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# 1. Purpose

The purpose for a contingency plan is to establish, provide, and keep updated emergency response procedures and information that is needed to effectively respond to partial or total loss of public water supply services that are caused by contamination or mechanical failure. In particular, the 1) pumping capacity of each well, 2) the vulnerability of each well due to its construction, and 3) the aquifer vulnerability at the well were considered in determining how to respond to contamination issues.

# 2. Public Water Supply Characteristics

The water supply distribution system that is operated by Public Water Supplier provides drinking water to 565 customer accounts (2009 DNR Report) and is summarized in this section.

2.1 **Water Supply Source(s)** - Information describing the water supply well(s) used by the Public Water Supplier is presented in Table 1 that is taken from the discussion of the public water supply system in the WHP plan.

**Table 1. Water Supply Well Information**  
(Primary = P, Emergency backup = E, Unused = U)

Local Well Name	Unique Number	Use/ Status <sup>1</sup>	Casing Diameter (inches)	Casing Depth (feet)	Well Depth (feet)	Date Constructed/ Reconstructed	Well Vulnerability	Aquifer Vulnerability
2	217883	E	6"	123	193	1967	No	Moderate
3	509080	P	16"	118	250	1990	Moderate	Moderate

2.2 **Treatment** - The Public Water Supplier adds chlorine, fluoride, polyphosphates and sodium permanganate to Well #3. If Well #2 is put on in the event of an emergency, chlorine and fluoride will be added to the water.

2.3 **Water Storage and Distribution System** -The general characteristics of the water supply system are summarized as follows:

1. One 250,000-gallon elevated storage tank;
2. 56,000 feet of water supply lines; and
3. A 1,000-gallon per minute booster pump that is throttled down to 400 gpm.

The water tower can be isolated for maintenance or in the event of a water supply disruption. The majority of the water distribution system is looped, with the exception of 31 dead ends in the system. The water system contains the necessary valves and piping to meet its operational needs and all service connections are metered.

2.4 **Maps and Plans** - Maps of the water distribution system are on file at the City offices and summarized in Appendix A - Maps are also available and on file at BDM Consulting Engineers, located in St. Paul, Minnesota.

### 3. Priority Water Users During a Water Supply Emergency

The following table identifies the priority that water users will receive in the event of a major system disruption, failure or an emergency. Water conservation procedures will be enacted by the city government and coordinated between the public works director, city administrator, mayor, and city council.

**Table 2. Water Use Priority Grouping**

<b>Priority Group and Rank</b>	<b>Average Day Demand (GPD)</b>	<b>Demand Reduction Potential (GPD)</b>
Residential #1	0.089	0.013
Institutional #1	Included above	Included above
Commercial #2	0.014	0.005
Non-essential #3	0.004	0.004
<b>TOTAL</b>	<b>0.107</b>	<b>0.022</b>

### 4. Alternative Water Supply Options

4.1 **Bottled Water or bulk water delivery supplies, delivery and distribution:** Main Street Market and Deli 320-396-5013 has bottled water available as do several convenience stores in the community. The Public Water Supplier has made arrangements with this business to provide bottled water to residents upon notification of interruption of the public water supply system. Larger quantities of bottled water for long-term distribution will be provided by:

1. Wal Mart, Cambridge, MN 763-689-0606
2. CUB Foods, Cambridge, MN 763-689-1112
3. Wal Mart, Pine City, MN 320-629-5845
4. Target, Cambridge, MN 763-689-3858

4.2 **Construct New Well.** No other new wells are planned as part of the routine maintenance and capital improvement plan of the water supply system. However, in the event that a City well goes down permanently, the Public Water Supplier will contact the MDH district engineer (320-223-7330) to initiate procedures for constructing a replacement water supply well under emergency circumstances.

4.3 **Emergency Backup Well(s).** The Public Water Supplier has Well #2 that it maintains for emergency use only. In the event that Well #3, which is the primary water supply well, cannot

be operated, the emergency backup well can provide 144,000 gallons per day (100 gpm X 60 X 24). The city will 1) contact the MDH district engineer (320-223-7330) that the well is being placed on line and 2) test the bacterial quality of the water from the emergency backup well.

**4.4 Emergency Treatment of Drinking Water.** In the event of the loss of electrical service to its water treatment equipment, the Public Water Supplier can provide power using an electrical generator. The generator is owned and maintained by the City. In the event of contamination levels or contaminants that the City’s treatment capabilities cannot address, treatment options will be discussed with MDH district engineer (320-223-7330).

