations, repairs of damage from any origin, and other improvements of or work on such structure including within its existing footprint.

The City has created a robust outreach and awareness program to inform residents and property owners about NFIP, City floodplain management regulations, and flood mitigation initiatives. This information is available on the City’s website. In addition, outreach to residents and property owners in the floodplain is a cornerstone of the City’s many Climate and Resiliency projects, enabling the City to partner with property owners to define and prioritize the actions needed from City staff and leadership.

Repetitive Loss Properties - A specific target group of repetitive loss properties is identified and serviced separately from other NFIP policies by the Special Direct Facility (SDF). The target group includes every NFIP insured property that, since 1978 and regardless of any change(s) of ownership during that period, has experienced four or more paid losses, two paid flood losses within a 10-year period that equal or exceed the current value of the insured property, or three

or more paid losses that equal or exceed the current value of the insured property, regardless of any changes of ownership, since the buildings construction or back to 1978. Target group policies are afforded coverage, whether new or renewal, only through the SDF.

The FEMA Regional Office provides information about repetitive loss properties to State and local floodplain management officials. The FEMA Regional Office may also offer property owners building inspection and financial incentives for undertaking measures to mitigate future flood losses. These measures include elevating buildings from the flood area, and in some cases drainage improvement projects. If the property owners agree to mitigation measures, their property may be removed from the target list and would no longer be serviced by the SDF.

Portsmouth NFIP Repetitive Flooding - As of June 2024, Portsmouth has had five repetitive loss buildings with payments totaling \$88,096.05.

Floodplain Management Goals for Reducing Flood Risks - A major objective to floodplain management is to continue participation in the NFIP. Communities that agree to manage Special Flood hazard Areas shown on NFIP maps participate in the NFIP by adopting minimum standards. The minimum requirements are the adoption of the floodplain Ordinances and Subdivision/Site Plan Review requirements for land designated as Special Flood hazard Areas. Under Federal Law, any structure located in a floodplain is required to have flood insurance. Federally subsidized flood insurance is available to any property owner located in a community participating in the NFIP. Communities that fail to comply with the NFIP will be put on probation and/or suspended. Probation is a first warning where all policy holders receive a letter notifying them of a \$50 increase in their insurance. In the event of suspension, the policyholders lose their NFIP insurance and are left to purchase insurance in the private sector, which is of significantly higher cost. If a community is having difficulty complying with NFIP policies, FEMA is available to meet with staff and volunteers to work through the difficulties and clear up any confusion before placing the community on probation or suspension.

Potential Administrative Techniques to Minimize Flood Losses in Portsmouth - A potential step in mitigating flood damage is participating in NFIP. Portsmouth continues to consistently enforce NFIP compliant policies to continue its participation in this program and has effectively worked within the provisions of NFIP. Below is a list of actions Portsmouth should consider, or continue to perform, to comply with NFIP:

- Participate in NFIP training offered by the State and/or FEMA (or in other training) that addresses flood hazard planning and management.
- Establish Mutual Aid Agreements with neighboring communities to address administering the NFIP following a major storm event.
- Address NFIP monitoring and compliance activities.
- Revise/adopt subdivision regulations, erosion control regulations, board of health regulations to improve floodplain management in the community.
- Prepare, distribute, or make available NFIP insurance and building codes explanatory pamphlets or booklet.
- Identify and become knowledgeable of non-compliant structures in the community.

- Inspect foundations at time of completion before framing to determine if lowest floor is at or above Base Flood Elevation (BFE) if they are in the floodplain.
- Require the use of elevation certificates.
- Enhance local officials, builders, developers, local citizens, and other stakeholders' knowledge of how to read and interpret the FIRM.
- Work with elected officials, the state and FEMA to correct existing compliance issues and prevent any future NFIP compliance issues through continuous communications, training, and education.
- Prohibit septic systems in floodplains.

Hurricane-High Wind Events

Description - Significantly high winds occur especially during hurricanes, tornadoes, winter storms and thunderstorms. Falling objects and downed power lines are dangerous risks associated with high winds. In addition, property damage and downed trees are common during high wind occurrences.

- **Hurricanes and Coastal Storms** - A hurricane is a tropical cyclone in which winds reach speeds of 74 miles per hour or more and blow in a large spiral around a relatively calm center. The eye of the storm is usually 20-30 miles wide and may extend over 400 miles. High winds are a primary cause of hurricane-inflicted loss of life and property damage. Hurricanes can also include coastal storm surges. The Saffir–Simpson hurricane wind scale (SSHWS), or the Saffir–Simpson hurricane scale (SSHS) for short, classifies hurricanes into five categories distinguished by the intensities of their sustained winds. To be classified as a hurricane, a tropical cyclone must have maximum sustained winds of at least 74 mph, Category 1. The highest classification in the scale, Category 5, is reserved for storms with winds exceeding 156 mph. The Saffir/Simpson Hurricane Scale is included in Appendix C. Portsmouth's proximity to the Atlantic Ocean makes the community vulnerable to coastal storms and the associated storm surge.
- **Tornadoes** - A tornado is a violent windstorm characterized by a twisting, funnel shaped cloud. They develop when cool air overrides a layer of warm air, causing the warm air to rise rapidly. The atmospheric conditions required for the formation of a tornado include great thermal instability, high humidity, and the convergence of warm, moist air at low levels with cooler, drier air aloft. Most tornadoes remain suspended in the atmosphere, but if they touch down, they become a force of destruction. Tornadoes produce the most violent winds on earth, at speeds of 280 mph or more. In addition, tornadoes can travel at a forward speed of up to 70 mph. Damage paths can be more than one mile wide and 50 miles long. Violent winds and debris slamming into buildings cause the most structural damage. The Enhanced Fujita Scale is the standard scale for rating the severity of a tornado as measured by the damage it causes. A tornado is usually accompanied by thunder, lightning, heavy rain, and a loud "freight train" noise. In comparison with a hurricane, a tornado covers a much smaller area but can be more violent and destructive.
- **Severe Thunderstorms** - All thunderstorms contain lightning. During a lightning discharge, the sudden heating of the air causes it to expand rapidly. After the discharge, the air contracts quickly as it cools back to ambient temperatures. This rapid expansion and

contraction of the air causes a shock wave that we hear as thunder, which can damage building walls and break glass.

- **Lightning** - Lightning is a giant spark of electricity that occurs within the atmosphere or between the atmosphere and the ground. As lightning passes through the air, it heats the air to a temperature of about 50,000 degrees Fahrenheit, considerably hotter than the surface of the sun. Lightning strikes can cause death, injury, and property damage.
- **Hail** - Hailstones are balls of ice that grow as they're held up by winds, known as updrafts, which blow upwards in thunderstorms. The updrafts carry droplets of supercooled water – water at a below freezing temperature – but not yet ice. The supercooled water droplets hit the balls of ice and freeze instantly, making the hailstones grow. The faster the updraft, the bigger the stones can grow. Most hailstones are smaller in diameter than a dime, but stones weighing more than a pound have been recorded. Details of how hailstones grow are complicated, but the results are irregular balls of ice that can be as large as baseballs, sometimes even bigger. While crops are the major victims, hail is also a hazard to vehicles and windows.

Location - Hurricane events are more potentially damaging with increasing proximity to the coast. Portsmouth's location adjacent to the Atlantic Coast makes hurricanes and high wind events severe threats. For this Plan, high-wind and lightning events were considered to have an equal chance of affecting any part of Portsmouth.

Extent – Hurricane strength is measured using the Saffir-Simpson scale, located in the appendix of this Plan. Portsmouth is located within Zone II hurricane-susceptible region (indicating a design wind speed of 160 mph). From 1950 to 2018 Rockingham County was subject to 9 tornado events, these included 2 type F0 (Tornado, 40-72 mph), 2 type F1 (Moderate Tornado, 73-112 mph), 4 type F2 (Significant Tornado, 113-157 mph) and 1 type F3 (Severe Tornado, 158-206 mph). Type 3 tornados can cause severe damage including tearing the roofs and walls from well-constructed homes, trees can be uprooted, trains over-turned, and cars lifted off the ground and thrown. Between 1900 and 2018 2 hurricanes have made landfall in New Hampshire, category 1 and category 2. Measurement scales for thunderstorms, lightning risk, and hail are in the appendix of this Plan.

Probability -High. The State of New Hampshire's Multi-Hazard Mitigation Plan Update 2023 rates Rockingham County with high likelihood of hurricane, tornado, and "Nor'-Easters" events. Also, it rates the risk of downbursts, lightning, and hail events as moderate. See Table 3, Hazard Identification and Risk Assessment.

Past Occurrence – Between 1635 and 2018 14 hurricanes have impacted the State of New Hampshire. The worst of these occurred on September 21, 1938, with wind speeds of up to 186 mph in MA and 138 mph elsewhere. Thirteen of 494 people killed by this storm were residents of New Hampshire. The Storm caused \$12,337,643 in damage (1938 dollars); timber not included. Hurricanes Sandy and Irene created areas of localized flooding in Portsmouth and power loss. High wind events in 2010, 2014, 2018, 2023, and 2024 resulted in extensive power outages, downed wires and trees in neighborhoods throughout the city. Lightning strikes from a fast-

moving thunderstorm on June 4, 2024, caused two separate house fires within minutes of each other.

Community Vulnerability – The Committee determined that high winds and heavy rain associated with hurricanes, as well as lightning and hail, can impact every neighborhood in Portsmouth before, during, and after the storm, resulting in downed trees, flooding of ponds, rivers, streams, roads and basements, and damage to home, businesses, and infrastructure. Infrastructure most at risk includes power lines, shoreline infrastructure, trees, shingled roofs, chimneys, shorefront neighborhoods, boats and docks, parks and harbors.

Severe Winter Weather

Description – Severe winter weather in the form of heavy snowstorms, ice storms and Nor’easters are a threat to the community with subzero temperatures from extreme wind chill and storms causing low visibility for commuters. Heavy snow loads from storms are known to collapse buildings. Ice storms disrupt power and communication services. Extreme cold affects vulnerable populations, including the elderly and unhoused.

- **Heavy Snowstorms** - A winter storm can range from moderate snow to blizzard conditions. Blizzard conditions are considered blinding wind-driven snow over 35 mph that lasts at least three hours. A severe winter storm deposits four or more inches of snow during a 12-hour period or six inches of snow during a 24-hour period.
- **Ice Storms** - An ice storm involves rain, which freezes upon impact. Ice coating at least one-fourth inch in thickness is heavy enough to damage trees, overhead wires, and similar objects. Ice storms also often produce widespread power outages.
- **Nor’easter** - A Nor’easter is a large weather system traveling from South to North passing along or near the seacoast. As the storm approaches New England and its intensity becomes increasingly apparent, the resulting counterclockwise cyclonic winds impact the coast and inland areas from a Northeasterly direction. The sustained winds may meet or exceed hurricane force, with larger bursts, and may exceed hurricane events by many hours (or days) in terms of duration.

Location - Severe winter weather events have an equal chance of affecting any part of Portsmouth.

Extent - Large snow events in Southeastern New Hampshire can produce 30 inches of snow. Portions of central New Hampshire recorded snowfalls of 98” during one slow moving storm in February of 1969. Ice storms occur regularly in New England. The Sperry-Piltz ice accumulation scale is found in the Appendix of this Plan. Many severe ice storms have been recorded that have affected New Hampshire since 1929. These events caused disruption of transportation, loss of power and millions of dollars in damage.

Probability - High. The State of New Hampshire’s Multi-Hazard Mitigation Plan Update 2023 rates Rockingham County with high likelihood of heavy snows and ice storms. See Table 3, Hazard Identification and Risk Assessment.

Past Occurrence – Portsmouth has been impacted by six severe winter storms in the past five years. Two Nor’easters in 2018 and a heavy snowstorm in December 2022 resulted in power outages and damage to coastal infrastructure. At its peak the 2022 snowstorm dropped four inches of snow in one hour. Two Nor’Easters in March 2023 and March 2024 resulted in wet, heavy snowfall amounts over six inches combined with gusty winds, resulting in power outages and required extensive snow removal, removal of fallen trees, and utility repairs.

Community Vulnerability - Severe winter weather has struck Portsmouth and every other community in the region on an annual basis in recent memory. The Committee determined that heavy snow, strong and gusty winds, and frigid temperatures can impact all parts of the city equally, resulting in downed trees and power lines, extended power outages, and unsafe driving conditions. Extended power outages and the resulting loss of heat in homes of elderly and vulnerable residents are of concern. Rapid snow melting after severe winter weather can result in flooding of rivers and streams, posing risk to roads and structures. The Committee identified the elderly and vulnerable populations, utility lines and towers, and trees at greatest risk from severe winter weather.

Wildfire

Description - Wildfire is defined as an uncontrolled and rapidly spreading fire, including grass and forest fires. A forest fire is an uncontrolled fire in a woody area. They often occur during drought and when woody debris on the forest floor is readily available to fuel the fire. Grass fires are uncontrolled fires in grassy areas.

Location - The Committee identified the southern half of the city and the forest surrounding the Urban Forestry Center as most at risk of wildfire.

Extent - A wildfire in Portsmouth is unlikely, but if a crown fire were to occur it could be very damaging to structures abutting wooded areas of the city. The neighborhoods in the southern half of the city are relatively low-density residential compared to the more urban center of the city. A large grass fire could damage structures and neighborhood buildings near large open areas. A large grass and forest fire has not impacted Portsmouth in recent memory. The largest wildfire in Portsmouth has not surpassed six acres. The Hazard Mitigation Committee expects a wildfire of less than 10 acres to be the worst-case scenario. The Wildland-Urban Interface Scale, a tool to quantify the expected severity of wildfire events in developed areas, is included in Appendix K.

Probability - Medium. The State of New Hampshire’s Multi-Hazard Mitigation Plan Update 2023 rates Rockingham County with moderate risk to wildfires. See Table 3, Hazard Identification and Risk Assessment

Past Occurrence - Most wildfires in Portsmouth are minor brush fires. No Large fires have occurred within recent memory. Smoke from Canadian wildfires impacted air quality in 2023.

Community Vulnerability - The Committee determined that all forested and open areas in Portsmouth are prone to wildfires, with the threat increasing during periods of drought. Increasing development in the southern and more forested part of the city increases vulnerability

to wildfire as the number of structures and the population increases. The Committee summarized the threat as follows:

- Structures located near large open vegetated areas are prone to lightning strikes.
- Vulnerability increases during drought events.
- Tree debris created by high wind and winter storm events.

Conflagration

Description – Conflagration is a large destructive fire. In this Plan, it refers to an urban fire that is spread due to tightly spaced buildings.

Location – The Committee identified the urban center of Portsmouth as at risk of conflagration.

Extent – The extent of conflagration could be extreme given the tight building density and old wooden structures located in downtown Portsmouth and abutting neighborhoods.

Probability – The Committee determined the probability of conflagration is medium. See Table 3, Hazard Identification and Risk Assessment.

Past Occurrence – Three fires over a decade in the early 19th century destroyed 500 buildings in downtown Portsmouth, resulting in the brick buildings present today. Multi-alarm fires in downtown Portsmouth have occurred in 2013 and 2015. A fire destroyed the State Street Saloon downtown in April 2017, with over fifty departments responding.

Community Vulnerability – The Committee determined that closely situated wooden structures, historic buildings, and structures without adequate fire protection are most at risk of conflagration. Redevelopment in Portsmouth’s downtown increases the risk of conflagration as building density and population increase.

Earthquakes

Description – Seismic activity including landslides and other geologic events. Geologic events are often associated with California, but New England is considered a moderate risk earthquake zone. An earthquake is a rapid shaking of the earth caused by the breaking and shifting of rock beneath the earth’s surface. Earthquakes can cause buildings and bridges to collapse, disrupt gas, electric and phone lines, and often cause landslides, flash floods, fires, and avalanches. Larger earthquakes usually begin with slight tremors but rapidly take the form of one or more violent shocks, and end in vibrations of gradually diminishing force called aftershocks. The underground point of origin of an earthquake is called its focus; the point on the surface directly above the focus is the epicenter. The magnitude and intensity of an earthquake is determined using scales such as the Richter Magnitude Scale, located in the Appendix of this Plan.

Location – An earthquake has an equal chance of affecting all areas of Portsmouth.

Extent - New England is particularly vulnerable to the injury of its inhabitants and structural damage because of our built environment. Few New England States currently include seismic

design in their building codes. Massachusetts introduced earthquake design requirements into their building code in 1975 and Connecticut very recently did so. However, these specifications are for new buildings, or very significantly modified existing buildings only. Existing buildings, bridges, water supply lines, electrical power lines and facilities, etc. have rarely been designed for earthquake forces (New Hampshire has no such code specifications).

Probability - Moderate. The State of New Hampshire's Multi-Hazard Mitigation Plan 2023 ranks all the Counties in the State with at moderate risk to earthquakes. See Table 3, Hazard Identification and Risk Assessment.

Past Occurrence - Large earthquakes have not affected the City of Portsmouth within recent memory. The strongest damaging quakes to impact New Hampshire were centered in Tamworth on December 20 and 24, 1940, both with a measured magnitude of 5.8. The Hazard Mitigation Committee expects a magnitude 3.4 to 4.5 magnitude to be the worst-case scenario.

Community Vulnerability - The Committee determined that earthquakes do not pose a frequent threat to Portsmouth, but if one were to occur the most vulnerable structures include brick buildings, steeples, bridges and other infrastructure, dams, and utility lines, as well as secondary hazards such as fire, power outages, or a hazardous material leak or spill.

Drought

Description - Drought is a period of unusually constant dry weather that persists long enough to cause deficiencies in water supply (surface or underground). Droughts are slow-onset hazards that can severely affect municipal water supplies, private water wells, crops, recreation resources, and wildlife. The City of Portsmouth operates a regional water system that includes Portsmouth, Pease Tradeport, Newington, New Castle, Greenland, and portions of Rye and Madbury. Water supply wells and a reservoir are located outside of the City's limits. If drought conditions extend over several years, the direct and indirect economic impacts can be significant. High temperatures, high winds, and low humidity can worsen drought conditions and make areas more susceptible to wildfire. In addition, human actions and demands for water resources can accelerate drought-related impacts.

Location – The Committee determined that drought poses risks to the municipal water supply serving the city and to private wells. The risks of wildfire associated with drought conditions are greatest in forested and open grassland areas.

Extent - Although New Hampshire is typically thought of as a water-rich state, there are times the demand for water can be difficult to meet. A combination of increased population and extended periods of low precipitation can cause reduced water supplies. Drought can impact Portsmouth after extended periods with limited rain and snowfall, often for several months, and is a city-wide hazard, impacting both private wells and the City's municipal water system surface water and groundwater supplies. Rockingham County experienced extreme drought in 2021 and 2022 referred to as a D3 on the U.S. Drought Monitor Scale. The Hazard Mitigation Committee expects extreme drought to be the worst-case scenario. The City's DPW monitors the information provided by NH DES Drought Management Program. The U.S. Drought Monitor Scale is in the appendix of this Plan.

Probability - Low. See Table 3, Hazard Identification and Risk Assessment.

Past Occurrence - The State of New Hampshire Multi-Hazard Mitigation Plan Update 2023 rates Rockingham Count at low risk for drought. However, drought conditions persisted across southern New Hampshire for two of the last five years, resulting in the City activating a water-use restriction schedule in 2021 and 2022.

Community Vulnerability - The Committee determined that water supply and fire flow are the most at risk due to drought conditions. Increasing development and associated population growth, year-round and seasonal, also stress water supply during periods of drought.

Climate Change

Description - Climate is defined as the long-term, prevailing pattern of temperature, precipitation, and other weather variables at a given location as described by statistics, such as means and extremes. Climate differs from weather in that weather is the current state or short-term variation of these variables at a given location. Climate change is the observed change in atmospheric variables over time that are the result of natural and anthropogenic, or human-caused, influences. Climate change is directly related to the ongoing increase in global temperature, a rise that is influenced by the steady increase in the concentration of atmospheric greenhouse gases that has been occurring and continues to occur across the globe.

Location – Climate change can affect all areas of Portsmouth, in the form of increased temperatures, extreme precipitation events, drought, sea-level rise, and coastal storm surge. All these events could significantly alter the types and magnitudes of hazards impacting Portsmouth. Rising sea-levels are already impacting neighborhoods and infrastructure along the coastline and shoreline of tidal rivers and streams.

Extent – Extreme heat events impact Portsmouth for 3-4 days each summer and the number of days may increase as the result of climate change. The average annual temperature in New Hampshire has increased three degrees since the early 20th century. Winter warming has been larger than any other season. Future winter warming will have large effects on snowfall and snow cover. Flooding from extreme precipitation events, sea-level rise, and coastal storm surge increasingly impacts Portsmouth. Mean precipitation and precipitation extremes are projected to increase in the future, with associated increases in flooding. Portsmouth is planning for a 1-to-1.7-foot sea-level rise by 2050, and six-foot rise by 2100.

Probability – The Committee determined the probability of climate change impacting Portsmouth as high given the increase in hazard events since the last Plan Update. See Table 3, Hazard Identification and Risk Assessment.

Past Occurrence – Annually. Since the 2017 Plan Update, Portsmouth has experienced drought, extreme heat, coastal storms, sea-level rise, and extreme precipitation events, as described under the individual hazard.

Community Vulnerability - The Committee determined that all of Portsmouth is at risk of impacts associated with climate change and the effects of climate change pose real and significant threats to community safety, resilience, and quality of life. The Committee determined that climate change impacts the City in the following ways:

- Flooding of roadways, including evacuation routes, and homes and businesses due to rising sea-levels and increase in extreme precipitation events.
- Rising sea-levels along the coast also threaten City infrastructure, historic resources, and public recreation facilities.
- Increasing periods of extreme heat impact human health, especially among the elderly and vulnerable populations, and stress water supplies.

Extreme Temperatures

Description – Temperatures across New Hampshire have increased by an average of three degrees since 1901, the result of climate change. Warming is highest during the fall and winter seasons and is associated with a decrease in frequency and severity of cold extremes. Conditions of extreme heat are defined as a prolonged period of excessively hot weather, with temperatures above the average high temperature for a particular region for that time of year, often combined with high humidity. In New Hampshire, extreme heat conditions are defined as two days of temperatures over 90 degrees. The heat index is a measure of how hot it really feels when relative humidity is factored in with actual air temperature. The hottest temperature recorded in Portsmouth was 104 degrees on August 2, 1975.

Winter storms, blizzards, and episodes of high barometric pressure accompanied by clear night skies can bring extreme cold temperatures to the region, increasing the risk of frostbite and hypothermia. The risk of extended power outages increases during winter storms, increasing the vulnerability of elderly and vulnerable residents. The coldest temperature recorded in Portsmouth was -26 degree on January 22, 1984.

Location – Extreme temperatures can affect all areas of Portsmouth.

Extent - Extreme heat events impact Portsmouth for 3-4 days each summer, and extreme cold events impact the city 2-3 days each winter. Extreme heat events have impacted Portsmouth in 2021, 2023, and 2024, with temperatures exceeding 90 degrees. The National Weather Service Heat Index is included in this Plan as Appendix K, and the Wind Chill Chart is included as Appendix L.

Probability – High.

Past Occurrence – Annually. The City opened cooling centers during an extreme heat event on June 19-21, 2024.

Community Vulnerability - The Committee determined that all parts of Portsmouth are at risk of impacts associated with extreme temperatures. Extreme heat can cause heat-related illnesses, like heat stroke or heat exhaustion, which occur when the body is unable to cool itself fast enough.

The young, elderly and vulnerable populations are especially at risk of heat stroke. The Emergency Management Coordinator maintains a list of these populations, including addresses for homes, day care centers, and congregate care facilities.

Infectious Disease

Description – Infectious diseases are illnesses caused by organisms – such as bacteria, viruses, fungi, or parasites. Many organisms live in and on our bodies. They are normally harmless or even helpful, but under certain conditions, some organisms may cause disease. Some infectious diseases can be passed from person to person, some are transmitted by bites from insects or animals, and others are acquired by ingesting contaminated food or water or being exposed to organisms in the environment. Signs and symptoms vary depending on the organism causing the infection, but often include fever and fatigue. Mild infections get better on their own without treatment, while some life-threatening infections may require hospitalization. A definition of infectious diseases by the Mayo Clinic is in the Appendix.

According to the United States Centers for Disease Control and Prevention (CDC), the number of people with a disease that is usually present in a community is referred to as the baseline or endemic level of the disease. This number of infections is not necessarily the desired level, which may in fact be zero, but rather is the typical or normal number of people infected. In the absence of intervention and if the number of infections is not high enough to deplete the pool of susceptible persons, the disease may continue to occur at this level indefinitely. Thus, the baseline level is often regarded as the expected level of the disease. While some diseases are so rare in each population that a single case warrants an epidemiologic investigation (e.g., rabies, plague, polio), there are other diseases that occur more commonly so that only deviations from the norm (i.e., seeing more cases than expected) warrants investigation.

Epidemics occur when an agent (the organism) and susceptible hosts are present in adequate numbers, and the agent can be effectively conveyed from a source to the susceptible people. More specifically, an epidemic may result from a recent increase in amount or virulence of the agent, the recent introduction of the agent into a setting where it has not been before, an enhanced mode of transmission so that more susceptible persons are exposed, a change in the susceptibility of people's response to the agent, and/or factors that increase exposure or involve introduction through new portals of entry.

Epidemics may be caused by infectious diseases, which can be transmitted through food, water, the environment, or person-to-person or animal-to-person, and noninfectious diseases, such as chemical exposure, which causes increased rates of illness. Infectious diseases that may cause an epidemic can be broadly categorized into the following groups: foodborne (E.Coli), water (Giardiasis), vaccine preventable (Measles), sexually transmitted (HIV), person-to-person (TB), arthropod borne (Lyme), zoonotic (Rabies), and opportunistic fungal and fungal infections (Candidiasis). An epidemic may also result from a bioterrorist event in which an infectious agent is released into a susceptible population, often through an enhanced mode of transmission, such as aerosolizing.

Location – Infectious disease can affect all areas of Portsmouth.

Extent – The magnitude and severity of infectious disease is described by its speed of onset (how quickly people become sick, or cases are reported) and how widespread the infection is. Some infectious diseases are inherently more dangerous and deadly than others, but the best way to describe the extent of infectious diseases relates to the disease occurrence:

- Endemic – Constant presence and/or usual prevalence of a disease or infection agent in a population within a geographic area
- Hyperendemic – Persistent, high levels of disease occurrence.
- Cluster – Aggregation of cases grouped in place and time that are suspected to be greater than the number expected even though the expected number may not be known.
- Epidemic – An increase, usually sudden, in the number of cases of a disease above what is normally expected.
- Outbreak – The same as epidemic, but over a much smaller geographical area.
- Pandemic – Epidemic that has spread over several countries or continents, usually affecting many people.

Probability – The probability of infectious disease is high.

Past Occurrence – Infectious diseases, such as seasonal influenza, and gastrointestinal illness occur annually in Portsmouth. The COVID-19 pandemic impacted Portsmouth beginning in 2020 and the city continues to experience cases of COVID-19 and community transmission.

Community Vulnerability – The Committee determined that all parts of Portsmouth are at risk of impacts associated with infectious disease. Rates of illness, duration of disease, and the ability to treat or prevent illness once the causative agent is identified are just a few factors that will further determine the vulnerability of the population.

In response to the COVID-19 pandemic, City staff collaborated to oversee information sharing and coordination of the City's pandemic response. Information was distributed via City and school newsletters and emails. The Police and Fire Departments and Health and Welfare Departments worked with City administration to form a task force to share information, and the Recreation Department and Housing Authority also worked as community liaisons, coordinating and transporting food to elderly and homebound residents. The COVID-19 pandemic impacted all facets of municipal government, the general work force, and supply chains for everyday items

Table 3 summarizes Portsmouth’s vulnerability to the natural hazards identified in this Plan Update. Flooding, from sea-level rise, coastal storm surge, and extreme precipitation events resulting from climate change, is the greatest risk facing Portsmouth. The City’s location along a tidal river increases the probability that flooding will result in death or injury, physical losses and damages, and interruptions of service. Portsmouth’s historic downtown is an important economic development resource for the region and state. Locations vulnerable to flooding include critical infrastructure such as the wastewater treatment plant, Portsmouth Middle School, the public library, as well as commercial, industrial, and residential development, shoreland neighborhoods, and significant historical, cultural, and recreational resources, including Prescott Park and Strawberry Banke Museum.

Table 3 – Hazard Identification and Risk Assessment

Scoring for Probability Columns A, B & C	Column A Probability of death or injury	Column B Probability of physical losses and damage	Column C Probability of interruption of service	Column D Probability of occurring within 25 years	Column E (A+B+C/3) Impact average	Column F (D x E) Relative threat	Column G Risk
1=Very Low (0-20%)							High 13.0-21.9
2=Low (21-40%)							
3=Moderate (41-60%)							Medium 6.0-12.9
4=High (61-80%)							
5=Very High (81-100%)							
	Human Impact	Property Impact	Business Impact	Probability of Occurrence	Severity	Risk Severity x Occurrence	Low 0-5.9
Natural Hazard							
Flooding	4.00	5.00	5.00	5.00	4.66	23.30	High
Hurricane/High Wind	3.00	5.00	5.00	5.00	4.33	21.66	High
Coastal Storms	3.00	5.00	5.00	5.00	4.33	21.66	High
Severe Winter Weather	4.00	4.00	4.00	5.00	4.00	20.0	High
Climate Change includes sea-level rise, extreme precipitation events	2.00	5.00	5.00	5.00	4.00	20.00	High
Extreme Temperatures	3.00	3.00	2.00	5.00	2.66	13.33	High
Infectious Disease	5.00	1.00	5.00	4.00	3.66	14.66	High
Lightning/Hail	2.00	3.00	2.00	5.00	2.33	11.66	Medium
Earthquakes	5.00	5.00	5.00	2.00	5.00	10.00	Medium
Drought	1.00	3.00	2.00	5.00	2.00	10.00	Medium
Wildfires	2.00	4.00	3.00	3.00	3.00	9.00	Medium
Conflagration	4.00	5.00	4.00	2.00	4.33	8.66	Medium

Table 4 highlights Presidentially declared disaster and emergency declaration for natural hazard events in New Hampshire from 1986 – 2024.

Table 4: State of New Hampshire					
Presidentially Declared Disasters (DR) and Emergency Declarations (EM) 1986-2024					
<i>Source: State of NH Multi-Hazard Mitigation Plan, 2013 Update and FEMA</i>					
Date Declared	Event	FEMA DR	Program	Amount	Counties Declared
08/27/86	Severe storms/flooding	FEMA-771-DR	PA	\$1,005,000	Cheshire and Hillsborough
04/16/87	Severe storms/flooding	FEMA-789-DR	PA/IA	\$4,888,889	Carroll, Cheshire, Grafton, Hillsborough, Merrimack, Rockingham, and Sullivan
08/29/90	Severe storms/winds	FEMA-876-DR	PA	\$2,297,777	Belknap, Carroll, Cheshire, Coos, Grafton, Hillsborough, Merrimack, and Sullivan
09/09/91	Hurricane	FEMA-917-DR	PA	\$2,293,449	Statewide
11/13/91	Coastal storm/flooding	FEMA-923-DR	PA/IA	\$1,500,000	Rockingham
03/16/93	Heavy snow	FEMA-3101-DR	PA	\$832,396	Statewide
01/03/96	Storms/floods	FEMA-1077-DR	PA	\$2,220,384	Carroll, Cheshire, Coos, Grafton, Merrimack, and Sullivan
10/29/96	Severe storms/flooding	FEMA-1144-DR	PA	\$2,341,273	Grafton, Hillsborough, Merrimack, Rockingham, Strafford, and Sullivan
01/15/98	Ice storm	FEMA-1199-DR	PA/IA	\$12,446,202	Belknap, Carroll, Cheshire, Coos, Grafton, Hillsborough, Merrimack, Strafford, and Sullivan
07/02/98	Severe storms	FEMA-1231-DR	PA/IA	\$3,420,120	Belknap, Carroll, Grafton, Merrimack, Rockingham, and Sullivan
10/18/99	Hurricane/tropical storm Floyd	FEMA-1305-DR	PA	\$750,133	Belknap, Cheshire, and Grafton
3/2001	Snow emergency	FEMA-3166-EM	PA	\$4,500,000	Cheshire, Coos, Grafton, Hillsborough, Merrimack, Rockingham, and Strafford
2/17/2003 - 2/18/2003	Snow emergency	FEMA-3177-EM	PA	\$3,000,000	Cheshire, Hillsborough, Merrimack, Rockingham, and Strafford
09/12/03	Severe storms/flooding	FEMA-1489-DR	PA	\$1,300,000	Cheshire and Sullivan

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03/11/03	Snow emergency	FEMA-3177-EM	PA	\$3,000,000	Cheshire, Hillsborough, Merrimack, Rockingham, and Strafford
01/15/04	Snow emergency	FEMA-3193-EM	PA	\$3,200,000	Belknap, Carroll, Cheshire, Coos, Grafton, Hillsborough, Merrimack, and Sullivan
03/30/05	Snow emergency	FEMA-3207-EM	PA	\$4,654,738	Belknap, Carroll, Cheshire, Grafton, Hillsborough, Merrimack, Rockingham, Strafford, and Sullivan
03/30/05	Snow emergency	FEMA-3208-EM	PA	\$1,417,129	Carroll, Cheshire, Coos, Grafton, and Sullivan
04/28/05	Snow emergency	FEMA-3211-EM	PA	\$2,677,536	Carroll, Cheshire, Hillsborough, Rockingham, and Sullivan
10/26/05	Severe storm/flooding	FEMA-1610-DR	PA/IA	\$14,996,626	Belknap, Cheshire, Grafton, Hillsborough, Merrimack, and Sullivan
05/31/06	Severe storm/flooding	FEMA-1643-DR	PA/IA	\$17,691,586	Belknap, Carroll, Grafton, Hillsborough, Merrimack, Rockingham, and Strafford
4/15/2007 - 4/23/2007	Severe storm/flooding	FEMA-1695-DR	PA/IA	\$27,000,000	Belknap, Carroll, Cheshire, Coos, Grafton, Hillsborough, Merrimack, Rockingham, Strafford, and Sullivan
08/11/08	Severe storms/tornado/flooding	FEMA-1782-DR	PA	\$1,691,240	Belknap, Carroll, Merrimack, Rockingham, and Strafford
09/05/08	Severe storms/flooding	FEMA-1787-DR	PA	\$4,967,595	Belknap, Coos, and Grafton
10/03/08	Severe storms/flooding	FEMA-1799-DR	PA	\$1,050,147	Hillsborough and Merrimack
12/11/08	Severe winter storm	FEMA-3297-EM	DF A/P A	\$900,000	Belknap, Carroll, Cheshire, Coos, Grafton, Hillsborough, Merrimack, Rockingham, Strafford, and Sullivan
01/02/09	Severe winter storm	FEMA-1812-DR	DF A/P A	\$19,789,657	Belknap, Carroll, Cheshire, Coos, Grafton, Hillsborough, Merrimack, Rockingham, Strafford, and Sullivan

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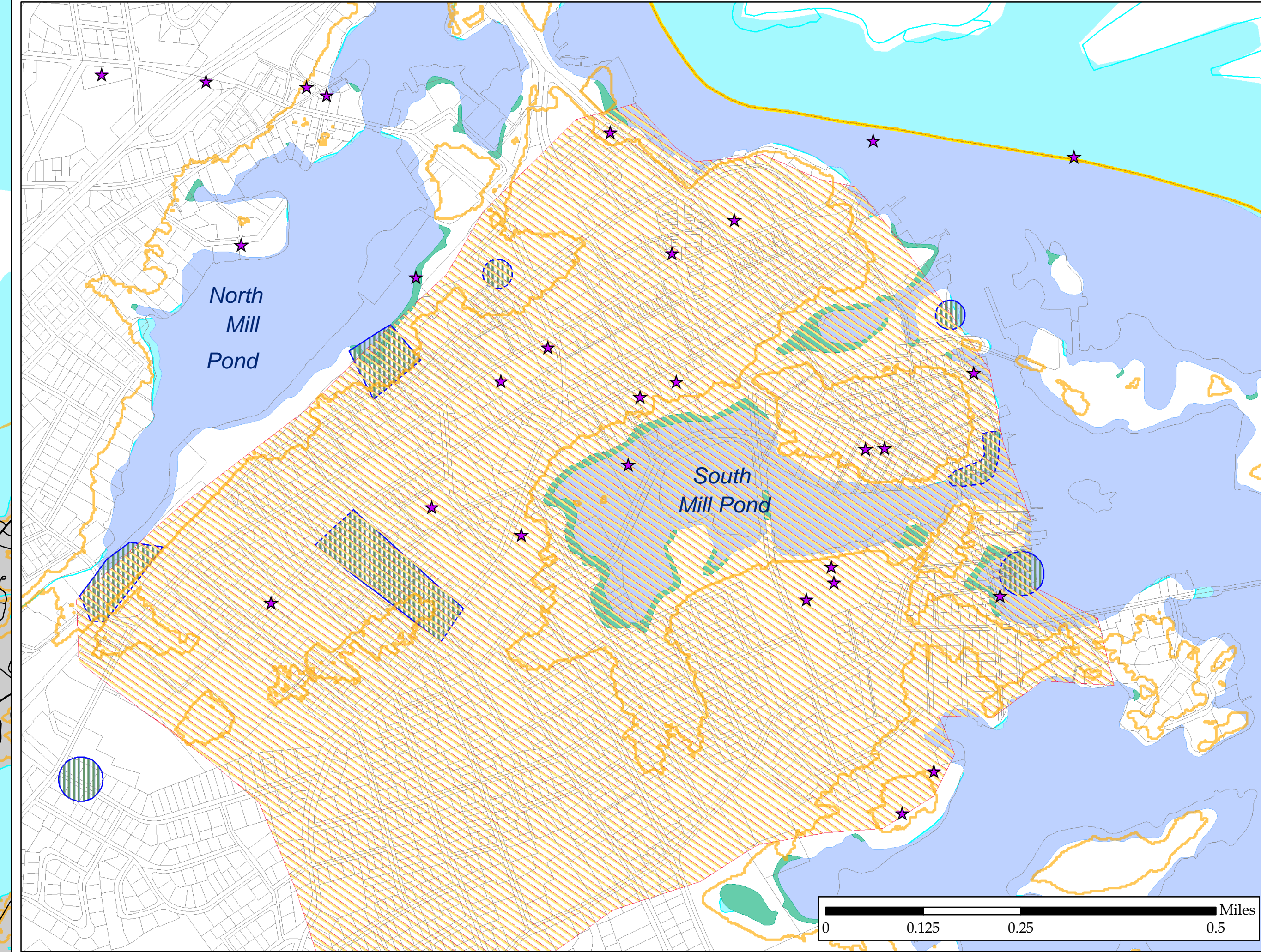
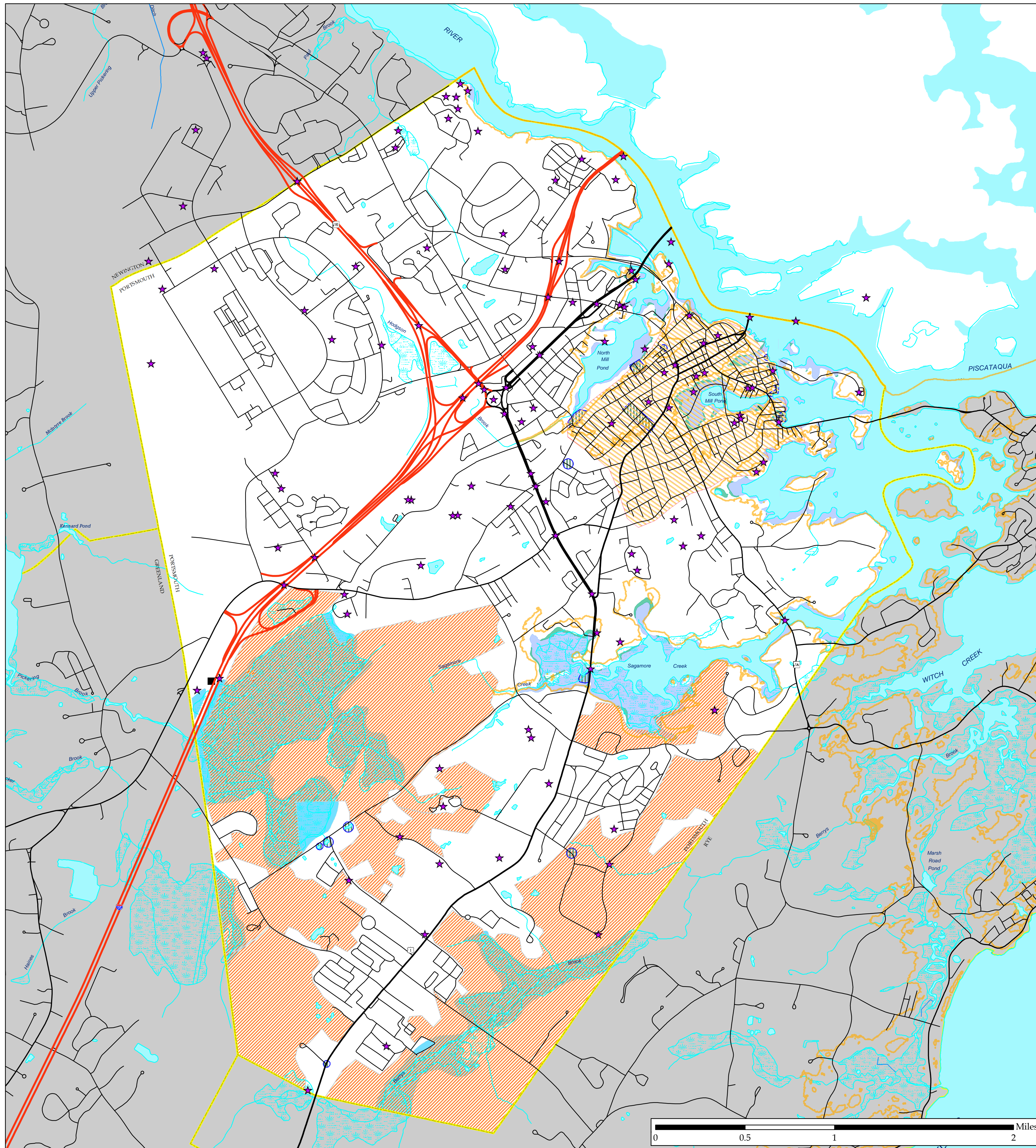
03/29/10	Severe winter storm	FEMA-1892-DR	PA	\$9,103,138	Merrimack, Rockingham, Strafford, and Sullivan
05/12/10	Severe winter storm	FEMA-1913-DR	PA	\$3,057,473	Hillsborough and Rockingham
07/22/11	Severe storms/flooding	FEMA-4006-DR	PA	\$1,664,140	Coos and Grafton
09/03/11	Tropical storm Irene	FEMA-4026-DR	PA/IA	\$11,101,752	Belknap, Carroll, Coos, Grafton, Merrimack, Strafford, and Sullivan
12/07/11	October Nor'easter	FEMA-4049-DR	PA	\$4,411,457	Hillsborough and Rockingham
06/18/12	Severe storms/flooding	FEMA-4065-DR	PA	\$3,046,189	Cheshire
10/30/12	Hurricane Sandy	DR-4095 EM-3360	PA DFA	\$2,132,376	Belknap, Carroll, Cheshire, Coos, Grafton, Hillsborough, Merrimack, Rockingham, Strafford, and Sullivan
2/8/2013 - 2/10/2013	Severe storm/blizzard	DR-4105	PA	\$6,127,598	Belknap, Carroll, Cheshire, Hillsborough, Merrimack, Strafford, and Rockingham
6/26/2013 – 7/3/2013	Severe storms/flooding	DR-4139	PA	\$6,389,705	Cheshire, Sullivan, and Grafton
1/26/2015 – 1/29/2015	Severe winter storm/snowstorm	DR-4209	PA	\$4,607,527	Strafford, Rockingham, and Hillsborough
3/14/2017 – 3/15/2017	Severe winter storm/snowstorm	DR-4316	PA	\$8,306.550	Belknap and Carroll
1/1/2017 – 1/2/2017	Severe storms/flooding	DR-4329	PA	\$6,218,291	Grafton and Coos
10/29/2017 - 11/1/2017	Severe Storm/flooding	DR-4355	PA	\$4,710,744	Sullivan, Merrimack, Belknap, Carroll, Grafton, Coos
3/2/2018 – 3/8/2018	Severe Storm/flooding	DR-4370	PA, IA	\$8,588,765	Rockingham
3/13/2018 – 3/14/2018	Severe Winter Storm/snowstorm	DR-4371	PA, IA	\$1,981,453	Carroll, Strafford, Rockingham
7/11/2019- 7/12/2019	Severe Storm/flooding	DR-4457	PA	\$675,907,70	Grafton
7/17/2021- 7/19/2021	Severe Storm/flooding	DR-4622	PA	\$1,195,832	Cheshire
3/13/2020 – 5/11/2023	COVID-19 Pandemic	EM-3445	PA, IA	NA – still active	New Hampshire
1/20/2020- 5/11/2023	COVID-19 Pandemic	DR-4516	PA, IA	NA – still active	New Hampshire

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7/29/2021-8/2/2021	Severe Storm/flooding	DR-4624	PA	\$3,530,071	Cheshire, Sullivan
12/22/2022-12/25/2022	Severe Storm/flooding	DR-4693	PA	\$1,251,386	Belknap, Carroll, Grafton, Coos
7/9/2023-7/13/2023	Severe Storm/flooding	DR-4740	PA	\$170,675	Rockingham, Cheshire, Sullivan, Grafton, Belknap, Carroll, Coos
12/17/2023-12/21/2023	Severe Storm/flooding	DR-4761	PA	NA	Carroll, Grafton, Coos
1/9/2024-1/14/2024	Severe Storms/flooding	DR-4771	PA	NA	Rockingham, Grafton

Program Key: PA – Public Assistance; IA – Individual Assistance; DFA – Direct Federal Assistance

Map 2: Past and Future Hazards, Portsmouth, New Hampshire



Portsmouth Critical Facilities

- ★ Portsmouth Critical Facilities
- Portsmouth Storm Surge Zone
- Portsmouth Conflagration
- Portsmouth Floods
- Portsmouth Wildfire
- Portsmouth FEMA A Zone
- Portsmouth FEMA 500 Year Zone
- Portsmouth FEMA VE Zone
- Portsmouth FEMA AE Zone

BASE FEATURES

- Interstate
- US Route
- State Route
- Local
- Interstate Ramp
- Major Road Ramp
- Political Boundaries
- Stream or Shoreline
- Apparent Wetland Limit
- Intermittent Stream
- Other Surface Water Feature
- Wetlands (USGS)
- Surface Water Bodies
- Parcels

Past and future hazards were identified by the Hazard Mitigation Planning Committee from the City of Portsmouth. Information was gathered to accompany the development of a Hazard Mitigation Plan under the guidance and funding of the NH Bureau of Emergency Management, April, 2004. Updated Jan. 2017

FEMA Q3 Flood Data was created from the Federal Emergency Management Agency, National Flood Insurance Program, Q3 Flood Data DISC 23 (Maine, New Hampshire, Vermont). ARC/INFO Export files were retrieved from the CD cited above, imported into ARC/INFO, projected (from geographic coordinates, NAD27 to NH State Plane feet, NAD83), processed to reconstruct topology, and written back out as Export files. Any documentation files for the data can be had from RPC, and do not reflect the processing noted above and performed by Complex Systems Research Center, UNH, December, 1997.

Base data (town boundaries, hydrography, roads, railroads and utility lines) are taken from the USGS Digital Line Graph data, 1:24,000, as archived in the GRANIT database at Complex Systems Research Center, Institute for the study of Earth, Oceans and Space, University of New Hampshire, Durham, NH: 1992-1999. Roads have been updated from work done by Rockingham Planning Commission and NH Department of Transportation. Partial updates have been completed through 2000.



CHAPTER IV - CRITICAL FACILITIES

The Critical Facilities List for the City of Portsmouth was developed by Portsmouth's Hazard Mitigation Committee. The Critical Facilities List has been broken up into three categories. The first category contains facilities needed for Emergency Response in the event of a disaster. The second category contains Non-Emergency Response Facilities that have been identified by the committee as non-essential. These are not required in an emergency response event but are considered essential for the everyday operation of Portsmouth. The third category contains Facilities/Populations that the committee wishes to protect in the event of a disaster. A description of critical facilities can be found in Table 5 through Table 7 and locations can be found on Map 3: Critical Facilities.

Table 5: Category 1 - Emergency Response Services and Facilities:

Critical Facility	Facility Type	City	Address
City Fuel Pumps	Emergency Fuel Storage	Portsmouth	680 Peverly Hill Rd.
Portsmouth Fire Department Station #3	Fire Station	Portsmouth	127 International Dr
Portsmouth Fire Department Station #2	Fire Station	Portsmouth	3010 Lafayette Rd.
Portsmouth Fire Station Fire Central	Fire Station	Portsmouth	170 Court St
Portsmouth Regional Hospital	Medical Facility	Portsmouth	333 Borthwick Ave.
Police Station	Police Station	Portsmouth	1 Junkins Ave.
Public Works	Public Works	Portsmouth	680 Peverly Hill Rd.
City Hall	City Hall	Portsmouth	1 Junkins Ave.

Table 6: Category 2- Non-Emergency Response Facilities:

Critical Facility	Facility Type	City	Address
Pease International Tradeport	Airport	Portsmouth	42 Airline Ave.
Sarah Mildred Long Bridge	Bridge	Portsmouth/Kittery, ME	Route 1 Bypass
Memorial Bridge	Bridge	Portsmouth/Kittery, ME	Route 1
Interstate 95 High-Level Bridge	Bridge	Portsmouth/Kittery, ME	I-95
Cell Antenna	Cell Tower	Portsmouth	680 Peverly Hill Rd
Verizon	Cell Tower	Portsmouth	56 Islington St
Capstar Radio Operating Company	Cell Tower	Portsmouth	815 Lafayette Rd
Capstar Radio Operation Company	Cell Tower	Portsmouth	333 Borthwick Ave
Capstar Radio Operation Company	Cell Tower	Portsmouth	1555 Islington St
I-95	Critical Road	Portsmouth	Rt. 95

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Critical Facility	Facility Type	City	Address
Rt. 1	Critical Road	Portsmouth	Rt. 1
Rt. 1 BYP	Critical Road	Portsmouth	Rt. 1 BYP
Rt. 16	Critical Road	Portsmouth	Rt. 16
Portsmouth Traffic Circle	Major Intersection	Portsmouth	Rt. 1, 16
Paul A. Doble Army Reserve Center	Government Facility	Portsmouth	145 West Rd.
Federal Building	Government Facility	Portsmouth	62 Daniel St
Naval Shipyard	Government Facility	Portsmouth	N\A
NH Air National Guard -157	Government Facility	Portsmouth	302 Newmarket St.
NH Port Authority	Government Facility	Portsmouth	555 Market St
Pease Control Tower	Government Facility	Newington	42 Airline Ave.
Portsmouth Harbor	Harbor	Portsmouth	Piscataqua River
Clear Choice MD	Medical Facility	Portsmouth	750 Lafayette Rd.
Convenient MD Urgent Care	Medical Facility	Portsmouth	599 Lafayette Rd.
Portsmouth Regional Hospital Medical – Center for Rehabilitation and Wellness	Medical Facility	Portsmouth	155 Borthwick Ave.
Northeast Rehabilitation Hospital	Medical Facility	Portsmouth	105 Corporate Dr.
Cutts St. Substation	Power Station	Portsmouth	560 Maplewood Ave
Islington St. Substation	Power Station	Portsmouth	435 Interstate Bye-Pass
Jackson Hill Sub Station	Power Station	Portsmouth	2 Jackson Hill St
Lafayette Rd. Substation	Power Station	Portsmouth	940 Lafayette Road
Pease Substation	Power Station	Portsmouth	7 Exeter St.
PSNH	Power Station	Portsmouth	Maplewood Ave
Schiller (PSNH) Power Plant	Power Station	Portsmouth	400 Gosling Rd
Rail Yard	Railroad	Portsmouth	N\A
Atlantic Heights Pump Station	Sewage Facility	Portsmouth	134 Preble Way
Clough Drive Pump Station	Sewage Facility	Portsmouth	210 Clough Dr.
Constitution Avenue Pump Station	Sewage Facility	Portsmouth	280 Constitution Ave.
Corporate Drive Pump Station	Sewage Facility	Portsmouth	215 Corporate Dr.
Deer Street Pump Station	Sewage Facility	Portsmouth	2 Deer St.
Gosling Road Pump Station	Sewage Facility	Portsmouth	120 Gosling Rd
Griffin Road Pump Station	Sewage Facility	Portsmouth	205 Griffin Rd.
Heritage Avenue Pump Station	Sewage Facility	Portsmouth	329 Heritage Ave.
Lafayette Road Pump Station	Sewage Facility	Portsmouth	630 Lafayette Rd
Leslie Drive Pump Station	Sewage Facility	Portsmouth	590 Market St
Marcy Street Pump Station	Sewage Facility	Portsmouth	535 Marcy St.

