



APPENDIX B

Emergency Preparedness Procedures



EMERGENCY PREPAREDNESS PROCEDURES

Water emergencies can occur as a result of vandalism, sabotage, accidental contamination, mechanical problems, power failures, drought, flooding, and other natural disasters. The purpose of emergency planning is to develop emergency response procedures and to identify actions needed to improve emergency preparedness. In the case of a municipality, these procedures should be in support of, and part of, an all-hazard emergency operations plan.

Federal Emergency Response Plan

Section 1433(b) of the Safe Drinking Water Act, as amended by the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Public Law 107-188, Title IV – Drinking Water Security and Safety), requires community water suppliers serving over 3,300 people to prepare an Emergency Response Plan. The City of Shorewood’s Federal Emergency Response Plan was revised and adopted in 2011.

Operational Contingency Plan

The State recommends that all utilities develop an operational contingency plan that describes measures to be taken for water supply mainline breaks and other common system failures, as well as for routine maintenance. The City maintains a contact list for contractors and suppliers and a water emergency telephone list that act as an Operational Contingency Plan.

Emergency Response Procedures

Quick access to concise and detailed information on water sources, water treatment, and the distribution system may be needed in an emergency. System operation and maintenance records should be maintained in secured central and back-up locations so that the records are accessible for emergency purposes. A detailed map of the system showing the water sources, treatment plant, storage facilities, supply lines, interconnections, and other information that would be useful in an emergency should also be readily available. It is critical that public water supplier representatives and emergency response personnel communicate about the response procedures and be able to easily obtain this kind of information both in electronic and hard copy formats (in case of a power outage).

The City of Shorewood maintains records and maps of the water system. City staff can access these resources from a central secured location in the event of an emergency, and appropriate staff know where these resources are located.

Procedures for Augmenting Water Supplies

The City of Shorewood has six interconnections with four neighboring communities, to be used only in the event of an emergency. Each interconnection has a capacity of 1,000 gpm. The interconnections are with Minnetonka at Vine Hill Road and Shady Hills Road and at Vine Hill



Road and Waterford Place; with Chanhassen at Silver Lake Trail; with Victoria at Smithtown Road; and with Tonka Bay at CSAH 19 and Glen Road and at CSAH 19 and Smithtown Road. The City is exploring a possible interconnection with the City of Excelsior and has identified potential locations for that interconnection.

In the case of a short-term emergency, the City would need to obtain and distribute bottled water. For a long-term emergency, the City will evaluate the cause of service disruption and will determine if a new water source or improved water treatment is necessary. The scale of the response will depend on the cause of the disruption. In this case, a feasibility study will be conducted to determine the most cost-effective solution to the issue.

Allocation and Demand Reduction Procedures and Triggers

The City must prepare procedures to address gradual decreases in water supply, as well as emergencies and the sudden loss of water due to line breaks, power failures, sabotage, etc. These allocation and demand reduction procedures must be consistent with Minnesota State Statute 103G.261 that identifies and defines the priorities in which water usage will be allocated in the event of an emergency. They are defined as follows:

1. Domestic water supply only, excluding industrial and commercial uses of municipal water supply. The first priority also includes uses for power production that meet contingency requirements. Domestic use is defined by MN Rules 6115.0630, Subp. 9, as use for general household purposes for human needs such as cooking, cleaning, drinking, washing, and waste disposal, and uses for on-farm livestock watering excluding commercial livestock operations which use more than 10,000 gallons per day or one million gallons per year.
2. Consumption of less than 10,000 gallons per day.
3. Agricultural irrigation and processing of agricultural products of more than 10,000 gallons per day.
4. Power production in excess of the use provided for in the contingency plan.
5. All other water use of more than 10,000 gallons per day.
6. Non-essential uses. These uses are defined by Minnesota Statutes 103G.291 as lawn sprinkling, vehicle washing, golf course and park irrigation, and other non-essential uses.

The table below lists the priority ranking, average day demand, and demand reduction potential for each customer category in the City.



Customer Category	Allocation Priority	Average Day Demand (GPD)	Short-Term Emergency Demand Reduction Potential (GPD)
Residential	1	357,500	*
Commercial	2	22,100	*
Irrigation	3	6,800	*
Non-Essential	4	-	263,500
Total	-	386,400	263,500

GPD = gallons per day

*Non-essential use calculated as increased summer demand across all customer categories.

The City of Shorewood will use the following conditions to trigger an emergency response:

- Contamination
- Loss of Production
- Infrastructure Failure
- Governor’s Executive Order

The City of Shorewood has identified the following short-term and long-term actions to be implemented as part of an emergency response:

Short-term Actions

- Supply augmentation through interconnection(s)
- Enforce its critical water deficiency ordinance
- Allocate water through emergency action of the City Council

Long-term Actions

- Supply augmentation through interconnections
- Enforce its critical water deficiency ordinance
- Allocate water through emergency action of the City Council
- Meet with large water users to discuss their contingency plan



Notification Procedures

The City of Shorewood has developed the following plan to inform customers regarding conservation requests, water use restrictions, and suspensions; with the support of City staff, neighboring communities, and local news outlets:

Short-term demand reduction declared (within one year)	Long-term demand reduction declared (over one year)	Governor’s Critical water deficiency declared
Frequency: Monthly	Frequency: Annually	Frequency: As Needed
<ul style="list-style-type: none"> ▪ Website ▪ Social media (e.g. Twitter, Facebook) ▪ Direct customer mailing ▪ Press release (TV, radio, newspaper) ▪ Public alert community notification system 	<ul style="list-style-type: none"> ▪ Website ▪ Social media (e.g. Twitter, Facebook) ▪ Direct customer mailing ▪ Press release (TV, radio, newspaper) 	<ul style="list-style-type: none"> ▪ Website ▪ Social media (e.g. Twitter, Facebook) ▪ Direct customer mailing ▪ Press release (TV, radio, newspaper)

Enforcement

Minnesota Statutes require public water supply authorities to adopt and enforce water conservation restrictions during periods of critical water shortages. As stated in Minnesota Statutes 103G.291, Subdivision 1, regarding public water supply appropriation during deficiency, if the governor determines and declares by executive order that there is a critical water deficiency, public water supply authorities appropriating water must adopt and enforce water conservation restrictions within their jurisdiction that are consistent with rules adopted by the commissioner. The restrictions must limit lawn sprinkling, vehicle washing, golf course and park irrigation, and other nonessential uses, and have appropriate penalties for failure to comply with the restrictions.

The City has a critical water deficiency ordinance defined in Shorewood City Code, Chapter 9: Section 903.12 Subd.1. This section authorizes the City Council to have the authority to implement water restrictions, which improves response times for dealing with water emergencies.