**4.5 Source Management (blending).** The Public Water Supplier has the capability to blend water that is pumped from its water supply wells. The MDH district engineer (320-223-7330) will provide recommendations regarding the amount of blending that is required to maintain contaminant levels below federal and state drinking water limits.

**4.6 Scheduling Pumping of City Wells to Minimize the Spread of Contamination.** The Public Water Supplier will contact the MDH hydrologist (651-201-4691) upon notification that a contaminant level has been exceeded to assess whether pumping of the impacted well(s) should be continued to avoid contamination of other City wells.

## 5. Inventory of Available Emergency Equipment and Materials

**Table 3. Available Emergency Response Equipment and Suppliers**

Description	Owner	Telephone	Location	Acquisition Time
Well Repair	Thein Well	320-796-2111	Spicer, MN	2 hrs.
Pump Repair	Thein Well	320-796-2111	Spicer, MN	2 hrs.
Electrician	Anderson Electric	320-980-3285	Pine City, MN	1 hr.
Plumber	Brunswick Htg & Cooling	320-396-2168	Mora, MN	1 hr.
Backhoe/Excavator	D & M Excavating	763-286-0215 (Cell)	Mora, MN	1 hr.
Chemical Feed	Hawkins Chemicals	612-331-9100	St. Paul, MN	2 hrs.
Meter Repair, Valves, pipe fitting, etc.	Tonka	763-559-2837	Plymouth, MN	1 hr.
Generator	Generator Systems Service	507-964-2231	Mapleton, MN	2 hrs.

## 6. Emergency Response Procedures

Emergency Response Coordinator:

Name: Mike Piha, PeopleService, Inc.  
 Address: 15197 Henriette Rd, Pine City, MN  
 Cell Phone: (612) 644-0248  
 Home Phone: (320) 629-6903  
 E-mail contact: [mpiha@peopleservice.com](mailto:mpiha@peopleservice.com)

Alternate:

Jerry Williams, PeopleService, Inc.  
 509 Oak Ave, Hinckley, MN  
 Cell Phone: (320) 630-5304  
 Home Phone: (320) 384-7924

The duties of the response coordinator or the alternate are listed in the following table.

**Table 4 Duties of the Emergency Response Coordinator or the Alternate**

Incident	Response Procedure & Comments
<b>Identify Disruption (Mechanical Failure or Contamination)</b>	Identifies the nature of the water supply disruption and communicates this information to the city government, the alternate response coordinator, and members of the emergency oversight committee.
<b>Notify Response Personnel</b>	Notifies city staff and others who will be responding to the water supply emergency about the disruption and coordinates their efforts to correct it.
<b>Incident Direction and Control</b>	Identifies the actions that are needed to correct the water supply emergency and directs responders to implement corrective actions.
<b>Internal Communication</b>	Communicates the status of response efforts to the primary spokesperson and the emergency oversight committee as needed to keep these parties informed of progress.
<b>Assess Incident Response on Continual Basis</b>	Assesses the efforts to correct the water supply disruption on a continual basis so that the emergency oversight committee can take additional corrective actions and the city government and public are updated on issues and progress.
<b>Define the Extent of a Contamination Disruption</b>	Coordinates efforts to define the extent and level of the contamination with local, state, and federal agencies. This may continue after initial corrective actions have been implemented.
<b>Define the Extent of a Mechanical Disruption</b>	Coordinates efforts to define the cause(s) of the mechanical failure and the equipment, data, and expertise that are needed to correct it. Identifies measures for reducing the likelihood that a similar mechanical failure will not occur in the future.
<b>Identify Need for an Alternate Water Supply</b>	Evaluates the need to obtain an alternate water supply, the time period it is needed before the water supply emergency is corrected, and the actions that are needed to achieve it.

In event of pump failure, Thein Well can put in a temporary submersible pump within 24 hrs.

## 7. Notification Procedures

7.1 **Responder Contacts** -Table 5 contains the names and telephone numbers of the local and state agency contacts as well as other individuals, businesses, or members of the public that will be notified depending on the nature of the public water supply emergency. The emergency response coordinator, Mike Piha, will use this list to select the members of an Emergency Oversight Committee Table 6. The committee will meet throughout the duration of the emergency to aid in decision-making and to update the City regarding their roles in correcting the problem.