Critical Facility	Facility Type	City	Address
Marsh Lane Pump Station	Sewage Facility	Portsmouth	4 Marsh Lane
Mechanic Street Pump Station	Sewage Facility	Portsmouth	113 Mechanic St.
Mill Pond Way Pump Station	Sewage Facility	Portsmouth	131 Mill Pond Way
Northwest Street Pump Station	Sewage Facility	Portsmouth	221 Northwest St
Pease Wastewater Treatment Plant	Sewage Facility	Portsmouth	135 Corporate Dr.
Peirce Island Sewage Treatment Plant	Sewage Facility	Portsmouth	200 Peirce Island Rd.
Rye Line Pump Station	Sewage Facility	Portsmouth	3618 Lafayette Rd
Tucker's Cove Pump Station	Sewage Facility	Portsmouth	91 Gosport Rd.
West Road Pump Station	Sewage Facility	Portsmouth	280 West Rd
Woodlands 1 Pump Station	Sewage Facility	Portsmouth	306 FW Hartford Dr.
Woodlands 2 Pump Station	Sewage Facility	Portsmouth	516 FW Hartford Dr.
Control Station #1	Water Facility	Madbury	60 Freshet Rd.
Newington Booster Station	Water Facility	Newington	Arboretum Dr.
Pease Water Treatment Plant	Water Facility	Portsmouth	Grafton Dr
Water Treatment Plant	Water Facility	Madbury	60 Freshet Rd.
Bellamy Reservoir Dam	Water Facility-Reservoir	Madbury	Mill Hill Rd.
Constitution Avenue Tank	Water Tank	Portsmouth	95 Constitution Ave.
Hobbs Hill Tank	Water Tank	Portsmouth	International Dr
Newington Booster Station Tank	Water Tank	Newington	165 Arboretum Drive
NHANG Water Tank	Water Tank	Newington	182 Arboretum Dr.
Spinney Road Tank	Water Tank	Portsmouth	Spinney Lane
Collins Well	Water Facility-Well	Portsmouth	Harvard St
Greenland Well #5	Water Facility-Well	Greenland	Post Rd.
Harrison Well	Water Facility-Well	Portsmouth	Grafton Dr
Haven Well	Water Facility-Well	Portsmouth	Airport Taxiway
Madbury Well #2	Water Facility-Well	Madbury	60 Freshet Rd.
Madbury Well #3	Water Facility-Well	Madbury	60 Freshet Rd.
Madbury Well #4	Water Facility-Well	Madbury	60 Freshet Rd.
Portsmouth Well #1	Water Facility-Well	Portsmouth	Griffin Rd
Smith Well	Water Facility-Well	Portsmouth	Country Club Rd

Table 7: Category 3 - Facilities/Populations to Protect:

The third category contains people and facilities that need to be protected in the event of a disaster.

Critical Facility	Facility Type	City	Address
Portsmouth High School	Emergency Shelter	Portsmouth	50 Andrew Jarvis Dr.
Amerigas	Hazardous Material	Portsmouth	1407 NH 33
Irving Oil Terminal	Hazardous Material	Portsmouth	50 Pebble Way
LP Storage at Barberry Lane	Hazardous Material	Portsmouth	139 Barberry Lane
NHANG Fuel Tanks	Hazardous Material	Newington	400 Gosling Road
Schiller Station Coal Pile	Hazardous Material	Portsmouth	400 Gosling Road
Schiller Station Fuel Tanks A	Hazardous Material	Portsmouth	400 Gosling Road

Critical Facility	Facility Type	City	Address
Schiller Station Fuel Tanks B	Hazardous Material	Portsmouth	400 Gosling Road
Schiller Station Fuel Tanks C	Hazardous Material	Portsmouth	400 Gosling Road
Schiller Station Woodshed	Combustible Material	Portsmouth	400 Gosling Road
Portsmouth Atheneum	Historical Society	Portsmouth	9 Market Square
Portsmouth Library	Library	Portsmouth	125 Parrot Ave
Hillcrest Estates	Mfd Housing Park	Portsmouth	3201 Lafayette Rd.
Oriental Gardens	Mfd Housing Park	Portsmouth	Woodbury Ave.
Snug Harbor	Mfd Housing Park	Portsmouth	1338 Woodbury Ave.
Edgewood Center	Nursing Home	Portsmouth	928 South St.
Wentworth Senior Living	Nursing Home	Portsmouth	346 Pleasant St
Sunbridge Nursing Home	Nursing Home	Portsmouth	188 Jones Ave.
Atlantic Heights	Senior Housing Facility	Portsmouth	40 Bedford Way
Lafayette School	Senior Housing Facility	Portsmouth	100 Lafayette Road
Margeson Apartments	Senior Housing Facility	Portsmouth	245 Middle St.
Feaster Apartments	Senior Housing Facility	Portsmouth	140 Court St.
Woodbury Manor	Senior Housing Facility	Portsmouth	60 Manor Drive
Pleasant Street Apartments	Senior Housing Facility	Portsmouth	438 Pleasant St.
State Street Apartments	Senior Housing Facility	Portsmouth	948 State St.
Cottage Connors Cottage	Senior Housing Facility	Portsmouth	5 Junkins Ave
Water Country	Outdoor Recreation	Portsmouth	2300 Lafayette Rd.
Community Campus	Community Center	Portsmouth	100 Campus Dr.
Dondero Elementary School	School	Portsmouth	32 Van Buren Ave.
Little Harbour Elementary School	School	Portsmouth	50 Clough Dr.
New Franklin Elementary School	School	Portsmouth	1 Franklin Dr
Portsmouth High School	School	Portsmouth	50 Andrew Jarvis Dr.
Portsmouth Middle School	School	Portsmouth	155 Parrot Ave
Robert Lister Academy	School	Portsmouth	35 Sherburne Rd.
Seacoast Community School	School	Portsmouth	100 Campus Dr.
St. Patrick Academy	School	Portsmouth	315 Banfield Rd.
Agape School	Pre-school	Portsmouth	397 Lafayette Rd.
Early Learning Center at Temple Israel	Pre-school	Portsmouth	200 State St.
Portsmouth Head Start	Pre-school	Portsmouth	100 Campus Dr.
KinderCare Learning Center	Pre-school	Portsmouth	72 Mirona Rd.
Camp Seaweed	Child Care	Portsmouth	350 Banfield Rd.
Children's Garden	Child Care	Portsmouth	290 Peverly Hill Rd.

Critical Facility	Facility Type	City	Address
Discovery Child Enrichment Center	Child Care	Portsmouth	30 Rye St.
Little Blessings Child Care Center	Child Care	Portsmouth	1035 Lafayette Rd.
Pat's Family Group Child Care	Child Care	Portsmouth	1400 Woodbury Ave.
Dondero Peak/Community School	Child Care	Portsmouth	32 Van Buren Dr.
Place for Friends and Fun	Child Care	Portsmouth	400 Coolidge Dr.
Edgewood Learning Center	Child Care	Portsmouth	928 South St.
Great Bay Kids Company	Child Care	Portsmouth	81 New Hampshire Ave.
Unal Kaya Davis Childcare	Child Care	Portsmouth	347 Lincoln Ave.
Little Harbor Peak Program	On-site Child Care	Portsmouth	50 Clough Dr.
New Franklin Peak Program	On-site Child Care	Portsmouth	1 Franklin Dr.
Clipper Harbor	Congregate Care	Portsmouth	188 Jones Ave.
Great Bay Residential Facility	Congregate Care	Portsmouth	413 Lafayette Rd.
Inn at Edgewood	Congregate Care	Portsmouth	926 South St.
Chase Home for Children	Congregate Care	Portsmouth	698 Middle St.
Betty's Dream Rainbow Apartments	Housing Facility	Portsmouth	75 Longmeadow Rd.
Krepfels Center	Community Center	Portsmouth	100 Campus Dr.
New Heights	Community Center	Portsmouth	100 Campus Dr.
Seacoast District YMCA	Community Center	Portsmouth	550 Peverly Hill Rd.

Map 3 – Critical Facilities

CHAPTER V – POTENTIAL HAZARD DAMAGE

Identifying Vulnerable Facilities and Calculating the Potential Loss

Numerous studies to identify areas in Portsmouth at risk of natural hazard, as well as options for mitigating hazards, have been completed by the City, Rockingham Planning Commission, and the State of New Hampshire. Several of these mitigation measures have been completed by the City, such as adopting an ordinance regulating development in extended flood hazard areas and assessing historic resources vulnerable to hazards, or are underway, such as the Climate Action Report, which will include city-wide mitigation and adaptation strategies. Preparing to protect Portsmouth’s wealth of cultural and historic resources is an important challenge facing the community.

Flooding

The 2015 Portsmouth Vulnerability Assessment completed by the Rockingham Planning Commission reports that the greatest flood impacts will be to upland areas (particularly within the 100-year floodplain), tidal wetlands, and conserved wetlands. Moderate impacts are anticipated for roadways and critical facilities. Critical facilities impacted by flooding are sewage pump stations and stormwater outfalls. The City continues to work on redesigning and relocating utility infrastructure in the highest risk locations.

Geographically, flooding from the sea-level rise and storm surge scenarios will impact areas surrounding North Mill Pond, South Mill Pond, the South End, Peirce Island, Little Harbour, Sagamore Creek. These areas contain significant historical, cultural, and economic development resources, including Strawberry Banke and the Historic District, and the downtown business district, which is central to the Port of New Hampshire and the region’s tourism, recreation, and fisheries economy. Most of the land affected by projected sea-level rise and coastal storm flooding is located within the current 100-year floodplain with minor extension of flooding into the 500-year floodplain. The occurrence of the three sea-level rise scenarios within the 100-year floodplain provides the rationale to implement climate adaptation strategies within the current 100-year floodplain.

Table 8 – Summary of 2015 Vulnerability Assessment Data

Sea-Level Rise (SLR) Scenarios	SLR 1.7 feet	SLR 4.0 feet	SLR 6.3 feet	SLR 1.7 feet + storm surge	SLR 4.0 feet + storm surge	SLR 6.3 feet + storm surge
Infrastructure (# of sites)	23	30	35	33	40	54
Critical Facilities (# of sites)	0	0	11	8	11	11
Roadways (miles)	1.1	2.1	4.9	4.2	7.5	11.0
Uplands (acres)	104.5	197.3	313.9	287.7	406.6	534.6
Freshwater Wetlands (acres)	1.2	8.6	11.1	10.7	11.8	14.5
Tidal Wetlands (acres)	87.3	94.4	96.3	96.0	97.1	97.9
Conserved and Public Lands (acres)	52.2	64.7	76.1	73.6	85.0	95.4
100-year Floodplain (acres)	927.3	1,017.8	1,023.1	1,022.1	1,023.8	1,023.9
500-year Floodplain (acres)	927.3	1,017.9	1,028.8	1,028.0	1,030.8	1,031.3

The 2013 Coastal Resilience Initiative report completed by the City of Portsmouth modeled four sea-level rise scenarios – 7.5 feet, 11.5 feet, 13.5 feet and 18 feet – and recommends adaptation strategies including flood walls, tide gates, culvert replacements, and elevating roadways and properties. The report estimated the potential financial impact to buildings from flooding based on the monetary value of damages under each of SLR scenarios. Using 2013 property values, the flood impacts range from \$32 million under the 7.5 feet SLR scenario to \$600 million under the 18 feet SLR scenario.

In 2018 the city completed a Historic Resources Climate Change Vulnerability Assessment and Adaptation Plan. The plan integrated quantitative data, such as flood elevation, type of structure, and economic value, with qualitative data, such as National Park Service designations and historic survey, to develop the Historic Resource Valuation and Risk Assessment Map. The study area focused on target areas to evaluate the economic impact of flooding, including groundwater seepage, and sea-level rise – Strawberry Banke Museum, South End, North Mill Pond, Prescott Park, and the working waterfront. The Plan recommends changes to land use regulations, emergency preparedness, evacuation plans, and flood monitoring, and assesses options for fortifying, accommodating, and relocating historic resources.

The 2022 Seacoast Transportation Corridors Vulnerability Assessment completed by the Rockingham Planning Commission evaluated the impacts to travel in the region as the result of sea-level rise and storm surge along roadways in ten coastal communities, including Portsmouth. Roads assessed were Route 1A, Route 1B, Route 1, and I-95 – the primary roadways running from North-South – and Route 101 and Route 286 – the primary evacuation routes running East/West along New Hampshire’s coast. All these roads are vulnerable to sea-level rise and sea-level rise induced groundwater rise in certain areas. Flooding scenarios studied were 1 foot of sea-level rise (SLR), 1.7 feet SLR, 4.0 feet SLR, and 6.3 feet SLR. Table 8 depicts the roadway location in Portsmouth impacted under each SLR scenario.

Table 9 – Portsmouth Roadway Locations Impacted by Sea-Level Rise
Source: 2022 Seacoast Transportation Corridors Vulnerability Assessment

SLR Scenario	1 feet SLR	1.7 feet SLR	4 feet SLR	6.3 feet SLR
Locations	none	none	State St./Daniel St. Marcy St. New Castle Ave. Parrott Ave. Junkins Ave. US 1 at Sagamore Creek	Market St./Russell St. Bartlett St. Richards Ave. Bridge St. NH 1B at Rye town line NH 1A at Sagamore Creek US 1 North of Sagamore Creek

Four feet of sea-level rise brings inundation to Junkins Ave., Parrott Ave., Marcy St., and State St./Daniel St. The segment of roadway underneath the Memorial Bridge ramp is inundated and traffic will need to be re-routed. Flooding along Marcy St. limits access to Prescott Park, Strawberry Banke, Pierce Islands, as well as many homes and businesses along the waterfront between Peirce Island Rd. and New Castle Ave. Impacts along the South Mill Pond affect Junkins Ave. and Parrott Ave. and limit accessibility to City Hall, the Public Library, and the Middle School. The Assessment included a site prioritization, with four locations in Portsmouth prioritized - State St./Daniel St. near the Memorial Bridge, Marcy St. near Prescott Park, Junkins Ave and Parrott Ave., and US 1 over Sagamore Creek.

Hurricane/ High Wind Events

Hurricanes do affect the Northeast coast periodically. Since 1900, two hurricanes have made landfall in the State of New Hampshire. Due to the location of the City of Portsmouth most hurricanes would likely degrade to tropical storms by the time they impact the city. Even degraded hurricanes or tropical storms could still cause significant damage to the City of Portsmouth. Tornadoes are uncommon in New Hampshire and damage largely depends on where the tornado strikes. The potential loss posed by high wind events was calculated by multiplying the assessed value of structures by the percent of damage expected by the hazard event. The 2023 assessed value of all the residential and commercial structures in the City of Portsmouth was \$6,394,367,400. Assuming 1% to 5% damage, a hurricane or tornado could result in \$63,943,674 to \$3,197,183,700 of structure damage. The amount of damage caused by lightning will vary according to the type of structure hit and the type of contents inside.

Severe Winter Weather

Heavy snowstorms typically occur during January and February. New England usually experiences at least one or two heavy snowstorms with varying degrees of severity each year. Power outages, extreme cold and impacts to infrastructure are all effects of winter storms that have been felt in Portsmouth in the past. All these impacts are a risk to the community, including isolation, especially of the elderly, and increased traffic accidents. Damage caused because of this type of hazard varies according to wind velocity, snow accumulation and duration. The potential loss posed by severe winter weather was calculated by multiplying the assessed value of structures by the percent of damage expected by the hazard event. The 2023 assessed value of all the residential and commercial structures in the City of Portsmouth was \$6,394,367,400. Assuming 1% to 5% damage, severe winter weather could result in \$63,943,674 to \$3,197,183,700 of structure damage. The amount of damage caused by lightning will vary according to the type of structure hit and the type of contents inside.

Wildfire

The risk of fire is difficult to predict based on location. Forest fires are more likely to occur during years of drought. The areas identified as at risk of wildfire (Map 2: Past and Future Hazards) by the Hazard Mitigation Committee are in the southern half of the City of Portsmouth. These areas include large tracts of open vegetation including forests and wetlands. Drought conditions increase the risks of wildfire in these open vegetated areas.

Conflagration

Conflagration, a large and damaging urban fire, is a potential hazard in the urban center of Portsmouth. This is due to the age and construction materials of many of the buildings. These structures are also built on small lots, close together. The risk of fire spreading from one building to an adjacent building is high. It is highly unlikely that a fire would burn a large portion of the city before being controlled by the fire department. The potential loss posed by conflagration was calculated by multiplying the assessed value of structures by the percent of damage expected by the hazard event. The 2023 assessed value of all the residential and commercial structures in the City of Portsmouth was \$6,394,367,400. Assuming 1% to 5% damage, conflagration could result in \$63,943,674 to \$3,197,183,700 of structure damage.

Extreme Temperatures

The Committee determined that all parts of the City of Portsmouth are at risk of the impacts associated with extreme temperatures. Young and elderly populations are particularly vulnerable to heat stroke and the Emergency Management Coordinator can direct vulnerable residents and visitors to municipal cooling stations.

Drought

Extended drought can impact municipal water supplies, private drinking wells, and make vegetated areas more susceptible to wildfire. There is no record of monetary damage in the City of Portsmouth related to drought. The 2015 Climate Resilience Evaluation and Awareness Exercise Tool and Report assesses drought impacts on water supply and coastal storm surge on water and wastewater infrastructure.

Earthquakes

Earthquakes can cause buildings and bridges to collapse, disrupt utility infrastructure, and are often associated with landslides and flash floods. Four earthquakes in New Hampshire between 1924-1989 had magnitudes of 4.2 or more. Two of these occurred in Ossipee, one west of Laconia, and one near the Quebec border. If an earthquake were to impact the City of Portsmouth, buildings that are not built to a high seismic design level would be susceptible to structural damage. The potential loss posed by an earthquake was calculated by multiplying the assessed value of structures by the percentage of damage expected by the hazard event. The 2023 assessed value of all the residential and commercial structures in the City of Portsmouth was \$6,394,367,400. Assuming 1% to 5% damage, an earthquake could result in \$63,943,674 to \$3,197,183,700 of structure damage.

Climate Change

The potential hazard damage from climate change is described above under flooding, extreme temperatures, and drought.

Infectious Disease

Epidemics have the potential to cause a significant loss of life and/or widespread illness throughout the State, as well as cause disruptions to economies at all levels. The threat of a pandemic influenza, such as COVID-19, exemplifies a devastating situation where there may be an extreme shortage of essential service workers, a rapid transmission of disease from person-to-person, and no effective vaccination to prevent the illness. The monetary value of this impact cannot be determined.

CHAPTER VI - EXISTING HAZARD MITIGATION PROGRAMS

Research shows how the climate of New Hampshire and the Seacoast region has changed over the past century and predicts the future climate of the region will be affected by human activities that are warming the planet. Overall, New England has been getting warmer and wetter over the last century and the rate of change has increased over the last four decades. As a coastal city on a tidal river, Portsmouth is increasingly vulnerable to storm surges and sea-level rise. Higher temperature events and more intense storm events will impact both the built and natural environments. To address these challenges, the City has proactively designed several hazard mitigation programs to increase mitigate the impacts of natural hazards and increase resiliency. Table 10 describes programs that are currently in place as hazard mitigation actions or strategies for Portsmouth.

Table 10 - Existing Hazard Mitigation Programs for the City of Portsmouth

Existing Hazard Mitigation Programs	Description	Recommended Actions
2025-2030 City Capital Improvements Plan	Prioritizes public improvements and infrastructure needs, including hazard mitigation and adaptation planning, and sets a six-year schedule and financing strategy	Review annually and revise every five years
2025 City Master Plan	Guides land use and development and provides comprehensive vision for the future	Review annually and update as needed
2024 City Climate Action Plan/Climate Future	Establishes climate mitigation targets including climate-smart land use	Review and update as needed
2024 City Zoning Ordinance	Includes floodplain development and shoreline development regulations, wetland buffer regulations, stormwater management	Review annually and revise as needed
2024 City Emergency Operations Plan	Establishes lines of responsibility during a disaster, as well as procedures and resources	Review annually and revise as needed
2023 Seabrook Station Radiological Emergency Plan	Plan for all the municipalities within 10 miles of Seabrook Station; Portsmouth is within the 50-mile radius	Reviewed annually
2022 Seacoast Transportation Corridors Vulnerability Assessment	Identifies and prioritizes roadways and travel corridors in the region at risk of flooding	Revise as needed
2022 City Open Space Plan	Identifies and prioritizes land for protection and includes climate resiliency objectives	Review annually and update as needed
2020 City Subdivision Regulations	Includes flood hazard areas, erosion and sediment control, and stormwater management regulations	Review annually and update as needed
2018 City Historic Properties Climate Change Vulnerability	Uses economic, historic, cultural, and flood water vulnerability measurements to	Review annually and update as needed

Assessment and Adaptation Plan	characterize, risk-assess, and prioritize key historic assets in the City	
2015 City Climate Resilience Evaluation and Awareness Exercise Tool and Report	Assesses risk of drought on drinking water supply and impacts of coastal storm surge on wastewater pump stations	Review annually and update as needed
2013 City Coastal Resilience Initiative	Identifies the impacts of climate change and recommends adaptation measures	Review annually and update as needed
2018 Building Codes	Set minimum safety requirements for residential and commercial buildings relative to hazards, including wind, rain, hail, and other natural hazards	Reviewed annually for compliance with state codes and updated as needed
2007 City Stormwater Management Master Plan	Details City's stormwater management plans to ensure water discharges comply with State of NH MS4 Permit requirements	Update needed
MS4 Permit Requirements	Permit requirements include enhanced post-construction stormwater management, limits on impervious cover, and retrofitting stormwater management infrastructure	Review annually
Emergency Services	Emergency services are provided by Police and Fire Departments in cooperation with other municipal departments, including Emergency Management, Public Works, Health, and Welfare	Emergency service personnel participate in on-going training related to hazard mitigation prevention and response
Emergency Communication Center	Assists the fire department, police department, emergency medical services, and public works	Emergency service personnel participate in on-going training related to hazard mitigation prevention and response
Mutual Aid Agreements	Seacoast Chief Fire Officers Mutual Aid District (SCFOMAD), includes southeastern NH, southern ME, and northeastern MA, assets include a Mobile Command Unit; Seacoast Technical Assistance Response Team (START) is a subsidiary of SCFOMAD and provides all-hazard and all-planning emergency hazardous materials response	Reviewed annually and updated as needed
Public Education and Outreach	City Emergency Management oversees extensive and inclusive public messaging about hazard mitigation and hazard events with information shared on social media, City website and newsletters	Identify stakeholders to assist City with additional messaging relative to hazard mitigation and emergency preparedness

CHAPTER VII – POTENTIAL MITIGATION ACTIONS

The Hazard Mitigation Committee reviewed the City’s existing hazard mitigation programs described in Table 10 and mitigation actions listed in the *2013 FEMA Mitigation Ideas Resource Guide* to develop a comprehensive list of potential mitigation actions, listed below in Table 11. Actions listed in the 2017 Plan were also reviewed by the Committee to determine if they were relevant to this Plan Update and if the action was completed, ongoing, or no longer necessary and removed. Actions were ranked in five mitigation categories – prevention, preparedness, structural protection, emergency services, and public information and involvement, as well as by the type of hazards mitigated. Many new actions were identified by the Committee, incorporating recommended actions outlined in many climate adaptation and resilience reports completed by the City.

Table 11: Potential Mitigation Actions

Mitigation Strategies or Action	Mitigation Category	Natural Hazard(s) Mitigated	Description	Status 2024: New/Completed/ Deferred/ Removed
Develop vegetation setbacks plan	Prevention	Wildfire	Manage vegetation setbacks in areas at risk of wildfire	Removed
Complete culvert replacements in multiple locations	Preparedness, Prevention	Flooding	Replace undersized and improperly sited culverts in locations prone to flooding	Complete and ongoing with additional culvert installation ongoing throughout the life of this Plan
Create shelter at New Franklin School	Emergency Services	All Hazards	New Franklin School is located outside of the floodplain	Removed
Increase GIS capacity for real-time emergency access	Emergency Services	All Hazards	Allows increased efficiency in dispatching emergency services	Completed
Review Building Codes for wind and earthquake standards	Structural Protection	High Wind, Earthquake	Continue researching current codes for high wind	Completed for wind Removed for earthquake
Acquire new imagery of the city	Emergency Services	All Hazards	Imagery benefits City’s mitigation and emergency services	Completed
Purchase fixed electronic variable message boards	Emergency Services	All Hazards	Enable timely communication about hazard preparation and hazard events with the public	Completed and ongoing with new message boards being purchased throughout the life of this Plan
Purchase new vacuum truck	Prevention, Emergency Services	Flooding	Used as part of stormwater management program; truck is shared with other	Completed

Mitigation Strategies or Action	Mitigation Category	Natural Hazard(s) Mitigated	Description	Status 2024: New/Completed/ Deferred/ Removed
			communities as part of a regional mutual aid program	
Acquire backup power for municipal and school buildings and wells	Emergency Services	All Hazards	Backup power would enable these buildings to serve as emergency shelters	Completed and ongoing with new generators being purchased throughout the life of this Plan
Update City's stormwater management plan	Prevention, Structural Protection	Flooding	Stormwater management is difficult in the City's densely developed down City	Completed
Purchase and install signs indicating evacuation routes in parking garages and lots	Emergency Services	All Hazards	Signs would inform visitors and residents of routes identified in the Traffic Hazard Management Plan	Completed and ongoing with new signs being installed throughout the life of this Plan
Improve mutual aid for water support	Emergency Services	Conflagration, Wildfire, Drought	Mutual aid would assure adequate water supply for firefighting	Completed
Protect wastewater pump stations from flooding	Structural Protection	Flooding, including sea-level rise and storm surge	Wastewater pump stations are in areas prone to flooding and sea level rise	Some sites completed and others ongoing throughout the life of this Plan
Develop an urban forestry management plan to reduce fire risk	Prevention, Emergency Services	Conflagration, Wildfire	Identify areas of fire risk in urban areas and develop a management plan	Removed
Study improvement of water transmission from Bellamy Reservoir	Property Protection, Emergency Services	Fire, Drought	Increase the efficiency of transmitting water from Bellamy Reservoir in Madbury to City	Partially completed and ongoing throughout the life of this Plan
Protect historic structures in Prescott Park during stormwater management and climate adaptation infrastructure retrofits	Property Protection	Flooding, including sea-level rise and coastal storm surge	Historic structures in Prescott Park are at risk of damage during construction and installation of upgraded stormwater management and climate adaptation infrastructure	New
Complete Fleet Street sewer separation feasibility study	Structural Protection	Flooding	Project includes water, sewer, and drainage upgrades to improve stormwater management	New

Mitigation Strategies or Action	Mitigation Category	Natural Hazard(s) Mitigated	Description	Status 2024: New/Completed/ Deferred/ Removed
Complete Capacity Management Plan for Public Works Department	Emergency Services	All Hazards	Efficient management of Public Works resources (staff, equipment, training) is needed to reduce the risk of natural hazards	New
Complete Mechanic Street pump station upgrade	Structural Protection	Flooding, including sea-level rise and coastal storm surge	Mechanic Street sewer pump station is at risk of inundation from rising sea-levels and coastal storm surge	New
Formalize agreements for pre-treatment of industrial wastewater	Structural Protection, Natural Resource Protection	Protects human health and the environment	Pre-treating industrial wastewater will improve water quality discharged from the wastewater treatment plant	New
Establish a groundwater monitoring program to measure groundwater flows and the impacts of tidal intrusion on infrastructure	Structural Protection, Property Protection	Flooding, including sea-level rise and coastal storm surge	Coastal storm surge, rising sea-levels, and saltwater intrusion threaten infrastructure and land	New
Rebuild Junkins Avenue causeway to prevent flooding of roadway	Structural Protection	Flooding, including sea-level rise and coastal storm surge	Junkins Avenue is a critical roadway, serving the Police Dept., City Hall, Senior Housing, Middle School, and Public Library	New
Purchase cots and storage trailers for City Health Department for use at emergency shelters	Emergency Services	All Hazards	Health Department needs cots and storage trailers for use at emergency shelters	New
Convert City garage to a secure and climate-controlled storage for Health Department supplies	Emergency Services	All Hazards	Health Department needs secure and climate-controlled storage for supplies	New
Conduct climate change vulnerability assessments every five years	Prevention, Property Protection, Structural Protection,	Climate Change, including flooding, sea-level rise,	Climate change science and data is updated frequently, and accurate vulnerability assessments are needed to	New

Mitigation Strategies or Action	Mitigation Category	Natural Hazard(s) Mitigated	Description	Status 2024: New/Completed/ Deferred/ Removed
	Emergency Services, Public Information and Involvement, Natural Resource Protection	coastal storm surge, extreme precipitation, extreme temperatures, drought	guide City policies and programs	
Continue allocating funds through the CIP for land conservation and natural resource protection projects identified in the City Open Space Plan, including salt marsh and coastal land protection	Prevention, Property Protection, Structural Protection, Natural Resource Protection	Flooding, Hurricane, Coastal Storms, Climate Change, Drought	Conserving undeveloped land from development enables increase resiliency in the form of flood storage, salt marsh and wetland migration, water quality and quantity protection	New
Increase public education and outreach about the types of hazards impacting Portsmouth, the public's role in stormwater management, and pre-disaster mitigation	Public Information and Involvement	All Hazards	The City maintains a robust public information program with opportunities for sharing more information about hazard mitigation and emergency preparedness	New
Update City Stormwater Management Infrastructure Master Plan	Prevention, Structural Protection	Flooding	An update to the 2007 Stormwater Management Infrastructure Master Plan is needed to enable accurate and efficient stormwater management	New
Provide safe pedestrian and bike access into and out of the downtown, including accessing the rail trail	Emergency Services	All Hazards		New
Develop and adopt an MOU with Seacoast Public Health Network to	Emergency Services	Infectious Diseases	Partnering with Seacoast Public Health Network strengthens the City's capacity to serve residents	New

Mitigation Strategies or Action	Mitigation Category	Natural Hazard(s) Mitigated	Description	Status 2024: New/Completed/ Deferred/ Removed
strengthen the partnership with the City during public health emergencies			during an infectious disease outbreak	
Partner with State, Seacoast Municipalities, and the Red Cross to identify a regional emergency shelter location	Emergency Services	All Hazards	A regional emergency shelter location is needed away from the coast for all hazards, especially hurricanes and coastal storms	New
Expand urban tree planting program	Prevention	Extreme Heat	Increasing the number of trees in urban areas can reduce temperatures, mitigating impacts of extreme heat on public health	New

CHAPTER VIII - FEASIBILITY AND PRIORITIZATION OF PROPOSED MITIGATION ACTION

The goal of each strategy or action is reduction or prevention of damage from a hazard event. To determine their effectiveness in accomplishing this goal, a set of criteria was applied to each proposed strategy. A set of questions developed by the Committee that included the STAPLEE method was developed to rank the proposed mitigation actions. The STAPLEE method analyzes the Social, Technical, Administrative, Political, Legal, Economic and Environmental aspects of a project and is commonly used by public administration officials and planners for making planning decisions. The following questions were asked about the proposed mitigation strategies identified in Table 11:

- Does it reduce disaster damage?
- Does it benefit the environment?
- Does it meet regulations?
- Will historic structures be saved or protected?
- Does it help achieve other community goals?
- Could it be implemented quickly?

STAPLEE criteria:

- **Social:** Is the proposed strategy socially acceptable to the community? Are there equity issues involved that would mean that one segment of the community is treated unfairly?
- **Technical:** Will the proposed strategy work? Will it create more problems than it solves?
- **Administrative:** Can the community implement the strategy? Is there someone to coordinate and lead the effort?
- **Political:** Is the strategy politically acceptable? Is there public support both to implement and to maintain the project?
- **Legal:** Is the community authorized to implement the proposed strategy? Is there a clear legal basis or precedent for this activity?
- **Economic:** What are the costs and benefits of this strategy? Does the cost seem reasonable for the size of the problem and the likely benefits?
- **Environmental:** How will the strategy impact the environment? Will the strategy need environmental regulatory approvals?

Each proposed mitigation strategy was evaluated using the above criteria and assigned a score (Good = 3, Average = 2, Poor = 1) based on the above criteria. An evaluation chart with total scores for each strategy can be found in the collection of individual tables under Table 12.

After each strategy was evaluated and prioritized according to the final score. The highest scoring strategies were determined to be of more importance, economically, socially, environmentally, and politically feasible and, hence, prioritized over those that were lower scoring. This prioritizing was used as a basis for developing the Action Plan outlined in Table 13.

Table 12.1 Complete culvert replacements in multiple locations

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	3
Does it contribute to other goals?	3
Does it benefit the environment?	3
Does it meet regulations?	3
Will historic structures be saved or protected?	3
Could it be implemented quickly?	2
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	2
Score	37

Table 12.2 Purchase fixed electronic variable message boards

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	1
Does it contribute to other goals?	2
Does it benefit the environment?	1
Does it meet regulations?	1
Will historic structures be saved or protected?	1
Could it be implemented quickly?	2
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	3
Score	29

Table 12.3 Acquire backup power for municipal and school buildings and wells

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	3
Does it contribute to other goals?	3
Does it benefit the environment?	3
Does it meet regulations?	3
Will historic structures be saved or protected?	3
Could it be implemented quickly?	3
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	3
Score	39

Table 12.4 Purchase and install signs indicating evacuation routes

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	1
Does it contribute to other goals?	2
Does it benefit the environment?	1
Does it meet regulations?	2
Will historic structures be saved or protected?	1
Could it be implemented quickly?	2
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	3
Score	30

Table 12.5 Protect wastewater pump stations from flooding

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	3
Does it contribute to other goals?	3
Does it benefit the environment?	3
Does it meet regulations?	3
Will historic structures be saved or protected?	2
Could it be implemented quickly?	1
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	2
Score	35

Table 12.6 Study improvement of water transmission from Bellamy Reservoir

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	3
Does it contribute to other goals?	3
Does it benefit the environment?	3
Does it meet regulations?	3
Will historic structures be saved or protected?	1
Could it be implemented quickly?	1
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	2
P: Is it Politically acceptable?	2
L: Is there Legal authority to implement?	2
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	1
Score	30

Table 12.7 Protect historic structures in Prescott Park during infrastructure retrofits

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	3
Does it contribute to other goals?	3
Does it benefit the environment?	2
Does it meet regulations?	3
Will historic structures be saved or protected?	3
Could it be implemented quickly?	2
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	2
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	2
E: Are other Environmental approvals required?	1
Score	33

Table 12.8 Complete Fleet St. sewer separation study

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	2
Does it contribute to other goals?	3
Does it benefit the environment?	3
Does it meet regulations?	3
Will historic structures be saved or protected?	2
Could it be implemented quickly?	1
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	1
Score	33

Table 12.9 Complete capacity management plan for Public Works Dept.

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	3
Does it contribute to other goals?	3
Does it benefit the environment?	3
Does it meet regulations?	3
Will historic structures be saved or protected?	3
Could it be implemented quickly?	2
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	3
Score	38

Table 12.10 Complete Mechanic St. pump station upgrade

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	3
Does it contribute to other goals?	3
Does it benefit the environment?	3
Does it meet regulations?	3
Will historic structures be saved or protected?	2
Could it be implemented quickly?	1
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	2
Score	35

Table 12.11 Formalize agreements for pre-treatment of industrial wastewater

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	2
Does it contribute to other goals?	3
Does it benefit the environment?	3
Does it meet regulations?	3
Will historic structures be saved or protected?	1
Could it be implemented quickly?	2
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	3
Score	35

Table 12.12 Establish groundwater monitoring program

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	2
Does it contribute to other goals?	3
Does it benefit the environment?	3
Does it meet regulations?	3
Will historic structures be saved or protected?	1
Could it be implemented quickly?	2
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	3
Score	35

Table 12.13 Rebuild Junkins Ave. causeway to prevent flooding of roadway

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	2
Does it contribute to other goals?	3
Does it benefit the environment?	3
Does it meet regulations?	3
Will historic structures be saved or protected?	1
Could it be implemented quickly?	1
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	1
Score	32

Table 12.14 Purchase cots and trailers for Health Dept.

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	1
Does it contribute to other goals?	3
Does it benefit the environment?	1
Does it meet regulations?	3
Will historic structures be saved or protected?	1
Could it be implemented quickly?	2
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	3
Score	32

Table 12.15 Convert City garage to secure and climate-controlled storage for Health Dept. supplies

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	1
Does it contribute to other goals?	3
Does it benefit the environment?	1
Does it meet regulations?	2
Will historic structures be saved or protected?	1
Could it be implemented quickly?	3
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	3
Score	33

Table 12.16 Conduct climate change vulnerability assessments every five years

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	3
Does it contribute to other goals?	3
Does it benefit the environment?	3
Does it meet regulations?	3
Will historic structures be saved or protected?	3
Could it be implemented quickly?	2
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	3
Score	38

Table 12.17 Continue allocating funds through CIP for land conservation projects

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	3
Does it contribute to other goals?	3
Does it benefit the environment?	3
Does it meet regulations?	3
Will historic structures be saved or protected?	2
Could it be implemented quickly?	1
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	3
Score	36

Table 12.18 Increase public education and outreach about hazards mitigation

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	2
Does it contribute to other goals?	3
Does it benefit the environment?	2
Does it meet regulations?	3
Will historic structures be saved or protected?	1
Could it be implemented quickly?	3
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	3
Score	35

Table 12.19 Update Stormwater Management Infrastructure Master Plan

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	3
Does it contribute to other goals?	3
Does it benefit the environment?	3
Does it meet regulations?	3
Will historic structures be saved or protected?	3
Could it be implemented quickly?	2
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	3
Score	38

Table 12.20 Provide safe pedestrian and bike access into and out of downtown

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	1
Does it contribute to other goals?	3
Does it benefit the environment?	3
Does it meet regulations?	2
Will historic structures be saved or protected?	1
Could it be implemented quickly?	3
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	3
Score	34

Table 12.21 Develop and adopt an MOU with Seacoast Public Health Network to strengthen the partnership with the City during public health emergencies

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	2
Does it contribute to other goals?	3
Does it benefit the environment?	1
Does it meet regulations?	3
Will historic structures be saved or protected?	1
Could it be implemented quickly?	2
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	3
Score	33

Table 12.21 Partner with the State, Seacoast municipalities, and the Red Cross to identify a regional emergency shelter location

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	1
Does it contribute to other goals?	3
Does it benefit the environment?	1
Does it meet regulations?	3
Will historic structures be saved or protected?	1
Could it be implemented quickly?	1
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	3
Score	31

Table 12.22 Expand urban tree planting program

Criteria	Evaluation Rating (1-3)
Does it reduce disaster damage?	2
Does it contribute to other goals?	3
Does it benefit the environment?	3
Does it meet regulations?	1
Will historic structures be saved or protected?	1
Could it be implemented quickly?	2
S: Is it Socially acceptable?	3
T: Is it Technically feasible and potentially successful?	3
A: Is it Administratively workable?	3
P: Is it Politically acceptable?	3
L: Is there Legal authority to implement?	3
E: Is it Economically beneficial?	3
E: Are other Environmental approvals required?	3
Score	33

CHAPTER IX – IMPLEMENTATION SCHEDULE FOR PRIORITY MITIGATION ACTIONS

This step involves developing an action plan that outlines who is responsible for implementing each of the prioritized strategies determined in the previous step, as well as when and how the actions will be implemented. The following questions were asked to develop an implementation schedule for the identified priority mitigation strategies:

WHO? Who will lead the implementation efforts? Who will put together funding requests and applications?

HOW? How will the community fund these projects? How will the community implement these projects? What resources will be needed to implement these projects?

WHEN? When will these actions be implemented, and in what order?

Table 13 is the Action Plan. In addition to the prioritized mitigation projects, Table 14 includes the responsible party (WHO), how the project will be supported (HOW), and what the timeframe is for implementation of the project (WHEN).

Table 13: Action Plan for Proposed Mitigation Actions

Score	Project	Responsibility/ Oversight	Funding/ Support	Estimated Cost	Timeframe
39	Purchase and install backup power for municipal and school buildings, water wells, and wastewater pumps	DPW	City/State Grants/ Federal Grants	\$500,000	Short Term 1 year
38	Conduct climate change vulnerability assessments every five years	Planning and Sustainability/ DPW	City/State Grants/ Federal Grants	\$120,000	Long Term 3-5 years
38	Complete capacity management plan for Public Works Department	DPW	City	\$200,000	Medium Term 2-3 years
38	Update Stormwater Management Infrastructure Master Plan	DPW	City/State Grants/ Federal Grants	\$200,000	Medium Term 2-3 years
37	Complete culvert replacements in multiple locations	DPW	City/State Grants/ Federal Grants	\$5M	Long Term 3-5 years
36	Allocate funds through CIP for land conservation projects	Planning and Sustainability	City/State Grants/ Federal Grants	\$750,000	Long Term 3-5 years

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Score	Project	Responsibility/ Oversight	Funding/ Support	Estimated Cost	Timeframe
35	Protect wastewater pump stations from flooding	DPW	City/State Grants/Federal Grants	\$2M	Long Term 3-5 years
35	Increase public education and outreach about hazard mitigation	EMD/EMC	City/State Grants/Federal Grants	\$150,000	Short Term 1 year
35	Complete Mechanic Street pump station upgrade	DPW	City/State Grants/Federal Grants	\$20M	Long Term 3-5 years
35	Formalize agreements for pretreatment of industrial wastewater	DPW	City/State Grants/Federal Grants	\$400,000	Short Term 1 year
35	Establish groundwater monitoring program	DPW	City/State Grants/Federal Grants	\$300,000	Medium Term 2-3 years
34	Provide safe pedestrian and bike access into and out of downtown	DPW	City/State Grants/Federal Grants	\$150,000	Short Term 1 year
33	Protect historic structures in Prescott Park during stormwater management retrofits	DPW	City/State Grants/Federal Grants	\$8M	Long Term 3-5 years
33	Complete Fleet Street sewer separation feasibility study	DPW	City/State Grants/Federal Grants	\$16M	Long Term 3-5 years
33	Expand urban tree planting program	DPW	City/State Grants/Federal Grants	\$150,000	Short Term 1 year
33	Convert City garage to secure storage for Health Dept.	DPW/Health Dept.	City/State Grants/Federal Grants	\$50,000	Short Term 1 year
33	Develop and adopt an MOU with Seacoast Public Health Network	EMD/EMC/Health Dept.	City/State Grants/Federal Grants	\$10,000	Short Term 1 year
32	Purchase cots and trailers for Health Dept.	EMD/EMC/Health Dept.	City/State Grants/Federal Grants	\$250,000	Short Term 1 year
31	Partner with State, Seacoast municipalities, Red Cross to identify regional shelter location	EMD/EMC	City/State Grants/Federal Grants	\$50,000	Long Term 3-5 years
30	Purchase and install sign indicating evacuation routes	DPW	City/State Grants/Federal Grants	\$10,000	Short Term 1 year

Score	Project	Responsibility/ Oversight	Funding/ Support	Estimated Cost	Timeframe
30	Study improvement of water transmission from Bellamy Reservoir	DPW	City/State Grants/Federal Grants	\$28M	Long Term 3-5 years
29	Purchase fixed electronic variable message boards	EMD/EMC/DPW	City/State Grants/Federal Grants	\$200,00	Short Term 1 year

Sources of funding and support for the projects listed in Table 13 include:

- City of Portsmouth – Annual City Department and City Board and Commission operating budgets, Capital Improvements Plan allocations, and department staff time.
- State of New Hampshire – The State of New Hampshire oversees several competitive grant programs designed to fund the projects listed in Table 13, including the Clean Water State Revolving Fund, Climate Pollution Reduction Grants, Coastal Resilience Grants, Drinking Water-Related Grants, Drinking Water State Revolving Fund, Drinking Water and Groundwater Trust Fund, Infrastructure Funding/ARPA, Watershed Assistance Grants, and the Department of Transportation Ten Year Plan prioritized projects.
- Federal – Sources of federal grants for hazard mitigation are included in Appendix B.

CHAPTER X- INCORPORATING, MONITORING, EVALUATING, AND UPDATING THE PLAN

Incorporating the Plan into Existing Planning Mechanisms

Upon review and approval by FEMA and the State of New Hampshire Homeland Security and Emergency Management, the Hazard Mitigation Plan Update 2024 will be adopted by the Portsmouth City Council as a standalone document and as an appendix of the City's Emergency Operations Plan (EOP). The Plan Update will be consulted during updates to the Master Plan and Capital Improvement Plan (CIP). The Planning Board is responsible for updating the Master Plan and CIP and will review the Action Plan during each update. The Planning Board in conjunction with Emergency Management Director and Emergency Management Coordinator will determine what items can and should be added to the CIP based on the City's annual budget and sources of other funding. Considerations about future land use and proximity to current and potential hazard areas need to be inherently part of the planning process. NH RSA 674:2 III (e) gives cities the authority to include a natural hazards section, which documents the physical characteristics, severity, and extent of any potential natural hazards to the community, within the framework of a Master Plan.

Monitoring, Evaluating and Updating the Plan

Recognizing that many mitigation projects are ongoing, and that while in the implementation stage communities may suffer budget cuts, experience staff turnover, or projects may fail altogether, a good plan needs to provide for periodic monitoring and evaluation of its successes and failures and allow for updates of the Plan where necessary.

To track progress and update the Mitigation Strategies identified in the Action Plan, the Hazard Mitigation Committee shall remain active and will revisit the Plan annually and after each natural hazard event. These reviews will assess the Plan's effectiveness, accuracy, and completeness in achieving its stated purpose and goals. Plan reviews will also address the recommended improvements to the Plan as contained in the FEMA plan review checklist and any weaknesses the City identified that the Plan did not adequately address. Plan reviews will also incorporate any new information based on changing conditions in land use, hazard types, vulnerable populations, and climate change. The Emergency Management Director and Emergency Management Coordinator are responsible for initiating these reviews and will involve appropriate stakeholders via public meetings, presentations to governing bodies, neighborhood-specific meetings, climate change planning forums, and soliciting feedback via the City's website and social media accounts. The Plan will also be thoroughly updated every five years.

In keeping with the process of adopting the 2024 Plan Update, a public meeting to receive public comment on Plan maintenance and updating will be held during any review of the Plan. This publicly noticed meeting will allow for members of the community not involved in developing the Plan to provide input and comments each time the Plan is revised. The final revised Plan will

be adopted by the City Council appropriately, at a second publicly noticed meeting, and posted on the City website to enable public review.

Changes should be made to the Plan to accommodate for projects that have failed or are not considered feasible after a review of their consistency with STAPLEE, the timeframe, the community's priorities, and funding resources. Priorities that were not ranked highly initially, but identified as potential mitigation strategies, should be reviewed during the monitoring and update of this Plan to determine feasibility of future implementation.

Appendix A - Summary of Hazard Mitigation Strategies

<https://www.fema.gov/node/mitigation-ideas-resource-reducing-risk-natural-hazards>

I. RIVERINE AND COASTAL FLOOD MITIGATION

A. PREVENTION - Prevention measures are intended to keep the problem from occurring in the first place, and/or keep it from getting worse. Future development should not increase flood damage. Building, zoning, planning, and/or code enforcement officials usually administer preventative measures.

- **Planning and Zoning** - Land use plans are put in place to guide future development, recommending where - and where not - development should occur. Sensitive and vulnerable lands can be designated for uses that would not be incompatible with occasional flood events - such as parks or wildlife refuges. A Capital Improvements Program can recommend the setting aside of funds for public acquisition of these designated lands. The zoning ordinance can regulate development in these sensitive areas by limiting or preventing some or all development - for example, by designating floodplain overlay, conservation, or agricultural districts.
- **Open Space Preservation** - Preserving open space is the best way to prevent flooding and flood damage. Open space preservation should not, however, be limited to the flood plain, since other areas within the watershed may contribute to controlling the runoff that exacerbates flooding. Land Use and Capital Improvement Plans should identify areas to be preserved by acquisition and other means, such as purchasing easements. Aside from outright purchase, open space can also be protected through maintenance agreements with the landowners, or by requiring developers to dedicate land for flood flow, drainage and storage.
- **Floodplain Development Regulations** - Floodplain development regulations typically do not prohibit development in the special flood hazard area, but they do impose construction standards on what is built there. The intent is to protect roads and structures from flood damage and to prevent development from aggravating the flood potential. Floodplain development regulations are generally incorporated into subdivision regulations, building codes, and floodplain ordinances, which either stand-alone or are contained within a zoning ordinance.

Subdivision Regulations: These regulations govern how land will be divided into separate lots or sites. They should require that any flood hazard areas be shown on the plat, and that every lot has a buildable area that is above the base flood elevation.

Building Codes: Standards can be incorporated into building codes that address flood proofing for all new and improved or repaired buildings.

Floodplain Ordinances: Communities that participate in the National Flood Insurance Program are required to adopt the minimum floodplain management regulations, as developed by FEMA. The regulations set minimum standards for subdivision regulations and building codes. Communities may adopt more stringent standards than those set forth by FEMA.

- **Stormwater Management** - Development outside of a floodplain can contribute significantly to flooding by covering impervious surfaces, which increases storm water runoff. Storm water management is usually addressed in subdivision regulations. Developers are typically required to build retention or detention basins to minimize any increase in runoff caused by new or expanded

impervious surfaces, or new drainage systems. Generally, there is a prohibition against storm water leaving the site at a rate higher than it did before the development. One technique is to use wet basins as part of the landscaping plan of a development. It might even be possible to site these basins based on a watershed analysis. Since detention only controls the runoff rates and not volumes, other measures must be employed for storm water infiltration - for example, swales, infiltration trenches, vegetative filter strips, and permeable paving blocks.

- **Drainage System Maintenance** - Ongoing maintenance of channel and detention basins is necessary if these facilities are to function effectively and efficiently over time. A maintenance program should include regulations that prevent dumping in or altering watercourses or storage basins; regrading and filling should also be regulated. Any maintenance program should include a public education component, so that the public becomes aware of the reasons for the regulations. Many people do not realize the consequences of filling a ditch or wetland or regrading their yard without concern for runoff patterns.

B. PROPERTY PROTECTION - Property protection measures are used to modify buildings subject to flood damage, rather than to keep floodwaters away. These may be less expensive to implement, as they are often carried out on a cost-sharing basis. In addition, many of these measures do not affect a building's appearance or use, which makes them particularly suitable for historical sites and landmarks.

- **Relocation** - Moving structures out of the floodplain is the surest and safest way to protect against damage. Relocation is expensive, however, so this approach will probably not be used except in extreme circumstances. Communities that have areas subject to severe storm surges, ice jams, etc. might want to consider establishing a relocation program, incorporating available assistance.
- **Acquisition** - Acquisition by a governmental entity of land in a floodplain serves two main purposes: (1) it ensures that the problem of structures in the floodplain will be addressed; and (2) it has the potential to convert problem areas into community assets, with accompanying environmental benefits. Acquisition is more cost effective than relocation in those areas that are subject to storm surges, ice jams, or flash flooding. Acquisition, followed by demolition, is the most appropriate strategy for those buildings that are simply too expensive to move, as well as for dilapidated structures that are not worth saving or protecting. Relocation can be expensive; however, there are government grants and loans that can be applied toward such efforts.
- **Building Elevation** - Elevating a building above the base flood elevation is the best on-site protection strategy. The building could be raised to allow water to run underneath it, or fill could be brought in to elevate the site on which the building sits. This approach is cheaper than relocation and tends to be less disruptive to a neighborhood. Elevation is required by law for new and substantially improved residences in a floodplain and is commonly practiced in flood hazard areas nationwide.
- **Floodproofing** - If a building cannot be relocated or elevated, it may be floodproofed. This approach works well in areas of low flood threat. Flood proofing can be accomplished through barriers to flooding, or by treatment to the structure itself.

Barriers: Levees, floodwalls, and berms can keep floodwaters from reaching a building. These are useful, however, only in areas subject to shallow flooding.

Dry Flood proofing: This method seals a building against the water by coating the walls with waterproofing compounds or plastic sheeting. Openings, such doors, windows, etc. are closed either permanently with removable shields or with sandbags.

Wet Flood proofing: This technique is usually considered a last resort measure since water is intentionally allowed into the building to minimize pressure on the structure. Approaches range from moving valuable items to higher floors to rebuilding the floodable area. An advantage over other approaches is that simply by moving household goods out of the range of floodwaters, thousands of dollars can be saved in damages.

- **Sewer Backup Protection** - Storm water overloads can cause backup into basements through sanitary sewer lines. Houses that have any kind of connection to a sanitary sewer system - whether it is downspouts, footing drain tile, and/or sump pumps, can be flooded during a heavy rain event. To prevent this, there should be no such connections to the system, and all rain and ground water should be directed onto the ground, away from the building. Other protections include:

Floor drain plugs and floor drain standpipe, which keep water from flowing out of the lowest opening in the house.

Overhead sewer - keeps water in the sewer line during a backup.

Backup valve - allows sewage to flow out while preventing backups from flowing into the house.

- **Insurance** - Above and beyond standard homeowner insurance, there is other coverage a homeowner can purchase to protect against flood hazard. Two of the most common are National Flood Insurance and basement backup insurance.

National Flood Insurance: When a community participates in the National Flood Insurance Program, any local insurance agent can sell separate flood insurance policies under rules and rates set by FEMA. Rates do not change after claims are paid because they are set on a national basis.

Basement Backup Insurance: National Flood Insurance offers an additional deductible for seepage and sewer backup, provided there is a general condition of flooding in the area that was the proximate cause of the basement getting wet. Most exclude damage from surface flooding that would be covered by the NFIP.

C. NATURAL RESOURCE PROTECTION - Preserving or restoring natural areas or the natural functions of floodplain and watershed areas provide the benefits of eliminating or minimizing losses from floods, as well as improving water quality and wildlife habitats. Parks, recreation, or conservation agencies usually implement such activities. Protection can also be provided through various zoning measures that are specifically designed to protect natural resources.

- **Wetlands Protection** - Wetlands can store large amounts of floodwater, slowing and reducing downstream flows, and filtering the water. Any development that is proposed in a wetland is regulated by either federal and/or state agencies. Depending on the location, the project might fall under the jurisdiction of the U.S. Army Corps of Engineers, which in turn, calls upon several other agencies to review the proposal. In New Hampshire, the N.H. Wetlands Board must approve any project that impacts a wetland. And many communities in New Hampshire also have local wetland ordinances. Generally, the goal is to protect wetlands by preventing development that would adversely affect them. Mitigation techniques are often employed, which might consist of creating a wetland on another site to replace what would be lost through the development. This is not an ideal practice, however, since it takes many years for a new wetland to achieve the same level of quality as an existing one.
- **Erosion and Sedimentation Control** - Controlling erosion and sediment runoff during construction and on farmland is important, since eroding soil will typically end up in downstream waterways. And, because sediment tends to settle where the water flow is slower, it will gradually fill in channels and lakes, reducing their ability to carry or store floodwaters. Practices to reduce erosion and sedimentation have two principal components: (1) minimize erosion with vegetation and (2) capture sediment before it leaves the site. Slowing the runoff increases infiltration into the soil, thereby controlling the loss of topsoil from erosion and the resulting sedimentation. Runoff can be slowed by vegetation, terraces, contour strip farming, no-till farm practices, and impoundments (such as sediment basins, farm ponds, and wetlands).
- **Best Management Practices** - Best Management Practices (BMPs) are measures that reduce nonpoint source pollutants that enter waterways. Nonpoint source pollutants are carried by storm water to waterways, and include such things as lawn fertilizers, pesticides, farm chemicals, and oils from street surfaces and industrial sites. BMPs can be incorporated into many aspects of new developments and ongoing land use practices. In New Hampshire, the Department of Environmental Services has developed best management practices for a range of activities, from farming to earth excavations.

D. EMERGENCY SERVICES - Emergency services protect people during and after a flood. Many communities in New Hampshire have emergency management programs in place, administered by an emergency management director (very often the local police or fire chief).

- **Flood Warning** - On large rivers, the National Weather Service handles early recognition. Communities on smaller rivers must develop their own warning systems. Warnings may be disseminated in a variety of ways, such as sirens, radio, television, mobile public-address systems, or door-to-door contact. It seems that multiple or redundant systems are the most effective, giving people more than one opportunity to be warned.
- **Flood Response** - Flood response refers to actions that are designed to prevent or reduce damage or injury, once a flood threat is recognized. Such actions and the appropriate parties include activating the emergency operations center (emergency director), sandbagging designated areas (public works department), closing streets and bridges (police department), shutting off power to threatened areas (utilities), releasing children from school (school

district), ordering an evacuation (selectmen/city council/emergency director), opening evacuation shelters (churches, schools, Red Cross, municipal facilities).

These actions should be part of a flood response plan, which should be developed in coordination with the persons and agencies that share the responsibilities. Drills and exercises should be conducted so that the key participants know what they are supposed to do.

- **Critical Facilities Protection** - Protecting critical facilities is vital, since expending efforts on these facilities can draw workers and resources away from protecting other parts of the community. Buildings or locations vital to the flood response effort:
 - emergency operations centers
 - police and fire stations
 - hospitals
 - highway garage
 - selected roads and bridges
 - evacuation routes
 - buildings or locations that, if flooded, would create secondary disasters
 - hazardous materials facilities
 - water/wastewater treatment plants
 - schools
 - nursing homes

All such facilities should have their own flood response plan that is coordinated with the community's plan. Nursing homes, other public health facilities, and schools will typically be required by the state to have emergency response plans in place.

- **Health and Safety Maintenance** - The flood response plan should identify appropriate measures to prevent danger to health and safety. Such measures include:
 - patrolling evacuated areas to prevent looting
 - providing safe drinking water
 - vaccinating residents for tetanus
 - clearing streets
 - cleaning up debris

The plan should also identify which agencies will be responsible for carrying out the identified measures. A public information program can be helpful to educate residents on the benefits of taking health and safety precautions.

Structural Projects - Structural projects are used to prevent floodwater from reaching properties. These are all man-made structures and can be grouped into the six types of discussed below. The shortcomings of structural approaches are that they can be very expensive, they disturb the land, disrupt natural water flows, and destroy natural habitats, they are built to an anticipated flood event, and may be exceeded by a greater-than-expected flood, and they can create a false sense of security.

Reservoirs - Reservoirs control flooding by holding water behind dams or in storage basins. After a flood peaks, water is released or pumped out slowly at a rate the river downstream can handle.

Reservoirs are suitable for protecting existing development, and they may be the only flood control measure that can protect development close to a watercourse. They are most efficient in deeper valleys or on smaller rivers where there is less water to store. Reservoirs might consist of man-made holes dug to hold the approximate amount of floodwaters, or even abandoned quarries. As with other structural projects, reservoirs:

- are expensive
- occupy a lot of land
- require periodic maintenance
- may fail to prevent damage from floods that exceed their design levels
- may eliminate the natural and beneficial functions of the floodplain

Reservoirs should only be used after a thorough watershed analysis that identifies the most appropriate location and ensures that they would not cause flooding somewhere else. Because they are so expensive and usually involve more than one community, they are typically implemented with the help of state or federal agencies, such as the Army Corps of Engineers.

Levees/Floodwalls - Probably the best known structural flood control measure is either a levee (a barrier of earth) or a floodwall made of steel or concrete erected between the watercourse and the land. If space is a consideration, floodwalls are typically used, since levees need more space. Levees and floodwalls should be set back out of the floodway, so that they will not divert floodwater onto other properties.

Diversions - A diversion is simply a new channel that sends floodwater to a different location, thereby reducing flooding along an existing watercourse. Diversions can be surface channels, overflow weirs, or tunnels. During normal flows, the water stays in the old channel. During flood flows, the stream spills over the diversion channel or tunnel, which carries the excess water to the receiving lake or river.

Diversions are limited by topography; they won't work everywhere. Unless the receiving water body is relatively close to the flood prone stream and the land in between is low and vacant, the cost of creating a diversion can be prohibitive. Where topography and land use are not favorable, a more expensive tunnel is needed. In either case, care must be taken to ensure that the diversion does not create a flooding problem somewhere else.

Channel Modifications - Channel modifications include making a channel wider, deeper, smoother, or straighter. These techniques will result in more water being carried away, but, as with other techniques mentioned, it is important to ensure that the modifications do not create or increase a flooding problem downstream.

Dredging: Dredging is often cost-prohibitive because the dredged material must be disposed of somewhere else, and the stream will usually fill back in with sediment. Dredging is usually undertaken only on larger rivers, and then only to maintain a navigation channel.

Drainage modifications: These include man-made ditches and storm sewers that help drain areas where the surface drainage system is inadequate or where underground drainage ways may be safer or more attractive. These approaches are usually designed to carry the runoff from smaller, more frequent storms.

Storm Sewers - Mitigation techniques for storm sewers include installing new sewers, enlarging small pipes, street improvements, and preventing back flow. Because drainage ditches and storm sewers convey water faster to other locations, improvements are only recommended for small local problems where the receiving body of water can absorb the increased flows without increased flooding.

In many developments, streets are used as part of the drainage system, to carry or hold water from larger, less frequent storms. The streets collect runoff and convey it to a receiving sewer, ditch, or stream. Allowing water to stand in the streets and then draining it slowly can be a more effective and less expensive measure than enlarging sewers and ditches.

Public Information - Public information activities are intended to advise property owners, potential property owners, and visitors about the hazards associated with a property, ways to protect people and property from these hazards, and the natural and beneficial functions of a floodplain.

- **Map Information** - Flood maps developed by FEMA outline the boundaries of the flood hazard areas. These maps can be used by anyone interested in a property to determine if it is flood prone. These maps are available from FEMA, the NH Office of Emergency Management, the NH Office of State Planning, or your regional planning commission.

Outreach Projects - Outreach projects are proactive; they give the public information even if they have not asked for it. Outreach projects are designed to encourage people to seek out more information and take steps to protect themselves and their properties. Examples of outreach activities include:

- Mass mailings or newsletters and e-newsletters to all residents
- Posting resource information on town website and social media accounts
- Notices directed to floodplain residents
- Displays in public buildings, malls, etc.
- Newspaper articles and special sections
- Radio and TV news releases and interview shows
- A local flood proofing video for cable TV programs and to loan to organizations
- A detailed property owner handbook tailored for local conditions
- Presentations at meetings of neighborhood groups

Research has shown that outreach programs work, although awareness is not enough. People need to know what they can do about the hazards, so projects should include information on protection measures. Research also shows that locally designed and run programs are much more effective than national advertising.

Real Estate Disclosure - Disclosure of information regarding flood-prone properties is important if potential buyers are to be able to mitigate damage. Federally regulated lending institutions are required to advise applicants that a property is in a floodplain. However, this requirement needs to be met only

five days prior to closing, and by that time, the applicant is typically committed to the purchase. State laws and local real estate practice can help by making this information available to prospective buyers early in the process.

Library - Your local library can serve as a repository for pertinent information on flooding and flood protection. Some libraries also maintain their own public information campaigns, augmenting the activities of the various governmental agencies involved in flood mitigation.

Technical Assistance - Certain types of technical assistance are available from the NFIP Coordinator, FEMA, and the Natural Resources Conservation District. Community officials can also set up a service delivery program to provide one-on-one sessions with property owners. An example of technical assistance is the flood audit, in which a specialist visits a property. Following the visit, the owner is provided with a written report, detailing the past and potential flood depths, and recommending alternative protection measures.

Environmental Education - Education can be a great mitigating tool, if people can learn what not to do before damage occurs. And the sooner the education begins, the better. Environmental education programs for children can be taught in the schools, park and recreation departments, conservation associations, or youth organizations. An activity can be as involved as course curriculum development or as simple as an explanatory sign near a river. Education programs do not have to be limited to children. Adults can benefit from knowledge of flooding and mitigation measures. And decision-makers, armed with this knowledge, can make a difference in their communities.

II. EARTHQUAKES

- **PREVENTIVE** - Planning/zoning to keep critical facilities away from fault lines.
Planning, zoning and building codes to avoid areas below steep slopes or soils subject to liquefaction.
Building codes to prohibit loose masonry, overhangs, etc.
- **PROPERTY PROTECTION:**
Acquire and clear hazard areas.
Retrofitting to add braces, remove overhangs.
Apply mylar to windows and glass surfaces to protect from shattering glass.
Tie down major appliances provide flexible utility connections.
Earthquake insurance riders.
- **EMERGENCY SERVICES** - Earthquake response plans to account for secondary problems, such as fires and hazardous materials spills.
Slope stabilization.

III. DAM FAILURE

- **PREVENTIVE:**
Dam failure inundation maps.
Planning/zoning/open space preservation to keep area clear.
Building codes with flood elevation based on dam failure.
Dam safety inspections.
Draining the reservoir when conditions appear unsafe.

- **PROPERTY PROTECTION** - Acquisition of buildings in the path of a dam breach flood. Flood insurance.
- **EMERGENCY SERVICES** - Dam conditioning monitoring; warning and evacuation plans based on dam failure.
- **EMERGENCY SERVICES** - Dam improvements, spillway enlargements. Remove unsafe dams.

IV. WILDFIRES AND CONFLAGRATION

- **PREVENTIVE:**

Zoning districts reflect fire risk zones.

Planning and zoning to restrict development in areas near fire protection and water resources.

Requiring new subdivisions to space buildings, provide firebreaks, on-site water storage, wide roads multiple accesses.

Building code standards for roof materials, spark arrestors.

Maintenance programs to clear dead and dry bush, trees.

Regulation of open fires.

- **PROPERTY PROTECTION:**

Retrofitting of roofs and adding spark arrestors.

Landscaping to keep bushes and trees away from structures.

Insurance rates based on distance from fire protection.

- **NATURAL RESOURCE PROTECTION** - Prohibit development in high-risk areas.
- **EMERGENCY SERVICES** - Fire Fighting

V. WINTER STORMS, HURRICANES, AND HIGH WIND EVENTS

- **PREVENTIVE** - Building code standards for light frame construction, especially for wind-resistant roofs.
- **PROPERTY PROTECTION:**
 - Storm shutters and windows
 - Hurricane straps on roofs and overhangs
 - Seal outside and inside of storm windows and check seals in spring and fall.
 - Family and/or company severe weather action plan & drills - include a NOAA weather radio, designate a shelter area or location, keep a disaster supply kit, including stored food and water, keep snow removal equipment in good repair; have extra shovels, sand, rock, salt and gas, know how to turn off water, gas, and electricity at home or work
- **NATURAL RESOURCE PROTECTION** - Maintenance program for trimming tree and shrubs
- **EMERGENCY SERVICES** - Early warning systems/NOAA Weather Radio Evacuation Plans

VI. DROUGHT

- **PREVENTIVE** – Assess vulnerability to drought risk, develop criteria for drought-related actions.
- **PROPERTY PROTECTION** - Regularly check for leaks to minimize water supply losses
- **NATURAL RESOURCE PROTECTION** – Require water conservation during drought emergencies
- **EMERGENCY SERVICES** – Monitor drought conditions

VII. EXTREME TEMPERATURES

• **PREVENTATIVE:**

Increase awareness of extreme temperature risk and safety through public education and outreach

Reduce urban heat island effect by increasing tree plantings

Assist vulnerable populations

• **PROPERTY PROTECTION:**

Educate residents on how to protect pipes from freezing

Add building insulation to walls and attics

• **NATURAL RESOURCE PROTECTION** – Monitor drought conditions during periods of extreme heat

• **EMERGENCY SERVICES** – Identify at-risk populations, establish and promote accessible heating and cooling centers

VIII. CLIMATE CHANGE – see strategies listed above

IX. INFECTIOUS DISEASE - https://www.fema.gov/sites/default/files/2020-07/fema_r2_guide-to-connecting-mitigation-public-health_booklet.pdf

• **PREVENTATIVE** – Combine risk awareness and emergency preparedness campaigns with public health campaigns

• **PROPERTY PROTECTION** – Zoning changes to enable safe and flexible use of public spaces

• **NATURAL RESOURCE PROTECTION** – Maintain public open spaces to provide safe recreational opportunities

• **EMERGENCY SERVICES** – Collaborate with health services and mental health providers

Appendix B – Technical and Financial Assistance for Hazard Mitigation

Local Municipalities must have a FEMA-approved Hazard Mitigation Plan to be eligible for Hazard Mitigation Assistance Grants. Consult with your NH Homeland Security and Emergency Management Field Representative about active funding opportunities.

HAZARD MITIGATION GRANT PROGRAM (HMGP) - Authorized under Section 404 of the Stafford Act, the Hazard Mitigation Grant Program (HMGP) provides grants to States and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the program is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. The purpose of the program is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster.

Hazard Mitigation Grant Program funding is only available in States following a Presidential disaster declaration. Eligible applicants are:

- State and local governments
- Indian tribes or other tribal organizations
- Certain private non-profit organization

Individual homeowners and businesses may not apply directly to the program; however, a community may apply on their behalf. HMGP funds may be used to fund projects that will reduce or eliminate the losses from future disasters. Projects must provide a long-term solution to a problem, for example, elevation of a home to reduce the risk of flood damage as opposed to buying sandbags and pumps to fight the flood. In addition, a project's potential savings must be more than the cost of implementing the project. Funds may be used to protect either public or private property or to purchase property that has been subjected to, or is in danger of, repetitive damage.

PRE-DISASTER MITIGATION GRANTS PROGRAM – The Pre-Disaster Mitigation Grants Program provides technical and financial assistance to States and local governments for cost-effective pre-disaster hazard mitigation activities that complement a comprehensive mitigation program, and reduce injuries, loss of life, and damage and destruction of property. FEMA provides grants to States and Federally recognized Indian tribal governments that, in turn, provide sub-grants to local governments (to include Indian Tribal governments) for mitigation activities such as planning, and the implementation of projects identified through the evaluation of natural hazards.

FLOOD MITIGATION ASSISTANCE (FMA) PROGRAM - FEMA provides funding to assist States and communities in implementing measures to reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insurable under the National Flood Insurance Program (NFIP). There are three types of grants available under FMA: Planning, Project, and Technical Assistance Grants. FMA Planning Grants are available to States and communities to prepare Flood Mitigation Plans. NFIP-participating communities with approved Flood Mitigation Plans can apply for FMA Project Grants. FMA Project Grants are available to States and NFIP participating communities to implement measures to reduce flood losses. Ten percent of the Project Grant is made available to States as a Technical Assistance

Grant. These funds may be used by the State to help administer the program. Communities receiving FMA Planning and Project Grants must participate in the NFIP.

EMERGENCY MANAGEMENT PERFORMANCE GRANT

GUIDELINES - Emergency Management Performance Grant (EMPG Program) funding is available to local communities and eligible Agencies for projects that fall in FOUR general areas of Emergency Management: Planning activities; Training activities; Drills and Exercises; and Emergency Management Administration. Contact Heather Dunkerley at NHHSEM,

The following list of possible projects and activities is meant to guide you in selecting projects for an EMA Grant Submission. This list of suggested projects is not intended to be all-inclusive. Local communities or agencies may have other specific projects and activities that reflect local needs based on local capability assessments and local hazards.

Planning Activities may include:

- Develop a Hazard Mitigation Plan for your community.
- Prepare a hazard mitigation project proposal for submission to NHHSEM.
- Create, revise, or update Dam Emergency Action plans.
- Update your local Emergency Operations Plan (EOP). Consider updating a number of specific annexes each year to ensure that the entire plan is updated at least every four years.
- If applicable, develop or incorporate a regional HazMat Team Annex into your EOP.
- Develop an Anti-Terrorism Annex into your EOP.
- Develop a local/regional Debris Management Annex into your EOP.
- Develop and maintain pre-scripted requests for additional assistance (from local area public works, regional mutual aid, State resources, etc.) and local declarations of emergency.
- Develop and maintain written duties and responsibilities for EOC staff positions and agency representatives.
- Develop and maintain a list of private non-profit organizations within your local jurisdiction to ensure that these organizations are included in requests for public assistance funds.
- Prepare a submission for nomination as a “Project Impact” Community.

Training Activities may include:

- Staff members attend training courses at the Emergency Management Institute.
- Staff members attend a “field delivered” training course conducted by NHHSEM.
- Staff members attend other local, State, or nationally sponsored training events, which provides skills or knowledge relevant to emergency management.
- Staff members complete one or more FEMA Independent Study Courses.
- Identify and train a pre-identified local damage assessment team.

Drills and Exercises might include:

- Conduct multi-agency EOC Exercise (Tabletop or Functional) and forward an Exercise Evaluation Report, including after action reports, to NHHSEM (external evaluation of exercises is strongly encouraged). Drills or Exercises might involve any of the following scenarios:
 - Hurricane Exercise
 - Terrorism Exercise
 - Severe Storm Exercise
 - Communications Exercise
 - Mass Causality Exercise involving air, rail, or ship transportation accident

- Participate in multi-State or multi-Jurisdictional Exercise and forward Exercise Report to NHHSEM.
- HazMat Exercise with Regional HazMat Teams
- NHHSEM Communications Exercises
- Observe or evaluate State or local exercise outside your local jurisdiction.
- Assist local agencies and commercial enterprises (nursing homes, dams, prisons, schools, etc.) in developing, executing, and evaluating their exercise.
- Assist local hospitals in developing, executing and evaluating Mass Care, HazMat, Terrorism, and Special Events Exercises.
- Administrative Projects and Activities may include:
- Maintain an Emergency Operations Center (EOC) and alternate EOC capable of accommodating staff to respond to local emergencies.
- Establish and maintain a Call-Down List for EOC staff.
- Establish and maintain Emergency Response/Recovery Resource Lists.
- Develop or Update Emergency Management Mutual Aid Agreements with a focus on Damage Assessment, Debris Removal, and Resource Management.
- Develop and maintain written duties and responsibilities for EOC staff positions and agency representatives.
- Develop or Update Procedures for tracking of disaster-related expenses by local agencies.

FLOOD MITIGATION ASSISTANCE (FMA) PROGRAM - FMA was created as part of the National Flood Insurance Reform Act (NFIRA) of 1994 (42 U.S.C. 4101) with the goal of reducing or eliminating claims under the National Flood Insurance Program (NFIP). FMA regulations can be found in 44 CFR Part 78. Funding for the program is provided through the National Flood Insurance Fund. FMA is funded at \$20 million nationally. FMA provides funding to assist States and communities in implementing measures to reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insurable under the National Flood Insurance Program (NFIP).

There are three types of grants available under FMA: Planning, Project, and Technical Assistance Grants. FMA Planning Grants are available to States and communities to prepare Flood Mitigation Plans. NFIP-participating communities with approved Flood Mitigation Plans can apply for FMA Project Grants. FMA Project Grants are available to States and NFIP participating communities to implement measures to reduce flood losses. Ten percent of the Project Grant is made available to States as a Technical Assistance Grant. These funds may be used by the State to help administer the program. Communities receiving FMA Planning and Project Grants must participate in the NFIP. A few examples of eligible FMA projects include: the elevation, acquisition, and relocation of NFIP-insured structures.

States are encouraged to prioritize FMA project grant applications that include repetitive loss properties. The FY 2001 FMA emphasis encourages States and communities to address target repetitive loss properties identified in the Agency's Repetitive Loss Strategy. These include structures with four or more losses, and structures with 2 or more losses where cumulative payments have exceeded the property value. State and communities are also encouraged to develop Plans that address the mitigation of these target repetitive loss properties.

Appendix C - Saffir/Simpson Hurricane Scale

This scale can be used to give an estimate of the potential property damage and flooding expected along the coast with a hurricane.

Category	Definition	Effects
One	Winds 74-95 mph	No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery, and trees. Also, some coastal road flooding and minor pier damage
Two	Winds 96-110 mph	Some roofing material, door, and window damage buildings. Considerable damage to vegetation, mobile homes, and piers. Coastal and low-lying escape routes flood 2-4 hours before arrival of center. Small craft in unprotected anchorages break moorings.
Three	Winds 111-130 mph	Some structural damage to small residences and utility buildings with a minor amount of curtainwall failures. Mobile homes are destroyed. Flooding near the coast destroys smaller structures with larger structures damaged by floating debris. Terrain continuously lower than 5 feet ASL may be flooded inland 8 miles or more.
Four	Winds 131-155 mph	More extensive curtainwall failures with some complete roof structure failure on small residences. Major erosion of beach. Major damage to lower floors of structures near the shore. Terrain continuously lower than 10 feet ASL may be flooded requiring massive evacuation of residential areas inland as far as 6 miles.
Five	Winds greater than 155 mph	Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. Major damage to lower floors of all structures located less than 15 feet ASL and within 500 yards of the shoreline. Massive evacuation of residential areas on low ground within 5 to 10 miles of the shoreline may be required.

Appendix D - Enhanced Fujita Tornado Damage Scale

The Enhanced Fujita Scale			
F-Scale Number	Potential Damage	Wind Speed	Type of Damage
F0	Light	65 – 85 mph	Little to no damage to man-made structures. Breaks branches off trees; pushes over shallow-rooted trees; damages signs
F1	Moderate	86 – 110 mph	Beginning of hurricane wind speed; peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off roads; Moderate damage.
F2	Considerable	111 – 135 mph	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars from trains pushed over; large trees snapped or uprooted; light object missiles generated.
F3	Severe	136 – 165 mph	Roof and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted and thrown.
F4	Devastating	166 – 200 mph	Well-constructed houses leveled; structures with weak foundations blown away some distance; cars thrown and large missiles generated.
F5	Incredible	Over 200 mph	Strong frame houses leveled off foundations and carried considerable distances; automobile-sized missiles fly through the air in excess of 109 yards; trees debarked; steel reinforced concrete structures badly damaged. Complete devastation.

Appendix E - The Richter Magnitude Scale

Earthquake Severity

Magnitudes	Earthquake Effects
Less than 3.5	Generally, not felt but recorded.
3.5-5.4	Often felt, but rarely causes damage.
Under 6.0	At most slight damage to well-designed buildings. Can cause major damage to poorly constructed buildings over small regions.
6.1-6.9	Can be destructive in areas up to about 100 kilometers across where people live.
7.0-7.9	Major earthquake. Can cause serious damage over larger areas.
8 or greater	Great earthquake. Can cause serious damage in areas several hundred kilometers across.

The Richter Magnitude Scale - Seismic waves are the vibrations from earthquakes that travel through the Earth; they are recorded on instruments called seismographs. Seismographs record a zig-zag trace that shows the varying amplitude of ground oscillations beneath the instrument. Sensitive seismographs, which greatly magnify these ground motions, can detect strong earthquakes from sources anywhere in the world. The time, locations, and magnitude of an earthquake can be determined from the data recorded by seismograph stations.

Earthquakes with magnitude of about 2.0 or less are usually called microearthquakes; they are not commonly felt by people and are generally recorded only on local seismographs. Events with magnitudes of about 4.5 or greater - there are several thousand such shocks annually - are strong enough to be recorded by sensitive seismographs all over the world. Great earthquakes, such as the 1964 Good Friday earthquake in Alaska, have magnitudes of 8.0 or higher. On average, one earthquake of such size occurs somewhere in the world each year. The Richter Scale has no upper limit. Recently, another scale called the moment magnitude scale has been devised for more precise study of great earthquakes. The Richter Scale is not used to express damage. An earthquake in a densely populated area which results in many deaths and considerable damage may have the same magnitude as a shock in a remote area that does nothing more than frightens wildlife. Large-magnitude earthquakes that occur beneath the oceans may not even be felt by humans.

Appendix F – Thunderstorm Criteria

Extreme Weather Madness Thunderstorm Criteria

THUNDERSTORM TYPES	Rainfall Rate/hr	MAX WIND GUST	HAIL SIZE	PEAK TORNADO Possibility	LIGHTNING FREQUENCY (5 min Intervals)	Darkness Factor	STORM IMPACT
T-1 – Weak thunderstorms or Thundershowers	.03-.10	< 25 MPH	None	None	Only a few strikes during the storm.	Slightly Dark. Sunlight may be seen under the storm.	1. No damage. 2. Gusty winds at times.
T-2 – Moderate Thunderstorms.	.10”-.25”	25-40 MPH	None	None	Occasional 1-10	Moderately Dark. Heavy downpours may cause the need for car lights.	1. Heavy downpours. 2. Occasional lightning. 3. Gusty winds. 4. Very little damage. 5. Small tree branches may break 6. Lawn furniture moved around
T-3 – Heavy Thunderstorms 1. Singular or lines of storms.	.25”-.55”	40-57 MPH	1/4 “ to 3/4”	EF0	Occasional to Frequent 10-20	Dark. Car lights used. Visibility low in heavy rains. Cars may pull off the road.	1. Minor Damage. 2. Downpours that produce some flooding on streets. 3. Frequent lightning could cause house fires. 4. Hail occurs within the downpours. 5. Small branches are broken. 6. Shingles are blown off roofs.
T-4 – Intense Thunderstorms 1. Weaker supercells 2. Bow Echos or lines of Storms	.55” – 1.25”	58 to 70 MPH	1” to 1.5”	EF0 to EF2	Frequent 20-30	Very Dark. Car lights used. Some street lights come on..	1. Moderate Damage. 2. Heavy rains can cause flooding to streams and creeks. Roadway flooding. 3. Hail can cause dents on cars and cause crop damage. 4. Wind damage to trees and buildings. 5. Tornado damage. 6. Power outages
T-5 – Extreme Thunderstorms 1. Supercells with family of tornadoes. 2. Derecho Windstorms	1.25” – 4”	Over 70 Mph	Over 1.5” to 4”	EF3 to EF5	Frequent to Continuous. > 30	Pitch Black, Street Lights come on. House lights maybe used	1. Severe Damage to Trees and Property. Damage is widespread. 2. Flooding rains. 3. Damaging hail. 4. Damaging wind gusts to trees and buildings. 5. Tornadoes F3-F5 or family of tornadoes can occur. Tornadoes can cause total devastation. 6. Widespread power outages.

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Appendix G - Lightning Risk Definitions

Lightning Risk Definitions	
Low Risk	Thunderstorms are only expected to be isolated or widely scattered in coverage (20 Percent Chance). Atmospheric conditions do not support frequent cloud-to-ground lightning strikes.
Moderate Risk	Thunderstorms are forecast to be scattered in coverage (30-50 Percent Chance). Atmospheric conditions support frequent cloud-to-ground lightning strikes.
High Risk	Thunderstorms are forecast to be numerous or widespread in coverage (60-100 Percent Chance). Atmospheric conditions support continuous and intense cloud-to-ground lightning strikes.

Appendix H - Hail Size Description Chart

Hail Size Description Chart		
Hailstone size	Measurement	
	in.	cm.
bb	< 1/4	< 0.64
pea	1/4	0.64
dime	7/10	1.8
penny	3/4	1.9
nickel	7/8	2.2
quarter	1	2.5
half dollar	1 1/4	3.2
golf ball	1 3/4	4.4
billiard ball	2 1/8	5.4
tennis ball	2 1/2	6.4
baseball	2 3/4	7.0
softball	3.8	9.7
Compact disc / DVD	4 3/4	12.1

Note: Hail size refers to the **diameter** of the hailstone.

Appendix I - Sperry-Pitz Ice Accumulation Index






The Sperry-Pitz Ice Accumulation Index, or “SPIA Index” – Copyright, February, 2009

ICE DAMAGE INDEX	DAMAGE AND IMPACT DESCRIPTIONS
0	Minimal risk of damage to exposed utility systems; no alerts or advisories needed for crews, few outages.
1	Some isolated or localized utility interruptions are possible, typically lasting only a few hours. Roads and bridges may become slick and hazardous.
2	Scattered utility interruptions expected, typically lasting 12 to 24 hours. Roads and travel conditions may be extremely hazardous due to ice accumulation.
3	Numerous utility interruptions with some damage to main feeder lines and equipment expected. Tree limb damage is excessive. Outages lasting 1 – 5 days.
4	Prolonged & widespread utility interruptions with extensive damage to main distribution feeder lines & some high voltage transmission lines/structures. Outages lasting 5 – 10 days.
5	Catastrophic damage to entire exposed utility systems, including both distribution and transmission networks. Outages could last several weeks in some areas. Shelters needed.

(Categories of damage are based upon combinations of precipitation totals, temperatures and wind speeds/directions.)

Appendix J - NOAA U.S. Drought Monitor Scale

Intensity:

	D0 Abnormally Dry
	D1 Drought - Moderate
	D2 Drought - Severe
	D3 Drought - Extreme
	D4 Drought - Exceptional

Appendix K - Class of Wildfire and Wildland Urban Zones

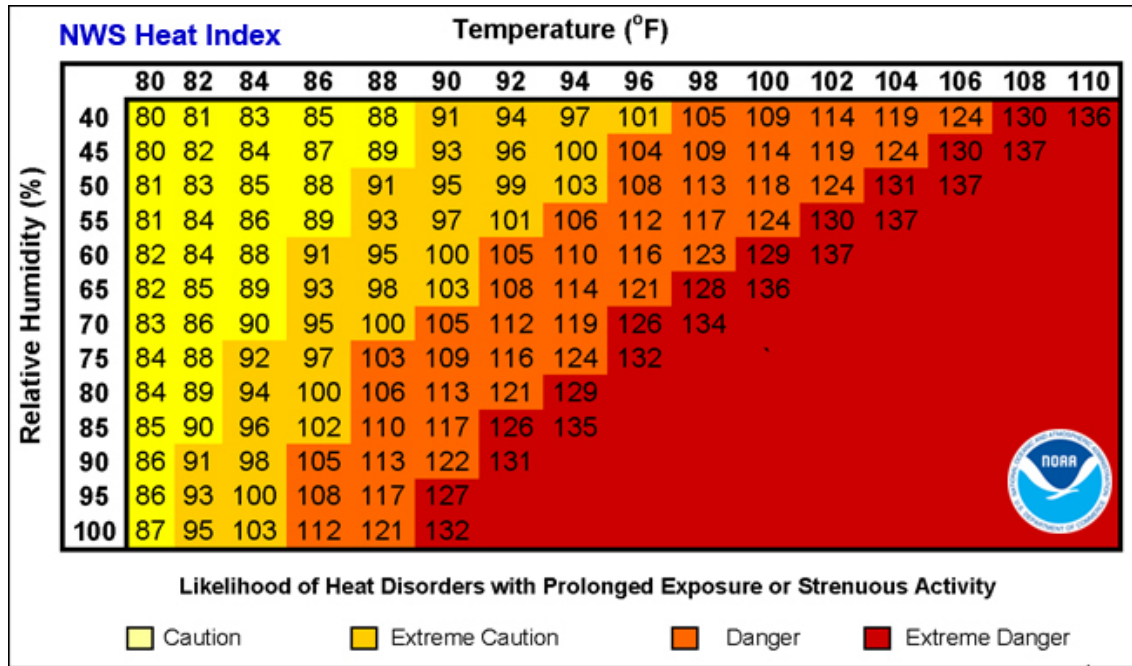
Size Class of Fire

- Class A - one-fourth acre or less;
- Class B - more than one-fourth acre, but less than 10 acres;
- Class C - 10 acres or more, but less than 100 acres;
- Class D - 100 acres or more, but less than 300 acres;
- Class E - 300 acres or more, but less than 1,000 acres;
- Class F - 1,000 acres or more, but less than 5,000 acres;
- Class G - 5,000 acres or more.

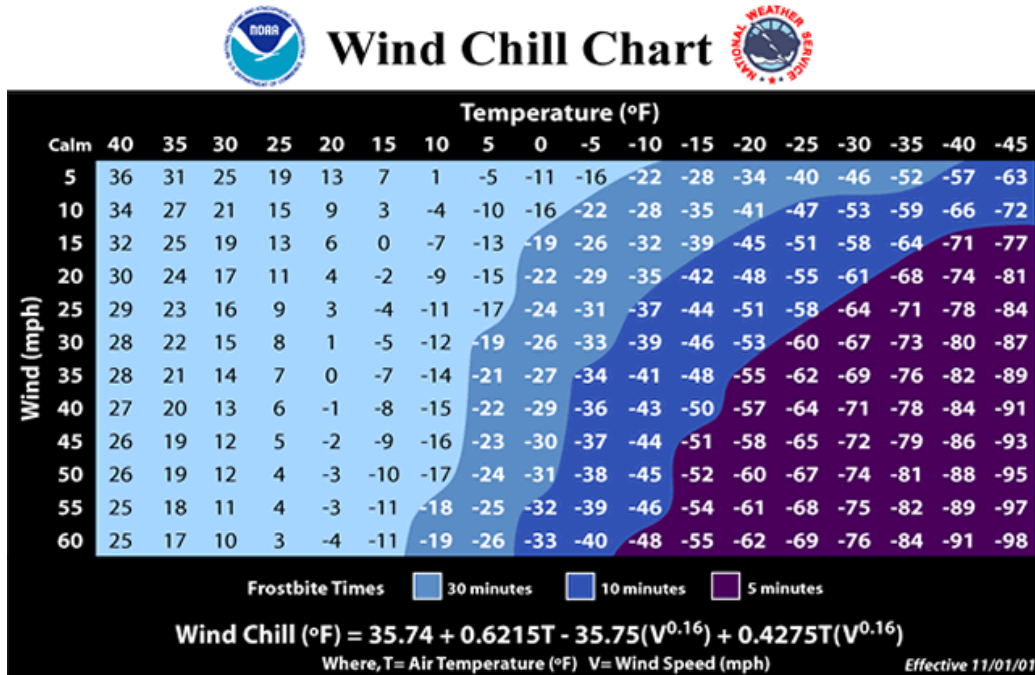
Table 4: E-Scale Building Construction Classes and Attributes

WUI scale	Building Construction Class	Ignition Vulnerabilities from Embers and Fire	Building Construction and Landscaping Attributes for Protection against Embers
E1 or F1	WUI 1	None	Normal Construction Requirements: <ul style="list-style-type: none"> - Maintained Landscaping - Local AHJ-Approved Access for firefighting equipment
E2 or F2	WUI 2	In this area, highly volatile fuels could be ignited by embers. Weathered, dry combustibles with large surface areas can become targets for ignition from embers.	Low Construction Hardening Requirements: <ul style="list-style-type: none"> - Treated combustibles allowed on structure - Attached treated combustibles allowed - Treated combustibles allowed around structure - Low flammability plants - Irrigated and well maintained Landscaping - Local AHJ-Approved Access for firefighting equipment
E3 or F3	WUI 3	Exposed combustibles are likely to ignite in this area from high ember flux or high heat flux	Intermediate Construction Hardening Requirements: <ul style="list-style-type: none"> - No exposed combustibles on structure - Combustibles placed well away from structure - Low flammability plants - Irrigated and well maintained landscaping - Local AHJ-Approved Access for firefighting equipment
E4 or F4	WUI 4	Ignition of combustibles from direct flame contact is likely.	High Construction Hardening Requirements: <ul style="list-style-type: none"> - No exposed combustibles - All vents, opening must be closed - Windows and doors must be covered with insulated non-combustible coverings. - Irrigated and well maintained low flammability landscaping - Local AHJ-Approved Access for firefighting equipment

Appendix L - Extreme Temperatures Heat Index



Appendix M – Wind Chill Chart



Appendix N - Definition of Infectious Diseases – Mayo Clinic

Infectious diseases are disorders caused by organisms — such as bacteria, viruses, fungi or parasites. Many organisms live in and on our bodies. They're normally harmless or even helpful. But under certain conditions, some organisms may cause disease.

Some infectious diseases can be passed from person to person. Some are transmitted by insects or other animals. And you may get others by consuming contaminated food or water or being exposed to organisms in the environment.

Signs and symptoms vary depending on the organism causing the infection, but often include fever and fatigue. Mild infections may respond to rest and home remedies, while some life-threatening infections may need hospitalization.

Many infectious diseases, such as measles and chickenpox, can be prevented by vaccines. Frequent and thorough hand-washing also helps protect you from most infectious diseases.

Appendix O - Documentation of Planning Process

To initiate the Plan Update process, the City Manager/Emergency Management Director and Fire Chief/Emergency Management Coordinator invited Department Heads from all City departments to participate in the Plan Update, as well as representatives from the Portsmouth business community, academia, and organizations serving vulnerable populations. Plan Update development occurred at a very rapid pace due to funding delays and the existing Plan expiration deadline, with meetings held on April 18, 2024, and June 26, 2024. The Hazard Mitigation Committee included the individuals listed below.

Plan Update Committee Member Name	Plan Update Committee Member Title
Karen Conrad	City Manager/Emergency Management Director, City of Portsmouth
William McQuillen	Fire Chief/Emergency Management Coordinator, City of Portsmouth
Jason Gionet	Assistant Fire Chief, City of Portsmouth
Mark Newport	Police Chief, City of Portsmouth
Mike Maloney	Deputy Police Chief, City of Portsmouth
Peter Rice	Public Works Director, City of Portsmouth
Brian Goetz	Deputy Public Works Director, City of Portsmouth
Eric Eby	City Engineer, City of Portsmouth
Erich Fielder	Engineering Supervisor, City of Portsmouth
Peter Britz	Planning and Sustainability Director, City of Portsmouth
Kate Homet	Associate Environmental Planner, City of Portsmouth
Sean Clancy	Assistant City Manager for Economic and Community Development, City of Portsmouth
Kim McNamara	Health Officer, City of Portsmouth
Ellen Tully	Welfare Director, City of Portsmouth
Joanna Diemer	Administrative Assistant, City of Portsmouth
Monte Bohanan	Director of Communications, City of Portsmouth

Rockingham Planning Commission (RPC) staff worked with the Emergency Management Coordinator (EMC) to directly seek input from residents, including neighborhoods most impacted by flooding, local businesses, academia, organizations supporting socially vulnerable populations, and Emergency Management Directors in abutting communities. City officials maintain a list of businesses in Portsmouth and a list of human resource organizations serving socially vulnerable and underrepresented residents. The Assistant City Manager for Economic and Community Development works closely with the Chamber Collaborative of Greater Portsmouth to communicate with all local businesses and invited all businesses to participate in the Plan Update process and to review the draft Plan Update. The EMC and RPC reviewed the draft Plan Update with representatives serving vulnerable populations. Emergency Management Directors in the abutting communities were emailed the draft Plan Update and invited to comment. Individuals listed below were invited to participate in the Plan Update process and review the draft Plan Update.

Social Service Organization	Contact Person
Southern New Hampshire Services - Provides social service programs for economically disadvantaged elderly, youth, and other vulnerable populations in Rockingham and Hillsborough County.	Ryan Clouthier, Chief Operating Officer
Greater Seacoast Community Health/Families First Health and Support Center – Not-for-profit community health and family resource center	Jessica Garlough, Director of Family and Social Services
Seacoast Regional Public Health Network – Provides multiple public health services, including public health emergency preparedness	Julia Meuse, Public Health Network Manager Public Health Emergency Preparedness Coordinator
Portsmouth Housing Authority	Craig Welch, Executive Director
Academia	Contact Person
Portsmouth High School	Stefano Chinosi, Principal
Portsmouth Middle School	Phillip Davis, Principal
Dondero Elementary School	Katherine Callahan, Principal
Little Harbour Elementary School	Erin Lawson, Principal
New Franklin Elementary School	Joanne Simons, Principal
Robert J. Lister Academy	Steve Krzyzanowki, Program Director
Portsmouth School Department	Zach McLaughlin, Superintendent
Abutting Communities	Contact Person
Newington, New Hampshire	EJ Hoyt and Michael Bilodeau, Co-Emergency Management Directors
New Castle, New Hampshire	Ted Hartmann, Emergency Management Director
Greenland, New Hampshire	Dennis Cote, Emergency Management Director
Rye, New Hampshire	Kevin Walsh, Emergency Management Director
Kittery, Maine	Robert Richter, Emergency Management Director
Business Community	Contact Person
The Chamber Collaborative of Greater Portsmouth	Ben VanCamp, President

Public notices about the Plan Update meetings were posted on the Town website and social media accounts to inform viewers and followers about meetings and opportunities to comment on the Plan. Notice about the Plan Update process was also posted on the Rockingham Planning Commission’s website and published in the RPC’s monthly newsletter. The newsletter is distributed to local officials in the 27-town RPC region. All Plan Update meetings were open to the public. RPC staff facilitated the Plan Update Committee meetings, guided the plan update process, and prepared the Plan Update.

City of PORTSMOUTH New Hampshire

Mon April 29, 2024
72°/57° Broken clouds

Search

Departments Government Residents Businesses Visitors ARPA Projects

Hazard mitigation plan seeking public input. Click here for more info

CITY MEETINGS
Calendar & Meeting Material >

MON APR 29
ARTS AND CULTURAL COMMISSION (ACC)
1:00 PM
Conference Room A, Municipal Building

TUE APR 30
SPECIAL POLICE COMMISSION MEETING: NON-PUBLIC SESSION
4:00 PM
Wm. Mortimer Conference Room, Police Department

TUE APR 30
SCHOOL BOARD STRATEGIC PLANNING SUBCOMMITTEE PERSONALIZED LEARNING MEETING #4
4:00 PM
PHS-CTC Culinary Arts Dining Room

HAZARD MITIGATION PLAN PUBLIC INPUT INFO

The City of Portsmouth is updating its Natural Hazard Mitigation Plan. The Federal Emergency Management Agency (FEMA) requires every community to develop and maintain a Natural Hazard Mitigation Plan with the goal of increasing resiliency to natural hazards such as flooding, storm surge, extreme temperatures, wildfires, etc.

Community members are welcome to share information on how and where natural hazards impact the City, and their neighborhoods. Any input on how the City can be better prepared is welcomed.

In simple terms, What are the hazards? – past and potential future hazards. Identify existing mitigation strategies, planning future strategies and identifying what may need to be considered to improve preparedness, and aid in response and recovery capability.

Please contact Chief William McQuillen at wjmcquillen@cityofportsmouth.com or (603-427-1515) to share information or if you have questions about the Plan itself.

RPC Begins Updates to Hazard Mitigation Plans in Atkinson and Portsmouth

NH Homeland Security and Emergency Management has awarded FEMA grant funds to the RPC to work with the towns of Atkinson and Portsmouth on updates to their Hazard Mitigation Plans. These Plans will include actions to mitigate and reduce the risks and impacts of natural hazards on people and property. Residents, landowners, business owners, municipal officials and other members of the public are welcome to attend plan update meetings.

Please contact Theresa Walker, RPC Consulting Planner, for information on meeting dates, or to share comments or questions, theresawalker@comcast.net.



City of Portsmouth Newsletter

For the Week of July 29, 2024

Does something look weird?
[View this email in your browser](#)

Did someone forward this to you? [Sign up here.](#)



Table of Contents

- [Upcoming City Meetings](#)
- [NHDOT Hosts Public Information Meeting Regarding Route 1 Corridor Improvement Project](#)
- [Hazard Mitigation Plan - Seeking Public Input](#)
- [Bicycle Pedestrian Plan Survey & Interactive Map](#)
- [Seasonal Construction Updates](#)
- [Free Prescott Park Garden Tours](#)
- [Portland Sea Dogs Trip](#)
- [Community Events](#)
- [Get Connected](#)

7 of 17 Automatic Zoom

City Council Meeting Agenda
July 15, 2024
Page 7

B. COUNCILOR BLALOCK

1. Sister Cities Trust Fund (***Sample motion – move to request that the Legal Department report back with a recommendation***)

C. COUNCILOR BAGLEY

1. Parking & Traffic Safety Committee Action Sheet and Minutes of June 6, 2024 (***Sample motion – move to approve and accept the action sheet and minutes of the June 6, 2024 Parking & Traffic Safety Committee meeting***)

XVI. APPROVAL OF GRANTS/DONATIONS
(There are no grants or donations on for approval this evening)

XVII. CITY MANAGER'S INFORMATIONAL ITEMS

1. *Community Policing Facility Update
2. *Sherburne Property Update
3. *South Meeting House Update
4. Hazard Mitigation Plan Update

XVIII. MISCELLANEOUS BUSINESS INCLUDING BUSINESS REMAINING UNFINISHED AT PREVIOUS MEETING

XIX. ADJOURNMENT [at 10:30 p.m. or earlier]

**Indicates verbal report*

**KELLI L. BARNABY, MMC/CNHMC
CITY CLERK**

Appendix P – Plan Approval Letter from FEMA

CERTIFICATE OF ADOPTION

WHEREAS, the City of Portsmouth received funding from the NH Office of Homeland Security and Emergency Management and assistance from Rockingham Planning Commission in the preparation of the Portsmouth Hazard Mitigation Plan Update 2024; and

WHEREAS, several public planning meetings were held between April 2024 and August 2024 regarding the development and review of the Portsmouth Hazard Mitigation Plan Update 2024; and

WHEREAS, the Portsmouth Hazard Mitigation Plan Update 2024 contains several potential future projects to mitigate hazard damage in the City of Portsmouth; and

WHEREAS, a duly noticed public meeting was held by the Portsmouth City Council on August 19, 2024, to formally approve and adopt the Portsmouth Hazard Mitigation Plan Update 2024.

NOW, THEREFORE BE IT RESOLVED that the Portsmouth City Council:

- The Plan is hereby adopted as the official plan of the City of Portsmouth;
- The respective individuals identified in the mitigation strategy of the Plan are hereby directed to pursue implementation of the recommended actions assigned to them;
- Future revisions and Plan maintenance required by 44 CFR 201.6 and FEMA are hereby adopted as part of this resolution for a period of five (5) years from the date of this resolution;
- An annual report of the progress of the implementation elements of the Plan shall be presented to the City Council by the City Manager/Emergency Management Director or the Emergency Management Coordinator.

NOW, THEREFORE BE IT RESOLVED that the City Council adopts the Portsmouth Hazard Mitigation Plan Update 2024.

IN WITNESS THEREOF, the undersigned has affixed his/her signature and the corporate seal of the City of Portsmouth on this _____ day of _____.

Mayor

Public Notary

Local Mitigation Plan Review Tool

Cover Page

The Local Mitigation Plan Review Tool (PRT) demonstrates how the local mitigation plan meets the regulation in 44 CFR § 201.6 and offers states and FEMA Mitigation Planners an opportunity to provide feedback to the local governments, including special districts.

1. The Multi-Jurisdictional Summary Sheet is a worksheet that is used to document how each jurisdiction met the requirements of the plan elements (Planning Process; Risk Assessment; Mitigation Strategy; Plan Maintenance; Plan Update; and Plan Adoption).
2. The Plan Review Checklist summarizes FEMA’s evaluation of whether the plan has addressed all requirements.

For greater clarification of the elements in the Plan Review Checklist, please see Section 4 of this guide. Definitions of the terms and phrases used in the PRT can be found in Appendix E of this guide.

Plan Information	
Jurisdiction(s)	Portsmouth, NH
Title of Plan	City of Portsmouth, NH Hazard Mitigation Plan Update 2024
New Plan or Update	Update
Single- or Multi-Jurisdiction	Single-jurisdiction
Date of Plan	7/7/2024
Local Point of Contact	
Title	William McQuillen, Fire Chief / Emergency Management Coordinator
Agency	City of Portsmouth, NH
Address	170 Court Street, Portsmouth, NH 03801
Phone Number	603-427-1515
Email	wjmcquillen@cityofportsmouth.com

Additional Point of Contact	
Title	Theresa Walker, Planning Consultant
Agency	Rockingham Planning Commission
Address	156 Water Street, Exeter, NH 03833
Phone Number	603-534-3913
Email	theresawalker@comcast.net

1 st Review Information	
State Review	
State Reviewer(s) and Title	Lynne Doyle, lynne.e.doyle@dos.nh.gov
State Review Date	7/17/2024
FEMA Review	
FEMA Reviewer(s) and Title	Jay Neiderbach, FEMA R1 Community Planer
Date Received in FEMA Region	7/17/2024
Plan Not Approved	7/30/2024
Plan Approvable Pending Adoption	Click or tap to enter a date.
Plan Approved	Click or tap to enter a date.

2nd Review Information	
State Review	
State Reviewer(s) and Title	Lynne Doyle, lynne.e.doyle@dos.nh.gov
State Review Date	8/6/2024
FEMA Review	
FEMA Reviewer(s) and Title	Jay Neiderbach, FEMA R1 Community Planer
Date Received in FEMA Region	8/6/2024
Plan Not Approved	Click or tap to enter a date.
Plan Approvable Pending Adoption	8/12/2024
Plan Approved	Click or tap to enter a date.

Plan Review Checklist

The Plan Review Checklist is completed by FEMA. States and local governments are encouraged, but not required, to use the PRT as a checklist to ensure all requirements have been met prior to submitting the plan for review and approval. The purpose of the checklist is to identify the location of relevant or applicable content in the plan by element/sub-element and to determine if each requirement has been “met” or “not met.” FEMA completes the “required revisions” summary at the bottom of each element to clearly explain the revisions that are required for plan approval. Required revisions must be explained for each plan sub-element that is “not met.” Sub-elements in each summary should be referenced using the appropriate numbers (A1, B3, etc.), where applicable. Requirements for each element and sub-element are described in detail in Section 4: Local Plan Requirements of this guide.

Plan updates must include information from the current planning process.

If some elements of the plan do not require an update, due to minimal or no changes between updates, the plan must document the reasons for that.

Multi-jurisdictional elements must cover information unique to all participating jurisdictions.

Element A: Planning Process

Element A Requirements	Location in Plan (section and/or page number)	Met / Not Met
A1. Does the plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement 44 CFR § 201.6(c)(1))		
A1-a. Does the plan document how the plan was prepared, including the schedule or time frame and activities that made up the plan’s development, as well as who was involved?	pp. 5, 7-11, 96-101	Met
A1-b. Does the plan list the jurisdiction(s) participating in the plan that seek approval, and describe how they participated in the planning process?	pp. 5, 7-11, 96-101	Met

Element A Requirements	Location in Plan (section and/or page number)	Met / Not Met
A2. Does the plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development as well as businesses, academia, and other private and non-profit interests to be involved in the planning process? (Requirement 44 CFR § 201.6(b)(2))		
A2-a. Does the plan identify all stakeholders involved or given an opportunity to be involved in the planning process, and how each stakeholder was presented with this opportunity?	pp. 5, 7-11, 96-101	Met
A3. Does the plan document how the public was involved in the planning process during the drafting stage and prior to plan approval? (Requirement 44 CFR § 201.6(b)(1))		
A3-a. Does the plan document how the public was given the opportunity to be involved in the planning process and how their feedback was included in the plan?	pp. 5, 7-11, 96-101	Met
A4. Does the plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement 44 CFR § 201.6(b)(3))		
A4-a. Does the plan document what existing plans, studies, reports and technical information were reviewed for the development of the plan, as well as how they were incorporated into the document?	pp. 9-10, 21, citations throughout	Met
ELEMENT A REQUIRED REVISIONS		
Required Revision: Click or tap here to enter text.		

