

**NORTH STRATFORD NH
WATER SYSTEM**

EMERGENCY PLAN

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PURPOSE AND REQUIREMENTS

Emergency response planning is an essential part of managing a drinking water system to maintain safe and reliable drinking water. An emergency plan helps to establish a protocol for the management and staff of a water system to follow during an emergency, and helps a water system reduce its vulnerability to emergencies. New Hampshire Administrative Rule, Env-Dw 503.21 Emergency Plans for Community Water Systems, requires community public water systems to have a formal emergency plan. Emergency plans for community systems must be reviewed annually by the water system and an updated plan must be submitted to the New Hampshire Department of Environmental Services (NHDES) at least every six years. Additionally, the plan will be subject to review during sanitary surveys and lack of one will be considered a significant deficiency.

HOW TO USE THIS DOCUMENT

The purpose of this emergency plan is to inform the user on how to respond to a water system emergency as required by Env-Dw 503.21.

SECTION 1. SYSTEM IDENTIFICATION

System PWS Number	2221010	
System Name	North Stratford Water System	
System Address	P.O. Box 366 North Stratford NH 03590	
Town	Stratford	
Source ID/Type/Description/Well Yield	002 GPW #1 80' East of pumphouse	Gpm 180
Source ID/Type/Description/Well Yield	003 GPW #2 240' East of pumphouse	Gpm 90
Population Served/# Service Connections	# of people 300	# of connections 109
Name, Title, Email and Phone Number of person responsible for maintaining this emergency plan.	Brian Hays Water and sewer operator	water-sewer@stratfordnh.gov 603-922-3357

SECTION 2. CHAIN-OF-COMMAND

Stratford Selectmen

1. Overall responsibility for managing a water emergency at North Stratford Water department.
2. Immediately notify the water system operator of a water emergency.
3. If necessary, immediately notify local and state emergency agencies such as police, fire, ambulance, health and NH DES drinking and ground water bureau.
4. Be available as contact person for local and state agencies.
5. Instruct the water system operator to implement the service /repair notification procedures.
6. If necessary, instruct the water system operator to implement the water system user notification procedures, Boil water procedures, alternate water procedures and or water use restrictions.
7. If necessary, represent the water system as spokesperson to all outside parties, including the media.

Water System Operator

1. Implement and oversee system user notification procedure.
2. If necessary, oversee and implement boil water order and alternate water procedures and water use restrictions.
3. Be available to provide hands on knowledge of system components.
4. Be available to as necessary to provide specialized repair of system components such as pumps, water treatment devices and valves.
5. Be available as necessary to take water samples and transport them to a certified laboratory for analysis.
6. Make available and coordinate use of system equipment such as keys, maps ,tools and spare parts.
7. Coordinate with agent for backhoe and dump truck during emergency.

Backup System operator

1. Assist in service and repair efforts.
2. Assist in emergency notification procedures.
3. Assist in return to normal operation.

Contracted Road Agent

1. Make available and coordinate use of equipment such as keys , maps, spare parts, vehicles and backhoe during emergency.

North Stratford Water System Users- contact selectmen in the event of an emergency.

SECTION 3. CONTACT INFORMATION

LOCAL NOTIFICATION LIST

FIRE (day) 603-737-6911	FIRE (night) SAME
POLICE (day) 603-737-6911	POLICE (night) SAME
Ambulance service (day) 603-737-6911	Ambulance service (night) SAME
Local Emergency Management Office (day)	Local Emergency Management Office (night)
Local Health Officer (day) Mario Audit 603-631-1622	Local Health Officer (night) SAME
Local Newspaper (day) Colebrook Chronicle 603-246-8998	Local Newspaper (night) SAME
City/Town Officials (day) Selectmens Office 603-922-5533	City/Town Officials (night) SAME
Local Radio Station (day) WOXX 97.1 814-437-2188	Local Radio Station (night) SAME
Power Company (day) Eversource 800-662-7764	Power Company (night) SAME
Neighboring Water System (day) Town of Northumberland Water & Sewer Department: 603-636-7395	Neighboring Water System (night) Town of Northumberland Water & Sewer Department: 603-636-7395
Other	Other