**Table 5. Emergency Contact Listing**

PERSONNEL	NAME	HOME PHONE	WORK PHONE
Water/Wastewater Spr	Victor Fanth	763-227-1332	320-674-4106
City Administrator	Angela Grafstrom	218-242-9971	763-688-1916 (cell)
Mayor	Patricia Carlson	320-396-3628	763-244-0450
Council Member	Robert Knowles	320-515-9397	320-396-3775
Council Member	Vicky Ethen	763-957-9297	320-396-2653
Council Member	Ryan Davis	651-308-0268	
Council Member	Seth Zeltinger	763-300-9583	320-396-3377
Response Coordinator	Victor Fanth	763-227-1332	320-674-4106
Al Response Coord.	Dan Eklund	612-685-0692	320-591-0446
State Incident Duty Officer	24/7 Phone Line	-----	800-422-0798
County Emergency Director	John Elder	763-689-2141	763-689-8306
Dep. County Emergency Dir.	Lisa Lovering	763-657-9443	763-689-2141
Fire Chief	Jeff Jones	320-364-9481	320-591-0561
Sheriff	Chris Caulk	763-657-9443	763-689-2141
Police Chief	Eric Baumgart	612-685-0692	320-591-0140
City Emergency Manager	Eric Baumgart	612-685-0692	320-591-0140
System Operator	Victor Fanth	763-227-1332	320-674-4106
Alt System Operator	Gary Giltner	612-644-0248	Peoples Services
School Superintendent	Ken Gagner	320-288-6634	320-396-5198
Ambulance	Allina	Emergency 911	NonEm 800-450-7463
Hospital/Doctor	Cambridge Med Ctr.		763-689-7700
Electric Power Company	East Central Energy	Em 320-396-2454	800-254-7944
Gas Company	Centerpoint Energy	Em 612-372-5050	800-296-9815
State Hwy Department	Dan Meinen	320-293-8562	320-293-8513
County Hwy Department	Richard Heilman	Same # after hrs	763-689-1870
Telephone Company	Centurylink	800-201-4099	800-244-1111
Internet	Genesis Wireless	612-298-8911 Jay	320-396-2990
Cable/Internet	Midco		800-888-1300
MPCA	After hrs duty officer	651-649-5451	651-296-6300
MRWA Tech Services	Curt Hawkinson	320-760-5886	800-367-6792
	MNWARN.ORG		
MDH District Engineer	Robert Dehler	651-201-3710	651-215-8700
MDH Source Water Protection	Karla Peterson	800-422-0798	651-201-4700

## 7.2 Critical Assessment Team

**Table 6. Emergency Oversight Committee**

<b>Title</b>	<b>Name</b>	<b>Response Assignment</b>
<b>Response Coordinator</b>	Mike Piha	Coordinate actions to address emergency
<b>Alt. Response Coordinator</b>	Paul Christensen	Coordinate actions to address emergency
<b>Water Operator</b>	Mike Piha	Direct or contact individuals and businesses to resolve issue
<b>Alt. Water Operator</b>	Jerry Williams	Direct or contact individuals and businesses to resolve issue
<b>Primary Spokesperson</b>	Mayor Ken Ceaglske	Contact media to inform citizens/businesses of emergency
<b>Public Health/Medical</b>	Kathy Minke	Assist City as needed to address emergency
<b>MDH District Engineer</b>	Was Kim Larson	Assist City as needed to address emergency
<b>MRWA Contact</b>	Dave Neiman	Assist City with technical questions regarding the wells and distribution system
<b>MPCA Contact (contamination)</b>	Kevin Faus	Assist City as needed to address emergency

## 7.3 Public Information Plan

<b>Primary Spokesperson:</b>	<b>Alternate:</b>
Name: Mayor Patricia Carlson	Angela Grafstrom, City Administrator
Address: 532 Broadway Ave S., Braham MN 55006	201 Broadway Ave S, Braham MN 55006
Work Phone: (320) 396-3383	(320) 396-3383
Alternate Contact Number: (763) 244-0450	(320) 496-8709
Email: <a href="mailto:pcarlson@braham.com">pcarlson@braham.com</a>	<a href="mailto:agrafstrom@braham.com">agrafstrom@braham.com</a>

The responsibilities of the primary spokesperson are to:

1. Give public statements that have been prepared by the City regarding the water supply emergency;
2. Coordinate and compile information submitted by responders to the water supply emergency;
3. Schedule official meetings between the City and members of the media; and
4. Coordinate efforts to keep the public informed about the water supply emergency.

**Public Information Center Location during Emergency:** Braham City Hall, 201 S. Broadway, Braham, MN 55006 (320) 396-3383

Times Available: City Hall would remain open as needed in the event of an emergency.  
 Alternate Information Center Location Site: Isanti County Emergency Operations Center,  
 Government Center, 555 18<sup>th</sup> Ave. SW, Cambridge, MN 55008

**Information to be conveyed to the public and media:**

1. Name of the Water System – **City of Braham Well #3**
2. Nature of the water supply emergency - \_\_\_\_\_
3. Steps being taken to replace the water supply- \_\_\_\_\_
4. *If applicable*- Contaminant(s) of concern & date of first detected- \_\_\_\_\_
5. *If applicable* - Source(s) of contamination- \_\_\_\_\_
6. *If applicable* - Public health impacts of the contamination or water supply interruption- \_\_\_\_\_
7. Steps the public should be taking- \_\_\_\_\_
8. Other responders who are cooperating with the City- \_\_\_\_\_
9. Steps being taken to eliminate the source of contamination mechanical failure- \_\_\_\_\_

**7.4 Media Contacts:**

**Table 7. Contact Information**

Media	Name	Telephone	Address
Newspaper	Isanti County New	(763) 689-1981	234 S. Main, Cambridge, MN 55008
Television	WCCO	(800) 444-9226	90 S. 11 <sup>th</sup> St, Mpls, MN
Radio	WCMP Radio	(320) 629-7575	15429 Pokegama Lake Rd., Pine City, MN

**8. Mitigation and Water Conservation Plan**

**8.1 Mitigation Efforts** of a water supply interruption that is related to mechanical failure involves direct participation by MDH to ensure that all state and federal regulations relating to the design and approval of mitigation efforts are met. Also, possible sources of funding or the continued use of the emergency alternative water supply will be identified with the assistance of the emergency oversight committee.

Mitigation of a water supply interruption that is related to high levels of chemical contamination or pathogen contamination will involve the direct participation of the MDH and likely the Minnesota Pollution Control Agency. Short-term versus long-term mitigation efforts will need to be developed through the emergency oversight committee.



The Public Water Supplier will take the following preventative steps to avoid the interruption of the water supply due to mechanical failure:

1. Infrastructure maintenance/upgrades/maps: The water system is flushed 2 times a year and the City budgets for water line repairs annually. The city maintains maps and records of system maintenance at City Hall.
2. Regular inspection of tower, well, pump house: All of these facilities are inspected daily. The well house and chemical rooms have keyed entries and are locked. The new water tower will be inspected and cleaned by General Construction, Inc. every 2 years.
3. Emergency training for staff: Staff receives annual training through PeopleService, Inc.
4. System security analysis: The City has assessed the likelihood that vandalism or terrorism may disrupt its water supply and has determined that much of this can be avoided by locking all facilities and have keyed entries to buildings. Also, the Braham Police Department makes periodic sweeps of the water supply facilities.
5. Construct an alternative water supply well: The City will consider adding a second primary water supply well to ensure that it has a backup supply if the existing well goes down. Doing this will greatly enhance the City's capabilities to provide an alternative water supply in the event of a water supply emergency.
6. Divide the water distribution system into separate districts: The city has installed control valves on the water supply distribution system so that sections can be isolated to repair leaks or to address contamination entry.
7. Ensure that proper sanitation procedures are followed during system maintenance:  
The City has established disinfection protocols identified by the MDH that must be followed after repair or installation work has been performed on water mains. Also, the City may enact a cross connection control program or other measures, if deemed necessary, to help reduce the possibility that contamination may be introduced into its water supply distribution system.

**8.2 Conservation Measures** - The Public Water Supplier has developed the following measures to conserve water as well as to identify the minimum capacity that it needs to provide for its residents.

1. Evaluating water use:
  - a) Radio-read water meters have been installed on all service connections and monthly readings are taken to identify the water supply needs of the community; and

- b) Water usage is reported annually to the Minnesota Department of Natural Resources and is used to identify the minimum daily requirements for residential water use. This information provides the basis for assigning water supply priority that is shown in Table 2.
2. Public Education:
- a) The city publishes a Consumer Confidence Report annually in which State water recommendations are presented;
  - b) Water use conservation tips are included in the City Newsletter which is made available to the public twice per year, and is also occasionally included on the utility bill; and
  - c) Water conservation is presented as part of tours of the Water Treatment Plant.
3. Rate structure: All water is billed out monthly at \$3.65 per 1,000 gallons, with a minimum of 2,500 gallons.
4. Emergency Response – In the event of a water supply shortage, the City will impose the following water use restrictions progressively to reduce demand:
- a) Eliminate non-essential uses. Activate watering ban;
    - i. Eliminate non-essential uses and all outdoor use.
    - ii. Eliminate non-essential, outdoor, commercial and institutional uses.  
(from City's 2008 Water Conservation Plan.)