Element B: Risk Assessment

Element B Requirements	Location in Plan (section and/or page number)	Met / Not Met
B1. Does the plan include a description of the type, location, and extent of all natural hazards that can affect the jurisdiction? Does the plan also include information on previous occurrences of hazard events and on the probability of future hazard events? (Requirement 44 CFR § 201.6(c)(2)(i))		
B1-a. Does the plan describe all natural hazards that can affect the jurisdiction(s) in the planning area, and does it provide the rationale if omitting any natural hazards that are commonly recognized to affect the jurisdiction(s) in the planning area?	pp. 16-38, Map 2, Appendices C-N	Met
B1-b. Does the plan include information on the location of each identified hazard?	pp. 16-38, Map 2	Met
B1-c. Does the plan describe the extent for each identified hazard?	pp. 16-38, Map 2, Appendices C-N	Met
B1-d. Does the plan include the history of previous hazard events for each identified hazard?	pp. 16-38, Map 2, Appendices C-N	Met
B1-e. Does the plan include the probability of future events for each identified hazard? Does the plan describe the effects of future conditions, including climate change (e.g., long-term weather patterns, average temperature and sea levels), on the type, location and range of anticipated intensities of identified hazards?	pp. 16-38	Met
B1-f. For participating jurisdictions in a multi-jurisdictional plan, does the plan describe any hazards that are unique to and/or vary from those affecting the overall planning area?	This is a single jurisdiction plan.	N/A
B2. Does the plan include a summary of the jurisdiction's vulnerability and the impacts on the community from the identified hazards? Does this summary also address NFIP-insured structures that have been repetitively damaged by floods? (Requirement 44 CFR § 201.6(c)(2)(ii))		
B2-a. Does the plan provide an overall summary of each jurisdiction's vulnerability to the identified hazards?	pp. 16-48, Maps 1-3	Met
B2-b. For each participating jurisdiction, does the plan describe the potential impacts of each of the identified hazards on each participating jurisdiction?	pp. 13-48, Maps 1-3	Met

Element B Requirements	Location in Plan (section and/or page number)	Met / Not Met
B2-c. Does the plan address NFIP-insured structures within each jurisdiction that have been repetitively damaged by floods?	pp. 21-22	Met

ELEMENT B REQUIRED REVISIONS

Required Revision:

Click or tap here to enter text.

Element C: Mitigation Strategy

Element C Requirements	Location in Plan (section and/or page number)	Met / Not Met
C1. Does the plan document each participant’s existing authorities, policies, programs and resources and its ability to expand on and improve these existing policies and programs? (Requirement 44 CFR § 201.6(c)(3))		
C1-a. Does the plan describe how the existing capabilities of each participant are available to support the mitigation strategy? Does this include a discussion of the existing building codes and land use and development ordinances or regulations?	pp. 49-50	Met
C1-b. Does the plan describe each participant’s ability to expand and improve the identified capabilities to achieve mitigation?	pp. 49-50	Met
C2. Does the plan address each jurisdiction’s participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement 44 CFR § 201.6(c)(3)(ii))		
C2-a. Does the plan contain a narrative description or a table/list of their participation activities?	pp. 20-23	Met
C3. Does the plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement 44 CFR § 201.6(c)(3)(i))		
C3-a. Does the plan include goals to reduce the risk from the hazards identified in the plan?	p. 12	Met

Element C Requirements	Location in Plan (section and/or page number)	Met / Not Met
C4. Does the plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infrastructure? (Requirement 44 CFR § 201.6(c)(3)(ii))		
C4-a. Does the plan include an analysis of a comprehensive range of actions/projects that each jurisdiction considered to reduce the impacts of hazards identified in the risk assessment?	pp. 51-55, Appendix A	Met
C4-b. Does the plan include one or more action(s) per jurisdiction for each of the hazards as identified within the plan's risk assessment?	pp. 69-71	Met
C5. Does the plan contain an action plan that describes how the actions identified will be prioritized (including a cost-benefit review), implemented, and administered by each jurisdiction? (Requirement 44 CFR § 201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))		
C5-a. Does the plan describe the criteria used for prioritizing actions?	pp. 56-71	Met
C5-b. Does the plan provide the position, office, department or agency responsible for implementing/administrating the identified mitigation actions, as well as potential funding sources and expected time frame?	pp. 69-71, Appendix B	Met
ELEMENT C REQUIRED REVISIONS		
Required Revision: Click or tap here to enter text.		

Element D: Plan Maintenance

Element D Requirements	Location in Plan (section and/or page number)	Met / Not Met
D1. Is there discussion of how each community will continue public participation in the plan maintenance process? (Requirement 44 CFR § 201.6(c)(4)(iii))		
D1-a. Does the plan describe how communities will continue to seek future public participation after the plan has been approved?	pp. 10-11, 72-73	Met
D2. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a five-year cycle)? (Requirement 44 CFR § 201.6(c)(4)(i))		
D2-a. Does the plan describe the process that will be followed to track the progress/status of the mitigation actions identified within the Mitigation Strategy, along with when this process will occur and who will be responsible for the process?	pp. 10-11, 72-73	Met
D2-b. Does the plan describe the process that will be followed to evaluate the plan for effectiveness? This process must identify the criteria that will be used to evaluate the information in the plan, along with when this process will occur and who will be responsible.	pp. 10-11, 72-73	Met
D2-c. Does the plan describe the process that will be followed to update the plan, along with when this process will occur and who will be responsible for the process?	pp. 10-11, 72-73	Met
D3. Does the plan describe a process by which each community will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement 44 CFR § 201.6(c)(4)(ii))		
D3-a. Does the plan describe the process the community will follow to integrate the ideas, information and strategy of the mitigation plan into other planning mechanisms?	p. 72	Met
D3-b. Does the plan identify the planning mechanisms for each plan participant into which the ideas, information and strategy from the mitigation plan may be integrated?	p. 72	Met
D3-c. For multi-jurisdictional plans, does the plan describe each participant's individual process for integrating information from the mitigation strategy into their identified planning mechanisms?	This is a single jurisdiction plan.	N/A

ELEMENT D REQUIRED REVISIONS

Required Revision:

Click or tap here to enter text.

Element E: Plan Update

Element E Requirements	Location in Plan (section and/or page number)	Met / Not Met
E1. Was the plan revised to reflect changes in development? (Requirement 44 CFR § 201.6(d)(3))		
E1-a. Does the plan describe the changes in development that have occurred in hazard-prone areas that have increased or decreased each community’s vulnerability since the previous plan was approved?	pp. 13-14, Map 1	Met
E2. Was the plan revised to reflect changes in priorities and progress in local mitigation efforts? (Requirement 44 CFR § 201.6(d)(3))		
E2-a. Does the plan describe how it was revised due to changes in community priorities?	pp. 51-55, 69-71	Met
E2-b. Does the plan include a status update for all mitigation actions identified in the previous mitigation plan?	pp. 51-55	Met
E2-c. Does the plan describe how jurisdictions integrated the mitigation plan, when appropriate, into other planning mechanisms?	p. 7, 51-55	Met

ELEMENT E REQUIRED REVISIONS

Required Revision:

Click or tap here to enter text.

Element F: Plan Adoption

Element F Requirements	Location in Plan (section and/or page number)	Met / Not Met
F1. For single-jurisdictional plans, has the governing body of the jurisdiction formally adopted the plan to be eligible for certain FEMA assistance? (Requirement 44 CFR § 201.6(c)(5))		
F1-a. Does the participant include documentation of adoption?	An unsigned copy of the adoption resolution was provided on p. 2	Choose an item.
F2. For multi-jurisdictional plans, has the governing body of each jurisdiction officially adopted the plan to be eligible for certain FEMA assistance? (Requirement 44 CFR § 201.6(c)(5))		
F2-a. Did each participant adopt the plan and provide documentation of that adoption?	This is a single jurisdiction plan.	N/A
ELEMENT F REQUIRED REVISIONS		
Required Revision: Click or tap here to enter text.		

Element G: High Hazard Potential Dams (Optional) – Not submitted for HHPD review

HHPD Requirements	Location in Plan (section and/or page number)	Met / Not Met
HHPD1. Did the plan describe the incorporation of existing plans, studies, reports and technical information for HHPDs?		
HHPD1-a. Does the plan describe how the local government worked with local dam owners and/or the state dam safety agency?	Click or tap here to enter text.	Choose an item.
HHPD1-b. Does the plan incorporate information shared by the state and/or local dam owners?	Click or tap here to enter text.	Choose an item.

HHPD Requirements	Location in Plan (section and/or page number)	Met / Not Met
HHPD2. Did the plan address HHPDs in the risk assessment?		
HHPD2-a. Does the plan describe the risks and vulnerabilities to and from HHPDs?	Click or tap here to enter text.	Choose an item.
HHPD2-b. Does the plan document the limitations and describe how to address deficiencies?	Click or tap here to enter text.	Choose an item.
HHPD3. Did the plan include mitigation goals to reduce long-term vulnerabilities from HHPDs?		
HHPD3-a. Does the plan address how to reduce vulnerabilities to and from HHPDs as part of its own goals or with other long-term strategies?	Click or tap here to enter text.	Choose an item.
HHPD3-b. Does the plan link proposed actions to reducing long-term vulnerabilities that are consistent with its goals?	Click or tap here to enter text.	Choose an item.
HHPD4-a. Did the plan include actions that address HHPDs and prioritize mitigation actions to reduce vulnerabilities from HHPDs?		
HHPD4-a. Does the plan describe specific actions to address HHPDs?	Click or tap here to enter text.	Choose an item.
HHPD4-b. Does the plan describe the criteria used to prioritize actions related to HHPDs?	Click or tap here to enter text.	Choose an item.
HHPD4-c. Does the plan identify the position, office, department or agency responsible for implementing and administering the action to mitigate hazards to or from HHPDs?	Click or tap here to enter text.	Choose an item.
HHPD Required Revisions		
Required Revision: Click or tap here to enter text.		

Element H: Additional State Requirements (Optional)

Element H Requirements	Location in Plan (section and/or page number)	Met / Not Met
This space is for the State to include additional requirements.		
Click or tap here to enter text.	Click or tap here to enter text.	Choose an item.

Plan Assessment

These comments can be used to help guide your annual/regularly scheduled updates and the next plan update.

Element A. Planning Process

Strengths

- The planning process included participation from a wide variety of community officials. Inclusion of the City's Planning Director and Associate Environmental Planner encouraged land use-based solutions to mitigation. Inclusion of the Welfare Director and Health Officer promoted engagement of vulnerable populations and underserved communities.
- Multiple contacts in different stakeholder groups (businesses, academia, organizations serving underserved communities, neighboring communities, etc.) were directly invited to participate in the planning process.
- The main body of the plan refers to the appendices. This makes it easy for the reader to find the materials that expand on what is in the plan.

Opportunities for Improvement

- For future updates, expand public engagement during the planning process, such as offering the public to complete a survey about their opinions on risk and mitigation activities.
- Provide more information about the structure and discussion of the planning committee meetings. This will serve as a useful reference for future updates and evaluation of the plan.
- Give a summary of how the community used the best available information. Describe what resources were used. If there are gaps in the data, explain what they are and how they may be addressed.
- Provide more information about how the most recent NFIP Flood Insurance Study (FIS) was incorporated into the plan, such as by identifying what information from the FIS was included and reviewed.

Element B. Risk Assessment

Strengths

- The plan describes extent through the use of scientific scales that are relative to the planning area. Using widely recognized scales paints a clear picture of an event's effects. It also shows how the scale can apply to past hazard events. This makes the plan more useful to the community.
- The plan's risk assessment referenced findings from the numerous previous studies that have been completed locally and regionally for the City of Portsmouth. This ensured a comprehensive

examination of risk that included historical and cultural resources, vulnerable populations, and effects of climate change.

- Maps clearly show the areas and sites that are most at risk.
- The community's greatest vulnerabilities are discussed in a clear way. This makes it easy to learn about major risks. The risk assessment lays the path for steps to reduce those risks.

Opportunities for Improvement

- Profile hazards separately, rather than using groupings, to ensure a detailed analysis. This applies specifically to nor'easters, ice storms, ice jams. While similarities exist between hazards, their cause, extent, and impacts can be significantly different and grouping hazards together can reduce the overall effectiveness of the risk assessment.
- Identify whether there is any history of state disaster declarations, in addition to the federal disaster declarations listed.

Element C. Mitigation Strategy

Strengths

- The description of how participants carry out their floodplain regulations is detailed and clear. This includes how they carry out their substantial damage provisions.
- The plan clearly lays out the actions in the plan that will directly reduce risk for the vulnerable and underserved communities in the area.

Opportunities for Improvement

- Provide more details about mitigation actions. Describe what they will entail and the tasks they will involve. For example, for a public outreach mitigation action, identify what activities will be implemented beyond the community's current engagement, and the specific topics that will be addressed. For actions that address infrastructure, make it clear whether actions will only involve "replacement" of existing assets or if improvements will also be made that reduce the risk.
- Delve more into how to expand current capabilities. Spell out what is lacking (funding, personnel, etc.) and the community's overall ability to expand or improve upon its mitigation capabilities in general.
- Ensure that the focus of the mitigation strategy is on mitigation, rather than preparedness. Mitigation actions reduce or eliminate long-term risk and are different from actions taken to prepare for or respond to hazard events. Mitigation activities lessen or eliminate the need for preparedness or response or recovery resources in the future. Also note that maintenance and repair without improvements and sustained activities that mitigate the vulnerabilities for the long term are not considered mitigation actions for the purposes of this plan.

- Provide more specifics about the local, state, and federal funding sources that will be used to fund each mitigation action.
- Multi-hazard and all-hazard actions are acceptable when they directly link to the vulnerabilities named in the risk assessment. Still, the community is strongly advised to develop unique actions for each hazard in the plan.
- Include more details about how mitigation actions will mitigate risk from future development.

Element D. Plan Maintenance

Strengths

- The plan lists specific the items that will be tracked and evaluated during annual updates.

Opportunities for Improvement

- Describe how the planning team will directly engage with underserved and vulnerable populations during the next five years. An equitable public outreach strategy does not end when the plan is adopted.
- Think of more ways to include the public in the implementation phase. Communities have presented to schools or other local groups, sent out yearly surveys, run tables at festivals and other events, and developed websites.
- Discuss the strength of the last plan's maintenance strategy. Did the community face any hardships during the monitoring, evaluating and updating efforts? Were any strong elements carried over in the plan update? Explain how the last plan's maintenance efforts shaped those planned for the next five years.
- Give more details on how information about hazard mitigation will be included in other plans.
- Include more details about how the plan will be evaluated and updated over the next five years. For evaluation, include: how the plan could be better integrated with other planning documents, how existing mitigation strategies could be improved to reduce the impact of recent occurrences of hazards, whether the current process for reviewing the plan effective, whether there are improvements to the public engagement process that could be implemented, or whether there are changes or improvements that could be made to the plan's goals. For the plan's five-year update, consider identifying when the update process will begin, other key dates in the planning process, and whether a consultant will be hired.

Element E. Plan Update

Strengths

- The development section of the plan explains the community's zoning and permitting process (and any recent changes to it).

Opportunities for Improvement

- Explain more clearly how recent, current and planned development has or has not affected the community's risk and vulnerability. Provide more information about specific sites that have been developed or redeveloped and the mitigation strategies that were incorporated into them.
- Give more details about how development trends have changed since the last plan update. Include data on major renovations, population changes, or the number of structures in the 1%-annual-chance floodplain.
- Expand on the changes the community has seen since the last plan was developed. Discuss how the needs of underserved communities or gaps in social equity have shifted in the planning area.
- Describe with a short narrative how the community's priorities have changed since the last plan update.
- Add lessons learned about carrying out mitigation actions. This would strengthen the plan. A short narrative on some "success stories" would also help.
- Discuss how mitigation activities have increased the community's resilience and how they support other long-term planning goals.

Element G. HHPD Requirements (Optional)

Strengths

- [insert comments]

Opportunities for Improvement

- [insert comments]

Element H. Additional State Requirements (Optional)

Strengths

- [insert comments]

Opportunities for Improvement

- [insert comments]

AUGUST 2024

Portsmouth's Climate Future

A Roadmap to Net Zero Emissions and Climate Resilience



PREPARED FOR



City of Portsmouth
1 Junkins Avenue
Portsmouth, New Hampshire 03801

PREPARED BY



VHB
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Watertown, Massachusetts 02472

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Acknowledgments

Special thanks are extended to the following groups for their support in developing *Portsmouth's Climate Future*. Their guidance and active participation will serve as a foundational factor in the success of this plan.

City of Portsmouth – Sustainability Committee (Past, Present, and Future Members)

City of Portsmouth – Department of Planning and Sustainability

- › Kate Homet, Associate Environmental Planner
- › Peter Britz, Director of Planning and Sustainability

Climate Action Plan RFP Committee

- › Karen Conard, City Manager
- › Beverly Mesa-Zendt, Former Planning Director
- › Peter Rice, Director of the Department of Public Works
- › Sarah Cornell, Supervisor of Technical Services for Portsmouth Public Library
- › Brian Goetz, Deputy Director of the Department of Public Works
- › Peter Britz, Director of Planning and Sustainability
- › Kate Homet, Associate Environmental Planner

City Department Liaisons for Climate Action

The City would also like to thank its Consultant Team for their support in the development of this plan:



Vanasse Hangen Brustlin, Inc.

260 Arsenal Place #2
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Plymouth, NH 03264



Rockingham Planning Commission

156 Water Street
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Finally, the City is especially grateful to its **Climate Ambassadors** and the many individuals who live, work, and play in Portsmouth who shared their ideas and comments to make this plan unique to your needs and your future.



CITY OF PORTSMOUTH

Municipal Complex
1 Junkins Avenue
Portsmouth, New Hampshire 03801
(603) 431-2000

Dear Residents of Portsmouth:

We believe in the City of Portsmouth and together we must choose our path. Portsmouth's Climate Future presents us with an incredible opportunity serving as a comprehensive roadmap charting a course for Portsmouth to contribute to a climate safe planet for our children and our future. The time is short and the task is large.

We understand we are facing an existential threat and we must act with the urgency needed to address that threat. The Climate Action Plan is the path to take the City to a zero carbon future. While we have been an Eco-Municipality since 2006, the scale of the problem has become more clear and supports the need for bold action to accelerate our current efforts. With this plan, we are committing to reduce our greenhouse gas emissions to zero by 2050.

Our municipal government can take steps such as those outlined in this plan to oversee and control its Climate Future. The larger community, which includes residents, businesses, workers, and visitors is also presented a path forward with this plan. Together, we will implement priority strategies that incorporate energy efficiency renewable energy, sustainable transportation, and climate adaptation. By directing our energy and earnest efforts, we will succeed in supporting a global shift to a low carbon future, support a resilient community and offset some of the negative impacts of climate change.

By adopting this plan, we ask that we all come together to act and demonstrate our belief in the City and its people, by moving it to a safer climate future for all. This means a future worthy of the 400 years of strength and solidarity that has made Portsmouth what it is today and stronger than it has ever been. Portsmouth has met challenges in the past and faced them head on. This plan gives the City an opportunity to meet head on the challenge of our time and come together to address it.

Sincerely,

Deaglan McEachern
Mayor

Karen S. Conard
City Manager

Bert Cohen
Chair of the Sustainability Committee

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Appendices

Appendix A: EasyRetro ResultsA-1

Acronyms

AFOLU	Agriculture, Forestry, and Other Land Use
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ATIIP	Active Transportation Infrastructure Investment Program
BAU	Business-As-Usual
BE	Building Energy Conservation and Efficiency
BEMS	Building Energy Management System
BEVs	Battery Electric Vehicles
BRIC	Building Resilient Infrastructure and Communities
CAFE	Corporate Average Fuel Economy
CCAP	Comprehensive Climate Action Plan
CDBG	Community Development Block Grant
CDFA	Community Development Finance Authority
CH ₄	Methane
CO ₂	Carbon Dioxide
COAST	Cooperative Alliance for Seacoast Transportation
COP21	United Nations 21st Conference of Parties
CSLU	Climate Smart Land Use
DC	Direct Current
DTS	Decarbonization Transportation Systems
EPDs	Environmental Product Declarations
EPP	Environmentally Preferable Purchasing
ER	Energy Resilience
FCEVs	Fuel Cell Electric Vehicles
FEMA	Federal Emergency Management Agency
FR	Flood Resilience
GHG	Greenhouse Gas
GPC	Global Protocol for Community-Scale Greenhouse Gas Emission Inventories
GRIP	Grid Resilience and Innovation Partnerships
GSCF	Granite State Clean Fleets
GWP	Global Warming Potential
HMGP	Hazard Mitigation Grant Program
HPDs	Health Product Declarations
HR	Heat Resilience
HVAC	Heating, Ventilation, and Air Conditioning
IPCC	Intergovernmental Panel on Climate Change
LCCA	Life Cycle Cost Analyses
LEDs	Light Emitting Diodes
LEED	Leadership in Energy and Environmental Design
LID	Low Impact Development
MT CO ₂ e	Metric Tons of Carbon Dioxide Equivalents
N ₂ O	Nitrous Oxide
NCA	National Climate Assessment
NH	New Hampshire

PACE	Powering Affordable Clean Energy
PCAP	Priority Climate Action Plan
PPAs	Power Purchase Agreements
PUC	Public Utilities Commission
PV	Photovoltaic
RE	Renewable Energy Production and Procurement
REC	Renewable Energy Certificates
RGGI	Regional Greenhouse Gas Initiative
RPS	Renewable Portfolio Standard
RSA	Revised Statutes Annotated
SEACAN	School Eco Club and Seacoast Climate Action Now
SIMAP	Sustainability Indicator Management & Analysis Platform
SWIFR	Solid Waste Infrastructure for Recycling
U.S. EPA	U.S. Environmental Protection Agency
UNFCCC	United Nations Framework Convention on Climate Change
USGBC	U.S. Green Building Council
V	Volts
VMT	Vehicle Miles Traveled
WM	Sustainable Waste Management
ZEVs	Zero-Emission Vehicles

Introduction





1

Introduction

The City of Portsmouth proudly introduces *Portsmouth's Climate Future*, a community-driven climate action plan aimed at reducing greenhouse gas (GHG) emissions from both community and local government sources to net zero levels. This initiative is part of a larger global effort to mitigate the worst impacts of climate change and build resilience for the future. Climate change stands as one of the most pressing challenges of the 21st century, making it imperative to act for the health, prosperity, and overall well-being of our residents, economy, and the surrounding natural environment.

While often seen as a daunting challenge – and understandably so, climate change also offers a unique opportunity to advance our community's vision, guided by the five themes laid out in the City's Master Plan: Vibrant, Authentic, Diverse, Connected, and Resilient.¹ It also empowers us to address historical inequities while ensuring fairness and justice as we forge ahead on our climate journey.

In this chapter, we introduce *Portsmouth's Climate Future* by outlining the basics of a climate action plan and exploring the key planning efforts and factors that shaped its development. Beyond this discussion, Chapter 2, *Community Participation*, describes the opportunities the City created to engage and obtain feedback from its stakeholders during the planning process. Chapter 3, *Greenhouse Gas Emissions Inventory*, establishes the GHG emissions baselines² at both the community and local government

¹ The City of Portsmouth's Master Plan is available at <https://www.cityofportsmouth.com/planportsmouth/master-plan>.

² In this context, the word "baseline" refers to the reference measurement used to compare future emissions and measure the effectiveness of climate mitigation actions.

scales, as well as forecasts those emissions under business-as-usual (BAU)³ conditions. Chapter 4, *Implementation Roadmap*, charts a clear path towards a **net zero⁴ future community-wide by 2050 and for the local government by 2040**. Finally, Chapter 5, *Enabling Success*, discusses the next steps in building community capacity to ensure successful implementation of the plan.



VIBRANT

A City that provides a high quality of life with an abundance of opportunities for living, working and playing.



AUTHENTIC

A City that treasures its unique character, natural resources and historic assets.



DIVERSE

A City that welcomes residents of all ages, backgrounds and economic levels and supports a wide variety of businesses.



CONNECTED

A City that provides strong links throughout the community, supports all forms of mobility and encourages walking, bicycling and transit.



RESILIENT

A City that considers and values the long term health of its natural and built environment.

Themes from the Portsmouth 2025 Master Plan

1.1 What is *Portsmouth's Climate Future*?

Portsmouth's Climate Future is our community's guide to addressing climate change together. This plan builds upon previous and ongoing planning efforts at the local, regional, and statewide levels, highlighting the actions and policies necessary to reduce GHG emissions and adapt to shifts in our climate. It reflects our shared commitment to enhancing our current sustainable practices and launching innovative new initiatives in six key focus areas or pathways:

- › **Building Energy Conservation and Efficiency** – Leveraging the latest technologies and sustainable building practices to reduce energy consumption where we live, work, and play.

³ "Business-as-usual" refers to the projected trends of GHG emissions assuming no significant actions are taken to reduce them.

⁴ In the context of GHG emissions, "the term Net Zero" refers to achieving a balance between the amount of GHGs emitted to and removed from the atmosphere, effectively resulting in no net increase in atmospheric GHG levels.

- › **Decarbonizing⁵ Transportation Systems** – Reducing our vehicle miles traveled through active transportation, shared mobility,⁶ and public transit modes while simultaneously increasing our adoption of electrified vehicles.
- › **Renewable Energy Production and Procurement** – Enabling and promoting the installation of local renewable energy systems and pursuing financial mechanisms to close the gap.
- › **Sustainable Waste Management** – Redirecting our waste streams away from landfills and incinerators through increased composting, source reduction, reuse, and recycling.
- › **Climate-Smart Land Use** – Enabling our natural lands and ecosystems to better serve their role as carbon sinks and utilizing land use controls to support the aims of the plan’s other pathways.
- › **Enhancing Climate Resilience** – Preparing and safeguarding our critical assets and resources against the potential impacts of climate change.

Portsmouth's Climate Future also serves as a detailed roadmap, featuring implementation timelines, designated responsibilities, estimated financial commitments, and funding opportunities. This roadmap is designed to leverage public resources efficiently while fostering a culture of climate action and shared responsibility among our community and key partners.

1.2 Driving Factors for Climate Action in Portsmouth

The following factors drove the City of Portsmouth to prepare this climate action plan and were carefully considered in its development.

1.2.1 Global Planning Context

Assessment reports from the Intergovernmental Panel on Climate Change (IPCC) have made it clear that our activities are directly warming the planet. This change has resulted in more frequent and severe weather events, such as heavy rainfall, droughts, and heat waves, as well as rising sea levels. The latest IPCC report (AR6), released in 2021 and 2022, revealed that the global average temperature has risen by 1.1°C since the pre-industrial era (i.e., the period before the Industrial Revolution) and that this average could exceed 2°C in the future without immediate and sustained GHG emissions reductions. A rise of 1.5°C or more would result in even more intensified climate hazards, creating greater risk to human health, economies, and natural ecosystems. Due to inherent socioeconomic disadvantages (e.g., poverty and minority status), such risks would be disproportionately borne by the most vulnerable of communities.

As a global crisis, climate change requires a global response. The Paris Agreement, adopted in December 2015 during the 21st Conference of Parties (COP21) to the United Nations Framework

⁵ “Decarbonization” refers to the process of reducing carbon dioxide (CO₂) and other GHG emissions (e.g., methane [CH₄] and nitrous oxide [N₂O]) through the implementation of climate mitigation measures, such as cleaner energy sources and energy efficiency measures.

⁶ Per the Shared-Used Mobility Center, shared mobility is defined as transportation services and resources that are shared among users, either concurrently or one after another. This includes public transit; micromobility (bikesharing, scooter sharing); automobile-based modes (carsharing, rides on demand, and microtransit); and commute-based modes or ridesharing (carpooling and vanpooling).

Convention on Climate Change (UNFCCC), is a global commitment involving almost every country in the world, both developed and developing. It is a legally binding agreement where all signatories commit to take actions that limit global temperature rise to less than 2°C above pre-industrial levels, aiming for even lower at 1.5°C to avoid the worst impacts of climate change. The Paris Agreement also aims to help countries become climate resilient and increase their ability to adapt to the adverse effects of climate change.

In this global planning context, initiatives like *Portsmouth's Climate Future* play a crucial role in contributing to the collective effort to combat climate change and ensure the well-being of our planet for future generations.

1.2.2 National Planning Context

As part of its commitment under the Paris Agreement, the United States has pledged to reduce its emissions by 50-52 percent below 2005 levels by 2030. Further commitments have been made, including reaching 100 percent carbon pollution-free electricity by 2035, as outlined in Executive Order 14057, and achieving a net-zero emissions economy by 2050 and delivering 40 percent of benefits from federal investments in climate and clean energy to disadvantaged communities, per Executive Order 14008.⁷ *The Long-Term Strategy of the United States* lays out pathways to achieve a net-zero GHG emissions economy by 2050.⁸

To achieve such reductions, policies and legislation are being leveraged or have been enacted, including the Clean Air Act which has been used to regulate GHG emissions from major sources such as power plants and vehicles; the Inflation Reduction Act which allocated significant funding to renewable energy, electric vehicles, and energy efficiency improvements; and the Infrastructure Investment and Jobs Act, which provided significant funding to sustainable infrastructure projects (e.g., public transportation and modernizing the electrical grid).

From a climate resilience perspective, the National Climate Assessment (NCA), produced by the United States Global Change Research Program, examines climate trends, vulnerabilities, and projected future changes on the national and regional scales. The NCA notably calls attention to rising average temperatures, more frequent and severe heat waves, changes in precipitation patterns, and rising sea levels. It assesses climate impacts on health, agriculture, water resources, coastal areas (including the City of Portsmouth), ecosystems, and infrastructure. The report underscores the importance of coordinated climate adaptation strategies implemented alongside efforts to reduce GHG emissions.

Among key federal policies that advance climate resilience, the *National Climate Resilience Framework* serves as a guide to help all levels of government anticipate, prepare for, adapt to, and recover from the impacts of climate change, and Executive Order 14008 requires federal agencies to develop climate adaptation and resilience plans that address the impacts of climate change on their operations and assets. Notable related legislation includes the American Recovery and Reinvestment Act and the Energy Policy Act, which enhance the energy sector's

⁷ The White House. (n.d.). "President Biden's Historic Climate Agenda." Accessed from, <https://www.whitehouse.gov/climate/>

⁸ United States Department of State and the United States Executive Office of the President. (2021). *The Long-Term Strategy of the United States: Pathways to Net-Zero Greenhouse Gas Emissions by 2050*. Accessed from, <https://www.whitehouse.gov/wp-content/uploads/2021/10/us-long-term-strategy.pdf>

resilience, and the Coastal Zone Management Act, which includes provisions to enhance the resilience of coastal communities to sea level rise and extreme weather events. Additionally, funding opportunities through the Federal Emergency Management Agency (FEMA), such as through the Hazard Mitigation Grant Program (HMGP) and Building Resilient Infrastructure and Communities (BRIC) Program, along with the Infrastructure Investment and Jobs Act and the Water Resources Development Act, further support resilience efforts.

1.2.3 State Planning Context

The New Hampshire Climate Action Plan: A Plan for New Hampshire's Energy, Environmental, and Economic Development Future, published in March 2009, includes strategies and actions to reduce GHG emissions and enhance the state's resilience to climate change, with a focus on energy efficiency, renewable energy, and sustainable land use. It set a non-binding statewide GHG emissions reduction target of 80 percent below 1990 levels by 2050. In 2015, through the Resolution Concerning Climate Change and other collaborative agreements, New Hampshire, along with other New England states, committed to reducing statewide GHG emissions by 35-45 percent from 1990 levels by 2030. As one of New Hampshire's most densely populated communities and most popular tourist destinations, the efforts the City of Portsmouth undertakes to reduce its GHG emissions can significantly contribute to achieving these targets.

In 2022, the New Hampshire Department of Energy published *New Hampshire: 10-Year Energy Strategy*, which sets policy goals for energy efficiency, renewable energy development, and energy resilience.

In March 2024, the State released the *State of New Hampshire Priority Climate Action Plan*, prepared in collaboration with the U.S. Environmental Protection Agency (U.S. EPA) with funding provided through the U.S. EPA's Climate Pollution Reduction Grant Program. The Priority Climate Action Plan (PCAP), which shall supersede the 2009 Climate Action Plan, establishes a detailed statewide GHG emissions inventory and creates a pathway to support statewide investment in policies, practices, and technologies that reduce GHG emissions, as well as other harmful air pollutants while supporting high-quality jobs, economic growth, and quality of life for residents. The PCAP will be followed by a Comprehensive Climate Action Plan (CCAP) that will set near- and long-term GHG emissions reduction targets. The CCAP is expected in August 2025. *Portsmouth's Climate Future* and the State's PCAP and upcoming CCAP will be aligned and work together towards similar objectives.

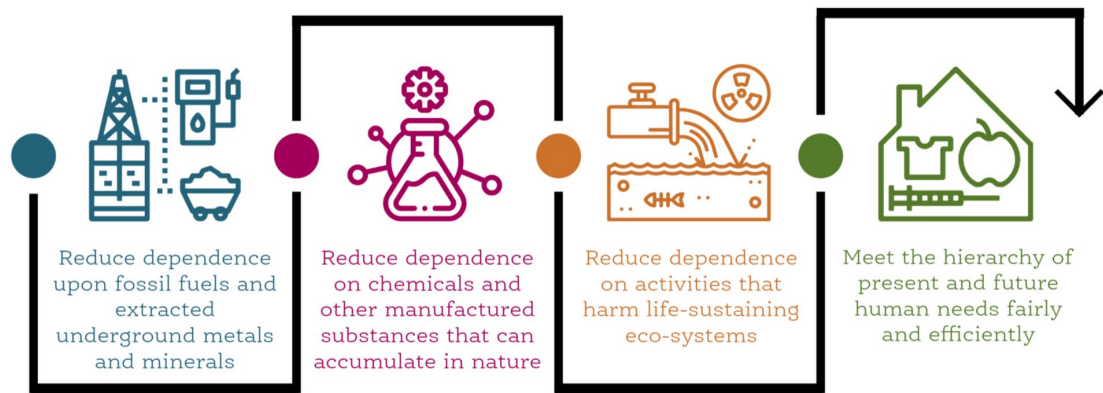
In addition to the planning efforts described above, New Hampshire is also a participant in the Regional Greenhouse Gas Initiative (RGGI), a cooperative effort among northeastern states to cap and reduce carbon dioxide (CO₂) emissions from the energy sector. Relatedly, New Hampshire's Renewable Portfolio Standard (RPS) statute, RSA 362-F, requires 25.2 percent of the state's energy supply to come from renewable energy sources by 2025.

From a climate resilience perspective, the State is currently updating its *2019-2020 New Hampshire Coastal Flood Risk Summary*, which highlights the increasing risk of coastal flooding due to sea level rise and extreme weather events. It stresses the need for immediate adaptation strategies and underscores partnerships between state agencies, local governments, and stakeholders to enact resilience-positive policies.

1.2.4 Local Planning Context

In the City of Portsmouth, our local planning efforts are deeply rooted in a comprehensive strategy that addresses both current issues and opportunities, as well as emerging challenges, with environmental stewardship at the core of our focus.

The Mayor’s Blue Ribbon Committee on Sustainable Practices – now the Sustainability Committee – was established in 2007 after the City’s 2005 Master Plan highlighted the community’s desire to be more sustainable and ecologically friendly. On the recommendation of the committee, the City Council declared the City to be an Eco-Municipality. The following graphic depicts how the City intends to become more sustainable through this commitment.



Credit: VHB, Adapted from The Natural Step Guiding Objectives

Our 2025 Master Plan, published in 2017, advances this approach. Of particular relevance to *Portsmouth’s Climate Future* is how the 2025 Master Plan aims to address the long-term health of our natural and built environments under the theme of “Resilient,” through the following goals:

- › Implement best management practices and site design standards to ensure the sustainability and resilience of public and private infrastructure;
- › Manage public open spaces for passive recreation and environmental preservation;
- › Promote effective stewardship to enhance the City’s natural resources;
- › Promote efficient use and management of resources; and
- › Incorporate climate change impacts and adaption into all development review and planning efforts.

Building on the above, as the following list demonstrates, we have a strong commitment to the continued implementation of climate-focused projects and programs.



Solar Photovoltaic (PV) Array at the Madbury Water Treatment Plant

- › Between 2016 and 2017, the City upgraded its entire streetlight system to light-emitting diodes (LEDs).
- › The City completed two large solar photovoltaic (PV) arrays at the Portsmouth High School and Madbury Water Treatment Plant, which combined produce around 700,000 kilowatt hours of renewable electricity annually.
- › In 2017, the Mayor signed a letter promoting the Paris Agreement’s goals for increasing efforts to cut GHG emissions, creating a clean energy economy, and standing for environmental justice.
- › In 2018, following a report from the Renewable Energy Committee, the Portsmouth City Council adopted a Renewable Energy Policy that moved the entire City, beginning with the local government, towards becoming a “Net Zero Energy”⁹ community.
- › In 2023, with support from the Portsmouth Energy Advisory Committee, the City Council adopted the Portsmouth Community Power Plan. Portsmouth Community Power combines the buying power of residents and businesses to expand energy choices, including options with greater renewable content than those obtainable directly from the utility while lowering costs.



Portsmouth Community Power Logo

⁹ “Net zero energy” is defined on a source energy basis (i.e., accounting for losses in transmission and distribution) and as the actual energy consumed on an annual basis is less than or equal to locally generated renewable energy.

- › In 2023, the City Manager approved a new purchasing policy that guides all new municipal construction and major renovation projects to include energy-efficient technologies and utilize sustainable practices, such as U.S. Green Building Council’s (USGBC’s) Leadership in Energy and Environmental Design (LEED) Silver-equivalent certification for all new municipal building projects.
- › In May 2024, the City Council voted unanimously to pass zoning amendments to increase access to electric vehicle charging stations by expanding the number of districts in the City where they can be installed. The City has installed one charging station (two ports) in the lower parking lot at City Hall on Junkins Avenue.
- › The Sustainability Committee continues to serve in its capacity as a resource and educational conduit for the advancement of sustainability in the community.

In addition to the above, the City and its Sustainability Committee routinely work with local and regional community organizations, such as the Portsmouth High School Eco Club and Seacoast Climate Action Now (SEACAN). Over the last few years, these partnerships have brought forth actions like the community carbon footprint tracking dashboard BrightAction

(<https://brightaction.app/newhampshire/portsmouth>), the annual Sustainability Fair held every April to promote sustainability in the community, and Eco Day at the Portsmouth Farmer’s Market every August to highlight local sustainability initiatives in our food systems and beyond. These collaborative partnerships are key to building community capacity to advance common sustainability and climate action goals.



Electric Vehicle Charging Station at City Hall

1.2.4.1 Climate Change in Portsmouth

As a coastal community, the City of Portsmouth faces substantial risks stemming from the impacts of climate change. Rising sea levels and storm surges pose significant threats to the City’s infrastructure, including roadways, buildings, and public utility systems, potentially jeopardizing their functionality as well as the safety of residents and visitors. Such hazards are already impacting areas surrounding North Mill Pond, South Mill Pond, the South End, Peirce Island, Little Harbor, and Sagamore Creek – areas home to significant historical and cultural resources – as well as vital economic assets, such as the downtown business district and fisheries-based activities.

To address its coastal vulnerability, the City of Portsmouth undertook the 2013 Coastal Resilience Initiative, which mapped areas of the community most vulnerable to sea level rise as well as

severe coastal storms and identified adaptation strategies,¹⁰ and completed the 2018 *Historic Resources Climate Change Vulnerability Assessment and Adaptation Plan*,¹¹ which evaluated the economic and cultural impact of flooding and sea level rise in the Downtown Historic Register District. The City is currently updating its Hazard Mitigation Plan, which will enable it to apply for certain types of non-emergency funding under FEMA's HMGP.

The City has also worked closely with its partners, namely the Rockingham Planning Commission, on several studies, including the *Portsmouth Tides to Storms Vulnerability Assessment* (2015) and the *Seacoast Transportation Corridor Vulnerability Assessment* (2022). While the Tides to Storms Vulnerability Assessment focused on municipal assets within Portsmouth, the Corridor Vulnerability Assessment provides a broad assessment of at-risk transportation infrastructure – notably including Junkins Avenue, Parrott Avenue, Marcy Street, and State Street/Daniel Street, as well as US 1 at Sagamore Creek and New Hampshire (NH) 1B. Each of these reports continues to aid Portsmouth's local planning and implementation efforts for future climate adaptation measures.

The City was also chosen to be a host site for the 2023 Keeping History Above Water Conference where the City of Portsmouth Planning and Sustainability Department and Water, Wastewater, Stormwater Division of the Department of Public Works along with Strawberry Banke Museum and the University of New Hampshire Institute for the Study of Earth, Oceans, and Space welcomed 165 attendees to the three-day conference to explore "Water Has a Memory: Preserving Historic Port Cities from Sea Level Rise." This national conference brought to light many of the climate adaptation issues facing Portsmouth in terms of our unique port city and the preservation of our historical resources.

Aside from sea level rise and storm surge, per the *New Hampshire Climate Assessment 2021*, New Hampshire's climate is already becoming warmer and wetter, with temperatures across the state increasing by an average of 3°F since 1901 and annual precipitation increasing by 12 percent over the last 120 years – with the greatest increases occurring since 1971. Higher temperatures and levels of precipitation are projected to continue over the course of this century, with implications for various sectors such as transportation, infrastructure, outdoor recreation, energy, public health, and the environment.

In Portsmouth, annual average maximum and minimum temperatures are expected to rise by 2.0-2.1°F over the next two decades, with an increase of up to 9.1°F possible by the end of the century. Such temperature increases would result in an 8-35 percent decrease in heating degree days (a measure of the energy demand required to heat buildings) and a 34-198 percent increase in cooling degree days (a measure of the energy demand required to cool buildings). Extreme heat days (i.e., days above 90°F) – exacerbated by the urban heat island effect in heavily developed communities such as Portsmouth due to impervious cover (i.e., buildings and pavements) – are also expected to rise to over 50 days by the end of the century – posing a significant risk to populations including the elderly, children, persons with chronic illness, and

¹⁰ More information on the Coastal Resilience Initiative is available at <https://www.cityofportsmouth.com/planportsmouth/cr/>.

¹¹ A Story Map illustrating the Historic Resources Climate Change Vulnerability Assessment and Adaptation Plan is available at <https://portsmouthnh.maps.arcgis.com/apps/MapJournal/index.html?appid=302cb9580dfb4d4dbd66d6bb39055a88e>.

lower-income households who have limited ability to adapt to rising temperatures, such as those that cannot afford to live in a dwelling with air conditioning.

Total annual precipitation is projected to increase, particularly during winter and spring seasons, by up to 4 percent over the next two decades and by up to 10 percent by the end of the century. Additionally, the frequency and intensity of extreme precipitation events are expected to rise, with the number of days with the most extreme precipitation (i.e., greater than two inches within 24 hours) increasing by up to 69 percent. Such extreme conditions can result in inland and coastal flooding, damages to infrastructure or disruptions to their functionality, and risks to human health including increases in respiratory and heart disease, and diseases due to pests, as well as water supply contamination, among other potential impacts.

The above-described climate trends and projections, as well as the concerning findings of related research, highlight the need to adapt to existing impacts and to reduce GHG emissions to avoid the worst effects of climate change.

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Community Participation



2

Community Participation

At the launch of this planning effort, the City of Portsmouth prepared a comprehensive public outreach and engagement plan designed to seamlessly integrate and set detailed timelines for various outreach strategies. Our diversified approach—encompassing in-person meetings, virtual events, surveys, a dedicated project website, and targeted signage—ensured that all residents and stakeholders had meaningful opportunities to actively participate or otherwise follow our progress. This robust strategy was vital for spurring community interest and securing widespread buy-in, which is critical for the success of *Portsmouth's Climate Future*. Through their involvement, participants helped to set greenhouse gas (GHG) emissions targets, as well as identify and refine actionable strategies to address local climate change challenges. The following sections further describe our outreach strategies.

2.1 Public Engagement Events and Surveys

Three in-person public workshops were held over the course of this project. An online alternative was also made available for each workshop, and assistance with language and other accessibility needs was offered. Workshop 1 was held in May 2023 at the Eileen Dondero Foley City Council Chambers (63 attendees), serving as a project kickoff meeting. It focused on the project goals while highlighting the urgency of climate action, known vulnerabilities, and an overview of engagement opportunities available to the public throughout the project schedule. Workshop 2 was held in July 2023 at the Portsmouth Public Library (29 attendees), where the 2021 GHG emissions inventories and draft GHG emissions reduction measures were presented, along with updates on the project's engagement process. Returning to the Eileen Dondero Foley City Council Chambers, Workshop 3 was held in February 2024 (25 attendees). This last workshop allowed participants to provide feedback on the draft GHG emissions reduction targets, along with the pathways and prioritized actions to reach those targets.

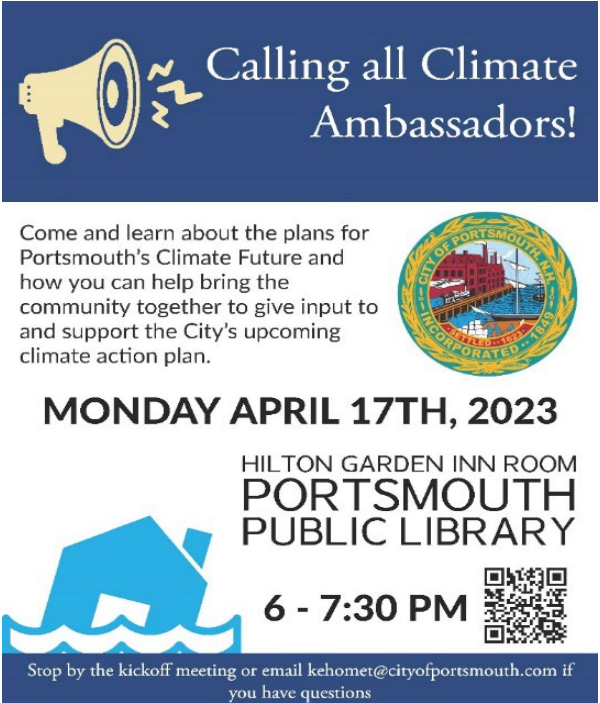
For each of the public workshops, an online survey was also created to encourage broader participation and feedback outside of the meeting itself. Alongside Workshop 2, draft actions were presented in the EasyRetro platform (<https://easyretro.io/>), where participants were able to “vote” on those they supported and provide direct comments to convey their suggestions, thoughts, or questions. The EasyRetro results are presented in **Appendix A**.

In addition to the public workshops, the City created a dedicated project website that provided monthly updates on the planning process, relevant resources to give context to the project, and a feedback form that allowed the public to submit questions or comments on the project.

To bring the project further into the community, City Staff and Climate Ambassadors tabled at a series of events including the Sustainability Fair (April 2023), the Piscataqua RiverFest (June 2023), Market Square Day (June 2023), and Eco Day at the Farmer’s Market (August 2023). At these events, the project team informed the community about *Portsmouth’s Climate Future* and related planning efforts, while soliciting feedback on local climate issues and what residents want their community and their City to do in terms of GHG emissions reduction and climate adaptation. Finally, in September 2023, the project team hosted a community get-together at a local brewery in Portsmouth to discuss the plan and overarching goals of moving the City of Portsmouth toward a net zero future.

2.2 Climate Ambassadors

Early on in this plan’s development, it became clear that additional capacity to carry out the extensive outreach envisioned would be necessary. To bridge this gap, we established a Climate Ambassador Program, soliciting volunteers to engage with a broader assortment of citizens. A training workshop was held in April of 2023, after which the Ambassadors actively conducted outreach by attending meetings of existing organizations and interacting with groups of residents. The Ambassadors provided project information and collected valuable feedback and ideas that informed the drafting of this climate action plan. This was a new approach for Portsmouth and could be replicated in the future. As with any new initiative, there is room for improvement. For example, if replicated, the City should recruit Ambassadors with existing trusted relationships with disadvantaged groups, including low-income communities, communities of color, persons with limited English proficiency, and the intellectually and developmentally disabled, as well as seniors and youth.



Calling all Climate Ambassadors!

Come and learn about the plans for Portsmouth’s Climate Future and how you can help bring the community together to give input to and support the City’s upcoming climate action plan.

MONDAY APRIL 17TH, 2023

HILTON GARDEN INN ROOM
PORTSMOUTH PUBLIC LIBRARY

6 - 7:30 PM

Stop by the kickoff meeting or email kehomet@cityofportsmouth.com if you have questions

Climate Ambassadors Recruitment Flyer



Top: Public brainstorming at Workshop 1. **Middle:** Discussion facilitation at Workshop 2. **Bottom (Left):** Kate Homet with the City of Portsmouth's Planning & Sustainability Department at a tabling event. **Bottom (Right):** Project signage welcomed in local storefronts, on lawns, and at events.

Greenhouse Gas Emissions Inventory

3

3

Greenhouse Gas Emissions Inventory

To date, the City of Portsmouth has developed four greenhouse gas (GHG) emissions inventories – in 2006,¹² 2012,¹³ 2018,¹⁴ and 2021. This chapter of *Portsmouth's Climate Future* publishes the results of the most recent inventory at two scales: the community as a whole and local government operations. In addition to reporting baseline emissions, this section forecasts GHG emissions at both scales under business-as-usual (BAU) conditions. Notably, community emissions far surpass local government emissions, underscoring the necessity for substantial community responsibility and action in reducing overall emissions.

3.1 Portsmouth's Greenhouse Gas Emissions Baseline

For calendar year 2021, with support from a community volunteer, the City of Portsmouth prepared an update to its GHG emissions inventory using the University of New Hampshire Sustainability Institute's Sustainability Indicator Management & Analysis Platform (SIMAP®). SIMAP is typically used within the higher education industry to account for GHG emissions at the campus level; however, the City modified the platform to apply the tool to the GHG emissions generated within the community and from its operations. Due to some limitations in adapting this tool, it was not possible to compare the 2021 inventories to previous years. Additionally, the lingering impacts of the COVID-19 pandemic may have influenced the data. Therefore, the City of Portsmouth is encouraged to conduct regular updates to its GHG emissions inventories and reassess its mitigation targets and implementation strategies, as necessary.

¹² The City of Portsmouth's 2006 GHG Emissions Inventory is available at https://files.cityofportsmouth.com/files/ww/2006_ICLEI_Inventory_w_appdx.pdf

¹³ The City of Portsmouth's 2012 GHG Emissions Inventory is available at https://files.cityofportsmouth.com/files/ww/Portsmouth%202012%20GHG%20Inventory_w_appendix.pdf

¹⁴ The City of Portsmouth's 2018 GHG Emissions Inventory is available at https://files.cityofportsmouth.com/files/planning/2018_GHG_Portsmouth_Final.pdf

3.1.1 Community-Wide Emissions

The community-scale portion of the 2021 GHG inventory includes emissions generated from electricity, natural gas, and other fuel consumption within the residential, commercial, and industrial sub-sectors. It also includes transportation emissions resulting from on-road vehicle miles traveled within the City of Portsmouth’s jurisdictional limits, upstream energy-related activities (i.e., natural gas leakage from piping infrastructure and transmission and distribution losses from purchased electricity), and waste generated from within the City but processed outside of its boundaries. It does not account for emissions from agriculture, forestry, and land use; aviation; waterborne navigation; and wastewater processing.

In 2021, total community-wide emissions amount to 163,397 metric tons of carbon dioxide equivalents (MT CO₂e). In other terms, this total represents 7.5 MT CO₂e per person, which is less than the State of New Hampshire at 11.0 MT CO₂e per person.