NH STATE NOTIFICATION LIST

State Police	(603) 223-4381
Drinking Water and Groundwater Bureau	(603) 271-2513 or (603) 271-3503
After regular business hours contact the NH State Police at (603) 223-4381 and ask for the on-call person at NHDES.	
Homeland Security and Emergency Management	(603) 271-2231 or 1-800-852-3792
Health and Human Services	(603) 271-4496

SERVICE/REPAIR NOTIFICATION LIST*

Electrician (day) Jeremy Labrecque, JL Electrical LLC 603-359-5394	Electrician (night) Charles Goulet 603-922-5535
Plumber (day) Colebrook Plumbing and heating 603-237-8301	Plumber (night) SAME
Pump Specialist (day) Skillings & Sons INC 800-441-6281	Pump Specialist (night) SAME
Soil Excavator (day) Mike Lynch 603-922-3816	Soil Excavator (night) 603-331-1832
Hydrogeologic Consultant (day) None	Hydrogeologic Consultant (night) None
Emergency Response Consultant (day) None	Emergency Response Consultant (night) None
Equipment Rental (day) WEIR Bros Colebrook Rental Center 603-237-4490	Equipment Rental (night) SAME
Laboratory (day) Eurofins Phone: 800-287-0525 Direct: 603-410-3881 Email: Joelle.DelSignore@ET.EurofinsUS.com	Laboratory (night) Not available
Information Technology Technician (day) Michel Logemann-Fearless Computing 603-444-6509	Information Technology Technician (night) SAME

SECTION 4. EMERGENCY NOTIFICATION PROCEDURES

North Stratford Water System Notification Procedures

The Stratford Selectmen are responsible for implementing notification of the water system users. The North Stratford water system has approximately 109 service connections, or one service connection per building. Approximately 20% of these are seasonal residences. Due to the relatively small size of the distribution system, a combination of telephone and hand delivery notification is to be used. Each household will be responsible for notifying all other members of that household. The water system operator along with the backup system operator will be responsible for posting by hand at all residences not reached by phone within 2 (two) hours of an emergency, including the following Public places

1. Stratford Public School
2. North Stratford apartments
3. North Stratford post office
4. Stratford Town Hall and offices
5. Claudette's and Deans restaurant
6. North Woods Trading Post
7. Burns Auto Repair

Please note NHDES Drinking Water and Groundwater Bureau must be notified within 24 hours of the following:

- Actual or suspected tampering, sabotage, security breach, or any suspicious incident at the water system;
- Damage to or depletion of the source of the supply or water system facilities which impairs the quality or sufficiency of the supply; or
- Interruption of service of a pressure zone or the entire water system due to an extended power outage, line break, or other cause.

SECTION 4A. BOIL ORDERS/DO NOT DRINK ORDERS

The water system operator under instruction from the selectmen will implement a boil order for the North Stratford Water System. If necessary, the backup water system operator and the town health officer will assist in this effort using telephone, door to door, and flyer posting as listed in the directions for issuing boil order. Priority notification will be given to any unique water system customers. The decision to lift a boil order/do not drink order must be made by the Department of Environmental Services. Current and past drinking water advisories can be found at the NHDES website for [Drinking Water Advisories](#).

SECTION 4B. CRITICAL USERS

Unique Water System User

The North Stratford Water system does not have a Unique water system user at this time. During emergencies causing interruption of service, the water system operator is responsible for providing priority notification to this person. Priority notification and alternate water supply will be supplied on a priority basis. If person cannot be reached by phone a visit to the home will be made

SECTION 4C. MUTUAL AID

North Stratford water system is a member of NHPWMA. It is the selectmens responsibility to activate mutual aid agreement when they deem necessary. (see attached list of MHPWMA members)

SECTION 5. CONTINUITY OF OPERATIONS

The purpose of a continuity of operations plan (COOP) is to address how the water system will stay operational during and following an emergency by identifying essential staff and functions. See following tables to understand who is responsible for responding to emergencies.