GHG Emissions per Capita (2021)

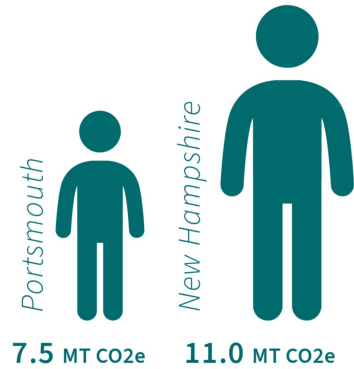
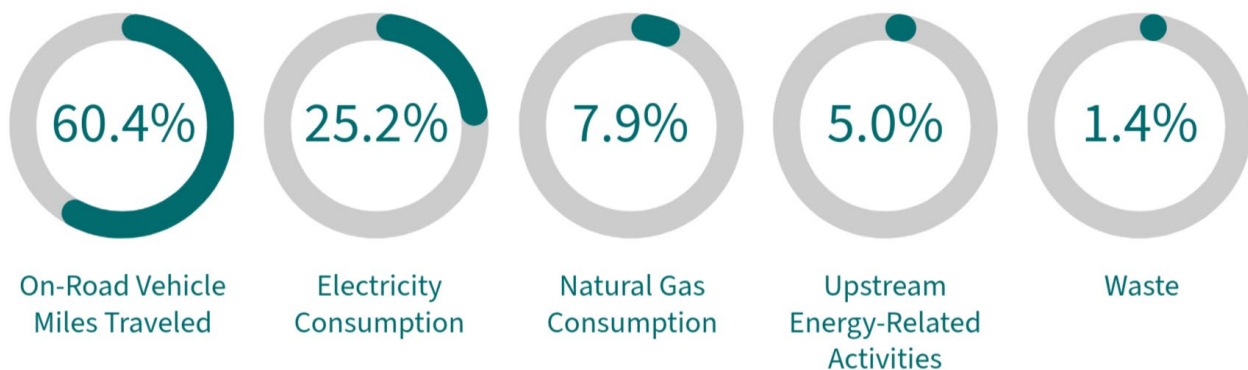


Figure 3-1 illustrates the breakdown of emissions resulting from activities occurring within the Portsmouth community. As shown, the largest source of estimated emissions was from the transportation sector at 60.4 percent, followed by grid-supplied electricity consumption at 25.2 percent. This indicates an opportunity for the community to reduce its GHG emissions by minimizing vehicle miles traveled (i.e., shifting from driving cars to active transportation, public transport, and shared mobility), transitioning to zero-emission vehicles (ZEVs) (i.e., battery electric vehicles [BEVs] and hydrogen fuel cell electric vehicles [FCEVs]), and implementing energy efficiency measures in the existing building stock (e.g., lighting upgrades; heating, ventilation, and air conditioning [HVAC] system improvements; building insulation and sealing; energy efficient appliance and equipment upgrades, power management and controls, and renewable energy integration). While there are many opportunities to facilitate supporting cleaner energy across Portsmouth households, opting for a cleaner energy mix from Portsmouth Community Power is one of the most accessible options.

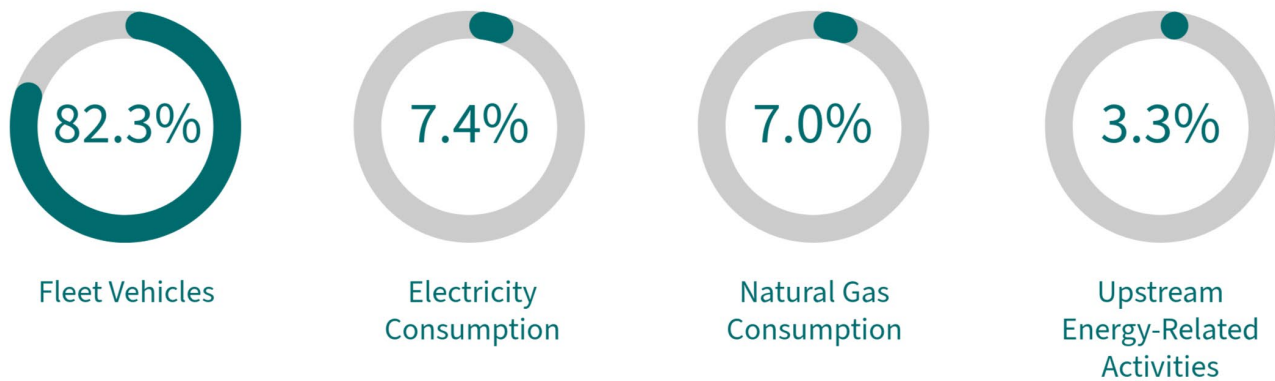
Figure 3-1: Total Community GHG Emissions by Sector/Source (2021)



3.1.2 Local Government Operations

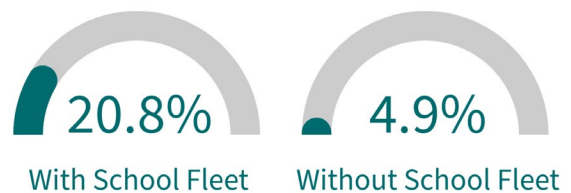
For local government operations, the 2021 GHG inventory includes all emissions resulting from energy consumption within City-owned buildings and facilities (i.e., natural gas combustion and purchased electricity), government-operated vehicles and equipment (motor gasoline and diesel combustion), street and traffic lights (purchased electricity), and water and wastewater infrastructure (natural gas and propane combustion and purchased electricity). It also includes indirect emissions resulting from upstream energy-related activities. It does not account for fugitive emissions from refrigerants and fire suppression equipment. It also does not include indirect emissions from waste generated by government operations, employee commuting, or employee business travel.

Figure 3-2: Total Local Government GHG Emissions by Source (2021)



In 2021, total local government operations emissions amounted to roughly 33,977 MT CO₂e. **Figure 3-2** above depicts the composition of these emissions by source. The largest source of estimated emissions was government-operated vehicles and equipment at 82.3 percent, 92.6 percent of which can be attributed to the School Department’s vehicle fleet, including its bus system. Grid-supplied electricity consumption and stationary combustion followed at 7.4 percent and 7 percent, respectively. Not accounting for the School Department’s vehicle fleet, total local government operations emissions amounted to 8,071 MT CO₂e, 31 percent and 29.6 percent of which derived from purchased electricity and stationary combustion, respectively.

Municipal Emissions as a Percentage of Community Emissions



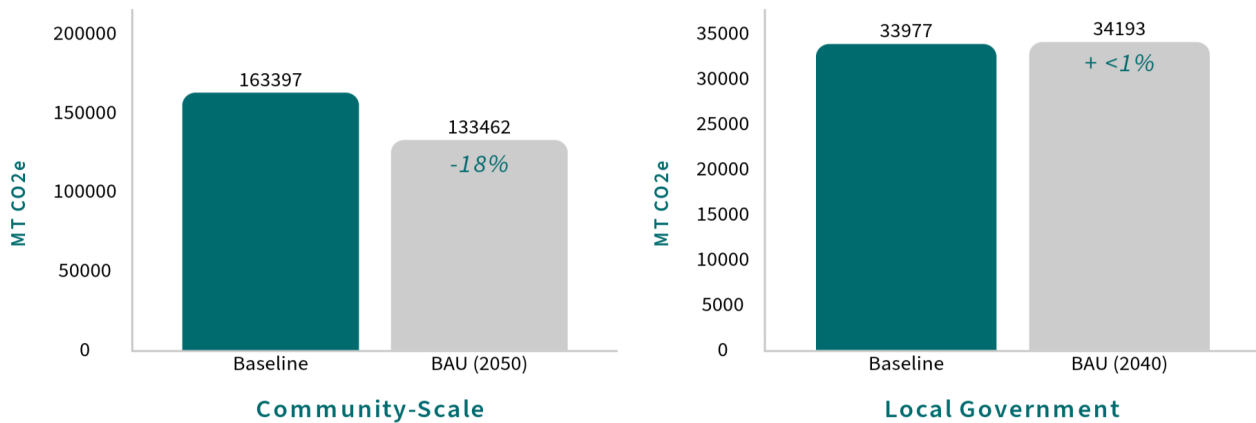
3.2 Business-As-Usual Forecast

BAU forecasts were prepared to demonstrate projected trends of community-wide GHG emissions and GHG emissions from local government operations if no significant action were to be taken to reduce them. For the City of Portsmouth, due to limitations of the 2021 GHG

emissions inventories, it is important to note that these forecasts were heavily dependent on assumptions that included population growth provided by the New Hampshire Department of Business and Economic Affairs,¹⁵ local government employee growth based on historical growth rates as revealed through a review of the City’s Annual Comprehensive Financial Reports, Corporate Average Fuel Economy (CAFE) standards,^{16,17} and the contribution of renewable energy sources to the statewide electrical grid as dictated by the State’s Renewable Portfolio Standard (RPS).¹⁸ Any variances impacting these assumptions or additional influences (e.g., new regulations or governmental policy) can result in significant changes to these forecasts.

The BAU forecasts for the City of Portsmouth were aligned with the GHG emissions reduction target years for the community (2050) and local government (2040) (see Chapter 4, *Implementation Roadmap*). As shown in **Figure 3-3**, despite projected population increases of around 11 percent, community-wide GHG emissions were forecasted to decrease by approximately 18 percent from the 2021 baseline to 2050. CAFE standards were the largest contributor to this reduction. As for local government emissions, they are expected to remain stable, increasing less than 1 percent by 2040.

Figure 3-3: Business-As-Usual (BAU) Forecasts – Community (2050) and Local Government (2040)



It should be noted that the State’s RPS aims to achieve substantial renewable energy targets by 2025. Accordingly, no further renewable energy contributions to the statewide electrical grid were assumed thereafter as part of these BAU forecasts. Due to the short-term focus of this policy, communities such as Portsmouth are compelled to create and implement strategies to bridge the gap and fully address emissions reductions from purchased electricity.

¹⁵ New Hampshire Department of Business and Economic Affairs. (2022). *State of New Hampshire: State, County, and Municipal Population Projections: 2020-2050*. Accessed from, <https://www.nheconomy.com/getmedia/0205c62d-9c30-4b00-9c9e-d81d8f17b8b3/NH-Population-Projections-2020-2050-Final-Report-092022.pdf>

¹⁶ CAFE standards, or Corporate Average Fuel Economy standards, are U.S. regulations aimed at improving the average fuel efficiency of cars and light trucks to reduce energy consumption and GHG emissions.

¹⁷ As CAFE standards do not apply to school buses, a conservative 10 percent efficiency gain was applied to this emissions source under the local government BAU forecast. Such efficiency gains can be expected through advancements in engine and powertrain technology, improvements in aerodynamics and weight reduction, idle-reduction technologies, and stricter remissions regulations. This estimate does not take into account the potential electrification of the School Department’s bus fleet.

¹⁸ More information on the New Hampshire Renewable Portfolio Standard is available at <https://www.energy.nh.gov/renewable-energy/renewable-portfolio-standard>.

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Implementation Roadmap



4

Implementation Roadmap

This chapter establishes greenhouse gas (GHG) emissions reduction targets for the Portsmouth community and local government, as well as lays out actions for each to reach the targets while simultaneously enhancing Portsmouth’s resilience to climate change. The details herein serve as a flexible guide to the implementation of *Portsmouth’s Climate Future* – the who, what, and how.

4.1 Toward a Net Zero Emissions Future

In adopting *Portsmouth’s Climate Future*, Portsmouth’s City Council is setting a target to reach net zero emissions within the community by 2050. Leading by example, it is committing to reducing local government-owned and controlled activities to net zero levels by an earlier target date of 2040. These targets were established with careful consideration, and the planning process revealed robust community support for their adoption.¹⁹

Figures 4-1 and 4-2 illustrate the net zero targets at the community scale and local government scale, respectively. They mirror or are more aggressive than existing local, regional, and national commitments, including that of the State of New Hampshire which aims to reduce GHG emissions by 80 percent below 1990 levels by 2050.²⁰ Consistent with climate science, they are designed to help achieve a long-term global warming outcome below 1.5 degrees Celsius,²¹ thereby avoiding the worst effects of climate change.

¹⁹ Many participants at Workshop #3 desired to see a more ambitious net zero target for the community, aligning it with the local government. However, it was determined that achieving net zero emissions at the community scale by 2040 would be difficult and the flexibility of the longer-term target would better allow different sectors/sources to adapt considering their specific challenges. Further, such a short-term goal could lead to trade-offs, potentially including the diversion of substantial investments from other purposes.

²⁰ The State of New Hampshire is currently in the process of updating its Climate Action Plan, which will presumably include updated commitments for GHG emissions reduction.

²¹ The Intergovernmental Panel on Climate Change (IPCC). (2023). *AR6 Synthesis Report Climate Change 2023*. Accessed from, <https://www.ipcc.ch/sr15/>

Figure 4-4: Drawdown to Zero – Community Activities

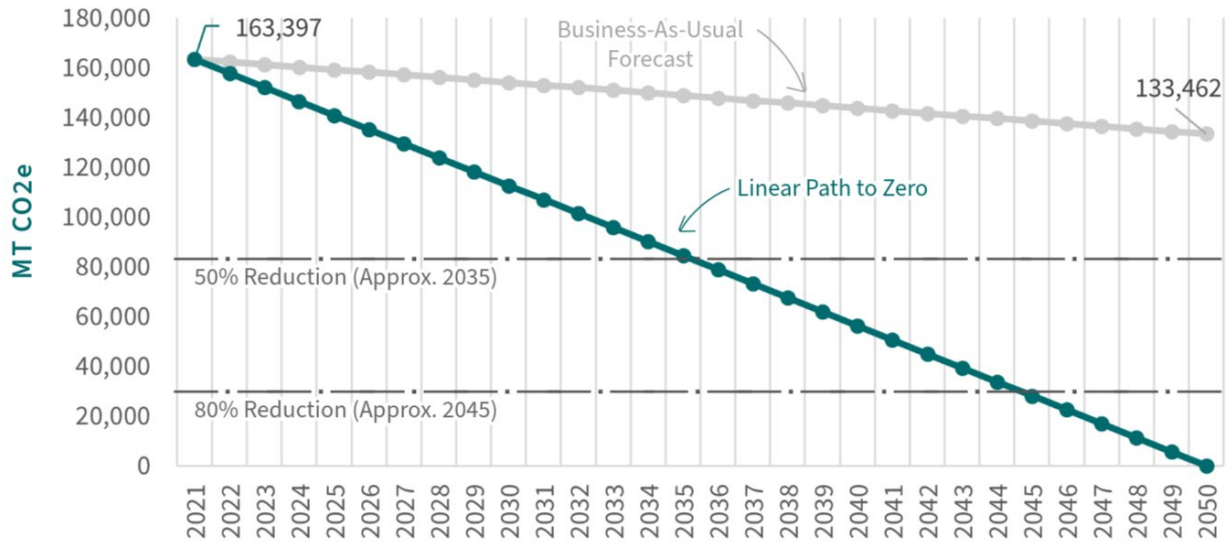
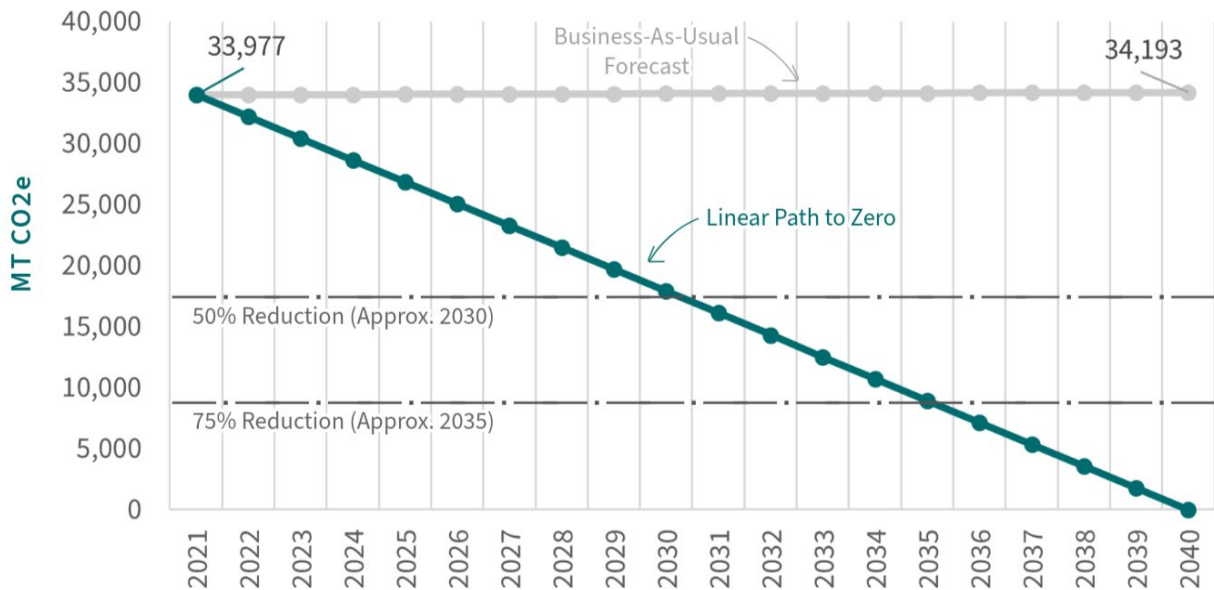


Figure 4-2: Drawdown to Zero – Local Government Operations



While challenging, these targets can potentially be reached through the comprehensive implementation of the priority and supporting actions laid out in this plan. It is essential, however, to acknowledge the possible practical challenges of implementation, including resource allocation, technological barriers, and stakeholder cooperation. Crucially, significant and sustained public support and action are necessary to fully realize GHG emissions reductions at the community scale. As necessary, addressing residual emissions (i.e., any emissions remaining after all feasible actions have been taken) through offsets and carbon removals (see

Section 4.1.1) is possible, though they will require rigorous verification and high standards to ensure their effectiveness and integrity.

It is important to note that these targets are based on the data as well as the sectors and sources covered in the City's 2021 GHG emissions inventories. As the City continually updates its emissions inventories with more refined data and to cover a broader set of sectors and sources, it should regularly review how it defines its net zero targets. Similarly, the City should routinely review its progress toward meeting the targets to identify and address any projected shortfalls and adjust for continuous improvement purposes.

4.1.1 A Note on Carbon Sinks

This plan prioritizes direct emissions reductions within the community; however, it recognizes the critical role of carbon sinks – natural reservoirs that absorb and store more carbon dioxide (CO₂) than they release into the atmosphere. Examples of carbon sinks include forests, soils, oceans, and wetlands. **Projects that create or enhance natural land covers, such as through reforestation, afforestation, wetland restoration, and urban green infrastructure, can be indispensable components in achieving a community's net zero targets.** They can compensate for residual emissions – those emissions that remain after all feasible measures to reduce or eliminate emissions have been implemented – or even enable a carbon-negative community (i.e., removing more carbon from the atmosphere than is generated).

4.2 Roadmap Organization

As presented in this section, the actions to be undertaken by the community and the local government in *Portsmouth's Climate Future* are organized by pathway:

- › Building Energy Conservation and Efficiency;
- › Decarbonizing Transportation Systems;
- › Renewable Energy Production and Procurement;
- › Sustainable Waste Management;
- › Climate-Smart Land Use; and
- › Enhancing Climate Resilience.

These pathways give focus to the priority actions that aim to both mitigate and adapt to climate change in the City of Portsmouth. In the following sections, these actions are defined in terms of their implementation details such as their implementation timelines, champions and supporting entities, costs and funding opportunities, co-benefits, and equity considerations.

4.3 Equity Considerations

This plan addresses the causes of climate change by targeting GHG emissions while recognizing that disadvantaged populations, often the least responsible for these emissions, are the most affected. On an academic level, this inequity may arise from their increased exposure to environmental hazards like floodplains, decreased adaptive capacity resulting from economic

constraints and limited access to infrastructure (e.g., waterbodies, natural environments, high-quality housing, healthy foods, broadband), and pre-existing health conditions combined with limited access to healthcare, political marginalization, barriers in education and information gathering, and disproportionate economic impacts such as energy burden (i.e., relatively higher electricity, home heating and cooling, and transportation energy costs).

According to the Demographic Index and Supplemental Demographic Index provided by the U.S. Environmental Protection Agency's (U.S. EPA's) EJScreen, concentrations of disadvantaged populations in the City of Portsmouth are in U.S. Census Block Groups 330151071001 and 330151071003. These areas also face critical service gaps in broadband access, health insurance, and housing affordability, and these deficiencies can hinder residents' ability to engage in community-wide efforts to reduce GHG emissions and limit their capacity to adapt to and respond to climate hazards. It is important to note, however, that disadvantaged populations reside throughout the City – not just in the above-referenced locations. Therefore, equity considerations should be applied universally and not only when an action impacts an area with higher concentrations of these populations.

This plan recognizes that climate action requires a just transition, meaning that associated benefits (e.g., cost-saving energy efficiency technologies, access to renewable energy, resilient neighborhoods, green jobs, access to natural areas) and burdens of climate action (e.g., costs of energy efficiency upgrades and retrofits), must be fairly distributed. Accordingly, the implementation of the actions detailed in this chapter requires careful consideration of their potential direct, indirect, and compounding consequences on the City's disadvantaged populations, as well as their key support structures, including community organizations such as Cross Roads House, Families First, and Operation Blessing. To this end, the City should:

- › Better understand its low-income households and the energy burden (i.e., the percentage of a household's income that is spent on energy costs, which include expenses for electricity, heating, cooling, and transportation fuel) and energy deficit (i.e., where the energy supply is insufficient to meet the energy demand – perhaps due to issues of affordability) that exists within the City. The U.S. Department of Energy's Low-Income Energy Affordability Data Tool can be helpful in this regard.
- › Prioritize households with a high energy burden for energy efficiency incentives and create targeted communications for these households to relay information on available funding opportunities.
- › Ensure new infrastructure or enhancements to such infrastructure are equitably sited throughout the City, taking into consideration existing access and need. For example, there is likely a greater need for electric vehicle charging infrastructure in areas with multi-family housing and for cooling centers in areas that may not have access to air conditioning.
- › Consider subsidizing any direct costs of new public infrastructure or new services to users. For example, the cost of charging electric vehicles at public stations located in lower-income areas should be minimized to the extent practicable.

- › Assess the impacts of decision-making and the siting of new infrastructure on impacted communities to ensure they avoid, minimize, or mitigate any disproportionate effects on surrounding low-income and minority populations. For example, energy infrastructure such as power plants have historically been sited in low-income and minority communities, leading to disproportionate exposure to pollution and health risks. To be effective, this process should include community consultation.
- › Recognize that some actions may require households to purchase new products or services, for example, reusable products and organic waste collection. The implementation of such actions should consider free or discounted options for low-income households to ensure that these measures are accessible and do not impose additional financial burdens on disadvantaged communities.
- › Work to close any gaps in understanding the actions needed to be taken at the community level and awareness of opportunities to engage in those actions. This may require targeted educational campaigns with language accommodations.

4.4 Supporting Actions

In the development of this plan, we identified several measures that, while not directly reducing GHG emissions, would facilitate and amplify the emissions reduction benefits of the prioritized actions. Additionally, for certain actions, the City may not have direct implementation authority but could play a strategic role in facilitating their execution. These supporting actions identified during the planning process for *Portsmouth's Climate Future* include:

- › Staffing
 - Appoint a Climate Action Manager/Sustainability Manager to manage the implementation of *Portsmouth's Climate Future*.
 - Identify staff to continue to monitor federal and state incentives, rebates, and tax breaks that support climate mitigation and resiliency.
- › Policies and Procedures
 - Continue regularly updating the City's GHG Emissions Inventories, improving their accuracy and comprehensiveness. Institute data governance to support this effort.
 - Continue to assess City plans and reports to ensure they appropriately acknowledge and integrate *Portsmouth's Climate Future* so that efforts are unified and consistently directed toward achieving long-term climate resilience and sustainability goals.
 - Launch a publicly available reporting dashboard to track progress toward achieving the GHG reduction targets included in *Portsmouth's Climate Future*. This dashboard should also report on implementation progress by pathway and prioritized action. Provide an alternative to the online dashboard for those with limited access to technology.
 - With state approval, as necessary, incorporate carbon emissions and the cost of carbon as evaluation criteria in the City's capital planning process and in department operating budget requests, where relevant.

› Education and Awareness

- Develop, launch, and maintain a consolidated community education program that engages residents and other property owners/developers to provide resources on a range of energy efficiency and transition technologies, relating to buildings (e.g., Weatherization Assistance Program) and building systems (e.g., NHSaves), electric vehicles (e.g., Granite State Clean Fleets, Plug-In Electric Drive Vehicle Tax Credit), and renewable energy deployments (e.g., Low-Moderate Income Solar Renewable Energy Grant). Organize and tailor such resources and information to their target audiences. Afford this program a prominent place on the City's website, enlist staff and/or community members such as the Sustainability Committee and other local organizations, to serve as "Coaches" to perform direct engagements, and engage partners in planning and conducting community-scale education events.
- Raise awareness about local climate impacts through art and cultural events (e.g., shows, installations, etc.) In the process, highlight Portsmouth's cultural diversity.
- Continue to support community conversations on climate and sustainability topics to keep the momentum going upon completion of *Portsmouth's Climate Future* and to further the culture of climate awareness in Portsmouth. These conversations should be held across the City, but particularly in neighborhoods that experience/are exposed to the most impact. Follow best practices in planning and holding meetings with disadvantaged populations to encourage the greatest levels of participation possible.
- Provide educational resources on the installation of solar panels on historic properties. Information should be in line with City regulations, the National Park Service, and the Secretary of the Interior Design Standards for Rehabilitation. Build upon the ordinance amendment adopted in July 2024 that makes it easier for homeowners to install solar arrays in the City's historic district.
- Develop community support and capacity for conducting waste characterization studies to better understand and communicate the composition of the local government and community waste streams.

› Partnerships

- Invest in workforce development to support clean energy jobs, including through partnerships with the School Department and local/regional colleges. These investments should prioritize the City's disadvantaged populations to reduce their economic constraints and support greater adaptive capacity.
- Partner with utilities to evaluate the existing capacity and redundancy of the electric grid, considering the expected future demand due to electrification of vehicles and building systems. As part of this study, identify smart electric grid technologies that could be implemented. Additional considerations should include microgrid technology and distributed energy resources. Where practicable, ensure that system upgrades are prioritized in the areas most vulnerable to the impacts of climate change.
- Work with partners (e.g., the State, Eversource, and Offshore Wind Developers) to leverage the City's coastal facilities to support offshore wind construction and energy production, including manufacturing/marshaling, transmission interconnection, and

energy storage. Seek Host Agreements that would provide the City with various fiscal and economic benefits.

- Serve as an active participant in future state-wide climate action planning, including the upcoming Comprehensive Climate Action Plan (CCAP) under the U.S. EPA's Climate Pollution Reduction Grant program.²²
 - Support local agricultural entities and food co-ops to build awareness of and encourage farm-to-table practices (i.e., buying and ordering locally/regionally grown foods) to reduce transportation emissions. This action should leverage local Seacoast farmers markets.
- › Advocacy
- Support carbon pricing policies at the state and federal levels. The Citizens Climate Lobby can be leveraged for support.
 - Advocate for state-level rebates for the purchase or lease of new or used electric vehicles. Drive Electric NH is a potential partner.
 - Advocate for a Clean Heat Standard in New Hampshire, similar to Massachusetts and Vermont. A Clean Heat Standard generally requires heating energy suppliers to replace fossil heating fuels with clean heat over time. With low-income households more likely to have less money to upgrade their heating systems, revenue generated through this program could be directed at offsetting home retrofits for these households.
 - Advocate for an increase in the State's Renewable Portfolio Standard (RPS) requirements beyond 2025. Do so in partnership with organizations such as Clean Energy NH.
 - Encourage the state to implement a tourism tax to reduce the GHG emissions associated with tourist activities. Projects to be funded through this tax could support the tourism industry by positioning the City of Portsmouth as a "green destination." Encourage the state to engage small, disadvantaged business enterprises to hear their concerns and address them where feasible.
 - Advocate for the establishment of a Coastal Flood Risk Mitigation Fund at the state level that uses a percentage of the local Room & Meal tax receipts, parking fees, or other local revenue sources to purchase and install temporary or permanent flood protection measures and establish a rebate program to encourage property owners to install flood protection measures.

4.5 Priority Actions

In the planning for *Portsmouth's Climate Future*, an initial list of potential actions was developed, informed by best practices and input from community and stakeholder engagement.

Recognizing the need for focused implementation due to resource limitations, the initially identified actions were evaluated for prioritization based on several criteria. The criteria below were weighted in the evaluation process relative to 1. The weights applied to each criterion are provided in parentheses.

²² More information on the U.S. EPA's Climate Pollution Reduction Grant program is available at <https://www.epa.gov/inflation-reduction-act/climate-pollution-reduction-grants>.

- › **Relevance to the City (Unweighted [Yes/No])** – The applicability of the action to Portsmouth's specific context.
- › **GHG Emissions Benefit (1.5)** – The potential reduction in emissions that the action could achieve.
- › **Cost (1.25)** – The City's financial obligations for action implementation.
- › **Implementation Complexity (0.75)** – The ease or difficulty of putting the action into practice.
- › **Staffing Needs (1)** – The human resources required to implement the action.
- › **Secondary Sustainability Impacts (1.25)** – Any additional sustainability benefits relating to one or more of the following: (1) Energy Conservation/Efficiency, (2) Water Conservation/Efficiency, (3) Natural Resource Protection or Enhancement, (4) Responsible Materials Management, (5) Community Health and Wellness, (5) Equity and Justice, and (6) Added Economic Value.
- › **The Climate Mitigation/Adaptation Intersection (1.5)** – The ability of the action to support both reducing emissions and adapting to climate change impacts.

The actions listed in the following sections include those that demonstrated the greatest cost-benefit through the above-described evaluation process, refined and supplemented by contributions from the community (Public Workshop #3) and City departments. Each action includes implementation details such as Action Champion (i.e., the groups expected to lead or motivate implementation), Time to Complete, and Approximate Cost to the City. Additionally, qualitative assessments are provided for each action including their relative GHG emissions reduction potential (assessed against other actions of the same focus – community or local government), payback potential, and the specific goals they support from the City's Master Plan.

For detailed information on the development, prioritization, and refinement of the priority actions, please contact the City's Planning & Sustainability Department.

4.5.1 Building Energy Conservation and Efficiency (BE)

The following actions aim to minimize energy consumption in existing and future buildings across residential, commercial, and industrial sectors. While the primary focus of the actions under Building Energy Conservation and Efficiency is energy reduction, co-benefits at the building level include lower operational costs, improved efficiencies, enhanced occupant comfort and staff productivity, and increased safety. More broadly, electrifying fossil fuel-based building systems can enhance local air quality, reducing electricity use can alleviate demand on the regional grid, and upgrading outdated heating, ventilation, and air conditioning (HVAC) systems can see higher global warming potential (GWP) refrigerants replaced with lower GWP alternatives. Collectively, these actions can also boost energy security by reducing dependence on fossil fuels and contributing to job creation in the building and clean energy sectors.

Of importance, in the implementation of actions under this pathway and those under Renewable Energy Production and Procurement, the City of Portsmouth should conduct higher-level planning for neighborhood-scale decarbonization to reduce dependence on fossil fuels and facilitate the decommissioning of natural gas pipelines. This includes building electrification

(e.g., heat pumps) and the development of thermal energy networks that utilize renewable energy sources (e.g., district heating with ground source heat pumps).

BE-1 Encourage community-wide building weatherization measures so that building heating/cooling is more effective and efficient.

Type:	Focus:	GHG Benefits:
Mitigation	Community	Medium
Champion:	Time to Complete:	Master Plan Goal Alignment:
Sustainability Committee	Ongoing	Goal 5.4
Approximate Cost:	Potential Payback:	
<\$100k	Higher Property Valuations (Community and Local Government); Energy Cost Savings (Community)	

BE-2 Support the adoption of tax incentives (e.g., preferential rates) for multi-family and commercial buildings that are both highly efficient and fossil-fuel-free.

Type:	Focus:	GHG Benefits:
Mitigation	Community	Medium
Champion:	Time to Complete:	Master Plan Alignment:
Sustainability Committee	<5 Years	Goals 1.1 and 5.4
Approximate Cost:	Potential Payback:	
\$100k to \$500k	Higher Property Valuations (Community and Local Government); Energy Cost Savings (Community)	

BE-3 Advocate for the implementation and enforcement of building energy and emissions performance standards. Require multi-family and commercial buildings of a certain size to report their energy usage and GHG emissions to the City for purposes of enforcement and benchmarking. ENERGY STAR Portfolio Manager can be used to track, benchmark, and report data.

Type:	Focus:	GHG Benefits:
Mitigation	Community	Medium
Champion:	Time to Complete:	Master Plan Alignment:
Sustainability Committee	<5 Years	Goals 1.1 and 5.4
Approximate Cost:	Potential Payback:	
\$100k to \$500k	Higher Property Valuations (Community and Local Government); Energy Cost Savings (Community)	

BE-4 Advocate for an advanced energy code, with an incentivized net-zero pathway. Include solar- and electric vehicle-capable, ready, and install requirements. Once adopted, ensure that resources are put in place to support code compliance.

Type:	Focus:	GHG Benefits:
Mitigation	Community	High
Champion:	Time to Complete:	Master Plan Alignment:
Sustainability Committee	<5 Years	Goals 1.1 and 5.4
Approximate Cost:	Potential Payback:	
<\$100k	Higher Property Valuations (Community and Local Government); Energy Cost Savings (Community)	

BE-5 Similar to Durham, establish a Powering Affordable Clean Energy (PACE) financing program to support energy efficiency retrofits, especially the older housing stock.

Type:	Focus:	GHG Benefits:
Mitigation	Community	Low
Champion:	Time to Complete:	Master Plan Alignment:
Sustainability Committee	10 Years	Goals 1.1 and 5.4
Approximate Cost:	Potential Payback:	
\$500k to \$1m	Higher Property Valuations (Community and Local Government); Energy Cost Savings (Community)	

BE-6 Conduct American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) energy audits of all municipal facilities and implement energy efficiency measures as feasible (e.g., LED lighting, HVAC equipment upgrades, water-efficient fixtures). For facilities in which energy upgrades were enacted within the last five years, implement a retro-commissioning program to ensure proper functioning. Retrofit projects can be supported by rebates and loans available through the state and utilities (e.g., NH Electric Co-op Commercial and Municipal Retrofit Energy Efficiency Programs).

Type:	Focus:	GHG Benefits:
Mitigation	Local Government	Medium
Champion:	Time to Complete:	Master Plan Alignment:
Public Works	10 Years	Goal 5.4
Approximate Cost:	Potential Payback:	
\$1m to \$5m	Energy Cost Savings (Local Government)	

BE-7 Design all municipal construction projects (new or major renovations) to be net zero energy/ready. To support performance verification and reporting, adopt a requirement that these projects meet the U.S. Green Building Council's (USGBC's) Leadership in Energy and Environmental Design (LEED) Zero Energy, as applicable.

Type:	Focus:	GHG Benefits:
Mitigation	Local Government	High
Champion:	Time to Complete:	Master Plan Alignment:
Public Works	Ongoing	Goal 5.4
Approximate Cost:	Potential Payback:	
Project by Project Basis	Energy and Operational Cost Savings (Local Government)	

BE-8 Implement a Building Energy Management System (BEMS) to monitor, measure, and control energy use in municipal buildings. Investigate a demand response and/or routine load-sharing program.

Type:	Focus:	GHG Benefits:
Mitigation	Local Government	Low
Champion:	Time to Complete:	Master Plan Alignment:
Public Works	<5 Years	Goal 5.4
Approximate Cost:	Potential Payback:	
\$500k to \$1m	Energy Cost Savings (Local Government)	

BE-9 Eliminate building systems that utilize fossil fuel sources (i.e., oil, natural gas, propane) for space heating and domestic hot water and replace these systems either with electric alternatives or non-GHG emitting alternatives in all municipal and School Department buildings.

Type:	Focus:	GHG Benefits:
Mitigation	Local Government	High
Champion:	Time to Complete:	Master Plan Alignment:
Public Works	15 Years	Goal 5.4
Approximate Cost:	Potential Payback:	
>\$5m	Energy and Operational Cost Savings (Local Government)	

4.5.2 Decarbonizing Transportation Systems (DTS)

The following actions have two main objectives: reducing vehicle miles traveled (VMT) and increasing the adoption of electric vehicles. Implementing these actions can also lead to secondary benefits such as reduced air and noise pollution and enhanced public health through active mobility. Furthermore, electric vehicle ownership can offer potential cost savings through lower energy and maintenance costs. Similar to the actions under “Building Energy Conservation and Efficiency,” electrification of transportation networks can boost energy security by reducing dependence on fossil fuels and contribute to job creation in the clean energy sector.

- DTS-1 Implement the recommendations of the City’s updated Bicycle and Pedestrian Plan, which shall support the creation of a viable alternative transportation network that reduces the community’s dependence on motor vehicles, thus reducing overall vehicle miles traveled. The plan’s implementation should be conducted in a timeframe consistent with the GHG emissions reduction targets of *Portsmouth’s Climate Future*.**

Type:	Focus:	GHG Benefits:
Mitigation	Community	Medium
Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	15 Years	Goals 1.1, 1.2, 4.1, and 4.2
Approximate Cost:	Potential Payback:	
Covered under the Bicycle Pedestrian Plan	Vehicle Ownership and Fuel Cost Savings (Community)	

- DTS-2 Prepare an electric vehicle charging plan to identify feasible and strategic locations for the installation of publicly available charging supply equipment, informed by existing and future needs. Create partnerships to enable the installation of charging stations at priority locations, while promoting their co-location with renewable energy systems to improve the clean energy profile of transportation electrification and encourage the City government to acquire public space for City transformers. Charging equipment should be located outside of flood-vulnerable areas.**

Type:	Focus:	GHG Benefits:
Mitigation	Community	High
Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	15 Years	Goal 5.4
Approximate Cost:	Potential Payback:	
>\$5m	Consumption Charges (Local Government), Fuel Cost Savings (Community)	

DTS-3 Expand public transportation within as well as into/out of Portsmouth to attract more “choice” riders (i.e., those that can utilize other modes of transportation) regularly and more efficiently serve “captive” riders (i.e., those that must take public transportation). This includes making bus connections to regional transportation hubs, such as the rail stations in Dover and Exeter and Pease International Airport, as well as exploring new forms of public transit (e.g., passenger rail and privately funded shuttle services). To maximize the sustainability benefits of public transportation, plan to electrify public transit fleets.

Type:	Focus:	GHG Benefits:
Mitigation	Community	Medium
Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	Ongoing	Goal 4.4
Approximate Cost:	Potential Payback:	
\$1m to \$5m	Higher Property Valuations and Vehicle Ownership and Fuel Cost Savings (Community)	

DTS-4 Work with local and regional transportation partners in conducting a microtransit (bus demand responsive transport) feasibility study to identify projects that would augment and/or replace fixed-route public transit service. Depending on the results of the study, commit to developing one or more pilot projects. Note that the Cooperative Alliance for Seacoast Transportation (COAST) already has a fairly robust microtransit service for target populations.

Type:	Focus:	GHG Benefits:
Mitigation	Community	Low
Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	<5 Years	Goal 4.4
Approximate Cost:	Potential Payback:	
\$100k to \$500k	Vehicle Ownership and Fuel Cost Savings (Community)	

DTS-5 Increase the usage of e-bikes/e-cargo bikes/adaptive e-bikes by covering part of the purchase cost at local bike shops, as well as by expanding e-bike charging stations and infrastructure along key commuting routes.

Type:	Focus:	GHG Benefits:
Mitigation	Community	Low
Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	<5 Years	Goals 1.1, 1.2, 4.1, and 4.2

Approximate Cost:	Potential Payback:
\$100k to \$500k	Fuel Cost Savings (Community)

DTS-6 Work with the New Hampshire Port Authority, in supporting the development of local alternative fuel infrastructure and ship-to-shore power to reduce emissions from commercial maritime vessels, including cruise ships.

Type:	Focus:	GHG Benefits:
Mitigation	Community	Not Estimated
Champion:	Time to Complete:	Master Plan Alignment:
City Manager	Ongoing	Goal 5.4
Approximate Cost:	Potential Payback:	
<\$100k	Project Economic Value/Community Benefits Agreement (Community and Local Government)	

DTS-7 Develop and implement a fleet decarbonization plan with consideration of vehicle electrification and renewable fuels. As applicable, this plan should adequately assess future charging needs by department and vehicle use types. Install additional Level 2 (240 volts [V]) and direct current (DC) fast (480V) charging stations, as appropriate. The cost of this strategy may be offset through funds available through the Granite State Clean Fleets program.

Type:	Focus:	GHG Benefits:
Mitigation	Local Government	Medium
Champion:	Time to Complete:	Master Plan Alignment:
Public Works	15 Years	Goal 5.4
Approximate Cost:	Potential Payback:	
>\$5m	Vehicle Ownership and Fuel Cost Savings (Local Government)	

DTS-8 Assess opportunities to right-size the municipal fleet to ensure the fleet inventory does not exceed operating requirements.

Type:	Focus:	GHG Benefits:
Mitigation	Local Government	Low
Champion:	Time to Complete:	Master Plan Alignment:
Public Works	15 Years	Goal 5.4
Approximate Cost:	Potential Payback:	
Covered in DTS-7	Vehicle Ownership and Fuel Cost Savings (Local Government)	

DTS-9 Work with the School Department to electrify the school bus fleet.

Type:	Focus:	GHG Benefits:
Mitigation	Local Government	High
Champion:	Time to Complete:	Master Plan Alignment:
School	15 Years	Goal 5.4
Approximate Cost:	Potential Payback:	
>\$5m	Vehicle Ownership and Fuel Cost Savings (Local Government)	

4.5.3 Renewable Energy Production and Procurement (RE)

The following actions aim to increase the supply of renewable energy into the electric grid and energy market serving the City of Portsmouth. Inherently, they also enable local air quality improvements, generate significant economic value through job creation, economic growth, and energy price stability, and promote enhanced electric grid management by reducing demand and integrating battery storage.

RE-1 Build community support for amending zoning and other City policies to eliminate existing barriers to solar photovoltaic (PV) and solar PV plus battery storage development. For example, consider allowing solar arrays as a principal use and adopting a policy that allows solar energy production systems in the Historic District. Revisit recent limitations that were placed on rooftop solar arrays with the adoption of the 2015 International Fire Code.

Type:	Focus:	GHG Benefits:
Mitigation	Community	Low
Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	<5 Years	Goals 1.1 and 5.4
Approximate Cost:	Potential Payback:	
<\$100k	Higher Property Valuations (Community and Local Government); Energy Cost Savings (Community)	

RE-2 Establish targets to increase participant sign-ups for the "Clean 100" option (i.e., 100 percent renewable content) under the Community Power program, established under RSA 53-E. Achieve these targets through continued education and awareness building among residents and businesses, as well as continuous efforts to ensure the option is price competitive.

Type:	Focus:	GHG Benefits:
Mitigation	Community	Medium

Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	10 Years	Goal 5.4
Approximate Cost:	Potential Payback:	
<\$100k	Energy Cost Savings (Community)	

RE-3 Promote renewable energy development – including thermal energy networks – through regulatory incentives. For example, adopt dimensional incentives/density bonuses for new or redeveloped sites that incorporate solar power energy systems into building design (including their parking lots). Consider expediting the building permit and inspection process as well as lowering permitting fees for renewable energy distributed generation systems.

Type:	Focus:	GHG Benefits:
Mitigation	Community	Low
Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	<5 Years	Goals 1.1 and 5.4
Approximate Cost:	Potential Payback:	
<\$100k	Higher Property Valuations (Community and Local Government); Energy Cost Savings (Community)	

RE-4 Encourage the development of community solar with battery backup, consistent with RSA 362-A:9, XIV (as amended), where residents who are unable to install solar energy production systems on their own accord (e.g., due to living in multi-family residential developments, financial limitations) can access the benefits of owning a solar PV system (e.g., credits on their electricity bill).

Type:	Focus:	GHG Benefits:
Mitigation	Community	Low
Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	Ongoing	Goal 5.4
Approximate Cost:	Potential Payback:	
<\$100k	Project Economic Value/Community Benefits Agreement (Community and Local Government); Energy Cost Savings (Community)	

RE-5 Actively promote offshore wind, tidal, and hydropower interconnection through the Piscataqua River into existing electric infrastructure in Newington/Portsmouth to improve the renewable energy mix in the ISO-NE grid.

Type:	Focus:	GHG Benefits:
Mitigation	Community	Not Estimated
Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	Ongoing	Goal 5.4
Approximate Cost:	Potential Payback:	
<\$100k	Project Economic Value/Community Benefits Agreement (Community and Local Government)	

RE-6 Plan, design, and build solar arrays with battery storage of sufficient generating capacity to power municipal buildings. Solar panels could be distributed across building roofs and parking lots or aggregated into one site. The Public Undeveloped Land Assessment lists several sites that may be suitable. Loans and grants are available to support municipal renewable energy development (e.g., NH Community Development Finance Authority [CDFA] Clean Energy Fund), as are ownership and financing options (e.g., power purchase agreements [PPAs]).

Type:	Focus:	GHG Benefits:
Mitigation	Local Government	Medium
Champion:	Time to Complete:	Master Plan Alignment:
Public Works	10 Years	Goals 5.4 and 5.5
Approximate Cost:	Potential Payback:	
>\$5m	Energy Cost Savings (Local Government)	

RE-7 Track the City’s renewable electricity supply, produced and/or procured, and supplement as needed with certified REC purchases to ensure that 100 percent of the City’s electricity consumption is covered by renewable energy projects. Renewable Energy Credits (RECs) generated from solar and wind facilities located in Northern New England should be favored over those from outside the region.

Type:	Focus:	GHG Benefits:
Mitigation	Local Government	Medium
Champion:	Time to Complete:	Master Plan Alignment:
City Manager	10 Years	Goal 5.4
Approximate Cost:	Potential Payback:	
\$100k to \$500k	None	

4.5.4 Sustainable Waste Management (WM)

The following actions aim to minimize materials sent to a landfill (e.g., Rochester Neck Road Solid Waste Facility and Turnkey Landfill) or an incinerator (e.g., Wheelabrator Concord). Such measures have the added benefits of resource conservation, lower air and water pollution levels, reduced litter/community beautification, and a potential revenue stream for the City from the sale of recycled materials. A focus on purchasing materials and products with sustainable attributes (e.g., regionally sourced, recycled content) can also have significant embodied carbon benefits by reducing the carbon emissions associated with their extraction, production, and transportation.

- WM-1 Building off the waste characterization studies, prepare and implement a Zero Waste Plan, which would see the Portsmouth community reduce, reuse, recycle, and compost at least 90 percent of its solid waste.**

Type:	Focus:	GHG Benefits:
Mitigation	Community	Low
Champion:	Time to Complete:	Master Plan Alignment:
Public Works	10 Years	Goals 1.1 and 5.4
Approximate Cost:	Potential Payback:	
\$100k to \$500k	Reduced Landfill Fees and Recycling Revenue (Local Government)	

- WM-2 Explore the adoption of a ban on single-use plastics, such as plastic and polystyrene food and beverage containers, bottles, straws, cups, cutlery, and disposable plastic bags.**

Type:	Focus:	GHG Benefits:
Mitigation	Community	Low
Champion:	Time to Complete:	Master Plan Alignment:
City Council	<5 Years	Goals 1.1 and 5.4
Approximate Cost:	Potential Payback:	
<\$100k	Reduced Goods Purchases (Community and Local Government)	

- WM-3 Support community efforts to create a voluntary certification program for Portsmouth restaurants working to reduce reusable plastics and food waste (levels might include "skip the stuff", composting, and offering smaller portion sizes).**

Type:	Focus:	GHG Benefits:
Mitigation	Community	Low
Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	<5 Years	Goals 1.1 and 5.4

Approximate Cost:	Potential Payback:
<\$100k	Project Economic Value (Community and Local Government)

WM-4 Support the expansion of curbside food waste collection services, perhaps in coordination with existing private-led services, to all residential households that receive Municipal Solid Waste and recycling services. Advocate for the requirement that all new multi-family development projects site potential locations for the adequate storage and handling of composting material should a municipal composting program become available in the future. Add information on at-home composting to the City's website.

Type:	Focus:	GHG Benefits:
Mitigation	Community	Low
Champion:	Time to Complete:	Master Plan Alignment:
Public Works	<5 Years	Goals 1.1 and 5.4
Approximate Cost:	Potential Payback:	
\$1m to \$5m	Reduced Landfill Fees (Local Government)	

WM-6 Adopt a municipal environmentally preferable purchasing (EPP) policy that can be used as a model for the private sector. Such a policy should prioritize products with available Environmental Product Declarations (EPDs) and/or Health Product Declarations (HPDs).

Type:	Focus:	GHG Benefits:
Mitigation	Local Government	Low
Champion:	Time to Complete:	Master Plan Alignment:
Finance	<5 Years	Goal 5.4
Approximate Cost:	Potential Payback:	
<\$100k	Lower Capital and Operating Costs (Local Government)	

4.5.5 Climate-Smart Land Use (CSLU)

Leveraging land use controls and the City's open space lands, the following actions aim to achieve multiple objectives: reducing GHG emissions by minimizing the travel required by residents and encouraging shifts to low-emission modes of transportation (i.e., active transportation, shared mobility, and public transit), sequestering carbon from the atmosphere, and enhancing the community's resilience to the impacts of climate change. They jointly serve to improve the quality of life of residents in terms of improving water quality, managing stormwater, and mitigating the heat island effect. Additionally, some also drive economic benefits and/or support wildlife habitat protection and enhancement.

CSLU-1 Maintain the current zoning of the Schiller Station to ensure that the existing power infrastructure stays intact for future uses such as energy storage. Explore the opportunity for this site to support the conveyance and perhaps storage of power generated by offshore wind projects.

Type:	Focus:	GHG Benefits:
Mitigation	Community	Not Applicable
Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	Ongoing	Goal 5.4
Approximate Cost:	Potential Payback:	
<\$100k	Project Economic Value/Community Benefits Agreement (Community and Local Government)	

CSLU-2 Identify publicly-owned land areas, or privately-owned lands for acquisition, which are suitable for new or enhanced GHG emissions sequestration and storage. For example, reforestation, forest management, and wetland restoration. Work with private landowners and land trusts to develop and manage similar projects, where appropriate. This could include improved forest management plans. Note that such projects may be eligible to generate carbon credits that can be sold in carbon markets.

Type:	Focus:	GHG Benefits:
Mitigation and Adaptation	Community	Not Estimated
Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	Ongoing	Goals 5.2, 5.3, and 5.4
Approximate Cost:	Potential Payback:	
>\$5m	Project Economic Value (Community and Local Government); Sale of Verified Carbon Offsets (Local Government)	

CSLU-3 Analyze neighborhood completeness, focusing on the availability of amenities and services within walkable and bikeable areas, as well as current or prospective access to efficient shared mobility and public transportation through transit-oriented developments and corridors. Aim to achieve the desired outcomes using both regulatory mechanisms (e.g., zoning-based incentives) and non-regulatory methods (e.g., business recruitment, tax incentives).

Type:	Focus:	GHG Benefits:
Mitigation	Community	Not Estimated

Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	<5 Years	Goals 1.1, 1.2, 1.4, 3.2, and 3.3
Approximate Cost:	Potential Payback:	
\$100k to \$500k	Higher Property Valuations (Community and Local Government); Energy, Vehicle Ownership, and Fuel Cost Savings (Community)	

CSLU-4 Implement blue carbon strategies (i.e., carbon sequestration through coastal resource conservation).

Type:	Focus:	GHG Benefits:
Mitigation and Adaptation	Community	Not Estimated
Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	<5 Years	Goals 5.2 and 5.3
Approximate Cost:	Potential Payback:	
\$1m to \$5m	Sale of Verified Carbon Offsets (Local Government)	

CSLU-5 Continue to support the expansion of the City's tree cover to combat urban heat, enhance public health, and reduce the energy need for cooling. For example, plant a shade way at locations such as State Street in downtown and Parrott Avenue from the Public Library to Junkins Avenue.

Type:	Focus:	GHG Benefits:
Mitigation and Adaptation	Community	Not Estimated
Champion:	Time to Complete:	Master Plan Alignment:
Public Works	Ongoing	Goals 1.1, 5.2, and 5.3
Approximate Cost:	Potential Payback:	
\$1m to \$5m	Higher Property Valuations (Community and Local Government); Energy Cost Savings (Community)	

4.5.6 Enhancing Climate Resilience

The following actions have the primary intention of increasing local resilience to the impacts of climate change – concerning flooding, extreme heat, and risks to energy infrastructure. However, their benefits can extend beyond this focus to also reduce GHG emissions as well as improve community health, enhance public safety, boost economic stability, and foster a higher quality of life through cleaner air and water, reduced energy costs, and preservation of natural habitats.

4.5.6.1 Flood Resilience (FR)

FR-1 Continue to identify critical public and private properties and infrastructure subject to sea-level rise and identify potential adaptation measures for each location. Seek implementation financing through Coastal Resiliency Funds (RSA 36:53) and Coastal Resiliency and Cultural and Historic Resources District & Funds (RSA 12-A:68 & 69).

Type:	Focus:	GHG Benefits:
Adaptation	Community	Not Applicable
Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	Ongoing	Goals 2.2, 5.1, and 5.5
Approximate Cost:	Potential Payback:	
\$100k to \$500k	Avoided Disaster Recovery Costs (Community and Local Government)	

FR-2 Strengthen Article 7.1 of the Site Plan Regulations to require Low Impact Development (LID) design practices and techniques in building design. Encourage the planting of trees and greenery around new or renovated buildings and sites that are being developed or subdivided. Prioritize the inclusion of open space.