SECTION 5A. ESSENTIAL PERSONNEL & BACKUP STAFF

Essential Personnel	Backup Staff	Job Duties
Brian Hays	Chester Smart	System operator / Backup operator
Town Selectmen	Town Admin Assistant	
Harry Juergens	Suzanne Goulet	Supervision / Spokeperson
Charles Goulet		
Ron Scott Jr.		
Mike Lynch		Backhoe/ equipment operator

SECTION 5B. SUPPORTING ESSENTIAL FUNCTIONS

Essential functions are activities that must be completed on a routine basis to ensure safe and reliable service to water customers.

Essential Functions	Associated Equipment	Supplies
Chlorine injection	3 LMI B series injection pumps	Sodium hypochlorite
PH adjustment		Sodium hydroxide
Alkinity adjustment		Sodium Bicarbonate
Daily system pressure and usage	Honeywell Chart recorder	
Check at pumphouse	Pressure and flow meters	
Water analysis	PH, Alkalinity, Chlorine test kits	

SECTION 5C. RECORD MANAGEMENT

Selectmens Office is responsible for all record keeping with backup records kept at selectmens office office.

SECTION 6. SYSTEM COMPONENTS

1. 2- 6 stage well pumps rated at 180gpm and 90gpm respectively
2. 158,000 gal aquastore glass lined water storage tank with capped and locked water fill pipe and locked altitude valve pit and overflow pipe
3. 8 inch ductile iron distribution lines with $\frac{3}{4}$ copper service lines
4. Treatment control building with wellhead controls and corrosion control and disinfection equipment
5. 23 waterous 5/14 inch fire hydrants
6. 109- $\frac{3}{4}$ service connection

SECTION 6A. SYSTEM EQUIPMENT & CHEMICALS

1. Assorted gate valve tools for 8 inch gate valves and hydrants and curb boxes
2. 60 kw 3 phase ONAN diesel generator
3. Magnetic line locator
4. 50, fifty pound bags of sodium bicarbonate
5. 6-15gal barrels 50% sodium hydroxide
6. 5- 15gal containers of 12.5% sodium hypochlorite

SECTION 6B. SYSTEM AS-BUILT PLAN

Two sets of system plans are kept at town office. No as built plans exist.

SECTION 6C. SYSTEM DEMAND

North Stratford's distribuion system has the ability to isolate sections of the network by closing gate valves. Unfortunately, the system is mostly dead end legs and any isolation of the system's network would result in a loss of service for customers. There is no opportunity to reduce demand by any other means.

What is the total production capacity of this system?	Gallons per day = 144,000
What is the total storage capacity of this system?	Gallons = 158,000

What is the average daily demand of this system?	Gallons per day =20,000
What is the maximum daily demand of this system?	Gallons per day =30,000
Estimated Available Water (divide total storage capacity by average daily demand)	Days =3.5 days

SECTION 7. ALTERNATE WATER SOURCE

The North Stratford Water System will utilize bulk water delivery to provide nonpotable water during a prolonged water emergency for waste elimination purposes. The town fire department pumper truck will be utilized to travel to the Norththumberland Water systems to get this nonpotable water. Customers will need to provide a containers to bring water back to their home.

SECTION 7A. BULK AND/OR BOTTLED WATER

Bottled water will be made available to the Stratford public school and unique water system users through duration of water emergency for potable needs.

SECTION 7B. INTERCONNECTIONS WITH ADJACENT WATER SYSTEMS

There are no adjacent water systems at this time

SECTION 7C. NEW SOURCE / REACTIVATION

The north Stratford Water system has two wells that have more than enough reserves to meet the demand of the water system users and has a well redevelopment plan that has had both well pumps replaced. Well #1 was rehabilitated in 2016 and well #2 in 2014. The stainless steel screens were cleaned and well production capacity is near original specifications. The North Stratford water system has no plans to develop additional sources at this time.