Type:	Focus:	GHG Benefits:
Mitigation and Adaptation	Community	Not Estimated
Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	<5 Years	Goals 4.1 and 5.1
Approximate Cost:	Potential Payback:	
<\$100k	Higher Property Valuations (Community and Local Government); Energy Cost Savings (Community); Avoided Capital and Operational Expenditures (Local Government)	

FR-3 Strategically integrate green infrastructure with the City's existing and future stormwater, combined sewers, and roadway infrastructure, while prioritizing permeable pavements for all new municipal paving projects.

Type:	Focus:	GHG Benefits:
Adaptation	Community	Not Estimated
Champion:	Time to Complete:	Master Plan Alignment:
Public Works	10 Years	Goals 1.4, 4.1, and 5.1

Approximate Cost:	Potential Payback:
\$1m to \$5m	Higher Property Valuations (Community and Local Government); Energy Cost Savings (Community); Avoided Capital and Operational Expenditures (Local Government)

FR-4 Conduct and/or update previous hydraulic & hydrologic modeling studies of the City’s storm drain system and major road culverts/bridges to identify and rank capacity constraints that contribute to land-based flooding affecting critical transportation corridors and properties. Implement appropriate corrections in consideration of any adjacent undeveloped areas that could provide additional temporary flood storage in flood-prone drainage areas. Build upon the Coastal Hydraulic Model being developed by the New Hampshire Department of Environmental Services and Woods Hole Group.

Type:	Focus:	GHG Benefits:
Adaptation	Community	Not Applicable
Champion:	Time to Complete:	Master Plan Alignment:
Public Works	<5 Years	Goals 5.1 and 5.5
Approximate Cost:	Potential Payback:	
\$100k to \$500k	Avoided Disaster Recovery Costs (Community and Local Government); Avoided Capital and Operational Expenditures (Local Government)	

FR-5 Establish a more sustainable and consistent funding source, such as a Stormwater Utility Fee, to help plan for and fund stormwater capacity and flood resiliency improvements. A Stormwater Utility Fee would have the added benefit of encouraging the reduction of impervious surfaces through increased greenspaces.

Type:	Focus:	GHG Benefits:
Adaptation	Community	Not Applicable
Champion:	Time to Complete:	Master Plan Alignment:
Public Works	<5 Years	Goal 5.1
Approximate Cost:	Payback:	
\$100k to \$500k	Direct Revenue (Local Government)	

FR-6 Review, prioritize, and develop a plan to initiate the recommended adaptive strategies included in the Historic Vulnerability Assessment StoryMap, available at: <https://portsmouthnh.maps.arcgis.com/apps/MapJournal/index.html?appid=302cb9580dfb4ddd666dbb39055a88e>.

Type:	Focus:	GHG Benefits:
Adaptation	Community	Not Applicable

Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	15 Years	Goals 2.2, 5.1, and 5.5
Approximate Cost:	Potential Payback:	
\$1m to \$5m	Avoided Disaster Recovery Costs (Community and Local Government)	

FR-7 Explore "managed retreat" through zoning and overlay zones, where development in vulnerable coastal areas could be phased out and living shorelines would be promoted to continue existing coastal ecosystem connectivity.

Type:	Focus:	GHG Benefits:
Adaptation	Community	Not Applicable
Champion:	Time to Complete:	Master Plan Alignment:
Planning and Sustainability	<5 Years	Goals 5.1 and 5.5
Approximate Cost:	Potential Payback:	
<\$100k	Avoided Disaster Recovery Costs (Community and Local Government)	

4.5.6.2 Heat Resilience (HR)

HR-1 Develop a Citywide Heat-Health Warning and Protection Plan to activate public health warnings, cooling centers, and other relief measures when air temperatures exceed 90° F for prolonged periods. Integrate or align this measure with the City's existing Emergency Response Plan.

Type:	Focus:	GHG Benefits:
Adaptation	Community	Not Applicable
Champion:	Time to Complete:	Master Plan Alignment:
Fire	<5 Years	N/A
Approximate Cost:	Potential Payback:	
<\$100k	Healthcare Cost Savings (Community)	

HR-2 Assess and ensure public facilities, schools, and other critical community facilities are resilient to extreme heat (e.g., by providing access to cooling) and other severe weather events.

Type:	Focus:	GHG Benefits:
Adaptation	Community	Not Applicable

Champion:	Time to Complete:	Master Plan Alignment:
Public Works	10 Years	Goal 5.1
Approximate Cost:	Potential Payback:	
>\$5m	Healthcare Cost Savings (Community); Avoided Disaster Recovery Costs and Energy Cost Savings (Local Government)	

HR-3 Coordinate an Annual Heat Resilience Workshop to engage and support local/regional healthcare providers, professionals/organizations that provide frontline services, and healthcare educators in screening and connecting individuals at higher risk for heat-health impacts to prevention resources.

Type:	Focus:	GHG Benefits:
Adaptation	Community	Not Applicable
Champion:	Time to Complete:	Master Plan Alignment:
Health	15 Years	N/A
Approximate Cost:	Potential Payback:	
<\$100k	Healthcare Cost Savings (Community)	

HR-4 Integrate heat resilience goals, standards, and guidelines into open space and recreation planning for planned improvements to existing open space.

Type:	Focus:	GHG Benefits:
Adaptation	Community	Not Applicable
Champion:	Time to Complete:	Master Plan Alignment:
Recreation	Ongoing	Goals 1.1, 1.4, 5.2, and 5.5
Approximate Cost:	Potential Payback:	
Costs covered under the Open Space and Recreation Plan and Capital Planning	Healthcare Cost Savings (Community); Higher Property Valuations (Community and Local Government)	

HR-5 Work toward establishing a network of "cool corridors" that offer shade and/or misting stations along routes with high pedestrian traffic. Augment these corridors with the application of reflective coatings to sidewalks and streets.

Type:	Focus:	GHG Benefits:
Adaptation	Community	Not Applicable
Champion:	Time to Complete:	Master Plan Alignment:
Public Works	10 Years	Goals 1.1, 1.4, 5.2, and 5.3

Approximate Cost:	Potential Payback:
\$1m to \$5m	Healthcare Cost Savings (Community); Higher Property Valuations (Community and Local Government)

4.5.6.3 Energy Resilience (ER)

ER-1 Identify and map vulnerable electric and gas infrastructure and work with Eversource and Unitil on adaptation strategies as infrastructure is maintained and upgraded. This may include converting existing overhead electric infrastructure to underground conduits if wind shear is a concern or relocating ground-mounted transformers to poles where flooding is a concern.

Type:	Focus:	GHG Benefits:
Adaptation	Community	N/A
Champion:	Time to Complete:	Master Plan Alignment:
City Manager	Ongoing	Goal 5.5
Approximate Cost:	Potential Payback:	
<\$100k	Avoided Disaster Recovery Costs (Local Government)	

ER-2 Investigate the potential for an islandable microgrid of critical municipal and/or public infrastructure that could continue to provide services if the regional grid is offline. This would require integration of renewables and battery storage sufficient to power minimal facility electric/HVAC/refrigeration needs (e.g., shelter).

Type:	Focus:	GHG Benefits:
Adaptation	Community	Not Estimated
Champion:	Time to Complete:	Master Plan Alignment:
Public Works	10 Years	Goals 5.4 and 5.5
Approximate Cost:	Payback:	
Covered under RE-6	Energy Cost Savings (Local Government)	

ER-3 Encourage the state's Public Utilities Commission (PUC) to provide a program to develop a citywide electric use notification system that has different advisory levels to encourage energy conservation during peak/high-cost periods.

Type:	Focus:	GHG Benefits:
Adaptation	Community	Not Estimated
Champion:	Time to Complete:	Master Plan Alignment:
Fire	Ongoing	Goal 5.4
Approximate Cost:	Payback:	
<\$100k	Energy Cost Savings (Community)	

ER-4 Partner with Eversource, local businesses, and residents to encourage the development of load-sharing programs at various scales (community, campuses, and buildings). These programs aim to reduce peak demand energy use and implement operational changes to lower overall year-round energy demand. The City’s local government would be responsible for developing and enforcing policies geared towards load-sharing and energy management, as well as convening and engaging stakeholders as appropriate.

Type:	Focus:	GHG Benefits:
Adaptation	Community	Not Estimated
Champion:	Time to Complete:	Master Plan Alignment:
City Manager	<5 Years	Goals 5.4 and 5.5
Approximate Cost:	Payback:	
\$100k to \$500k	Energy Cost Savings (Community and Local Government)	

Enabling Success

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Enabling Success

The context and implementation planning presented in this document represent a blueprint that needs to be transformed into reality. This chapter dives into the essential steps required to ensure that the actions devised in the planning phase of *Portsmouth's Climate Future* are successfully brought into reality.

5.1 Community Buy-In and Shared Responsibility

Central to the successful implementation of *Portsmouth's Climate Future* is the indispensable role of the Portsmouth community, including its residents, businesses, and community/partner organizations. This role includes showing support for the plan and building awareness of it through various social and professional channels. The following are suggested ways that the community can raise awareness of and continue to build momentum around *Portsmouth's Climate Future*:

- › Leverage your social media channels to share information about the plan, showcase how you are contributing to achieving its net zero targets, and highlight any missed climate mitigation and adaptation opportunities. Use **#PortsmouthClimateFuture** to bring more attention to and amplify the message of the plan, enable those interested to discover past posts about the plan, and encourage participation in the conversation.
- › Host “neighborhood coffee talks” that serve as casual, relaxed gatherings where people are encouraged to informally share their ideas, experiences, and best practices as they relate to *Portsmouth's Climate Future*. These informal conversations can also serve to strengthen community cohesion.
- › Write articles and op-eds, and send letters to the editor, for local newspapers and magazines such as the Portsmouth Herald, Foster's Daily Democrat, the New Hampshire Gazette, and the Portsmouth Pulse. *Drive the conversation and keep the plan at the forefront of everyone's mind!*

- › In collaboration with community partners, organize community events, aligned with *Portsmouth's Climate Future*, such as tree plantings, material/product swap meets, screenings of climate change documentaries, eco-friendly home tours, and sustainable living workshops (e.g., energy conservation, rainwater harvesting).
- › Engage in municipal meetings to advocate for climate action during public comment periods and participate in planning committees, advisory boards, and advocacy groups to influence ongoing efforts from the City and the State.

The community's role also includes taking personal initiative to implement the actions of the plan on the individual or household scale. When these individual efforts are collectively embraced by the larger community, they will cumulatively generate significant benefits, driving the City of Portsmouth toward a sustainable and resilient future. Additionally, members of Portsmouth's community are encouraged to reflect upon the following high-level questions to reduce their greenhouse gas (GHG) emissions in their everyday decision-making. In addition to the information here, community members should also consider utilizing publicly available resources such as Portsmouth BrightAction (<https://brightaction.app/newhampshire/portsmouth>), to help track and reduce their individual carbon footprints. Note that some of these questions address broader climate action concerns, which, while extending beyond the specific scope of *Portsmouth's Climate Future*, remain aligned with its overarching objectives of climate mitigation and adaptation.

- › Energy Use
 - Are my lighting systems and appliances energy-efficient?
 - Are there opportunities to weatherize my home or building?
 - Am I using heat pump technologies for heating and cooling?
 - Am I using renewable energy sources/have I signed up for the "Clean 100" option (i.e., 100 percent renewable content) under the Community Power program?
 - How can I reduce my energy consumption today?
- › Transportation
 - Is there a low or zero-emission mode of transportation available to me today (e.g., walking, biking, carpooling, use of public transportation, or working from home)?
 - Am I driving a battery electric or plug-in electric vehicle?
- › What steps can I take to minimize waste?
 - Am I composting my organic waste and diverting recyclable materials from the landfill?
 - Instead of new products, can I buy second-hand or repurposed items?
 - How can I reduce the use of single-use plastics and packaging?
- › How can my food choices be more environmentally friendly?
 - Can I reduce my consumption of meat and dairy?
 - Am I purchasing locally grown/produced and organic foods?
- › Is water being used efficiently in my building or home?
- › Do I have an emergency preparedness plan in case of extreme weather events?

5.2 Local Government Responsibility

Although *Portsmouth's Climate Future* is envisioned as a community-driven plan, the local government serves as the main facilitator. Aside from implementing the actions under its direct authority, typical of its responsibilities in implementing its other community plans, it owns the responsibility of:

- › Internally communicating plan implementation as a priority and plan consistency as a criterion for municipal decision-making.
- › Dedicating and supporting qualified staff to manage plan implementation.
- › Ensuring that all City officials, departments, and boards and commissions understand the plan and are empowered to collaborate on plan implementation, creating cross-departmental working groups, as necessary.
- › Confirming that all City champions acknowledge their expected contributions and affording them with the necessary resources and skills to fulfill those contributions.
- › Allocating or otherwise securing external funding to enable plan implementation (see **Section 5.3** for potential external funding opportunities).
- › Forging and strengthening working relationships with community organizations and facilitating similar relationships between these and other relevant organizations and the community.
- › Keeping the conversation going with the community by representing *Portsmouth's Climate Future* at community events and meet-ups, and engaging advocacy groups for feedback.
- › Routinely monitoring and communicating progress on plan implementation and any issues encountered, as well as any necessary adjustments to the plan and its targets.*
- › Establishing and managing feedback loops to allow for internal and external stakeholder comments on the implementation process and using that feedback to refine the process as appropriate.

* ***Note that the City is planning to release a GHG emissions dashboard on its website that will enable users to track the City's progress towards reaching its net zero emissions targets. This dashboard will also provide status updates on action implementation.***

5.3 External Funding Opportunities

Allocating funding for the implementation of *Portsmouth's Climate Future* is essential. However, given the constraints of the municipal budget and the necessity to balance public funds between various capital investments and operational functions, securing third-party funding sources and financing mechanisms is a financially prudent strategy. The following sections identify example opportunities, excluding tax credits, categorized by each pathway outlined in the plan. The City of Portsmouth should consistently review these and other programs and share relevant details with the entities that could benefit from their funding.

Note that life cycle cost analyses (LCCA) can be used to maximize municipal capital investments by evaluating the total cost of ownership, including initial costs, operational costs, maintenance costs, and disposal costs. Such analyses should be conducted to compare project alternatives to ensure capital investments are allocated to those that have the greatest cost efficiency. Aligned with this plan, the City should consider integrating explicit carbon pricing into LCCAs to quantify the cost of offsetting the GHG emissions associated with a project as well as the social cost of carbon to quantify the economic damages associated with those emissions.

5.3.1 Building Energy Conservation and Efficiency

Program Name	Administering Entity	Eligible Entities and Sectors
Eversource – Commercial New Construction Energy Efficiency Rebate Program and Residential Energy Efficiency Rebate Program	Public Service of New Hampshire	City of Portsmouth, Commercial, Industrial, Residential

Summary: Eversource, in collaboration with NH Saves, offers rebates for energy-efficient equipment installations, with prescriptive and custom incentives available for various systems such as lighting; heating, ventilation, and air conditioning (HVAC); motors; and more.

Website: Commercial - <https://www.eversource.com/content/business/save-money-energy/equipment-rebates-discounts>; Residential - <https://www.eversource.com/content/nh/residential/save-money-energy/manage-energy-costs-usage/efficient-products>

Program Name	Administering Entity	Eligible Entities and Sectors
Commercial and Industrial Energy Efficiency	Unitil	City of Portsmouth, Schools, Commercial, Industrial, Multifamily Residential, Institutional

Summary: Offers rebates for commercial heating and kitchen equipment to gas customers in partnership with NH Saves.

Website: <http://www.unitil.com/energy-efficiency/natural-gas-programs-rebates-assistance-for-businesses>

Program Name	Administering Entity	Eligible Entities and Sectors
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Business Energy Efficiency Loan Program	NH Business Finance Authority	Commercial, Industrial, Nonprofit, Agricultural
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Summary: A revolving loan program designed to finance energy efficiency improvements.

Website: <http://www.nhbfa.com/businessenergyloan/>

Program Name	Administering Entity	Eligible Entities and Sectors
Clean Energy Fund	NH Community Development Finance Authority (CDFA)	City of Portsmouth, Commercial, Nonprofit

Summary: Invests in energy efficiency and renewable energy projects aimed at reducing costs.

Website: <https://resources.nhcdfa.org/programs/clean-energy-fund/application/program-overview-objectives/>

Also Applicable: Community Development Block Grant Program (CDBG) (see **Section 5.3.5**)

5.3.2 Decarbonized Transportation Systems

Program Name	Administering Entity	Eligible Entities and Sectors
Granite State Clean Fleets	NH Department of Environmental Services	City of Portsmouth, Schools, Institutional

Summary: Supports municipalities, public schools, and transit districts in replacing old diesel vehicles and equipment with electric models, and funds electric vehicle charging infrastructure and renewable energy and storage technologies.

Website: <https://www.des.nh.gov/business-and-community/loans-and-grants/volkswagen-mitigation-trust>

Program Name	Administering Entity	Eligible Entities and Sectors
New Hampshire State Clean Diesel Program	New Hampshire Air Resources/Technical Services Bureau	City of Portsmouth, Schools, Commercial, Institutional

Summary: A competitive grant program focused on lowering diesel engine emissions in the state. Funds may be used for the purchase of medium and heavy-duty electric vehicles, electric school and transit buses, and electric vehicle charging equipment.

Website: <https://www.des.nh.gov/business-and-community/loans-and-grants/dera>

Program Name	Administering Entity	Eligible Entities and Sectors
Charging and Fueling Infrastructure Discretionary Grant Program	U.S. Department of Transportation	City of Portsmouth, Rockingham Planning Commission, COAST, Nonprofit, Research Institutions, Private Entities

Summary: Aims to expand the national network of electric vehicle charging and alternative fueling infrastructure to facilitate a transition to cleaner transportation modes.

Website: <https://www.fhwa.dot.gov/environment/cfi/>

Program Name	Administering Entity	Eligible Entities and Sectors
Safe Streets & Roads for All (SS4A)	U.S. Department of Transportation	City of Portsmouth

Summary: Supports planning, infrastructure development, behavioral changes, and operational efforts aimed at preventing fatalities and severe injuries on roads and streets, including pedestrians, cyclists, public transit passengers, personal conveyance, and micromobility users. Requires the development of a Safety Action Plan.

Website: <https://www.transportation.gov/grants/SS4A>

Program Name	Administering Entity	Eligible Entities and Sectors
Transportation Alternatives Program	NH Department of Transportation	City of Portsmouth, Rockingham Planning Commission, COAST, Schools, Nonprofit

Summary: Provides choices for non-motorized users that are safe, reliable, and convenient.

Website: <https://www.dot.nh.gov/projects-plans-and-programs/programs/transportation-alternatives-program>

Program Name	Administering Entity	Eligible Entities and Sectors
Active Transportation Infrastructure Investment Program (ATIIP)	U.S. Department of Transportation	City of Portsmouth, Rockingham Planning Commission, COAST, Schools, Nonprofit
<p>Summary: Enables projects that provide safe and connected active transportation facilities in active transportation networks or active transportation spines.</p> <p>Website: https://www.fhwa.dot.gov/environment/bicycle_pedestrian/atiip/</p>		

Program Name	Administering Entity	Eligible Entities and Sectors
Congestion Mitigation and Air Quality Improvement Program	NH Department of Transportation	City of Portsmouth, Rockingham Planning Commission, COAST, Nonprofit
<p>Summary: Enables projects that provide safe and connected active transportation facilities in active transportation networks or active transportation spines.</p> <p>Website: https://www.fhwa.dot.gov/environment/bicycle_pedestrian/atiip/</p>		

Also Applicable: CDBG (see **Section 5.3.5**)

5.3.3 Renewable Energy Production and Procurement

Program Name	Administering Entity	Eligible Entities and Sectors
Municipal Solar Grant Program	NH Department of Energy	City of Portsmouth
<p>Summary: Supports municipalities in installing new renewable energy systems, including ground-mounted, canopy-mounted, or rooftop solar photovoltaic systems, to meet the electrical demands of municipally-owned buildings.</p> <p>Website: https://www.energy.nh.gov/rules-and-regulatory/requests-proposals</p>		

Program Name	Administering Entity	Eligible Entities and Sectors
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Commercial & Industrial Renewable Energy Grants	NH Department of Energy	City of Portsmouth, Schools, Commercial, Industrial, Local Government, Nonprofit, Multifamily Residential, Institutional
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Summary: Provides funding for renewable energy projects at various facilities in New Hampshire, covering multiple renewable technologies.

Website: <https://www.energy.nh.gov/renewable-energy/renewable-energy-rebates/non-residential-sector-competitive-grants-program>

Program Name	Administering Entity	Eligible Entities and Sectors
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Low-Moderate Income Solar Renewable Energy Grant	NH Department of Energy	Low Income Residential
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Summary: Provides grant funding for community solar projects targeting low- to moderate-income households in manufactured housing communities or multifamily rental properties.

Website: <https://www.energy.nh.gov/renewable-energy/renewable-energy-rebates/low-moderate-income-solar-grant-program>

Program Name	Administering Entity	Eligible Entities and Sectors
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Commercial & Industrial Solar Rebate Program	NH Department of Energy	City of Portsmouth, Schools, Commercial, Industrial, Nonprofit, Agricultural, Multifamily Residential, Institutional
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Summary: This program, financed by alternative compliance payments from the state’s renewable portfolio standard (RPS), provides financial support for the installation of solar photovoltaic (PV) and solar-thermal systems.

Website: <https://www.energy.nh.gov/renewable-energy/renewable-energy-rebates/low-moderate-income-solar-grant-program>

Program Name	Administering Entity	Eligible Entities and Sectors
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U.S. Department of Energy - Loan Guarantee Program	U.S. Department of Energy	City of Portsmouth, Schools, Commercial, Industrial, Nonprofit, Agricultural, Institutional
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Summary: Provides financial backing to support the development and commercialization of innovative clean energy projects, reducing their financial risks.

Website: <https://www.energy.gov/lpo/loan-programs-office>

Also Applicable: Eversource - Commercial New Construction Energy Efficiency Rebate Program and Clean Energy Fund (see **Section 5.3.1**); Granite State Clean Fleets (GSCF) (see **Section 5.3.2**); and CDBG (see **Section 5.3.5**)

5.3.4 Sustainable Waste Management

Program Name	Administering Entity	Eligible Entities and Sectors
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Municipal Recycling & Storage Equipment Grants	New Hampshire the Beautiful	City of Portsmouth, Schools, Nonprofit
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Summary: Supports local recycling and litter prevention programs.

Website: <https://nhthebeautiful.org/municipal-recycling-and-storage-equipment-grants/>

Program Name	Administering Entity	Eligible Entities and Sectors
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Solid Waste Infrastructure for Recycling (SWIFR) Grants	U.S. Environmental Protection Agency (U.S. EPA)	City of Portsmouth, Institutional, Nonprofit
---	--	---

Summary: Supports the development of solid waste reduction and recycling infrastructure and projects that enhance waste management systems.

Website: <https://www.epa.gov/infrastructure/solid-waste-infrastructure-recycling-grant-program>

5.3.5 Climate Smart Land Use

Program Name	Administering Entity	Eligible Entities and Sectors
Community Development Block Grant (CDBG) Program	NH CDFA	City of Portsmouth
<p>Summary: Covering projects aimed at generating economic opportunities and community revitalization, CDBG funds can also be used for energy efficiency improvements (e.g., building upgrades), renewable energy projects (e.g., solar PV installations), sustainable transportation (bike and pedestrian paths and public transit improvements), green infrastructure (e.g., stormwater management), resilient and adaptive building design (e.g., floodproofing and heat mitigation), water conservation projects (e.g., rainwater harvesting), and community education and outreach.</p> <p>Website: https://resources.nhcdfa.org/programs/community-development-block-grant/</p>		

Program Name	Administering Entity	Eligible Entities and Sectors
Watershed Assistance Grants	NH Department of Environmental Services	City of Portsmouth, Schools, Rockingham Planning Commission, Nonprofit, Watershed Associations
<p>Summary: Provides funding and technical support for projects that aim to protect and restore watersheds, improve water quality, and enhance the resilience of aquatic ecosystems.</p> <p>Website: https://www.des.nh.gov/business-and-community/loans-and-grants/watershed-assistance</p>		

5.3.6 Enhancing Climate Resilience

Program Name	Administering Entity	Eligible Entities and Sectors
NH Coastal Resilience Grant Program	NH Department of Environmental Services	City of Portsmouth, Schools, Rockingham Planning Commission, Nonprofit, Private Companies

Summary: Provides funding to support projects that enhance coastal communities' ability to prepare for, respond to, and recover from coastal hazards and climate change impacts, including sea-level rise, storm surges, and extreme weather events.

Website: <https://www.des.nh.gov/business-and-community/loans-and-grants/coastal-resilience-grants>

Program Name	Administering Entity	Eligible Entities and Sectors
Local Source Water Protection Grants	NH Department of Environmental Services	City of Portsmouth, Conservation Commission, Schools, Rockingham Planning Commission, Watershed Associations, Nonprofit

Summary: Support activities that protect drinking water sources, including projects that address climate resilience such as stormwater infrastructure improvements and floodplain restoration.

Website: <https://www.des.nh.gov/business-and-community/loans-and-grants/drinking-water>

Program Name	Administering Entity	Eligible Entities and Sectors
Federal Emergency Management Agency (FEMA) Hazard Mitigation Assistance Grants	FEMA and NH Department of Safety	City of Portsmouth, Public Authorities, Schools, Nonprofit

Summary: Programs such as the Hazard Mitigation Grant Program (HMGP) and Building Resilient Infrastructure and Communities (BRIC), support projects that reduce risk or eliminate long-term risk to people and property from natural hazards and their effects. Example projects include flood mitigation, stormwater management, and infrastructure retrofits.

Website: <https://www.nh.gov/safety/divisions/hsem/HazardMitigation/hmgp.html>

Program Name	Administering Entity	Eligible Entities and Sectors
Grid Resilience and Innovation Partnerships (GRIP) Program	U.S. Department of Energy	Eversource, City of Portsmouth, ISO New England, Research Institutions, Nonprofit, Private Companies

Summary: Provides funding to enhance the resilience, reliability, and flexibility of the electric grid by supporting innovative grid modernization and infrastructure projects. Local microgrids, solar plus storage, undergrounding power lines, and demand response programs for residential and commercial consumers are example projects eligible for this program.

Website: <https://www.energy.gov/gdo/grid-resilience-and-innovation-partnerships-grip-program>

Also Applicable: GSCF (see **Section 5.3.2**) and CDBG (see **Section 5.3.5**)

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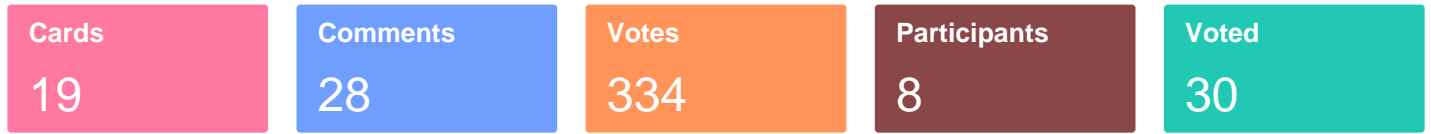
EasyRetro Results



Portsmouth Climate Future Draft Strategies

Provide your feedback on the high impact strategies listed below. A complete list is also available at <https://portsnh.co/climatefuture>.

Summary



Cards

Glossary

For your reference, a glossary of key terms has been created for all to use as they navigate through these actions.

Glossary:

Net Zero: Avoiding or reducing greenhouse gas emissions as much as possible, using carbon offsets or other credits to account for the remainder.

Carbon Offsets: Investments in a company, policy, or initiative that removes emissions from the atmosphere or prevents those emissions from being emitted in the first place.

Renewable Energy Credits (RECs): Purchasing the rights to the environmental, social, and other non-power attributes of renewable electricity generation.

Anaerobic Digester: A facility that treats organic waste (e.g., sewage, food scraps) in the absence of oxygen. The process of breaking down organic matter produces biogas (primarily methane and carbon dioxide) that can be captured and used for heating, electricity generation, or as a vehicle fuel.

Microtransit: A type of flexible, on-demand public transportation service that typically uses small vehicles (e.g., vans and mini-buses).

Urban Heat: Elevated temperatures experienced in urban areas as compared to non-urban areas, primarily caused by the concentration of buildings, concrete, and asphalt that absorb and retain heat.

Greenhouse Gas Sequestration: The process of capturing and storing greenhouse gas emissions (primarily carbon dioxide) from the atmosphere.

Blue Carbon: Carbon stored in coastal and marine ecosystems.

 3  2

Positive effort.

Stop wasting time and energy on this nonsense.

Built Environment

"Like" an action to indicate your support and/or add a comment if you have suggestions, thoughts, or questions.

Ensure all new municipal construction (new or major renovations) are net zero ready. To support performance verification and reporting, adopt a requirement that these projects meet the U.S. Green Building Council's (USGBC's) Leadership in Energy and Environmental Design (LEED) Zero Energy.

 23  2

I like the way this one is formulated - it contains a clear goal, it is measurable and specific.

Nonsense. What if the power grid goes down?

Eliminate building systems that utilize fossil fuel sources (i.e., oil, natural gas, propane) for space heating and hot water and replace these systems with electric alternatives in all municipal and School Department buildings.

 12  3

Does this jump to the solution (electrical) too quickly? For instance, hot water from a geothermal installation might be an economical and scalable alternative that might require less building retrofit.

What is the plan for all of the waste this would create?

Update building codes to eliminate systems that utilize fossil fuels in any new construction both residential and commercial.

We need to ensure that any proposed radical changes to policies, codes, regulations etc, are evaluated using reasonable cost benefit analysis. The premature shift to unproven energy sources to prevent theoretical man made climate change is the height of irresponsible. Climate has always changed on this planet and it always will regardless of these efforts, while radically reducing our standards of living and probably bankrupting us.

 1  0

Energy

"Like" an action to indicate your support and/or add a comment if you have suggestions, thoughts, or questions.

Plan, design, and build solar arrays with battery storage of sufficient generating capacity to power municipal buildings. Solar panels could be distributed across building roofs and parking lots, or aggregated into one site. The Public Undeveloped Land Assessment lists several sites that may be suitable. Loans and grants are available to support municipal renewable energy development (e.g., NH CDEFA Clean Energy Fund), as are ownership and financing options (e.g., power purchase agreements [PPAs]).

 32  2

All new municipal buildings should require roofs that are adequate to host solar array systems, especially systems that meet the required demands of that building if possible.

I like the idea of more solar + batteries, but feel this strategy could be better framed. To me it makes more sense to start with a goal ("acquire renewable energy source to power all municipal buildings with renewable power by 20xx"), then have a strategy that doesn't narrow down to solar solutions too quickly - for instance, "create plan to provide renewable power taking into account all opportunities" - for instance, wind power, building out of town, etc.

Building off of the University of New Hampshire's Living Bridge Project, explore opportunities to install tidal turbines at the Sarah Mildred Long Bridge, Memorial Bridge, and the bridge at Interstate 95.

 7  1

Not sure if this is a stand-alone strategy: it's a potential candidate for sourcing renewable power for the city, but I wonder if it would be better bundled into something like "research all possible means of generating renewable power (solar, wind, river) and do a cost benefit analysis" or similar. Also, it seems odd to apply impact/cost to this measure when we don't know if it is feasible or what it would cost. This item is listed as a 4/4 in impact/cost, but analysis might show that it is really a 1/5. Whereas a comparison study (wind solar river geo etc) might cost 2, but ultimately have a 5 impact.

Invest in community-scale energy and storage projects. Consider having commercial scale renewable energy distributed generation facility applications ready as New Hampshire Renewable Energy Funds become available.

 32  2

This has a ton of potential. Does it tie directly to some of the "change the permitting / zoning" actions also listed? I'd love to better understand the barriers to this idea so we can be sure that they are targeted by the plan. Another thought: money for community scale renewable does not necessarily have to come from the Energy Fund - the community itself could invest in a shared coop scheme.

Solar panes - Made in China; making our enemy wealthy at US citizen expense. Horrible to look at . Are not as productive as old technology.

Solid Waste

"Like" an action to indicate your support and/or add a comment if you have suggestions, thoughts, or questions.

Reconsider the feasibility of a regional anaerobic digester at the Pease WWTF. This strategy is also important for food waste diversion since composting facilities may be difficult to permit in the state.

 19  1

Reasonable area to continue in.

Prepare and implement a Zero Waste Plan, which would see the Portsmouth community reduce, reuse, recycle, and compost at least 90 percent of its solid waste.

 18  0

Assess the effectiveness of the current recycling program. Evaluate the feasibility of developing an expanded recycling center, as well as reverting back to multi-stream collection.

 12  0

Transportation

"Like" an action to indicate your support and/or add a comment if you have suggestions, thoughts, or questions.

Develop and implement a fleet electrification plan. Ensure that this plan adequately assesses future charging needs by department and vehicle use types. Install additional Level 1 (120V), Level 2 (240V), and DC Fast (480V) charging stations, as appropriate. Concurrently, assess opportunities to right-size the municipal fleet to ensure the fleet inventory does not exceed operating requirements. The cost of this strategy may be offset through funds available through the Granite State Clean Fleets program.

 16  1

Negative on "Green Energy Plan" - esp. for electric vehicles. Batteries made in China, rare earth metal exploitation (by China et al) in the 3rd world. Puts US workers out of work. Vehicles do not go far. We have a plethora of fossil fuels here in the US to use. Electrics do not go far, can have trouble finding charging stations, and too expensive.

Work with the School Department to electrify the school bus fleet.

 18  3

Related, I didn't see an anti-idling strat. The roads around LHS and PMS are full of idling cars at pickup time - bad for air quality as well as wasted CO2

Does the city own the busses?

This would also make them a WHOLE LOT quieter! They're as loud as dump trucks :(

Expand public transportation within as well as into and out of Portsmouth to attract more "choice" riders (i.e., those that can utilize other modes of transportation) on a regular basis and more efficiently serve "captive" riders (i.e., those that must take public transportation). This includes making bus connections to regional transportation hubs, such as the rail stations in Dover and Exeter, as well as exploring new forms of public transit (e.g., passenger rail). To maximize the sustainability benefits of public transportation, plan to electrify the fleet and prioritize City investment in options benefiting lower income communities.

 18  2

Shuttle bus within Portsmouth from outlying areas to city center .

I support the equity co-benefits of better transit both within Portsmouth and regionally.

Complete and implement an electric vehicle charging plan to identify feasible and strategic locations for the installation of publicly available Level 1 (120V), Level 2 (240V), and DC Fast (480V) Chargers.

 21  1

I am against the city spending \$100,000's for electric chargers in the downtown area. Keep them on the outskirts and put more attention into a walkable, bikeable city with public transportation.

Update the City's Bicycle and Pedestrian Plan (2014) with a focus on creating a viable alternative transportation network that reduces the community's dependency on motor vehicles as well as provides recreational opportunities. Projects should be prioritized based on their ability to reduce overall vehicle miles traveled.

 57  2

This is the most low hanging fruit to prevent GHG emissions. It's also much more inclusive and equitable.

Co-benefits beyond GHG reduction include greater safety, community health, and equity.

Work with local and regional transportation partners in conducting a microtransit feasibility study to identify projects that would augment and/or replace fixed-route public transit service.

 11  2

TR-21, Adjusting zoning ordinances to eliminate parking minimums and introduce parking maximums should also be a high priority.

not sure what this would entail or its benefits.,,,

Land Management

"Like" an action to indicate your support and/or add a comment if you have suggestions, thoughts, or questions.

Identify publicly-owned land areas - or privately-owned lands for acquisition - that are suitable for new or enhanced greenhouse gas emissions sequestration and storage, for example reforestation/afforestation, forest management, and wetland restoration. Work with private landowners to develop and manage similar projects, where appropriate. This could include improved forest management plans.

 11  1

It would be nice if this was attached to a specific goal, such as "sequester enough carbon to offset the city's carbon footprint".

Implement blue carbon strategies (i.e., carbon sequestration through coastal resource conservation).

 9  0

Expand the City's tree cover to combat urban heat, enhance public health, and reduce the energy need for cooling. For example, plant a shade way at locations such as State Street in downtown and Parrot Ave from the Library to Junkins.

 14  3

This strat may not rank highly for reducing GHG, but that is not its purpose - it's for reducing the urban heat island effect. NH summers are going to get hotter. I assume that "climate action plan" means "adapting to the reality of climate change" as well as the laudable goal of reducing GHGs.

Change zoning to eliminate development bonuses for any paved public areas. Add bonuses for creating green spaces in development proposals. Add trees and other shade systems to reduce heat island effects. Cover parking lots with solar carports.

The city should carry on with its excellent tree planting and forestry practices, but this ranks low in potential to reduce GHGs. New money can be better spent in other initiatives.

THOMAS M. CLOSSON
ATTORNEY AT LAW PLLC

CM Action Item #4

379 Amherst Street, Suite #2
PMB 231
Nashua, New Hampshire 03063
603-759-6614
thomas.closson@nhlaborlaw.com

To: City Manager Conard, Mayor McEachern, Members of the
Portsmouth City Council
cc: Portsmouth Fire Chief McQuillen, Portsmouth Fire Commission,
Human Resources Director Harper
From: Tom Closson
Re: Proposed Memorandum of Agreement on AEMT Certification
Date: August 13, 2024

I have negotiated the attached Memorandum of Agreement (“MOA”) with the Firefighters Association of Portsmouth, New Hampshire – Local #1313 (“Association”). The MOA provides compensation for a group of firefighters enrolled in, and actively pursuing their AEMT certification. The MOA represents what I believe to be a favorable resolution of a disputed claim.

CITY OF PORTSMOUTH, NEW HAMPSHIRE
AND THE
FIREFIGHTERS ASSOCIATION OF PORTSMOUTH, NEW HAMPSHIRE - LOCAL #1313

MEMORANDUM OF AGREEMENT

The City of Portsmouth, New Hampshire (“the City”) and the Firefighters Association of Portsmouth, New Hampshire – Local #1313 (“the Union”) hereby agree as follows:

1. The City and the Union are parties to a collective bargaining agreement that covers the period July 1, 2023, through June 30, 2026 (“the CBA”).
2. There is no provision in the CBA that obligates the City to compensate members of the bargaining unit for time spent in class actively pursuing AEMT certification.
3. By this MOA, the City agrees to reimburse those bargaining unit members who, as of March 1, 2024, were enrolled in an AEMT certification class and were actively pursuing AEMT certification, at their straight-time, base hourly rate of pay for all hours spent in such class. This time will not count as hours worked for determining overtime compensation.
4. The benefits of this MOA only apply to those bargaining unit members who, as of March 1, 2024, were enrolled in an AEMT certification class and were actively pursuing AEMT certification. By way of clarification, the benefits of this MOA do not apply to bargaining unit members who, as of March 1, 2024, already completed such a class. Additionally, the benefits of this this MOA do not apply to bargaining unit members who may take such a class in the future, unless the Fire Chief agrees, in writing, to extend the benefits of this MOA.
5. The Fire Chief specifically agrees that Firefighter Ed Sweeney, who was enrolled in an AEMT certification class on March 1, 2024, but who was not able to attend due to military deployment, will be entitled to the benefits of this MOA when he returns from military deployment, enrolls in an AEMT certification class and actively pursues AEMT certification.
6. This MOA addresses only the specific situations described above. This Memorandum of Agreement shall not be construed as creating any binding past practice between the parties.

Dated: _____

City of Portsmouth, New Hampshire

Dated: _____

Firefighters Association of Portsmouth, New
Hampshire – Local #1313

THOMAS M. CLOSSON
ATTORNEY AT LAW PLLC

CM Action Item #5

379 Amherst Street, Suite #2
PMB 231
Nashua, New Hampshire 03063
603-759-6614
thomas.closson@nhlaborlaw.com

To: City Manager Conard, Mayor McEachern, Members of the
Portsmouth City Council
cc: Portsmouth Fire Chief McQuillen, Portsmouth Fire Commission,
Human Resources Director Harper
From: Tom Closson
Re: Reclassification of Assistant Fire Chief Position
Date: August 13, 2024

On July 9, 2024, the Fire Commission voted to reclassify the Assistant Fire Chief position from Grade 23 to Grade 25 on the City's Non-Union Salary Schedule. To implement this reclassification, the Commission has requested that effective September 1, 2024, the current Assistant Fire Chief move from Grade 23/Step F to Grade 25/Step E.

The attached memorandum and supporting documents from Chief McQuillen outline the rationale for the reclassification. In brief, the reclassification is intended to align the position more closely with similar positions in other, competing fire departments, as well as with City Departments that have a clear second in command. The reclassification is also intended to address salary compression caused by the recently negotiated Fire Officers' collective bargaining agreement.



Portsmouth Fire Department

Board of Fire Commissioners

July 10, 2024

Kelly Harper
Human Resources Director
City of Portsmouth, One Junkins Ave
Portsmouth NH 03801

Dear Kelly,

At the July 9, 2024 Board of Fire Commissioners Regular meeting the commission voted to reclassify the Assistant Fire Chiefs position from a grade 23 to a grade 25 to better align with other fire departments, and City Departments that have a clear second in command.

The Commission would like to see the Assistant Chief moved on his next anniversary date September 1, 2024 from Grade 23 F to grade 25 E.

We believe that this change will benefit the City. Please reach out to me if there are any questions or concerns.

Sincerely

A handwritten signature in cursive script that reads "Richard Gamester".

Richard Gamester
Chairman
Portsmouth Board of Fire Commissioners

Department Memorandum



PORTSMOUTH FIRE DEPARTMENT

OFFICE OF THE FIRE CHIEF

To: Portsmouth Board of Fire Commissioners

From: Chief McQuillen

Date: July 9, 2024

Re: Assistant Fire Chief classification

As you know one of the largest challenges in the fire service is recruitment and retention of personnel. I and the staff have repeatedly reported on our challenges and efforts to address them.

One area of concern is the Department's ability to have some succession planning, in order to keep some continuity and stability. Our efforts to address the firefighters and fire officer's contracts and make them more competitive for the market and region had an unintended consequence that I write to you about now, the Assistant Chief's position.

Attached is the Assistant Chief's contract and a summary of the pay he would receive if he was not promoted and still a Captain. As you can see, even before factoring in overtime he is behind what we pay a lower rank with less responsibilities.

As you are aware the Assistant Chief is the Operations Chief and is responsible for managing the day to day affairs of the department, including facilities, maintenance, training and personnel, in addition to assisting with meetings that I can not attend.

Communities with an Assistant Chief and similar sized Departments or larger are as follows:

Dover (same sized Department and stations)	\$143,849
Arlington Ma (same sized Department and stations)	\$136,075-163,573
Needham Ma (same size Dept, two stations)	\$144,097-151,410
Reading Ma (slightly smaller Dept and two stations)	\$105,967-162,221
Nashua NH (larger, and two assistant chiefs)	\$151,196 start
Portsmouth	\$133,112 (current)-136,385

July 16, 2024

I am proposing that the Commission consider reclassifying the Assistant Chiefs' job from a grade 23 step F to a grade 25 step E, putting him on par with the Assistant Public Works Director and Deputy Police Chief. These jobs are similar in responsibility and succession planning within those departments in the City.

I believe that this change will help the long-range goals of the Department with respect to succession planning and to try and incentivize internal personnel to aspire to move up through the ranks. Additionally it will certainly make the position more attractive and be more in line with what the costs of housing in the area are, and what similar positions are paid.

I look forward to this discussion and working with you to make this proposed change.

Gionet Salary Comparison

Effective July 1, 2024

Assistant Fire Chief PMA Grade 23 Step F	\$131,411.30
Longevity 25 Years	\$1700.72
Total Salary	\$133,112.02

Captain 14 Year Masters	\$108,543.30
Longevity 25 Years	\$1337.38
Holiday Pay 12.5 Days @ \$417.47 / Day	\$5218.38
Paramedic Stipend @ 5%	\$5427.17
Bachelor's Degree @ 4%	\$4341.73
Boat Operator @ 2%	\$2170.87
Hazmat Technician @ 3.5%	\$3799.02
Shipboard Technician @ 2%	\$2170.87
Total Salary	\$133,008.72

**NON-UNION
SALARY SCHEDULE
JULY 1, 2024-JUNE 30, 2025**

18	ASST. CITY ATTORNEY OPERATIONS MANAGER	\$83,965.12	\$88,163.37 5.00%	\$92,571.54 5.00%	\$97,200.12 5.00%	\$102,060.13 5.00%	\$103,080.73 1.00%	\$104,884.64 1.75%	\$106,982.33 2.00%	Annual
19	CITY CLERK SENIOR PROSECUTOR	\$88,128.80	\$92,535.24 5.00%	\$97,162.00 5.00%	\$102,020.10 5.00%	\$107,121.11 5.00%	\$108,192.32 1.00%	\$110,085.69 1.75%	\$112,287.40 2.00%	Annual
20	CITY CLERK DIRECTOR OF COMMUNICATIONS AND COMMUNITY ENGAGEMENT OPERATIONS DIRECTOR	\$92,494.53	\$97,119.26 5.00%	\$101,975.22 5.00%	\$107,073.98 5.00%	\$112,427.68 5.00%	\$113,551.96 1.00%	\$115,539.12 1.75%	\$117,849.90 2.00%	Annual
21	IT ENGINEER CITY CLERK SENIOR ASSISTANT CITY ATTORNEY	\$97,091.06	\$101,945.61 5.00%	\$107,042.89 5.00%	\$112,395.04 5.00%	\$118,014.79 5.00%	\$119,194.93 1.00%	\$121,280.85 1.75%	\$123,706.46 2.00%	Annual
22	DEPUTY FIRE CHIEF	\$101,500.82	\$106,575.86 5.00%	\$111,904.65 5.00%	\$117,499.89 5.00%	\$123,374.88 5.00%	\$124,608.63 1.00%	\$126,789.28 1.75%	\$129,325.07 2.00%	Annual
23	ASSISTANT FIRE CHIEF HUMAN RESOURCES DIR DEPUTY CITY ATTORNEY OF COUNSEL	\$107,041.98	\$112,394.08 5.00%	\$118,013.78 5.00%	\$123,914.47 5.00%	\$130,110.20 5.00%	\$131,411.30 1.00%	\$133,711.00 1.75%	\$136,385.22 2.00%	Annual
24	CERTIFIED ASSESSOR ENGINEER SUPERVISOR	\$112,286.24	\$117,900.56 5.00%	\$123,795.58 5.00%	\$129,985.36 5.00%	\$136,484.63 5.00%	\$137,849.48 1.00%	\$140,261.84 1.75%	\$143,067.08 2.00%	Annual
25	DEPUTY PUBLIC WORKS DIRECTOR	\$117,900.18	\$123,795.19 5.00%	\$129,984.95 5.00%	\$136,484.23 5.00%	\$143,308.41 5.00%	\$144,741.44 1.00%	\$147,271.47 1.75%	\$150,219.96 2.00%	Annual
26	DIRECTOR OF FINANCE & ADM DIRECTOR OF PUBLIC WORKS & FACILITIES	\$123,514.57	\$129,690.29 5.00%	\$136,174.81 5.00%	\$142,983.55 5.00%	\$150,132.73 5.00%	\$151,634.05 1.00%	\$154,287.65 1.75%	\$157,373.40 2.00%	Annual
27	FIRE CHIEF CHIEF INFORMATION OFFICER CITY ATTORNEY	\$129,690.37	\$136,174.88 5.00%	\$142,983.63 5.00%	\$150,132.81 5.00%	\$157,639.45 5.00%	\$159,215.84 1.00%	\$162,002.12 1.75%	\$165,242.16 2.00%	Annual
28	DEPUTY CITY MANAGER	\$136,173.83	\$142,982.52 5.00%	\$150,131.64 5.00%	\$157,638.22 5.00%	\$165,520.14 5.00%	\$167,175.34 1.00%	\$170,100.91 1.75%	\$173,502.92 2.00%	Annual

Permanent part-time employees shall be paid an hourly rate based upon the appropriate salary set forth above.

PORTSMOUTH PROFESSIONAL FIRE OFFICERS ASSOCIATION
 LOCAL #4039
 SALARY SCHEDULE
 July 1, 2024 - June 30, 2025

Lieutenant EMT-Intermediate/Advanced	
Date of Promotion	\$82,725.06
12 Months	\$84,793.62
24 Months	\$86,913.18
36 Months	\$89,085.78
48 Months	\$91,313.46
10 Year Masters	\$93,596.22
14 Year Master	\$95,936.10

Captain EMT-Intermediate/Advanced	
Date of Promotion	\$93,596.22
12 Months	\$95,936.10
24 Months	\$98,334.12
36 Months	\$100,793.34
48 Months	\$103,312.74
10 Year Masters	\$105,895.38
14 Year Masters	\$108,543.30

108,543.30

x 16.5% Stipends

126,452.94

+ 1,337.38 Longevity

5,218.38 Holiday Pay

133,008.07



CM Action Item #7

August 09, 2024

Karen Conard, City Manager
1 Junkins Avenue
Portsmouth, NH 03801

Dear Ms. Conard,

Due to limited space on the construction jobsite located at 70 Pleasant Point Drive, Auger Building Company requests to license 176 ft² in the street immediately in front of the property at the end of Pleasant Point Drive, as shown in the attached exhibits and as noted on Encumbrance Permit ENCM-24-66. The term of this license would end on December 31, 2024.

We request that you please put this matter on the City Council's agenda for the next meeting for review. I am also attaching Exhibit A, describing use and placement.

Should there be any questions or concerns in the meantime, please feel free to contact me at (207)451-7253 to discuss.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ben Auger', written over a horizontal line.

Benjamin P. Auger
Auger Building Company

LICENSE AGREEMENT
B.P. AUGER BUILDING COMPANY, LLC AT 70 PLEASANT POINT DRIVE

The City of Portsmouth (hereinafter "City"), a municipal corporation with a principal place of business of 1 Junkins Avenue, Portsmouth, New Hampshire 03801, for good and valuable consideration as set forth herein, hereby grants this Revocable License to The B.P. Auger Building Company, LLC (hereinafter "Licensee") on behalf of Owner Katara, LLC, with a principal place of business 255 Portland Avenue, Greenland, NH, pursuant to the following terms and conditions:

1. **Area of License and Use:** The Owner owns the property located in the City of Portsmouth, Rockingham County, State of New Hampshire, at 70 Pleasant Point Drive, shown on the City of Portsmouth's Assessor's Map as Tax Map 207, Lot 15 ("Property"). For the Owner's title to the Subject Property, see Rockingham County Registry of Deeds at Book 6290, Page 1229.

License Area: The City authorizes Licensee to temporarily use 176 square feet Pleasant Point Drive, a City right of way more particularly described in Exhibit A attached.
2. **Use:** Licensee shall make use of the License Area for the purpose of siting a dumpster to facilitating the Licensee's construction of a house at 70 Pleasant Point Drive.
3. **Term:** The license for License Area shall be for approximately 133 days, from August 21, 2024 through December 31, 2024.

Licensee may terminate this License prior to the end of the term by returning the License Area to safe and effective use by the public prior to the expiration of the term of this License. The Licensee shall contact the Director of Public Works for a determination that the License Area has been returned to safe and effective use. Failure to remove all vehicles, barriers, materials and equipment and to return the License Area to the City in the manner prescribed under this License at the end of the term may result in enforcement action by the City.

4. **Notice:** Licensee shall provide notice to the City's Director of Public Works when Licensee assumes control and use of the License Area and again when it returns the License Area to the City's control and use.
5. **License Fees:** The Owner shall pay to the City a license fees in accordance with City Council Policy No. 2018-02 entitled "License Fee for Encumbrance of City Property". The License Fee Policy provides that the Owner will be charged a daily fee of \$0.05 per square foot per day.

License Fee Calculation: The total license fee for the License is $\$0.05 \times 176 \text{ square feet} = \$8.80 \text{ per day} \times 133 \text{ days} = \mathbf{\$1,170.40}$. The License Fee shall be paid in full prior to the start of the term of the License.

Because it is in the City's interest that the Licensed Area be returned to the public use as soon as possible, if the License Area is returned to the City prior to the end of the License Term, the City will refund the Licensee the portion of the License Fee paid but not used.

6. **Indemnification:** Licensee agrees to indemnify and hold harmless the City of Portsmouth for any and all property damage, bodily injury or personal injury which arises as a result of its utilization of the Licensed Area. This obligation survives termination or revocation of this Agreement.
7. **Insurance:** At all times the Licensee shall maintain insurance for bodily injury and property damage in the amount of at least \$1,000,000 per occurrence. Licensee will provide proof of insurance to the City during the term of this Agreement and the City will be named as an additional insured.
8. **Maintenance of Area:** During the term of this Agreement, Licensee shall maintain the License Area in a safe, neat and orderly fashion and shall take such actions as are necessary to protect the public safety. The Licensee shall secure the perimeter of the License Area and take such other measures as may be necessary for pedestrian and vehicular safety during use of the Licensed Area. This shall include pedestrian signage and working with the City's Department of Public Works to temporarily stripe new crosswalks for pedestrians as highlighted in orange in Exhibit A.

Owner is required to apply for separate Flagging Permits that are outside the scope of this License when closing roads that abut the Property and shall advise abutters of all Flagging Permit applications in advance. Owner is also required to provide weekly updates to abutters regarding construction activity for the following week until the project is complete.

9. **Damage:** Licensee agrees to remedy any damage to the License Area caused by the Licensee's activities. The work will be performed by Licensee to City specifications and survive the terms of this Agreement. The City may elect to accept reasonable reimbursement from the Licensee in lieu of Licensee's repairing the damage.

10. **Compliance with Other Laws:** This Agreement does not relieve Licensee from compliance with any other local, state or federal laws or regulations or conditions imposed by any local board. Failure to abide by any local, state or federal laws or regulations or any condition of a site plan may, at the City's discretion, result in revocation.

11. **Revocation:** The City may terminate this Agreement or any provision contained in this agreement on 72 hours written notice if Licensee fails to meet the terms and conditions of this License or if the public interest requires such termination. No 72 hour written notification is required by the City if it is an emergency.

12. **Contractor and Subcontractor Parking:** Licensee understands and agrees that its contractors and subcontractors for the project shall not use on-street parking. Language will be inserted in Licensee's vendors and suppliers Purchase Orders and Trade Subcontracts that make the prohibition against parking on City streets mandatory. Contractors shall limit/ manage construction vehicles and deliveries to avoid disruption to businesses, particularly during the holiday season. Contractors may use loading zones for active loading and unloading of materials, equipment and tools.

Dated this _____ day of _____, 2024.

City of Portsmouth

By: _____

Karen Conard
City Manager

Pursuant to vote of the City Council
of _____

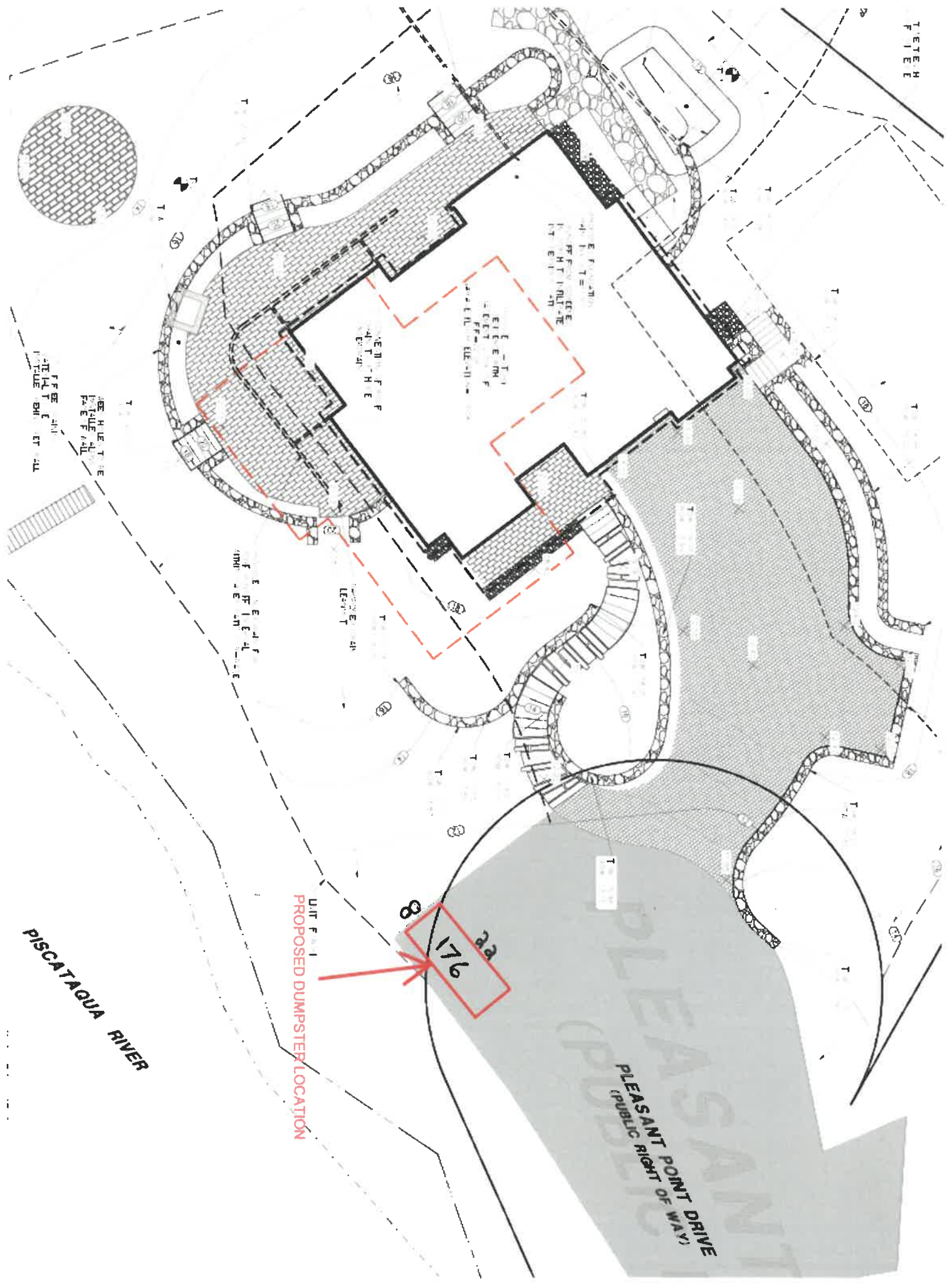
Dated this _____ day of _____, 2024.

**The B. P. Auger Building Company,
LLC**

By: _____

h/jferrini/license//70pleasantpoint/license

PROPERTY LINE



PISCATAQUA RIVER

PROPOSED DUMPSTER LOCATION

176

PLEASANT POINT DRIVE
(PUBLIC RIGHT OF WAY)

SECOND EXTENSION OF AMENDMENT TO LEASE AGREEMENT

WHEREAS, the **City of Portsmouth**, a municipal corporation organized and existing under the laws of the State of New Hampshire, and having a usual place of business at 1 Junkins Avenue in Portsmouth, New Hampshire (the “City” or “Lessor”), and **Child Advocacy Center of Rockingham County, Inc.**, (“CAC” or “Lessee”), a nonprofit agency the works with community partners to advocate and provide social services for child victims of crime for residents of Rockingham County, are parties to a Lease Agreement and Assignment and Assumption Agreement for real property located at 100 Campus Drive, Portsmouth, New Hampshire (the ‘Premises” or “Community Campus”):

WHEREAS, CAC leases a portion of Community Campus (“Leased Premises”) from the City pursuant to terms of the Lease Agreement;

WHEREAS, the City is constructing improvements to Community Campus for all of its tenants and the City and CAC desire to reconfigure and remodel its Leased Premises;

WHEREAS, an Amendment to Lease Agreement was executed by the parties and approved by Council on December 18, 2023, which extended the terms of the existing Lease Agreement until June 30, 2024;

WHEREAS, the parties agreed to extend the existing term of the Lease Agreement for two (2) months, in order for the City and CAC, and all other tenants of the Community Campus, to have sufficient time to finalize a new Lease Agreement, which incorporates the recently finalized plans that reflect the reconfigured and remodeled portion of the Leased Premises. This Extension of Amendment to Lease Agreement was approved by Council on June 17, 2024 and expires on August 31, 2024 and;

WHEREAS, the parties agree to extend the existing term of the Lease Agreement for another three (3) months (September 1, 2024 through November 30, 2024) in order for the City and all tenants of Community Campus to agree on finalized lease terms and final plans for the reconfigured lease space and common areas for all tenants; and

WHEREAS, prior to the expiration of the term set forth in this Second Extension of Amendment to Lease Agreement, the City and CAC will draft and submit a new Lease Agreement for Council approval.

NOW THEREFORE, the terms of the Lease Agreement are amended as follows:

1. Paragraphs 2.1 and 2.2 are deleted in their entirety and replaced with the following:

The term of this lease is for eleven (11) months, beginning on January 1, 2024 and terminating on November 30, 2024.

All other terms of the Lease Agreement not amended herein shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this Amendment to the Lease Agreement on _____, 2024.

WITNESS:

CITY OF PORTSMOUTH

Karen S. Conard, City Manager

Approved by vote of the City Council on

WITNESS:

**CHILD ADVOCACY CENTER OF
ROCKINGHAM COUNTY, INC.**

Name: Maureen Sullivan, DA, MBA
Executive Director

Duly Authorized by Vote of the Board on

SECOND EXTENSION OF AMENDMENT TO LEASE AGREEMENT

WHEREAS, the **City of Portsmouth**, a municipal corporation organized and existing under the laws of the State of New Hampshire, and having a usual place of business at 1 Junkins Avenue in Portsmouth, New Hampshire (the “City” or “Lessor”), and the **Krempels Center**, (“**Krempels Center**” or “Lessee”), a nonprofit agency which provides in person and online post-rehab community based programming to survivors of acquired brain injuries to residents of Rockingham County, are parties to a Lease Agreement and Assignment and Assumption Agreement for real property located at 100 Campus Drive, Portsmouth, New Hampshire (the ‘Premises” or “Community Campus”);

WHEREAS, the **Krempels Center** leases a portion of Community Campus (“Leased Premises”) from the City pursuant to terms of the Lease Agreement;

WHEREAS, the City is constructing improvements to Community Campus for all of its tenants and the City and the **Krempels Center** desire to reconfigure and remodel its Leased Premises;

WHEREAS, an Amendment to Lease Agreement was executed by the parties and approved by Council on December 18, 2023, which extended the terms of the existing Lease Agreement until June 30, 2024;

WHEREAS, the parties agreed to extend the existing term of the Lease Agreement for two (2) months, in order for the City and the **Krempels Center**, and all other tenants of the Community Campus, to have sufficient time to finalize a new Lease Agreement, which incorporates the recently finalized plans that reflect the reconfigured and remodeled portion of the Leased Premises. This Extension of Amendment to Lease Agreement was approved by Council on June 17, 2024 and expires on August 31, 2024 and;

WHEREAS, the parties agree to extend the existing term of the Lease Agreement for another three (3) months (September 1, 2024 through November 30, 2024) in order for the City and all tenants of Community Campus to agree on finalized lease terms and final plans for the reconfigured lease space and common areas for all tenants; and

WHEREAS, prior to the expiration of the term set forth in this Second Extension of Amendment to Lease Agreement, the City and the **Krempels Center** will draft and submit a new Lease Agreement for Council approval.

NOW THEREFORE, the terms of the Lease Agreement are amended as follows:

1. Paragraphs 2.1 and 2.2 are deleted in their entirety and replaced with the following:

The term of this lease is for eleven (11) months, beginning on January 1, 2024 and terminating on November 30, 2024.

All other terms of the Lease Agreement not amended herein shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this Amendment to the Lease Agreement on _____, 2024.

WITNESS:

CITY OF PORTSMOUTH

Karen S. Conard, City Manager

Approved by vote of the City Council on

WITNESS:

KREMPELS CENTER

Name: Barbara P. White, Co-Interim Directors of Operations

Duly Authorized by Vote of the Board on

SECOND EXTENSION OF AMENDMENT TO LEASE AGREEMENT

WHEREAS, the **City of Portsmouth**, a municipal corporation organized and existing under the laws of the State of New Hampshire, and having a usual place of business at 1 Junkins Avenue in Portsmouth, New Hampshire (the “City” or “Lessor”), and **Seacoast Outright**, (“**Seacoast Outright**” or “Lessee”), a nonprofit agency which serves, supports and advocated for LGBTQ+ youth who are residents of Rockingham County, are parties to a Lease Agreement and Assignment and Assumption Agreement for real property located at 100 Campus Drive, Portsmouth, New Hampshire (the ‘Premises” or “Community Campus”);

WHEREAS, the **Seacoast Outright** leases a portion of Community Campus (“Leased Premises”) from the City pursuant to terms of the Lease Agreement;

WHEREAS, the City is constructing improvements to Community Campus for all of its tenants and the City and the **Seacoast Outright** desire to reconfigure and remodel its Leased Premises;

WHEREAS, an Amendment to Lease Agreement was executed by the parties and approved by Council on December 18, 2023, which extended the terms of the existing Lease Agreement until June 30, 2024;

WHEREAS, the parties agreed to extend the existing term of the Lease Agreement for two (2) months, in order for the City and the **Seacoast Outright**, and all other tenants of the Community Campus, to have sufficient time to finalize a new Lease Agreement, which incorporates the recently finalized plans that reflect the reconfigured and remodeled portion of the Leased Premises. This Extension of Amendment to Lease Agreement was approved by Council on June 17, 2024 and expires on August 31, 2024 and;

WHEREAS, the parties agree to extend the existing term of the Lease Agreement for another three (3) months (September 1, 2024 through November 30, 2024) in order for the City and all tenants of Community Campus to agree on finalized lease terms and final plans for the reconfigured lease space and common areas for all tenants; and

WHEREAS, prior to the expiration of the term set forth in this Second Extension of Amendment to Lease Agreement, the City and the **Seacoast Outright** will draft and submit a new Lease Agreement for Council approval.

NOW THEREFORE, the terms of the Lease Agreement are amended as follows:

1. Paragraphs 2.1 and 2.2 are deleted in their entirety and replaced with the following:
The term of this lease is for eleven (11) months, beginning on January 1, 2024 and terminating on November 30, 2024.

All other terms of the Lease Agreement not amended herein shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this Amendment to the Lease Agreement on _____, 2024.

WITNESS:

CITY OF PORTSMOUTH

Karen S. Conard, City Manager

Approved by vote of the City Council on

WITNESS:

SEACOAST OUTRIGHT

Name: Heidi Carrington Heath, Executive Director

Duly Authorized by Vote of the Board on

PARKING LOT USAGE/MAINTENANCE AGREEMENT

Middle Street Baptist Church, 18 Court Street, Portsmouth, New Hampshire (hereinafter " Church"), and the City of Portsmouth, a municipal corporation with an address of 1 Junkins Avenue, Portsmouth, New Hampshire, (hereinafter "City"), hereby enter this agreement with respect to the parking lot owned by the Church (Tax Map 127, Lot 2) (hereinafter "the Lot") for the purposes and under the terms and conditions contained herein.

1. This Agreement has an indefinite term but may be terminated by either party upon 30 days written notice.
2. During the period in which this Agreement is in effect, sixteen (16) total parking spaces allocated in **Zone A** and (4) parking spaces allocated in **Zone B** [Exhibit A: MSBC Lot Map] shall be available at the discretion of the City for the purpose of employee parking for the Portsmouth Public Library and Portsmouth Middle School as defined herein:

Twelve (12) parking spaces shall be allocated for Library employees and four (4) parking spaces shall be allocated for Middle School employees in **Zone A** and four (4) parking spaces in **Zone B** shall be allocated for Middle School employees.

3. Parking under this Agreement shall be limited to Monday through Friday of each week and from the hours of 7:30 a.m. to 9:30 p.m. each day. Except, however, that by prior written notice, delivered to the Library Director not less than twenty-four (24) hours in advance, the Church may have use of the sixteen (16) spaces in **Zone A** and four (4) spaces in **Zone B** for specific Church events during these hours up to eight (8) times per calendar year. Such use of the spaces by the Church beyond eight (8) times shall be at the discretion of the City.
4. The City shall post and maintain signage in a manner to be approved by the Church to designate sixteen (16) spaces in **Zone A** and four (4) spaces in **Zone B** for Library and Middle School employee parking. The signs shall include information about the hours and days when such employees are permitted to use the spaces.
5. The City shall have the authority to provide regular and consistent enforcement of its rules and regulations governing the use of these parking spaces during the times stated to ensure that the parking spaces are being used only by authorized Library and Middle School employees with parking permits.
6. The City shall plow snow, apply salt and sand, and remove snow as necessary from the Lot in accordance with its normal practices for City parking lots.

7. Except as described in this Agreement, all other uses of the Lot shall be under the control of the Church.
8. The City agrees to indemnify and hold the Church harmless with respect to any and all claims for liability arising out of any use of the Lot which is sanctioned, arranged, sponsored or conducted by the City, to the extent and under the terms and conditions under which the City itself is entitled to indemnification from the New Hampshire Public Risk Management Exchange, under the terms of its member agreement as it may be in effect and as amended from time to time.
9. In exchange for the foregoing the City shall pay to Church the total annual compensation of \$1,000.00, which shall be due no later than July 31 of each year of the Agreement.

For the City of Portsmouth

**For Middle Street Baptist Church,
Portsmouth, NH**

Karen Conard, City Manager

By:

Dated: _____

Dated: _____

Pursuant to vote of the City Council

Pursuant to vote of the Middle Street Baptist
Church Board of Trustees on

On: _____

On: _____

Middle Street Baptist Church



ZONE A

ZONE B



City Council Emails from August 6, 2024 through August 16, 2024 at 9:45 a.m.

Submitted on Mon, 08/12/2024 - 17:30

First Name

tyra

Last Name

ott

Email

tyra34@yahoo.com

Address

13 aberdeen dr
stratham, New Hampshire. 03885

Message

Please fund PPTV. It serves as an invaluable educational, entertainment and informative asset for our community.

Submitted on Tue, 08/13/2024 - 09:19

First Name

Peter

Last Name

Bergh

Email

pb@princecom.com

Address

54 Lincoln Ave, ##Deliveries Back Porch##
Portsmouth, New Hampshire. 03801-4425

Message

I am writing to encourage you to approve funding recommended by the Conservation Commission for the Cavaretta/100-Acre Woods conservation easement. Over 12 years in the making, this project offers the City an exceptional opportunity to meet many of its conservation priorities, as outlined in the City's own 2020 Open Space Plan. It provides key wildlife habitat and corridors linking to the Urban Forestry Center, attenuates ever-increasing storm runoff, and creates a pathway to eventual full ownership with excellent

recreation/student education opportunities.

While some may see the requested amount of \$1,000,000 as a lot, I urge you to consider:

— Portsmouth has some of the highest property values in the state. The City will be protecting this vital property for about \$10,000 an acre

— On top of the City's contribution, SELT will raise an additional \$1.25 million, more than doubling the value City residents receive from the transaction

— The money is already earmarked and will not affect City tax rates

— In addition to bringing added funding to make this transaction happen, SELT has both the expertise and commitment to manage the easement (at no cost to the City) and, with luck, ultimately convert it to full ownership. They are an exceptionally respected regional land trust, with strong financials and a long history of working with municipalities.

We are fortunate to have a number of wonderful outdoor resources here in Portsmouth, like Creek Farm (which also started as an easement project) and the new bike path. The Cavaretta/100-Acre Woods project offers a rare opportunity, which won't last if we don't complete this transaction.

Thank you for your consideration,

Peter Bergh

54 Lincoln Avenue, Portsmouth

Member, SELT-NH Board of Directors

First Name

Marjorie

Last Name

Gruzen

Email

mgruzen@hotmail.com

Address

156 Front Street Apt 415

Exeter, New Hampshire. 03833

Message

I am writing to emphasize the critical importance of funding public access TV as a vital resource for our community. Public access television serves as a platform for local voices, enabling residents to share diverse perspectives, cultural programming, and community-driven content that might otherwise go unheard. It fosters civic engagement by providing a space for local culture and events, educational

programs, and community announcements, ensuring transparency and keeping our citizens informed. In an era where media is increasingly consolidated, public access TV remains a unique and essential tool for nurturing our local identity and strengthening community bonds. PPMtv has an impact on communities outside of Portsmouth, as well. Through the station's YouTube channel, programming can be seen throughout the state and beyond. Your support in funding this resource is not just an investment in media but in the very fabric of our community.

First Name

Robin

Last Name

Lurie-Meyerkopf

Email

talkinrobin5@gmail.com

Address

53 Whidden St.

Portsmouth, New Hampshire. 03801

Message

I have contacted the school board as well. Do the school administrators understand what's going on with kids and cellphones? I know individual teachers are trying but a ban needs to be system wide. Here's an interesting article. It is truly scary what kids are doing with their phones and how addictive the behavior has become.

<https://www.nytimes.com/2024/08/11/technology/school-phone-bans-indiana-louisiana.html?smid=nytcore-ios-share&referringSource=articleShare>

First Name

Peter

Last Name

Bielagus

Email

peterbielagus@gmail.com

Address

433 Broad St

Portsmouth, New Hampshire. 03801

Message

Dear Councilors,

My name is Peter Bielagus. I am a resident of Portsmouth. Since 2023, I have served as Treasurer on the Board of Directors. As you know, PPMtv has requested a hearing with the City council to discuss our funding. I am writing to introduce myself.

For the past twenty years, I have been an author and professional speaker, traveling the globe and teaching personal finance to people of modest incomes—servicemembers, high school and college students, and young professionals.

I discovered PPMtv in search of a place where I could continue filming my YouTube show, Money In The Movies. The show focuses on personal finance education and is designed to teach financial lessons found in our most popular movies.

- What can Batman teach us about stock I.P.O.s?
- What can James Bond teach us about investing in gold?
- What can Goodfellas teach us about limit liability companies? (in production)

The show has allowed me to reach audiences the world over, with a focus on people who may not normally pay any attention to their personal finances.

After meeting the team, I began shooting all of my episodes at PPMtv. Chad, Jake, and Roxie were terrific; they improved the way my show was shot, edited, and aired. I was amazed that this powerful media resource was right in my backyard.

A powerful resource, that is in danger of closing.

PPMtv has struggled from COVID, a move from our long-term home to our new location, and most recently, a severe drop in the annual funding we receive from cable revenues.

We have made great strides to meet these challenges. We are now in a larger, more energy-efficient, handicap-accessible, space, at below market rent. With a new board, we have stepped up our fundraising efforts. Despite these changes, our increased fundraising, and aggressive cost-cutting, PPMtv still requires a larger portion of the cable funding fee to operate. Already our staff is underpaid compared to industry averages.

With proper funding, the channel will not only be able to help more folks like me but also our ever-growing audiences. PPMtv goes well beyond the local people who film and watch our programs. It truly is a worldwide resource.

Thank you for your time and I look forward to our upcoming meeting with the City.

My Best,

Peter G. Bielagus

www.peterbspeaks.com

First Name

Rich

Last Name

Clyborne

Email

director@gundalow.org

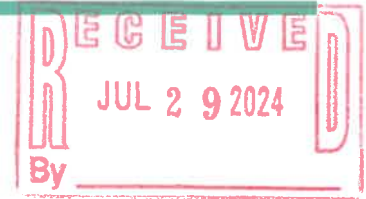
Address

60 Marcy Street

Portsmouth, New Hampshire. 03801

Message

As the Executive Director of a small nonprofit organization here in Portsmouth I can tell you that marketing dollars are not always available in large amounts. Producing 30-second video spots and short videos to highlight your organization's mission and programs can have a hefty price tag when working with professional production companies making this form of marketing out of reach for many. PPMTV has been a shining light in the community for a number of years helping the nonprofits who can't afford the more expensive production company fees to have access to video production services and broadcast coverage they would not typically be able to take advantage of. The staff at PPMTV are dedicated to helping increase awareness of local nonprofits and provide production services that rival the larger professional companies and the fees they charge allow for a wider variety of options when it comes to the length, complexity, and quality of productions. Allocating more of the PEG dollars that the City receives to PPMTV will allow them to continue providing these services and to help raise awareness of the many great things that the nonprofits who serve this community bring to the City of Portsmouth. Please consider increasing the amount allocated to this vital organization.



Portsmouth Public Media Television, Inc

One Middle Street
Portsmouth, NH 03801
(603) 427-8093

July 24, 2024

Hello Councilors,

My name is Alexis Mason. I serve as the President of the Board of Directors for PPMtv. We aim to get on the agenda for the August 19th Council meeting to discuss the topic of re-evaluating the outdated policy that dictates the City of Portsmouth take \$360,000 from the Cable Franchise Fee and allocate the remainder to PPMtv.

PPMtv was created thanks to a 2009 city council agreement that the station would receive funding from the federally mandated cable franchise fees allotted to the City of Portsmouth. Were it not for the PEG funding, which is earmarked for Public, Education and Government television programming, Portsmouth's cable access station would not have come to be.

This year, PPMtv's anticipated funding from the cable franchise fees was reduced to only \$86,000. Such a loss cannot be mitigated by fundraising on a scale which will allow PPMtv to remain operational. If the city council policy is not re-evaluated regarding these funds, PPMtv will, after 14 years of serving as Portsmouth's television podium, close its doors.

PPMtv representatives would love to meet with each of you individually prior to the meeting date to ensure that you have all the information needed to address this issue.

We would be pleased to provide you with a document which outlines all of the work we've done, the work we could do, and what PPMtv would like to see out of this re-evaluated policy. We appreciate your consideration.

This decision from 2009 has had a long standing impact on our ability to serve the Seacoast. We're hoping that you all see the value in changing it for the better.

Kind regards,

A handwritten signature in black ink that reads "Alexis Mason".

Alexis Mason
PPMtv Board of Directors, President



August 7, 2024

Mayor Deaglan McEachern
City Manager Karen Conard
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH 03801

Re: Proposed Conservation Easement on the 100-Acre Woods, Cavaretta Property

Dear Mayor McEachern and City Manager Conard:

The Southeast Land Trust of New Hampshire (SELT) respectfully requests the opportunity to present and discuss the proposed partnership with the City of Portsmouth to acquire a conservation easement on the Cavaretta property at the City Council's upcoming August 19th meeting. SELT looks to share additional information and answer the Council's questions about the critical natural resources of this property and how its permanent protection through a conservation easement will advance the City's own open space goals while providing lasting benefits to the current and future residents of the City.

In addition, SELT would like to offer the City Council an opportunity to visit the 100-Acre Woods for a guided tour with our Land Conservation Director Duane Hyde. We have offered dates to your staff and hope we can schedule that visit to occur soon after the requested August 19 meeting.

I look forward to continuing our work to achieve our shared goals. Thank you for your consideration.

Sincerely,

Brian Hart
Executive Director



Printed on recycled paper

The Nan and George Mathey Center for People and Nature at Burley Farms
247 North River Road Epping, NH 03042 603-778-6088 seltnh.org

Portsmouth City Council

August 2, 2024

Dear Councilors:

At a special meeting of the Conservation Commission on July 17th, 2024 the Conservation Commission by a unanimous vote, authorized the expenditure of a sum of up to \$1,000,000 (one million dollars) from the Conservation Fund to be donated to the Southeast Land Trust (SELT) for the purchase of a conservation easement on Elwyn Road (Map 225 Lot 43) and for no other purpose. Upon successful approval of SELT's New Hampshire Land Conservation Investment Program (LCIP) grant application, the Commission requests that the Council approve such expenditure and issue power to the City Manager to apply these funds as matching dollars towards the acquisition of a conservation easement on said parcel.

Yours Truly,

A handwritten signature in black ink, appearing to read 'S. Collins', written in a cursive style.

Samantha Collins,

Chairwoman Portsmouth Conservation Commission

cc: Karen Conard, City Manager
Peter Britz, Planning and Sustainability Director
Susan Morrell, City Attorney

MEMORANDUM

TO: Portsmouth City Council
FROM: Brian Hart, Executive Director and Duane Hyde, Land Conservation Director
Southeast Land Trust of New Hampshire (SELT)
DATE: August 13, 2024
RE: Partnership to conserve the 100-Acre Woods (Cavaretta Easement)

Thank you for the opportunity to publicly present and discuss the proposed partnership between the City of Portsmouth and the Southeast Land Trust of New Hampshire (SELT) to permanently conserve 94-acres of forest, fields, and wetlands owned by Joe Cavaretta, known as the 100-Acre Woods. This first page provides a brief snapshot of why SELT believes the conservation of this property and the proposed project advances the City's conservation and community goals. Additional details on each aspect follow.

Why conserve the 100-Acre Woods?

- **Identified Priority:** As the largest, privately-owned, unconserved and undeveloped property in the City, this land is a top priority, as determined by the City's own 2020 Open Space Plan and a multiple other science-based, data-driven conservation plans on the regional and state level. (see p. 2)
- **Protect critical natural resources:** These include wildlife habitat for rare and threatened species, the water quality of Berry's Brook, prime wetlands for flood storage and pollutant capture, and wildlife travel corridors connecting large blocks of habitat. (see p. 3)
- **Low-risk:** The project contract and proposed easement roles minimize the immediate and long-term risk to the City and shift it to SELT, minimizing future costs for the City and its taxpayers. (see p. 3)
- **A Strong Partner:** SELT is an independently accredited, professional land trust, whose sole mission is to conserve and steward land, and which has the resources, expertise and capacity to monitor and enforce the Cavaretta easement. (see p. 6)
- **A Future Option:** Once the easement is completed, the existing contract provides for a "right of first offer and refusal" to acquire the ownership of the 100-Acre Woods. Ownership is preferred by SELT and the Conservation Commission, and with input from the City, would further benefit the community through trails and nature-based education for area youth. (see p. 4)
- **Dedicated funds available:** The City's Conservation Fund, derived from the development of other land enrolled in current use, has been untapped for years and is available to provide the requested funds, at no direct cost to taxpayers through tax rate increases.
- **Leveraging City funds:** At 44% of the project's easement value and project costs, the City's contribution from the dedicated Conservation Fund will be matched dollar-for-dollar with other public and private funds raised by SELT. (see p. 6)
- **Now is the time:** After 12+ years of efforts, an agreement has been reached to provide the chance for conservation. Should this easement purchase not proceed, rising real estate values and increasing development pressure only increase the risk of this property being developed.

Recognized Priority Locally and Regionally

City of Portsmouth’s 2020 Open Space Plan

- **“High Priority”**: the Cavaretta property is identified as High Priority “parcel OO” that meets all four ranking categories (page 53).

Map Code	Description	Ownership	Opportunity		Ranking Categories				Priority		
			Acquisition/Conservation	Improvement	Proximity	Connectivity	Unique Resources	Equity & Access	High	Medium	Future
OO	Water quality protection for Berry’s Brook and habitat connectivity within Portsmouth and into nearby Rye.	Private	✓		*	*	*	*	X		

- **Identified as an “Emerging Area” to Retain and Expand Portsmouth’s Open Space Network:** the 100-Acre Woods property lies within the Berry’s Brook Headwaters which the plan describes as *“Even though this area of the City is dominated by wetlands and will not contribute as much recreational value overall, it is important to retain these open spaces. This will ensure water quality is maintained in Berry’s Brook as it flows into Rye and out to the Coast. These contiguous open space corridors also ensure habitat connectivity exists for the many species living in and passing through this area of the seacoast. This open space area also offsets the impact of the more intensely developed corridor along Route 1 while helping to reduce flooding, improve air and water quality, reduce the heat island effect, sequester carbon, and other benefits.”* (page 46)
- **Includes a general recommendation** to *“identify opportunities to partner with landowners and regional conservation organizations (such as Southeast Land Trust and the Society for the protection of NH Forests) to increase the percent of open space.”* (page 43).

2021 New Hampshire's Coastal Watershed Conservation Plan¹: 87-acres (93%) of the 100-Acre Woods lie within a Focus Area of this plan, which represents the best thinking of conservation agencies, conservation scientists and non-profits about the highest priority critical lands in the coastal watershed to conserve and safeguard for ecosystem functions and services.

2020 NHFG Wildlife Action Plan (WAP)²: This plan seeks to identify critical habitat to conserve for wildlife before they become too rare or costly to restore. The Plan ranks habitat in tiers of importance: state, regional, and local level. The Cavaretta land included 59-acres (63%) in these three tiers.

2019 Connect the Coast¹: This science-based plan identifies a network of lands critical to maintaining habitat connections for wildlife throughout the Seacoast region. 85-acres (90%) of the property is in an unfragmented, high-quality habitat area and 1.8-acre portion of the property is part of a key wildlife connectivity corridor that links this property to the Urban Forestry Center habitat block (The City’s Open Space Plan also recognized this connection – see the map on page 39.)

Resilient and Connected Landscape (TNC): This plan looked at what lands help wildlife and plants most effectively adapt to a changing climate (called climate resilience). 76-acres (81%) of the property identified average or better for climate resilience, a strong score due to its connectedness to undeveloped and conserved lands, its soils and geology, and topographic diversity.

Berry’s Brook Watershed Management Plan (Berry's Brook Watershed Protection Council, 1993): Specifically identified Cavaretta property as an area that if developed, could pose potentially serious

¹ The Nature Conservancy and Great Bay Resource Protection Partnership

² New Hampshire Fish and Game Department

impacts to the watershed due its size and nearness to Berry's Brook and its associated wetlands.

Protects Critical Natural Resources

1. **Preserves diverse wildlife habitat** due to mix of upland forests (~40 acres), forested wetlands (~47 acres, based on National Wetlands Inventory mapping), and open fields and shrubland (~7 acres), including probable habitat for threatened and endangered turtles.
2. **Conserves travel corridors for wildlife**, including a **1.8-acre portion of a regionally significant wildlife connectivity corridor** linking and providing for the ability for wildlife to move between the large habitat blocks of the Urban Forestry Center and the Berry's Brook area.
3. **Protects water quality of Berry's Brook** by conserving a 1/3 mile of a perennial tributary.
4. **Preserves significant wetland systems from development impacts**, including at least three vernal pools and 47-acres of wetlands, primarily concentrated in the southern portion of the property and part of a larger 220-acre Prime Wetland. Vernal pools provide essential habitat for certain frog and salamander species and vernal pools are a food source for many other species.
5. **Provides green infrastructure services** through flood storage and risk mitigation while capturing pollutants, as the property's wetlands and forested buffers absorb and store run-off and assimilate nutrients from the more heavily developed surroundings and slowly release these waters.
6. **Helps protect drinking water supplies**, as ~34.6 acres of the property are within a high transmissivity aquifer.
7. **Supports dispersed access through LCHIP's passive recreation requirements while creating future opportunity** for public ownership of the 100-Acre Woods with trails and nature-based education opportunities. Although needing further exploration, the conservation of the Cavaretta tract protects the opportunity for elementary education for not just one school, but two public schools: Portsmouth's Dondero Elementary School and the Rye Elementary School. Both of these schools offer outdoor education as part of their curriculum and reportedly the Dondero school lacks sufficient useable land; the Cavaretta's tract's proximity to the school could facilitate opportunities in the future. This will require further discussion with both the landowner and the schools.

Project Structure

- SELT and the City will have legal interests in the conservation easement on 94 acres of the Cavaretta property.
 - SELT would be the primary holder of the easement, carrying the costs and obligation to monitor the use of the land and take enforcement obligations against violations. SELT will provide the City with its monitoring reports and engage with the City with respect to the review of management plans and management activities on the property.
 - The City of Portsmouth would hold a third-party right of enforcement, allowing the City to minimize its ongoing costs, and choose to take enforcement action if SELT failed to do so. In addition, if SELT ceased to exist as an entity or if SELT became the future owner of the land,

the City will have the opportunity to decide if it would like to become the primary holder of the conservation easement.

- Excluded from the conservation easement is an approximately 5-acre area surrounding the existing house and outbuildings/improvements associated with the house. Mr. Cavaretta will retain the house and continue to pay property taxes on his buildings and the land.
- **Conservation easements are legal agreements that permanently limit the development** of land to protect critical natural resources, while allowing continued compatible uses, like agriculture, forestry, and outdoor recreation. Conservation easements are recorded in the Registry of Deeds, run with the land, and apply to the current and all future landowners.
- SELT's template conservation easement includes the following key terms:
 - Allows for forestry and agriculture. Commercial forestry must be conducted in accordance with a written forest management plan prepared by a licensed forester. Commercial forestry must be overseen by the licensed forester and follow best management practices and guidelines such as "Good Forestry in the Granite State". Agriculture must also follow best management practices
 - Prohibits subdivision of the land
 - Prohibits mining and excavations
 - Prohibits structures, except those used for forestry or agricultural purposes
 - Prohibits motorized vehicles (including ATVs) except for land management purposes
 - Prohibits burial of man-made materials or hazardous materials
 - Property cannot be used to satisfy the density, frontage or setback requirements for the development of any other property

Features specific to this property:

- Will allow for the maintenance and repair of the existing driveway and utilities along the driveway to serve the Excluded Area (house location)
- With the Land and Community Heritage Investment Program (LCHIP) funding proposed, the landowner has agreed to LCHIP's requirements that the land not be posted against public access or hunting. LCHIP's language has exceptions for when posting may be allowed, for instance during active timber harvest operations or agricultural cropland areas. This does not, however, require the landowner to provide opportunities for parking or for trail construction. This is a "dispersed" public access provision. Because SELT will likely someday have the opportunity to acquire the property, we will ensure the easement will allow for trails and parking at the landowner's discretion.
- The purchase agreement between SELT and the landowner stipulates a closing date of June 28, 2025 but the closing can extend until no later than December 31, 2025.

Right of First Offer and Refusal

From the onset of our discussions with Mr. Cavaretta, SELT sought to acquire the fee ownership of the property in recognition of additional public benefits that could be achieved. We explored multiple approaches that met Mr. Cavaretta's short and long-term goals and while Mr. Cavaretta is not willing to sell the property now, he did agree to provide a future opportunity to acquire the land. As part of its contract, SELT has a right of first offer and refusal for the property. This means that if Mr. Cavaretta ever

sells the property outside of his family (he has two siblings, and he is not married and has no children) then SELT will have the right to make an offer.

- If that offer is rejected, he cannot sell the property for less than SELT's offer.
- If he gets an offer that is more than SELT's offer, then SELT can match that offer and the property must be sold to SELT.

Should SELT exercise its right to acquire the property in the future, SELT will proactively engage the City to receive its input and feedback about how the 100-Acre Woods could best serve the needs of the City's residents, for trails and nature-based education, while continuing to protect its natural resources.

Should SELT elect not to exercise its right of first offer and refusal when the opportunity arises, the City will then have the ability to decide if it wants to exercise this right. Mr. Cavaretta has agreed to this approach whereby the City can step in. Note that should SELT, the City, or any other party acquire the property, the conservation restrictions would remain in effect.

Easement Valuation and Purchase Price

The standards of the land trust community require each of our proposed acquisitions to be appraised to ensure a fair valuation based on the property's size, characteristics, location, market conditions, and zoning regulations.

- In May of 2024, the easement was independently appraised at \$2.145 million, based on an appraisal completed by Stark & Webster Valuations, LLC, a certified and licensed general appraiser. The appraiser used a comparable sales analysis to determine fair market value.
- Mr. Cavaretta agreed to sell the easement for \$1.8 million, which represents a \$345,000 price reduction from the appraised value. We appreciate he chose to do this to support the conservation outcome.
- As part of the negotiation process, SELT hired Altus Engineering to provide a conceptual development plan based on the City's zoning regulations and the property's constraints, including the City's wetlands mapping. Altus evaluated two approaches, resulting in conceptual plans showing 13 single family homes or a planned unit development with 37 units in 8 buildings.
- Given the extraordinary growth in real estate values between 2019-20 and 2023-24, when the mean value of a condo in Portsmouth went from \$554,682 to \$955,808, the economic incentive to improve access and overcome development obstacles is very strong. While not considered for purposes of the appraisal, a likely scenario is that a developer would acquire the property *and* acquire an adjoining home(s) in the adjacent Elwyn Park and/or Woodlands neighborhoods. Doing so would provide additional points of access other than from Elwyn Road and increase the developability and density of housing on the property *beyond what the conceptual subdivision prepared by Altus Engineering.*

The purchase agreement between SELT and the landowner stipulates a closing date of June 28, 2025 but we can extend until no later than December 31, 2025.

Budget and Funding

The enclosed budget shows a total project cost of \$2,276,600, which represents the easement's purchase price and bargain sale value, due diligence (boundary, title, legal, etc.), project management, and long-term stewardship costs. The contribution to the Stewardship Fund is a one-time contribution to ensure that SELT will have the long-term (permanent) capacity to monitor, enforce, and administer the conservation easement. SELT uses an annual distribution from the Stewardship Fund, typically 4% of the Fund's value, to support our costs of stewarding the property.

Funding for the 100-Acre Woods project will come from both public and private sources. The requested contribution of \$1 million from the City's Conservation Fund is 44% of the project's overall value, meaning each dollar of the City's funds will be leveraged dollar for dollar. The City's Conservation Fund currently has a balance of \$2,200,000; of this, \$1,200,000 was generated from Land Use Change Tax resulting from the development of open space land.

The remaining 56% of the necessary funding will include nearly \$1 million of private contributions, committed and to be raised.

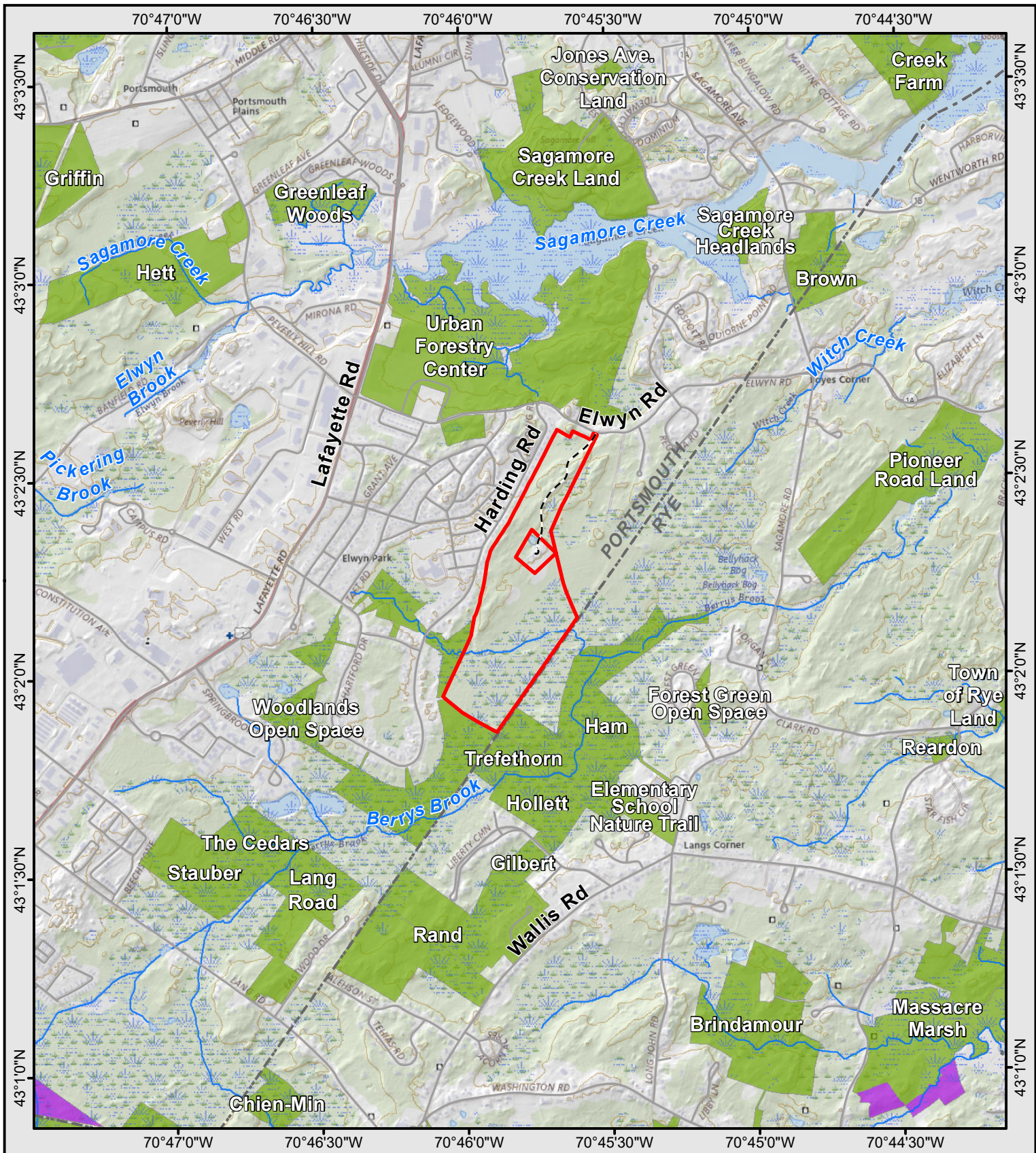
- Mr. Cavaretta has agreed to sell this conservation easement for \$345,000 less than its fair market value (aka, bargain sale), reflecting his commitment to the project and reducing the need to raise additional funds.
- SELT will raise the remaining \$581,600 from private foundations and individuals. This is a significant private fundraising effort for SELT, but we feel confident in our ability to raise these funds due to this being such a strong project and our well-established donor base in Portsmouth and the surrounding region.

SELT has requested \$350,000 from the NH Land and Community Heritage Investment Program (LCHIP), the state's land conservation and historic preservation program. This is a very competitive round for LCHIP and we learned this project is the largest dollar value request this round; however, the features of this property combined with its size and location in Portsmouth make it a competitive project. LCHIP makes its decisions in the fall with a December 2024 public announcement.

About SELT

SELT is a regional, non-profit land trust originally founded in 1980 and born from the mergers of the Seacoast Land Trust, Rockingham Land Trust, and Strafford Rivers Conservancy. Serving 52 communities of Rockingham and Strafford counties, SELT works with landowners and communities to protect and sustain the significant lands in our communities for clean water, outdoor recreation, fresh food, wildlife, and healthy forests. To date, we have protected more than 27,000 acres of land; of this SELT owns 11,000 acres with 13 public properties with developed trail systems. The remaining 15,000 acres are permanently conserved through 260+ conservation easements. SELT has a professional staff of 18 full time employees and is governed by a volunteer Board of Directors, including four residents of Portsmouth. Since 2013, SELT has maintained accreditation with the Land Trust Accreditation Commission, affirming its commitments to excellence and conservation permanence. SELT has previously worked with the City to conserve Great Bog, the Maxam property, and three properties along the Bellamy Reservoir in Madbury.

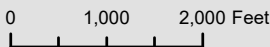
Attachments – Context Map
Aerial Map
Budget



- Project Boundary
- SELT Conservation Land
- Conservation & Public Land
- Driveway
- Road
- Town boundary



1:24,000

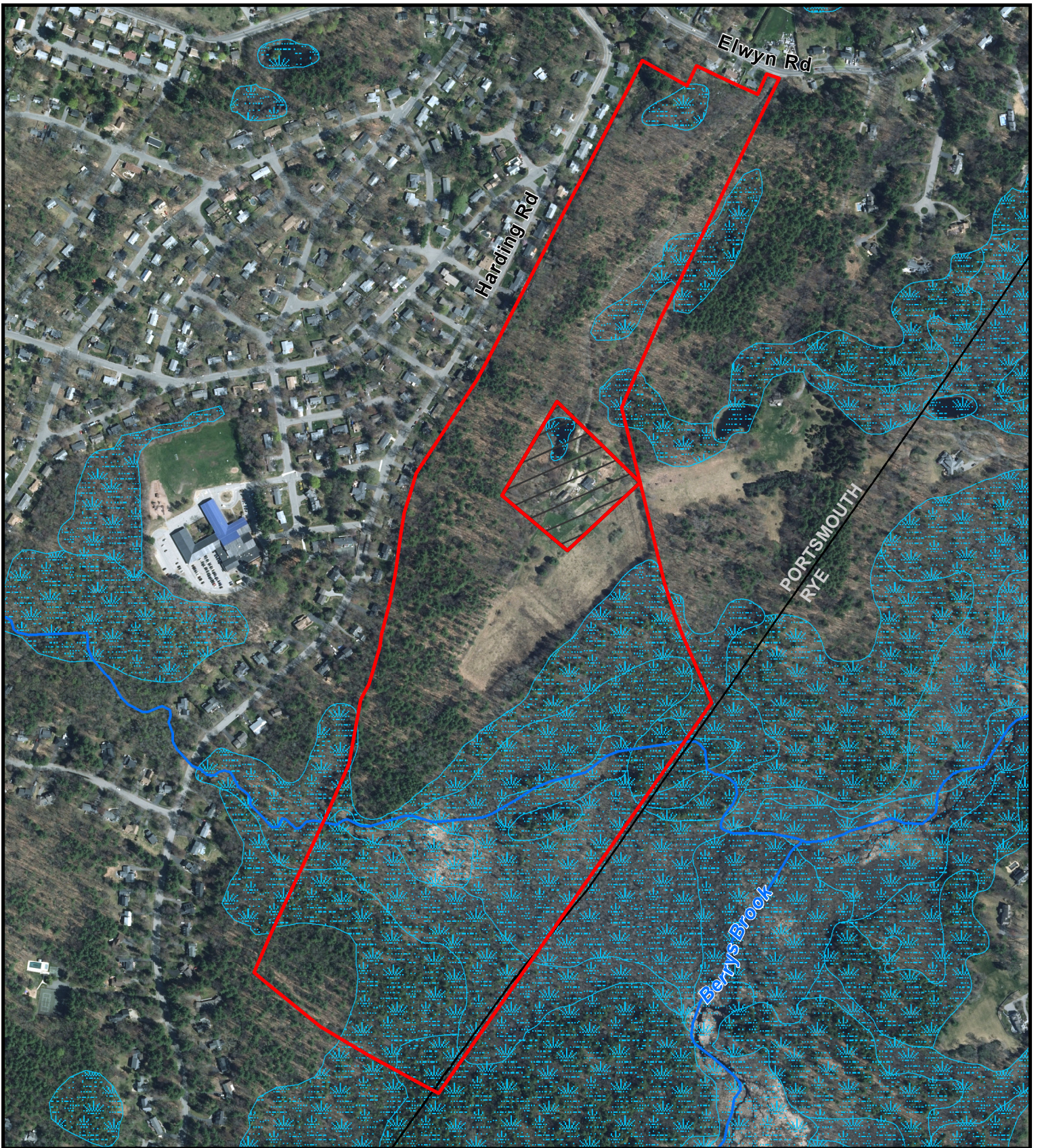


Cavaretta Project & Nearby Conservation Lands Portsmouth, NH

Boundary and feature locations are approximate.
Conservation lands from NH GRANIT. USGS topographic base map (published 1970-1998) processed by NH GRANIT; coordinate system is NAD83 UTM Zone 19N meters.

Map prepared by
Southeast Land Trust of NH
May 2024

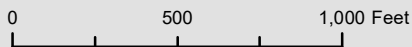




- Project Boundary
- Exclusion Area
- NWI wetland
- Stream



1:7,000



Cavaretta Project Portsmouth, NH

Boundary and feature locations are approximate. Easement boundary based on tax maps.

Map prepared by
Southeast Land Trust of NH
May, 2022





Budget Cavaretta Conservation Easement ~94- acres (Portsmouth)

EXPENSES

<u>Transaction Costs</u>	<u>Budget</u>	<u>Notes</u>
Acquisition Costs		
Easement Purchase Price	\$1,800,000	<i>Appraised FMV of CE \$2,145,000</i>
Easement Bargain Sale	\$345,000	
Due Diligence Costs		
Legal	\$12,500	<i>Title exam, title insurance, legal fees</i>
Survey	\$25,000	
Hazardous Waste Assess.	\$2,100	<i>Phase 1</i>
Appraisal(s)	\$8,200	<i>Initial appraisal and updated appraisal</i>
Closing Costs		
Recording fees	\$500	
Project Management Expenses		
SELT Project Management	\$30,000	<i>Flat Fee</i>
Conservation Consulting	\$6,500	<i>Wetlands assessment</i>
Travel	\$300	
Printing & Postage	\$10,000	<i>Community Mailing and Brochure</i>
Contingency	\$10,000	
Subtotal, Transaction Costs	\$2,250,100	
Stewardship Costs		
<u>Budget</u>		
Easement Stewardship Fund	\$24,700	<i>Min. contribution for Conservation Stewardship Fund</i>
Legal Defense Fund	\$1,800	<i>Flat rate contribution for legal defense of CEs</i>
Forest Management Plan	\$0	<i>If we were to apply to ARM this would be \$5K</i>
Archeological Assessment	\$0	<i>If we were to apply to ARM this would be \$2K</i>
Subtotal, Stewardship Costs	\$26,500	
TOTAL EXPENSES	\$2,276,600	<i>total Transaction Costs + Long Term Stewardship Costs</i>

REVENUES

<u>Revenue Sources</u>	<u>Budget</u>	<u>Notes</u>
Government		
Portsmouth Conservation Fund	\$1,000,000	<i>44% of total project cost</i>
LCHIP	\$350,000	<i>Application submitted</i>
Private Fundraising		
GBRPP	\$20,000	<i>To apply in 2025</i>
Private gifts	\$561,600	<i>SELT to Raise</i>
Landowner Bargain Sale-CE	\$345,000	<i>Per purchase agreement</i>
TOTAL REVENUES	\$2,276,600	



August 14, 2024

Portsmouth Mayor McEachern and City Council
1 Junkins Ave.
Portsmouth, NH 03801

Mayor McEachern and City Council,

In January 2024, The Music Hall took over leadership of the New Hampshire Film Festival (NHFF), and planning is well underway for the 22nd annual festival, which will take place this October 17-20, 2024, in various downtown Portsmouth locations.

This letter includes a street closure request for a portion of Portwalk Place and is separate from the request already approved by the City of Portsmouth for the closure of Chestnut St. throughout the festival weekend.

Cathartes, the owner of Portwalk Place, has granted The Music Hall permission to partially close down their private street, starting at the entrance of Portwalk Garage at the crosswalk and continuing to the southern half of Portwalk Place adjacent to Hanover St.

On Portwalk Place, we are scheduled to present a two-hour Hospitality Party on Saturday, October 19, 2024, from 11:30 a.m. to 1:30 p.m. as part of the New Hampshire Film Festival (NHFF) weekend of events. Attendees of the hospitality party will include approximately 200 NHFF VIP pass holders, corporate sponsors, filmmakers, and other film industry professionals. Partnering with Portwalk Place and Cathartes for planning purposes allows both organizations to work collaboratively to ensure a safe and successful event.

The date and schedule for this event are as follows:

Sat. October 19, 2024

8:00 AM: Event set up at Portwalk Place

11:30 AM: NHFF Hospitality Party begins

1:30 PM: NHFF Hospitality Party ends

2:30 PM: Portwalk Place opens again to the public and general vehicular traffic

We request from the City the approval to not only close this portion of Portwalk Place but, with further approval from the NH Liquor Commission, to also allow alcoholic beverages (wine, beer, and spirits) to be purchased and consumed inside the event's enclosure, under

The Music Hall's liquor license as a single-day festival license. The ability to sell alcoholic beverages will help offset the costs of producing this event. The Music Hall's professional, Servsafe, and T.E.A.M. certified staff will provide this beverage service, and those looking to purchase alcoholic beverages will have their IDs checked for age verification. Additionally, all insurance requirements will be met in accordance with the City of Portsmouth and Portwalk Place.

We plan to enclose Portwalk Place with stanchions to create a space where attendees can enjoy light catering provided by donations from local restaurants and live music from a locally-based DJ. The street enclosure will also be set up so that in the event of an emergency, emergency vehicles will be able to access businesses and residences on Portwalk Place with ease. Additionally, police detail will be coordinated and arranged throughout the duration of this event.

As you know, The Music Hall has had great success with our past offerings of outdoor programming with assistance from the City of Portsmouth. We are extremely confident in our ability to execute an event of this size and capacity again, as we have done so successfully in the past.

Events such as these will have a great economic impact, not only for the New Hampshire Film Festival and The Music Hall but also for their corporate sponsors and local restaurants to help further stimulate downtown's economic engine.

We are so grateful to the City of Portsmouth officials and staff, council people, and citizens for their continued support of both The Music Hall and the New Hampshire Film Festival.

Sincerely,

A handwritten signature in black ink that reads "Ashleigh Tucker Pollock". The signature is fluid and cursive, with the first name being the most prominent.

Ashleigh Tucker Pollock
Associate Executive Director, The Music Hall
28 Chestnut St.
Portsmouth, NH 03801
atucker@themusic hall.org

DRAFT Combined Ordinances and Policy related to Public Art:

Additions and removals in Redline, Language from the Public Art Policy in Blue. Note that the Public Art Review Committee Ordinance was embedded in the Funding of Public Art Ordinance. A note should be added to the Administrative Ordinance in the Boards, Commissions, and Authorities section referring to the Public Art Review Committee establishment in the Funding of Public Art Section, as was done in similar fashion with the Parking and Traffic Safety Committee.

ARTICLE XVII: FUNDING, REVIEW, AND ACQUISITION OF PUBLIC ART

Section 1.1700: STATEMENT OF PURPOSE

It is hereby declared that ~~it~~ shall be the public policy of the City of Portsmouth to assist and encourage the participation of its citizens and visitors in the enjoyment of the many benefits which flow from the arts. ~~The City of Portsmouth is committed to acquiring public art by donation, acquisition and commission.~~ Among other activities to this end, the City will allocate a portion of the expense of public building construction and significant building renovation projects to be spent on works of art which shall be available for the benefit of all without additional cost to those persons. Such works of art shall be called public art as defined in more detail herein.

Section 1.1701: DEFINITION OF PUBLIC ART

“Public Art” or “Public artworks” are meant to be enduring original artworks of the highest quality and craftsmanship. The artworks should be an integral part of the landscaping and/or architecture of a building or other site, considering the historical, geographical and social/cultural context of the site and constructed on a scale that is proportional to the scale of the development. “Artwork” – includes but is not limited to, painting, murals, inscriptions, stained glass, fiber work, statues, reliefs or other sculpture, monuments, fountains, arches, or other structures intended for ornament or commemoration. Also included in this definition are installations that are technological in nature, carvings, frescoes, mosaics, mobiles, photographs, drawings, collages, prints, crafts – both decorative and utilitarian in clay, fiber, wood, metal, glass, plastics and other materials. Landscape items include the artistic placement of natural materials and other functional art objects. Works of art may be ~~temporary~~, portable, ~~as well as~~ or permanent ~~in nature~~.

This definition shall not include:

Objects that are mass-produced from a standard design or reproductions of original art works; decorative, ornamental or functional elements, which are designed by the building architect; landscape architecture and landscape gardening except where these elements are an integral part of the artwork by the artist; directional elements such as super graphics, signage, or color coding except where these elements are integral parts of the original work of art; logos or corporate identity.

Section 1.1702: PUBLIC ART COMMITMENT

One (1%) percent of the bid price or negotiated contract price for the construction of all new municipal buildings or for the renovation of existing municipal buildings, in which the bid price or negotiated price shall be in excess of ~~Two~~Five Million (\$25,000,000.00) Dollars up to ~~fifteen~~ thirty

Million (\$~~1530~~,000,000.00) Dollars (expressed in terms of actual construction costs exclusive of design and engineering fees), shall be contributed to the Public Art Trust for the purpose of funding public art. Thereafter, such funds shall be expended in accordance with the terms of this ordinance and the Public Art Trust.

Section 1.1703: PUBLIC ART TRUST

There shall be created a Public Art Trust to serve as a repository of all public art **financial** contributions generated by application of this ordinance **or made by private persons or entities**. Such Trust shall be administered for the purpose of implementation of this ordinance. The terms of the Trust shall be consistent with this ordinance and shall be interpreted by reference to this ordinance.

Section 1.1704: EXEMPTION

By a two-thirds (2/3) vote, the City Council may exempt a municipal building, ~~such as a water or sewer plant,~~ from the Public Art Commitment described in Section 1.1701 if the purpose of this ordinance would not be fulfilled due to the building's inaccessibility to the public, location, use or other factors. In those cases, the public art associated with the project should be placed on other publicly owned property within the city, at the determination of the Council. Any Council determination to exempt a building under this provision shall be made no later than the final vote of the Council authorizing the funding for the project. (Amended 06/19/2017; amended 12/05/2022)

Section 1.~~412~~-1705: PUBLIC ART REVIEW COMMITTEE

The City Council hereby establishes a Public Art Review Committee (PARC) for the implementation and review of this ordinance, and all matters related to public art within Portsmouth. ~~Whenever from any source an issue relating to Public Art should be brought to the attention of the City Council, that matter will be referred to the standing committee.~~

- A. **Membership and Term:** The Public Art Review Committee (PARC) will consist of between seven and eleven members. Members shall include one member of city staff **in a non-voting capacity** to be designated by the City Manager, a City Councilor in a non-voting capacity, and the rest shall be community members. Members shall have demonstrated experience in the fine arts, architecture, art criticism, engineering or structural analysis, art history, graphic arts, interior design, landscape architecture, town planning, or other art and design-related fields, or who have demonstrated a strong interest in the visual arts and civic improvement. Other than the City Manager's appointment, the members shall be appointed by the Mayor, with approval from the Council, to staggered terms varying from two to three years.

The PARC shall be chaired by a member of the local arts community and shall interview or make recommendations to the PARC openings to the Mayor, as they may determine necessary. The term of the chairperson shall be for one year, with eligibility for reelection for two additional terms.

- ~~B. — Public Art Defined: For purposes of this Public Art Review Committee, "public art"~~

~~shall be defined as artwork located in or on a public space such as a municipal facility, park, right-of-way, or other municipally owned or controlled property. Artwork includes but is not limited to a painting, mural, inscription, stained glass, fiber work, statue, relief or sculpture, monument, fountain, arch or other structures intended for ornament or commemoration. Also include in this definition is any installation that is technological in nature or includes carvings, frescoes, mosaics, mobiles, photographs, drawings, collages, prints, crafts, both decorative and utilitarian in clay, fiber, wood, metal, glass, plastics and other materials. Landscape items include the artistic placement of natural materials and other function art objects. Works of art may be portable as well as permanent.~~

~~Public art does not include objects that are mass-produced from a standard design or reproductions of original art works unless of limited edition; decorative, ornamental or functional elements, which are designed by the building architect; landscape architecture and landscape gardening except where these elements are an integral part of the artwork by the artist; directional elements such as super graphics, signage or color coding except where these elements are integral parts of an original work of art; and logos, corporate identifiers or other forms of branding and advertising.~~

~~C.~~ B. Powers and Duties: The PARC shall have the following responsibilities:

1. To foster development and awareness of public art within the City of Portsmouth, and advise the City Manager, ~~and~~ City Council, and Land Use Boards with respect to matters relating to the development of public art awareness within the City of Portsmouth.
2. To accept referrals from the City Council or any other public body concerning public art and art issues generally.
3. To provide input on masterplans, zoning ordinances, strategic planning documents as they relate to public art and art issues generally.
4. To collaborate with the ~~C~~city on the acquisition, maintenance and marketing of its public art and develop a stewardship policy.
5. Establish Guidelines for review of public art based on the Public Art Acquisition Policy. ~~The guidelines shall be based on the following criteria:~~¹
 - The quality of the artwork; and
 - Appropriateness of the size, scale and materials for the site(s); and
 - Availability of an appropriate site; and
 - Costs of installation and maintenance of artwork; and
 - Condition and durability of the artwork; and
 - Aesthetic merit; and
 - Inclusion of a mandatory maintenance plan (including materials used and proper care for such materials).
6. Initiate public forums where appropriate for determining thematic

approaches and location options for public art.

7. Determine recruitment strategies to attract qualified artists for public art projects.
8. To review applications for public art following the Public Art Acquisition Policy, select final proposals, and advise the city on issues related to Percent for Art.
9. Review all applications for sponsored works of public art following the same guidelines as those for the Percent for Art program.
10. Advise and oversee public art programs established by the City of Portsmouth in accordance with any policies and guidelines either established by the city or established by the Public Art Review Committee at the request of the City Council.
11. To recommend to the City Council, as requested, replacement members to the PARC when they arise.
12. Identify and solicit funds to supplement the public art budget.
13. Perform further duties related to public art within the City of Portsmouth that the City Manager may request.

~~D.C.~~ Meeting Requirements: The PARC shall meet as necessary, but at least quarterly.

~~E.D.~~ Reporting Responsibility: The Public Art Review Committee (PARC) shall include an annual report of their proceedings and programs to City Council. Details of the report include, but are not limited to:

14. Assessing available and potential resources in the Public Art Trust.
15. Assessing possible and/or proposed municipal capital projects and criteria that would benefit from the inclusion of an artist in their design.
16. Assessing the impact of and opportunity for public art projects that advance economic development opportunities.

~~F.E.~~ Revenue Development: The PARC may solicit or receive gifts, money or other to be applied to principal or interest into the Public Art Trust, for either temporary or permanent use for the acquisition, maintenance and/or installation of public art.

Section 1.17056: EXPENDITURE OF PUBLIC ART FUNDS

Expenditure of public arts funds shall be determined by the City Council. In authorizing such expenditures the Council shall apply the following protocol and criteria:

- ~~A. No less than Up to ninety (90%) percent of the principal amount of public art contribution generated by any particular building project shall be expended on the site of that project, unless the City Council votes specifically otherwise to redirect the funds for other public art purposes. Unless the City Council votes specifically otherwise to redirect funds for other public art purposes, a-At least 75% of the principal amount of the public art contribution generated by any particular building project shall be expended for public art on the site of the project, unless subject to the exemption in section 1.1704, with remaining funds placed in the Public Art Trust for maintenance as described in 1.1708, or for other public art purposes. The remaining funds should be kept in the general Public Art Trust without designation for a particular project, to be disbursed at the direction of the City Council with advice from the PARC.~~
- B. In determining the selection of any public art project, the City Council will consider the recommendations of the Public Art Review Committee (PARC), may:
- ~~1. Refer the question to any agency of a public, non-profit or private nature which might be selected by the City Council for an advisory report, or;~~
 - ~~2. Refer the question to a standing committee for public art which may be created by the City Council under such terms and conditions as it may establish, or;~~
 - ~~3. Create an ad hoc committee for any particular public art project under such terms as the Council may establish, or;~~
 4. or seek such other advisory recommendation as the City Council deems appropriate.
- C. Upon the authorization by the City Council of a public arts project, the administrative and financial implementation of that authorization shall be performed by the administrative officials of the City.
- D. The Trustees of Trust Funds shall disburse funds from the Public Art Trust in amounts and at times as shall be specified in one or more written requests from the City Manager acting pursuant to authorization of the City Council. Each request shall identify the amount(s) requested, the purpose of the expenditure, and the public art project or public art concerning which the expenditure pertains and be accompanied by a copy of the Council authorization.

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Section 1.1707: ACQUISITION OF PUBLIC ART THROUGH DONATION

In addition to acquisition of public art through expenditure of funds from the public art commitment and expenditure of funds other financial contributions from the public art trust, the PARC shall have the authority to recommend in favor or against acceptance of suitable donations of art to the City Council. These works of art will be accepted unconditionally and free of all obligations and encumbrances. The City reserves the right to relocate donated artwork from time to time; and to not display a donated piece of art.

As pieces of public art are acquired, they will be entered into the City Art and Artifact Index maintained by Portsmouth Public Library staff. Changes of location, whether temporary or permanent will be recorded in the Art and Artifact Index.

Section 1.17068: MAINTENANCE AND REPAIR OF PUBLIC ART

Public art funds under this ordinance and the Public Art Trust to be created in conjunction herewith shall be available for repair and maintenance of public art, regardless of whether the public art work was initially funded by the Public Art Trust or otherwise. Maintenance needs for existing public art will be identified by the Public Works Department, with advice from the PARC, with cost estimates for same. As per instructions in section 1.1706D, the City Manager, with approval of the City Council, will authorize expenditure of funds from the Public Art Trust.

All donated, acquired or commissioned works of *outdoor* art shall include a cash stewardship donation of approximately ~~at least~~ 10% of the cost of the artwork which will be added to the Public Art Trust for ongoing stewardship of public art. *Indoor* art may or may not require a stewardship donation, depending on the type of art. The PARC will determine if a stewardship donation is required for a given piece of indoor art, and if so, the amount of the donation. If the artwork is donated, the committee will determine the value of the artwork.

Works from the collection may be considered for removal if they are in poor condition, damaged or deteriorated beyond reasonable repair or conservation or for other good cause. Should the Public Art Review Committee determine that a work of art be de-accessioned due to maintenance or repair challenges, or for any other reason, the committee shall make that recommendation to the City Council for its consideration and action. The City Council retains the authority to remove a work of art after receiving a recommendation for de-accessioning from the PARC. If a piece is decommissioned, the date and reason for withdrawal will also be so recorded in the City Art and Artifact Index.

Section 1.17079: FUNDING ACCEPTED

This ordinance authorizes and the Public Art Trust shall provide for the acceptance by the City of donations, grants or contributions to public art which might be approved from time to time by the City Council.

This ordinance also authorizes the Council to accept donations with a designated purpose to commission works of public art to be placed on public property. The commissioning process shall follow the same procedures outlined in the ordinance for public art associated with capital expenditures by the City.

(Adopted 9/18/2006 to become effective August 21, 2007; amended 12/05/2022)

¹ The Trustees of the Portsmouth Public Library have their own policy for art acquisition. PARC will defer to the Trustees of the Library for art acquisition at the Library.

- B. Duties and Powers: The primary purpose of the Audit Committee is to recommend an external auditor to the City Council. In the event the auditor identifies any serious exceptions, the Audit Committee shall advise and work with the City council as to next steps.

Section 1.411: CEMETERY COMMITTEE (Amended 05/01/2023)

- A. Membership and Term: The Cemetery Committee shall consist of not less than seven (7) or more than eleven (11) regular members. The members shall be appointed by the Mayor subject to the approval of the City Council. The first four (4) members appointed after adoption of this ordinance shall be appointed to terms of three (3) years commencing as of the date of completed appointment. Thereafter, all appointments shall be for terms of two (2) years. All appointments to fill vacancies shall serve the remainder of the vacant term. A quorum shall be a majority of the existing appointed members at any given time.
- B. Powers and Duties: The Committee shall provide advice and recommendations to the City Manager and the City Council with respect to all issues affecting municipal cemeteries, including the solicitation and acceptance of grants; the expenditure of any funds for specific improvements; and any expenditures from the Cemetery Trust Fund. Nothing herein shall limit the power of the City Council or City Manager to take immediate action in the event of exigent circumstances.
- C. It shall be the responsibility of the Cemetery Committee to encourage the restoration, preservation, and safeguarding of Portsmouth’s historic cemeteries and their history for future generations.

Section 1.412: PUBLIC ART REVIEW COMMITTEE

The Public Art Review Committee shall be established and shall have the duties and authorities described in Chapter 1, Article XVII of this ordinance.

~~A Membership and Term: The Public Art Review Committee (PARC) will consist of between seven and eleven members. Members shall include one member of city staff to be designated by the City Manager, a City Councilor in a non-voting capacity, and the rest shall be community members. Members shall have demonstrated experience in the fine arts, architecture, art criticism, engineering or structural analysis, art history, graphic arts, interior design, landscape architecture, town planning, or other art and design related fields, or who have demonstrated a strong interest in the visual arts and civic improvement. Other than the City Manager's appointment, the members shall be appointed by the Mayor, with approval from the Council, to staggered terms varying from two to three years.~~

~~The PARC shall be chaired by a member of the local arts community and shall interview or make recommendations to the PARC openings to the Mayor, as they may determine necessary. The term of the chairperson shall be for one year, with eligibility for reelection for two additional terms.~~

~~B. — Public Art Defined: For purposes of this Public Art Review Committee, “public art” shall be defined as artwork located in or on a public space such as a municipal facility, park, right of way, or other municipally owned or controlled property. Artwork includes but is not limited to a painting, mural, inscription, stained glass, fiber work, statue, relief or sculpture, monument, fountain, arch or other structures intended for ornament or commemoration. Also included in this definition is any installation that is technological in nature or includes carvings, frescoes, mosaics, mobiles, photographs, drawings, collages, prints, crafts, both decorative and utilitarian in clay, fiber, wood, metal, glass plastics and other materials. Landscape items include the artistic placement of natural materials and other function art objects. Works of art may be portable as well as permanent.~~

~~Public art does not include objects that are mass-produced from a standard design or reproductions of original art works unless of limited edition; decorative, ornamental or functional elements, which are designed by the building architect; landscape architecture and landscape gardening except where these elements are an integral part of the artwork by the artist; directional elements such as super graphics, signage or color coding except where these elements are integral parts of an original work of art; and logos, corporate identifiers or other forms of branding and advertising.~~

~~C. — Powers and Duties: The PARC shall have the following responsibilities:~~

- ~~1. — To foster development and awareness of public art within the City of Portsmouth and advise the City Manager and City Council with respect to matters relating to the development of public art awareness within the City of Portsmouth.~~
- ~~2. — To accept referrals from the City Council or any other public body concerning public art and art issues generally.~~
- ~~3. — To provide input on masterplans, zoning ordinances, strategic planning documents as they relate to public art and art issues generally.~~
- ~~4. — To collaborate with the city on the acquisition, maintenance and marketing of its public art and develop a stewardship policy.~~
- ~~5. — Establish Guidelines for review of public art based on the Public Art Acquisition Policy.~~
- ~~6. — Initiate public forums where appropriate for determining thematic approaches and location options for public art.~~
- ~~7. — Determine recruitment strategies to attract qualified artists for public art projects.~~

- ~~8. To review applications for public art following the Public Art Acquisition Policy, select final proposals, and advise the City on issues related to Percent for Art.~~
- ~~9. Review all applications for sponsored works of public art following the same guidelines as those for the Percent for Art program.~~
- ~~10. Advise and oversee public art programs established by the City of Portsmouth in accordance with any policies and guidelines either established by the City or established by the Public Art Review Committee at the request of the City Council.~~
- ~~11. To recommend to the City Council, as requested, replacement members to the PARC when they arise.~~
- ~~12. Identify and solicit funds to supplement the public art budget.~~
- ~~13. Perform further duties related to public art within the City of Portsmouth that the City Manager may request.~~

~~D. Meeting Requirements: The PARC shall meet as necessary, but at least quarterly.~~

~~E. Reporting Responsibility: The Public Art Review Committee (PARC) shall include an annual report of their proceedings and programs to City Council. Details of the report include, but are not limited to:~~

- ~~1. Assessing available and potential resources in the Public Art Trust.~~
- ~~2. Assessing possible and/or proposed municipal capital projects and criteria that would benefit from the inclusion of an artist in their design.~~
- ~~3. Assessing the impact of and opportunity for public art projects that advance economic development opportunities.~~

~~F. Revenue Development: The PARC may solicit or receive gifts, money or other to be applied to principal or interest into the Public Art Trust, for either temporary or permanent use for the acquisition, maintenance and/or installation of public art.~~

Section 1.413: ARTS AND CULTURAL COMMISSION (Added 09-05-2023)

- A. Membership and Term: The Arts and Cultural Commission shall consist of 14 qualified regular members and one alternate member. Of those 14 members, 4 members shall represent the arts and cultural institutions in Portsmouth, both for-profit and non-profit in nature, and their membership on the committee shall be on behalf of their institutions, rather than as an individual membership. Those institutional members shall not serve consecutive terms, but their membership shall rotate among those arts and cultural institutions to foster participation on the part of various institutions. An additional 4 members shall be appointed from the community artists within the City of Portsmouth.

ARTICLE XVII: FUNDING, REVIEW, AND ACQUISITION OF PUBLIC ART

Section 1.1700: STATEMENT OF PURPOSE

It is hereby declared that it shall be the public policy of the City of Portsmouth to assist and encourage the participation of its citizens and visitors in the enjoyment of the many benefits which flow from the arts. The City of Portsmouth is committed to acquiring public art by donation, acquisition and commission. Among other activities to this end, the City will allocate a portion of the expense of public building construction and significant building renovation projects to be spent on works of art which shall be available for the benefit of all without additional cost to those persons. Such works of art shall be called public art as defined in more detail herein.

Section 1.1701: DEFINITION OF PUBLIC ART

“Public Art” or “Public artworks” are meant to be enduring original artworks of the highest quality and craftsmanship. The artworks should be an integral part of the landscaping and/or architecture of a building or other site, considering the historical, geographical and social/cultural context of the site and constructed on a scale that is proportional to the scale of the development. “Artwork” – includes but is not limited to, painting, murals, inscriptions, stained glass, fiber work, statues, reliefs or other sculpture, monuments, fountains, arches, or other structures intended for ornament or commemoration. Also included in this definition are installations that are technological in nature, carvings, frescoes, mosaics, mobiles, photographs, drawings, collages, prints, crafts – both decorative and utilitarian in clay, fiber, wood, metal, glass, plastics and other materials. Landscape items include the artistic placement of natural materials and other functional art objects. Works of art may be temporary, portable, or permanent in nature.

This definition shall not include:

Objects that are mass-produced from a standard design or reproductions of original art works; decorative, ornamental or functional elements, which are designed by the building architect; landscape architecture and landscape gardening except where these elements are an integral part of the artwork by the artist; directional elements such as super graphics, signage, or color coding except where these elements are integral parts of the original work of art; logos or corporate identity.

Section 1.1702: PUBLIC ART COMMITMENT

One (1%) percent of the bid price or negotiated contract price for the construction of all new municipal buildings or for the renovation of existing municipal buildings, in which the bid price or negotiated price shall be in excess of Five Million (\$5,000,000.00) Dollars up to thirty Million (\$30,000,000.00) Dollars (expressed in terms of actual construction costs exclusive of design and engineering fees), shall be contributed to the Public Art Trust for the purpose of funding public art. Thereafter, such funds shall be expended in accordance with the terms of this ordinance and the Public Art Trust.

Section 1.1703: PUBLIC ART TRUST

There shall be created a Public Art Trust to serve as a repository of all public art financial contributions generated by application of this ordinance or made by private persons or entities. Such Trust shall be administered for the purpose of implementation of this ordinance. The terms of the Trust shall be consistent with this ordinance and shall be interpreted by reference to this ordinance.

Section 1.1704: EXEMPTION

By a two-thirds (2/3) vote, the City Council may exempt a municipal building from the Public Art Commitment described in Section 1.1701 if the purpose of this ordinance would not be fulfilled due to the building's inaccessibility to the public, location, use or other factors. In those cases, the public art associated with the project should be placed on other publicly owned property within the city, at the determination of the Council. Any Council determination to exempt a building under this provision shall be made no later than the final vote of the Council authorizing the funding for the project. (Amended 06/19/2017; amended 12/05/2022)

Section 1.1705: PUBLIC ART REVIEW COMMITTEE

The City Council hereby establishes a Public Art Review Committee (PARC) for the implementation and review of this ordinance, and all matters related to public art within Portsmouth. Whenever from any source an issue relating to Public Art should be brought to the attention of the City Council, that matter will be referred to the standing committee.

- A. **Membership and Term:** The Public Art Review Committee (PARC) will consist of between seven and eleven members. Members shall include one member of city staff in a non-voting capacity to be designated by the City Manager, a City Councilor in a non-voting capacity, and the rest shall be community members. Members shall have demonstrated experience in the fine arts, architecture, art criticism, engineering or structural analysis, art history, graphic arts, interior design, landscape architecture, town planning, or other art and design-related fields, or who have demonstrated a strong interest in the visual arts and civic improvement. Other than the City Manager's appointment, the members shall be appointed by the Mayor, with approval from the Council, to staggered terms varying from two to three years.

The PARC shall be chaired by a member of the local arts community and shall interview or make recommendations to the Mayor, as they may determine necessary. The term of the chairperson shall be for one year, with eligibility for reelection for two additional terms.

- B. **Powers and Duties:** The PARC shall have the following responsibilities:
 - 1. To foster development and awareness of public art within the City of Portsmouth, and advise the City Manager, City Council, and Land Use Boards with respect to matters relating to the development of public art

awareness within the City of Portsmouth.

2. To accept referrals from the City Council or any other public body concerning public art and art issues generally.
3. To provide input on masterplans, zoning ordinances, strategic planning documents as they relate to public art and art issues generally.
4. To collaborate with the City on the acquisition, maintenance and marketing of its public art and develop a stewardship policy.
5. Establish Guidelines for review of public art based on the Public Art Acquisition Policy. The guidelines shall be based on the following criteria:¹
 - The quality of the artwork; and
 - Appropriateness of the size, scale and materials for the site(s); and
 - Availability of an appropriate site; and
 - Costs of installation and maintenance of artwork; and
 - Condition and durability of the artwork; and
 - Aesthetic merit; and
 - Inclusion of a mandatory maintenance plan (including materials used and proper care for such materials).
6. Initiate public forums where appropriate for determining thematic approaches and location options for public art.
7. Determine recruitment strategies to attract qualified artists for public art projects.
8. To review applications for public art following the Public Art Acquisition Policy, select final proposals, and advise the city on issues related to Percent for Art.
9. Review all applications for sponsored works of public art following the same guidelines as those for the Percent for Art program.
10. Advise and oversee public art programs established by the City of Portsmouth in accordance with any policies and guidelines either established by the City or established by the Public Art Review Committee at the request of the City Council.
11. To recommend to the City Council, as requested, replacement members to the PARC when they arise.
12. Identify and solicit funds to supplement the public art budget.
13. Perform further duties related to public art within the City of Portsmouth that the City Manager may request.

- C. Meeting Requirements: The PARC shall meet as necessary, but at least quarterly.
- D. Reporting Responsibility: The Public Art Review Committee (PARC) shall include an annual report of their proceedings and programs to City Council. Details of the report include, but are not limited to:
 - a. Assessing available and potential resources in the Public Art Trust.
 - b. Assessing possible and/or proposed municipal capital projects and criteria that would benefit from the inclusion of an artist in their design.
 - c. Assessing the impact of and opportunity for public art projects that advance economic development opportunities.
- E. Revenue Development: The PARC may solicit or receive gifts, money or other to be applied to principal or interest into the Public Art Trust, for either temporary or permanent use for the acquisition, maintenance and/or installation of public art.

Section 1.1706: EXPENDITURE OF PUBLIC ART FUNDS

Expenditure of public arts funds shall be determined by the City Council. In authorizing such expenditures the Council shall apply the following protocol and criteria:

- A. At least 75% of the principal amount of the public art contribution generated by any particular building project shall be expended for public art on the site of the project, unless subject to the exemption in section 1.1704, with remaining funds placed in the Public Art Trust for maintenance as described in 1.1708, or for other public art purposes. The remaining funds should be kept in the general Public Art Trust without designation for a particular project, to be disbursed at the direction of the City Council with advice from the PARC.
- B. In determining the selection of any public art project, the City Council will consider the recommendations of the Public Art Review Committee (PARC), or seek such other advisory recommendation as the City Council deems appropriate.
- C. Upon the authorization by the City Council of a public arts project, the administrative and financial implementation of that authorization shall be performed by the administrative officials of the City.
- D. The Trustees of Trust Funds shall disburse funds from the Public Art Trust in amounts and at times as shall be specified in one or more written requests from the City Manager acting pursuant to authorization of the City Council. Each request shall identify the amount(s) requested, the purpose of the expenditure, and the public art project or public art concerning which the expenditure pertains and be accompanied by a copy of the Council authorization.

Section 1.1707: ACQUISITION OF PUBLIC ART THROUGH DONATION

In addition to acquisition of public art through expenditure of funds from the public art commitment and expenditure of other financial contributions from the public art trust, the PARC shall have the authority to recommend in favor or against acceptance of suitable donations of art to the City Council. These works of art will be accepted unconditionally and free of all obligations and encumbrances. The City reserves the right to relocate donated artwork from time to time; and to not display a donated piece of art.

As pieces of public art are acquired, they will be entered into the City Art and Artifact Index maintained by Portsmouth Public Library staff. Changes of location, whether temporary or permanent will be recorded in the Art and Artifact Index.

Section 1.1708: MAINTENANCE AND REPAIR OF PUBLIC ART

Public art funds under this ordinance and the Public Art Trust to be created in conjunction herewith shall be available for repair and maintenance of public art, regardless of whether the public art work was initially funded by the Public Art Trust or otherwise. Maintenance needs for existing public art will be identified by the Public Works Department, with advice from the PARC, with cost estimates for same. As per instructions in section 1.1706D, the City Manager, with approval of the City Council, will authorize expenditure of funds from the Public Art Trust.

All donated, acquired or commissioned works of *outdoor* art shall include a cash stewardship donation of approximately 10% of the cost of the artwork which will be added to the Public Art Trust for ongoing stewardship of public art. *Indoor* art may or may not require a stewardship donation, depending on the type of art. The PARC will determine if a stewardship donation is required for a given piece of indoor art, and if so, the amount of the donation. If the artwork is donated, the committee will determine the value of the artwork.

Works from the collection may be considered for removal if they are in poor condition, damaged or deteriorated beyond reasonable repair or conservation or for other good cause. Should the Public Art Review Committee determine that a work of art be de-accessioned due to maintenance or repair challenges, or for any other reason, the committee shall make that recommendation to the City Council for its consideration and action. The City Council retains the authority to remove a work of art after receiving a recommendation for de-accessioning from the PARC. If a piece is decommissioned, the date and reason for withdrawal will ~~also~~ be so recorded in the City Art and Artifact Index.

Section 1.1709: FUNDING ACCEPTED

This ordinance authorizes and the Public Art Trust shall provide for the acceptance by the City of donations, grants or contributions to public art which might be approved from time to time by the City Council.

This ordinance also authorizes the Council to accept donations with a designated purpose to commission works of public art to be placed on public property. The commissioning process shall follow the same procedures outlined in the ordinance for public art associated with capital expenditures by the City.

(Adopted 9/18/2006 to become effective August 21, 2007; amended 12/05/2022)

¹ The Trustees of the Portsmouth Public Library have their own policy for art acquisition. PARC will defer to the Trustees of the Library for art acquisition at the Library.

**ARTICLE XVII: ~~————~~FUNDING, REVIEW, AND ACQUISITION OF
PUBLIC ART**

Section 1.1700: STATEMENT OF PURPOSE

It is hereby declared that ~~is~~it shall be the public policy of the City of Portsmouth to assist and encourage the participation of its citizens and visitors in the enjoyment of the many benefits which flow from the arts. The City of Portsmouth is committed to acquiring public art by donation, acquisition and commission. Among other activities to this end, the City will allocate a portion of the expense of public building construction and significant building renovation projects to be spent on works of art which shall be available for the benefit of all without additional cost to those persons. -Such works of art shall be called public art as defined in more detail herein.

Section 1.1701: DEFINITION OF PUBLIC ART

“Public Art” or “Public artworks” are meant to be enduring original artworks of the highest quality and craftsmanship. -The artworks should be an integral part of the landscaping and/or architecture of a building or other site, considering the historical, geographical and social/cultural context of the site and constructed on a scale that is proportional to the scale of the development. -“Artwork” – includes but is not limited to, painting, murals, inscriptions, stained glass, fiber work, statues, ~~reliefs~~reliefs or other sculpture, monuments, fountains, arches, or other structures intended for ornament or commemoration. -Also included in this definition are installations that are technological in nature, carvings, frescoes, mosaics, mobiles, photographs, drawings, collages, prints, crafts – both decorative and utilitarian in clay, fiber, wood, metal, glass, plastics and other materials. -Landscape items include the artistic placement of natural materials and other functional art objects. -Works of art may be temporary, portable ~~as well as~~, or permanent in nature.

This definition shall not include:

Objects that are mass-produced from a standard design or reproductions of original art works; decorative, ornamental or functional elements, which are designed by the building architect; landscape architecture and landscape gardening except where these elements are an integral part of the artwork by the artist; directional elements such as super graphics, signage, or color coding except where these elements are integral parts of the original work of art; logos or corporate identity.

Section 1.1702: PUBLIC ART COMMITMENT

One (1%) percent of the bid price or negotiated contract price for the construction of all new municipal buildings or for the renovation of existing municipal buildings,

in which the bid price or negotiated price shall be in excess of ~~Two~~Five Million (\$~~25~~,000,000.00) Dollars up to ~~fifteen~~thirty Million (\$~~15~~30,000,000.00) Dollars (expressed in terms of actual construction costs exclusive of design and engineering fees), shall be contributed to the Public Art Trust for the purpose of funding public art. -Thereafter, such funds shall be expended in accordance with the terms of this ordinance and the Public Art Trust.

Section 1.1703: PUBLIC ART TRUST

There shall be created a Public Art Trust to serve as a repository of all public art financial contributions generated by application of this ordinance. ~~or made by private persons or entities.~~ Such Trust shall be administered for the purpose of implementation of this ordinance. - The terms of the Trust shall be consistent with this ordinance and shall be interpreted by reference to this ordinance.

Section 1.1704: EXEMPTION

By a two-thirds (2/3) vote, the City Council may exempt a municipal building, ~~such as a water or sewer plant,~~ from the Public Art Commitment described in Section 1.1701 if the purpose of this ordinance would not be fulfilled due to the building's inaccessibility to the public, location, use or other factors. -In those cases, the public art associated with the project should be placed on other publicly owned property within the city, at the determination of the Council. -Any Council determination to exempt a building under this provision shall be made no later than the final vote of the Council authorizing the funding for the project. (Amended 06/19/2017; amended 12/05/2022)

Section 1.1705: PUBLIC ART REVIEW COMMITTEE

The City Council hereby establishes a Public Art Review Committee (PARC) for the implementation and review of this ordinance, and all matters related to public art within Portsmouth. Whenever from any source an issue relating to Public Art should be brought to the attention of the City Council, that matter will be referred to the standing committee.

A. Membership and Term: The Public Art Review Committee (PARC) will consist of between seven and eleven members. Members shall include one member of city staff in a non-voting capacity to be designated by the City Manager, a City Councilor in a non-voting capacity, and the rest shall be community members. Members shall have demonstrated experience in the fine arts, architecture, art criticism, engineering or structural analysis, art history, graphic arts, interior design, landscape architecture, town planning, or other art and design-related fields, or who have demonstrated a strong interest in the visual arts and civic improvement. Other than the City Manager's appointment, the members shall be appointed by the Mayor, with approval from the Council, to staggered terms varying from two to three years.

The PARC shall be chaired by a member of the local arts community and shall interview or make recommendations to the PARC openings to the Mayor, as they may determine necessary. The term of the chairperson shall be for one year, with eligibility for reelection for two

additional terms.

B. Powers and Duties: The PARC shall have the following responsibilities:

1. To foster development and awareness of public art within the City of Portsmouth, and advise the City Manager, City Council, and Land Use Boards with respect to matters relating to the development of public art awareness within the City of Portsmouth.
2. To accept referrals from the City Council or any other public body concerning public art and art issues generally.
3. To provide input on masterplans, zoning ordinances, strategic planning documents as they relate to public art and art issues generally.
4. To collaborate with the City on the acquisition, maintenance and marketing of its public art and develop a stewardship policy.
5. Establish Guidelines for review of public art based on the Public Art Acquisition Policy. The guidelines shall be based on the following criteria:¹
 - The quality of the artwork; and
 - Appropriateness of the size, scale and materials for the site(s); and
 - Availability of an appropriate site; and
 - Costs of installation and maintenance of artwork; and
 - Condition and durability of the artwork; and
 - Aesthetic merit; and
 - Inclusion of a mandatory maintenance plan (including materials used and proper care for such materials).
6. Initiate public forums where appropriate for determining thematic approaches and location options for public art.
7. Determine recruitment strategies to attract qualified artists for public art projects.
8. To review applications for public art following the Public Art Acquisition Policy, select final proposals, and advise the city on issues related to Percent for Art.
9. Review all applications for sponsored works of public art following the same guidelines as those for the Percent for Art program.

10. Advise and oversee public art programs established by the City of Portsmouth in accordance with any policies and guidelines either established by the City or established by the Public Art Review Committee at the request of the City Council.

11. To recommend to the City Council, as requested, replacement members to the PARC when they arise.

12. Identify and solicit funds to supplement the public art budget.

13. Perform further duties related to public art within the City of Portsmouth that the City Manager may request.

C. Meeting Requirements: The PARC shall meet as necessary, but at least quarterly.

D. Reporting Responsibility: The Public Art Review Committee (PARC) shall include an annual report of their proceedings and programs to City Council. Details of the report include, but are not limited to:

a. Assessing available and potential resources in the Public Art Trust.

b. Assessing possible and/or proposed municipal capital projects and criteria that would benefit from the inclusion of an artist in their design.

c. Assessing the impact of and opportunity for public art projects that advance economic development opportunities.

E. Revenue Development: The PARC may solicit or receive gifts, money or other to be applied to principal or interest into the Public Art Trust, for either temporary or permanent use for the acquisition, maintenance and/or installation of public art.

Section 1.1706: EXPENDITURE OF PUBLIC ART FUNDS

Expenditure of public arts funds shall be determined by the City Council. -In authorizing such expenditures the Council shall apply the following protocol and criteria:

A. ~~A. — No less than ninety (90%) percent~~ At least 75% of the principal amount of ~~the~~ public art contribution generated by any particular building project shall be expended ~~for public art~~ on the site of ~~that~~ ~~the~~ project, unless ~~the City Council votes specifically otherwise~~ ~~subject~~ to ~~redirect the~~ ~~the~~

exemption in section 1.1704, with remaining funds placed in the Public Art Trust for maintenance as described in 1.1708, or for other public art purposes. The remaining funds should be kept in the general Public Art Trust without designation for a particular project, to be disbursed at the direction of the City Council with advice from the PARC.

~~B.~~ In determining the selection of any public art project, the City Council ~~may:~~

- ~~1. Refer the question to any agency of a public, non-profit or private nature which might be selected by the City Council for an advisory report, will consider the recommendations of the Public Art Review Committee (PARC), or;~~
- ~~2. Refer the question to a standing committee for public art which may be created by the City Council under such terms and conditions as it may establish, or;~~
- ~~3. Create an ad hoc committee for any particular public art project under such terms as the Council may establish, or;~~

B. ~~4.~~ Seek seek such other advisory recommendation as the City Council deems appropriate.

C. ~~C.~~ Upon the authorization by the City Council of a public arts project, the administrative and financial implementation of that authorization shall be performed by the administrative officials of the City.

D. The Trustees of Trust Funds shall disburse funds from the Public Art Trust in amounts and at times as shall be specified in one or more written requests from the City Manager acting pursuant to authorization of the City Council. Each request shall identify the amount(s) requested, the purpose of the expenditure, and the public art project or public art concerning which the expenditure pertains and be accompanied by a copy of the Council authorization.

Section 1.1706: — 1707: ACQUISITION OF PUBLIC ART THROUGH DONATION

In addition to acquisition of public art through expenditure of funds from the public art commitment and expenditure of other financial contributions from the public art trust, the PARC shall have the authority to recommend in favor or against acceptance of suitable donations of art to the City Council. These works of art will be accepted unconditionally and free of all obligations and encumbrances. The City reserves the right to relocate donated artwork from time to time; and to not display a donated piece of art.

As pieces of public art are acquired, they will be entered into the City Art and Artifact Index maintained by Portsmouth Public Library staff. Changes of location, whether temporary or permanent will be recorded in the Art and Artifact Index.

Section 1.1708: MAINTENANCE AND REPAIR OF PUBLIC ART

Public art funds under this ordinance and the Public Art Trust to be created in conjunction herewith shall be available for repair and maintenance of public art, regardless of whether the public art work was initially funded by the Public Art Trust or otherwise. Maintenance needs for existing public art will be identified by the Public Works Department, with advice from the PARC, with cost estimates for same. As per instructions in section 1.1706D, the City Manager, with approval of the City Council, will authorize expenditure of funds from the Public Art Trust.

All donated, acquired or commissioned works of *outdoor* art shall include a cash stewardship donation of approximately 10% of the cost of the artwork which will be added to the Public Art Trust for ongoing stewardship of public art. *Indoor* art may or may not require a stewardship donation, depending on the type of art. The PARC will determine if a stewardship donation is required for a given piece of indoor art, and if so, the amount of the donation. If the artwork is donated, the committee will determine the value of the artwork.

Works from the collection may be considered for removal if they are in poor condition, damaged or deteriorated beyond reasonable repair or conservation or for other good cause. Should the Public Art Review Committee determine that a work of art be de-accessioned due to maintenance or repair challenges, or for any other reason, the committee shall make that recommendation to the City Council for its consideration and action. The City Council retains the authority to remove a work of art after receiving a recommendation for de-accessioning from the PARC. If a

piece is decommissioned, the date and reason for withdrawal will also be so recorded in the City Art and Artifact Index.

Section 1.~~1707~~1709: FUNDING ACCEPTED

This ordinance authorizes and the Public Art Trust shall provide for the acceptance by the City of donations, grants or contributions to public art which might be approved from time to time by the City Council.

This ordinance also authorizes the Council to accept donations with a designated purpose to commission works of public art to be placed on public property. -The commissioning process shall follow the same procedures outlined in the ordinance for public art associated with capital expenditures by the City.

(Adopted 9/18/2006 to become effective August 21, 2007; amended 12/05/2022)

¹ The Trustees of the Portsmouth Public Library have their own policy for art acquisition. PARC will defer to the Trustees of the Library for art acquisition at the Library.

PARKING and TRAFFIC SAFETY COMMITTEE

ACTION SHEET

8:30 A.M. –August 1, 2024
Conference Room A

PRESENT: Members: Chairman Andrew Bagley, Steve Pesci, Stefanie Casella, Planning Department; Deputy Police Chief Mike Maloney; Mark Syracuse, Mary Lou McElwain; Dave Allen (alternate)

City Staff: City Engineer Eric Eby, Parking Director Ben Fletcher, Associate Engineer Tyler Reese

ACTION ITEMS FOR CITY COUNCIL
<ul style="list-style-type: none">Sagamore Avenue, voted to prohibit parking on both sides of Sagamore Avenue between Shaw Road and Wentworth House Road

- Sagamore Avenue, voted to prohibit parking on both sides of Sagamore Avenue between Shaw Road and Wentworth House Road

- Roll Call
- Financial Report: Voted to accept and place on file Financial Report dated, 2024.
- Public Comment Session: None
- Greenleaf Avenue, explore possibility of converting a portion of the roadway between Lafayette Road and the Route 1 Bypass to one way traffic as part of sidewalk construction project, by DPW: Voted to refer to staff for evaluation and report back, and schedule public meeting on sidewalk project.
- McDonough Street, request for all-way (3-way) stop at intersection with Langdon Street, by residents: Voted to schedule site visit and refer to staff for evaluation and report back.
- Daniel Street, request for handicap parking space at intersection with Penhallow Street, by resident: Voted to table request until comprehensive downtown handicap parking plan developed.
- Sagamore Avenue, request to renew parking prohibition on both sides of roadway between Shaw Road and Wentworth House Road, by DPW: Voted to prohibit parking on both sides of Sagamore Avenue between Shaw Road and Wentworth House Road.
- Car sharing, report back on options, alternatives and feasibility of providing a car sharing service in downtown Portsmouth: Informational; no action required.
- Police monthly accident report: Informational; no action required.
- City road construction projects update: Informational; no action required.

Respectfully submitted by: Leila Birr

PARKING and TRAFFIC SAFETY COMMITTEE
PORTSMOUTH, NEW HAMPSHIRE

CONFERENCE ROOM A
CITY HALL, MUNICIPAL COMPLEX, 1 JUNKINS AVENUE

Members of the public also had the option to join the meeting over Zoom.

8:30 AM

August 1, 2024

MINUTES

I. CALL TO ORDER

Councilor Andrew Bagley called the meeting to order at 8:30 AM.

II. ATTENDANCE

Members Present:

Chairman Andrew Bagley

Vice Chair Steve Pesci

Stefanie Casella, Planning Department

Officer Nick Small representing Deputy Police Chief Mike Maloney

Mark Syracuse

Mary Lou McElwain

Dave Allen (alternate)

City Staff Present:

Parking Director Ben Fletcher

City Engineer – Parking, Transportation and Planning Eric Eby

Associate Engineer Tyler Reece

Absent

Public Works Director Peter Rice

Fire Chief William McQuillen

Erica Wygonik

III. FINANCIAL REPORT

[00:04:12] Mary Lou McElwain moved to approve the financial reports dated May 31 and June 30, 2024. Seconded by Steve Pesci. Motion carried 7-0.

Mary Lou McElwain requested that we compare fiscal year 2023 and fiscal year 2024 data at our next meeting.

IV. PUBLIC COMMENT

None

V. PRESENTATIONS

None

VI. NEW BUSINESS

(No public comment during Committee discussion without Committee approval.)

- A. [00:05:53] Greenleaf Avenue, explore possibility of converting a portion of the roadway between Lafayette Road and the Route 1 Bypass to one way traffic as part of sidewalk construction project, by DPW. Mary Lou McElwain moved to refer to staff for evaluation and report back, and schedule public meeting on sidewalk project. Seconded by Stefanie Casella. Motion carried 7-0
- B. [00:15:14] McDonough Street, request for all-way (3-way) stop at intersection with Langdon Street, by residents. Mary Lou McElwain moved to schedule site visit and refer to staff for evaluation and report back. Seconded by Steve Pesci. Motion carried 7-0.
- C. [00:16:10] Daniel Street, request for handicap parking space at intersection with Penhallow Street, by resident. Mary Lou McElwain moved to table request until comprehensive downtown handicap parking plan developed, seconded by Dave Allen. Motion carried 7-0.

VII. OLD BUSINESS

- A. [00:17:46] Sagamore Avenue, request to renew parking prohibition on both sides of roadway between Shaw Road and Wentworth House Road, by DPW. Dave Allen moved to prohibit parking on both sides of Sagamore Avenue between Shaw Road and Wentworth House Road, seconded by Mary-Lou McElwain.
- B. [00:19:26] Car sharing, report back on options, alternatives and feasibility of providing a car sharing service in downtown Portsmouth.

VII. INFORMATIONAL

- A. [00:24:49] Police monthly accident report
- B. [00:26:56] City road construction projects update

VIII. MISCELLANEOUS

[00:31:28] Mary Lou McElwain requested removal of the wayfinding sign at Pleasant and Court Streets as it is a distraction from the stop sign. She also requested that the stop sign at Mechanic and Marcy Streets be moved up. These items will be added to a future agenda.

IX. ADJOURNMENT

Chairman Bagley adjourned the meeting at 9:00 a.m.

Respectfully submitted,
Leila Birr
Administrative Assistant
Department of Public Works

Historical Archives Memorandum of Understanding

The following agreement is between the City of Portsmouth, a New Hampshire municipality with a principal place of business at 1 Junkins Avenue, Portsmouth, NH 03801 (“the City”), the Strawberry Banke Museum, a non-profit entity organized under the laws of the state of New Hampshire with a mailing address of 17 Hancock Street, Portsmouth, NH 03801 (“Strawberry Banke”), the Portsmouth Historical Society, a non-profit entity organized under the laws of the state of New Hampshire with a mailing address of 10 Middle Street, Portsmouth, NH 03801 (“the Historical Society”), and the Portsmouth Athenaeum, a non-profit entity organized under the laws of the state of New Hampshire with a mailing address of P.O. Box 366, Portsmouth, NH 03801 (“the Athenaeum”). The City, Strawberry Banke, the Historical Society, and the Athenaeum may collectively be referred to as “the Parties”.

WHEREAS, the Parties share a common interest in the preservation of archives relating to the history of Portsmouth for the purpose of educational and cultural benefit to both residents of the City and the many tourists and visitors from around the world;

WHEREAS, each of the Parties share a common purpose of preservation and public access;

WHEREAS, the continued storage of archives within each organization is greatly strained by lack of physical space with inability to expand as a result of financial and practical concerns;

WHEREAS, the Parties are limited in their ability to take on new archives for their collections and limited in their ability to allow public access to their archives;

WHEREAS, the lack of space and adequate facilities is great cause for concern for the possibility of future damage to many vulnerable archives;

WHEREAS, the Parties have come together in the Blue Ribbon Committee for Historical Archive with the purpose of collaborating on a public/private historical archive project that would provide a secure location for the combined use of the Parties;

WHEREAS, a primary purpose of this collaboration is storing the Parties and potentially other organizations and individuals archives in one location for ease of public access and enjoyment;

WHEREAS, the Parties have agreed to pursue the formation of a 501(c)(3) non-profit organization as the entity under which the historical archive will exist (“the Entity”);

WHEREAS, representatives of the Parties consulted with Hurwit & Associates, a law firm specializing in the nonprofit sector for legal assistance;

WHEREAS, the estimated creation of the non-profit entity would cost between \$6,000 and \$8,000 in legal fees and require filing with the Internal Revenue Service;

WHEREAS, beginning the process of non-profit formation would require a \$3,500 retainer to be paid to Hurwit & Associates and starting to draft and gather the necessary materials for formation (seen in Exhibit A).

NOW, THEREFORE, the parties agree as follows:

1. Each of the Parties shall seek funding for the creation and future success of the Entity.
2. Pursuant to the vote of the Blue Ribbon Committee for Historical Archive (the “Committee”) of July 22, 2024, the Entity shall initially be named the Center for Archival Research of Portsmouth (“CARP”).
3. Pursuant to the vote of the Committee of July 22, 2024, CARP’s Board of Directors shall have an initial composition of two (2) members appointed by each party, and an additional three (3) Board members who will be at-large members. The at-large members shall be designated through a process to be defined in CARP’s by-laws.
4. Each Party shall appoint its Board members by vote of each Party’s respective governing body no later than December 31, 2024. An earlier deadline may be established by vote of the Committee.
5. Representatives of the Parties shall contribute to the drafting of documents necessary for the formation of the Entity as laid out in Exhibit A, including but not limited to:
 - Drafting of bylaws
 - Drafting a legal purpose statement
 - Developing a governance structure for the Entity including board seat allocation
 - Defining activities for the Entity
 - Drafting a three-to-five-page narrative of purpose
6. Each of the Parties must decide in accordance with the drafted bylaws what individual(s) will represent their organization on the initial board of the Entity.
7. Each of the Parties must conduct conservation assessments.
8. The Parties will each actively contribute to any other necessary aspects of the non-profit formation process.
9. Additionally, as fiscal sponsor, the Athenaeum will be responsible for the financial management of funds secured by the Parties for the Entity and their administration.

10. The Parties agree that the Athenaeum will enter into a Fiscal Sponsorship Agreement which will outline the obligations and benefits associated with its role as fiscal sponsor.
11. This document is intended to supplement, and not to replace, the ongoing efforts of the Historical Archive Committee, the Portsmouth City Council, or any other existing agreement between any of the Parties.
12. This agreement shall commence on the date of mutual execution and continue until the successful incorporation of the Entity or termination of the agreement by any of the Parties.

For the City of Portsmouth

Karen Sawyer Conard, City Manager

Dated: _____

Pursuant to vote of the City Council

On: _____

For the Strawberry Banke Museum

Signature: _____

Dated: _____

Printed Name: _____

Position: _____

For the Portsmouth Historical Society

Signature: _____

Dated: _____

Printed Name: _____

Position: _____

For the Portsmouth Athenaeum

Signature: _____

Dated: _____

Printed Name: _____

Position: _____