SECTION 8. ALTERNATE POWER SUPPLY

Available alternate power sources	ONAN 60KW portable generator
Manual or automatic transfer switch	Manual

Generator type, size, fuel type	Diesel 100gal tank 3 phase
Operations supported by generator	Treatment control building & Wells
Generator duration	24 Hour
Generator testing and maintenance schedule	monthly

SECTION 9. WATER USE RESTRICTIONS

The North Stratford Water system will implement the following conservation measures in the event of a water emergency.

1. Watering Gardens, Lawns, and other landscaped areas will be restricted at a minimum or banned entirely
2. Washing cars, trucks, boats, RVs and ATVs will be restricted at a minimum or banned entirely
3. Use of water from a hose to rinse or clean sidewalks , driveways, decks ect. Will be restricted or banned entirely.
4. The fire department in the area (Stratford, Colebrook, Groveton and Bloomfield) will be informed that fire fighting water from hydrants in The North Stratford water system will be unavailable until further notice.
5. The filling of swimming pools will be restricted at a minimum or banned entirely .
6. Water System customers will be required to follow water use restrictions adopted from DES fact sheet # WD-WSEB-26-2 that lists water efficiency practices for indoor water use.
7. In a prolong or dire water emergency relying on bulk water, rationing will be implemented.

SECTION 10. CYBERSECURITY

The Town of Stratford Water System is a stand alone system and as such is not connected to the internet in anyway and there is no remote access. The system calls out to a security contractor if problem is detected. The security company calls system operator to address problem on site in person.

SECTION 11. RISK ASSESSMENT

A risk assessment is a systematic process of evaluating the potential risks that may impair a utility's operation. NHDES recommends all systems conduct a risk assessment by including statements explaining how your system will handle preventable and unpreventable emergencies including malevolent acts and natural disasters. Although not a state requirement, it is a federal requirement for community water systems serving more than 3,300 people under Section 2013 of [America's Water Infrastructure Act](#) (AWIA).

Please assess the risks to the water system from malevolent acts and natural hazards, using current scientific data and predictions, as applicable, that may result in operational impairment. The risk assessment should not be submitted with the emergency plan. Please store it in a secure location as it contains sensitive information.

Every utility is different and should consider their specific needs when conducting a risk assessment relative to the utility’s location, staff size, population served, drinking water sources, treatment systems, critical infrastructure, and other equipment or assets that may be compromised during an emergency. A water system may consider types of emergencies including, but not limited to, extreme heat and cold, flooding especially if prone to storm surge and coastal flooding, wind storms, cyberattacks, sabotage and chemical spills. EPA has provided tools to conduct a risk assessment including the [Small System Risk and Resilience Assessment Checklist](#) and the [Vulnerability Self Assessment Tool](#).

SECTION 12. RETURN TO NORMAL OPERATION

The Decision to return to normal operation will be made by the Stratford Selectmen. The Selectmen will make this decision with the input of the NHDES if the emergency was caused by contamination of the water supply. The Water system operator is responsible for overseeing the return to normal operation. If necessary, the backup operator will assist in this effort. The water system operator will do any additional water quality testing that may be necessary to assess system conditions before returning the water system to normal operations. All water system users will be notified using the aforementioned notification procedure when the system is returned to normal operation.

SECTION 13. PLAN READINESS AND TRAINING

Each person listed in the North Stratford water system chain of command will keep an update copy of the emergency plan at their residence.

The Stratford Selectmen will ensure the plan is updated annually.

A copy of that updated plan will be kept at the Selectmen office, water system pumphouse and sewer building.

An article about the updated plan will be posted at the Town of Stratford website and mentioned in the annual consumer confidence report.

In all cases, earlier plans will be discarded after receipt of a new plan.

The North Stratford Water System will rehearse the updated plan annually.

SECTION 14. SIGNATURES

The owner and operator of the system must sign and date below. The plan should also be signed by any additional system representatives who assisted in the completion of this plan. The signatures attest that all information provided is true and accurate and that both the owner and primary operator have read and understand this plan.

Owner Name & Signature	Date
Operator Name & Signature	Date
System Representative Signature/Title	Date
System Representative Signature/Title	Date

Notes: