**City of Brewster**

**Emergency Water Supply Plan**

**Pursuant to the requirements of K.A.R. 28-15-18, the City of Brewster,**

**Has compiled the following information, and guidelines for the purpose of implementing an Emergency Water Supply Plan.**

**Section I Purpose**

**Section II Description**

**Section III Disaster Organization**

**Section IV Mutual Aid Agreement**

**Section VI Vulnerability of System (Disaster Response)**

**Section VII Water Rationing**

**Section VIII Emergency Contacts**

**Section IX Annual Review**

**Section I. Purpose**

The purpose of this plan is to isolate and conserve an adequate supply of potable water during emergency conditions that will be used only to sustain human life and the lives of pets and maintain standards of hygiene and sanitation.

**Section II. Description**

The potable water supply for the City of Brewster is obtained through water wells listed as wells 1,2 and 5.

**How is water produced:**

Water wells from Brewster are in the corporate city limits and use of vertical turbine pumps. Electric motors which we are going put on a generator to run the supply tank of 30,000 gallons with the 50,000 overhead supply tank already in use. #2 water well for backup power uses a natural gas 300ci Ford on Well #2. Water is pumped to the storage tank.

**Where are water wells located:**

Our water supply is the Ogallala aquifer and location:

Well #1 located at 201 First St.

Well #2 located at 203 First St.

Well #4 located at 204 Oklahoma Ave. Non public use as of 2021

Well #5 located west of Brewster on Manchester Rd 3200’ on the north side of the road

**How much water is produced from each well:**

Water Well Appropriations and Water rights

NEW DATA FILED 10-01-2021

Water Rights for well #1

1. KWR #35921: 8,359,706 mg, 25.65 Ac/Ft, Perfected 12/31/1990, Rated at 60 gpm at 80 psi. 144’ static water level, 180’ deep to shale.

Water Rights for well #2

1. KWR #35919: 8,359,706 mg, 25.65 Ac/Ft, Perfected 12/30/1990, Rated at 50 gpm at 70 psi. 144.4’ static water level, 180’ deep to shale. A new 7.5 gallon submersible pump and new schedule 80 PVC piping was installed in 8-2021.

 *Water Rights for well #4: NON PUBLIC WATER SUPPLY 12-2020.*

*1. KWR #22231 for 20.4 acre ft. (6,647,360 gallons) Ag Sun LLC and Football Field USD 314. 7 hp submersible pump 12-2020 set at 80 gallon per minute with 80# psi line pressure. 139.1’ static water level, 180’ to shale.*

*Water rights for Water Well #5 NEW 2020*

*1. KWR #TH 3: 55 Acre ft (17,921,805 gallons)*

*2. KWR #10738: 24 Acre ft. (7,820,424 gallons)*

*Production set at 120 gallon per minute 12/2020 w 142’ to static water level and well is 242’ deep to shale.*

*#1 total pumping gallons 8.35 million gallon per year, 25.65 Ac/ft*

*#2 total pumping gallons 8.35 million gallon per year, 25.65 Ac/ft*

*#4 total pumping gallons 20.4 acre/ft or 6,647,360 million gallon per year Non Public use only for nitrate compliance in 2020.*

*#5 total pumping gallons 79 acre/ft or 25,742,229 million gallon per year.*

*Public Water:*

*TOTAL AVAILABLE 130.3 acre/ft or 42,458,385 MILLION GALLON PER YEAR*

*Non-Public Water:*

*WATER WELL #4: 20.4 Ac/ft, 6,647,360 mg. (AgSun LLC and Brewster Athletic Field)*

Water well #1 produces 88 gmp with 55# head

Water well #2 produces 72 gpm with 50# head

Water well #4 produces 165 gpm with 50# head

Water well #5 produces 120 gpm with 0# head

**Storage system and supply:**

Brewsters water system includes an above ground storage system capable of holding 50,000 gallons of potable water located at the corner of First St. and Nebraska Ave.. Brewster also has for bulk water use firehydrant valves and discharge pipe systems capable of emergency use for supplying water to the mains and relieving pressure off after use is met. This pressure device can be adjusted for adequate operating pressures when and if needed.

As of 1-2021 the City made a water improvement with a new well located ¾ of a mile west of town on Manchester Rd. and a new 30,000 gallon cement in ground clear well to expand our water supply and blend water for public use to comply with the KDHE MCL Nitrate requirements.

**Booster information:**

City of Brewster has no boosters in the system at this time.

**Line Size:**

The City of Brewster has 4” cast iron mains on primary lines. The other lines include 4” ductile iron, 4” C-900, 2” cast iron, 2” pvc schedule 40. In 2020 we installed a new 3200’ of DR25 6” C900 water line from well 5 to the water blending station at the water tower location.

**Other connection:**

The City of Brewster has no other outside source water or services from other public water services or Rural Water Districts.

# **Section III. Disaster Organization**

1. **Mayor – In-Charge Overall or designee in the event of absence. City Superintendent or appointed person shall oversee all municipal services.**

**Responsibilities shall include and not be limited to:**

* **Preserve the safety and welfare for the public with priorities of: Water, Food and Shelter.**

1. Coordinate and direct efforts of maintenance personnel in repair of damage.

2. Establish communications within the governing body, local news media, and general public.

3. Establish command posts, medical posts, shelters, etc. while working with the County Emergency Preparedness Personnel.

4. Assess damages and establish communication with the Mayor and other officials.

5. Notify KDHE District Engineer **(785-625-5663)** or Bureau of Water and request assistance as needed.

6. Oversee any repairs or alterations from the source of supply to treatment and pumping to throughout the distribution system.

7. Request emergency equipment / supplies if needed.

8. Request work assistance if needed.

9. Contact Midwest Energy Company as to loss of power **(EMERGENCY NUMBER OF 800-222-3121).**

# **Section IV. Mutual Aid Agreement**

1. Verbal cooperative arrangement for water supply including City of Colby, City of Goodland or others as offered and working with the Thomas County Emergency Preparedness Personnel to help coordinate an effective and efficient process. Their offices will assist the City of Brewster in supplying potable water until our system is safely secured and on line again.
2. Verbal cooperative arrangements for water and wastewater repair parts and fitting have been made with neighboring water districts and cities if needed.

C. Mutual Aid Agreements are being drafted currently.

# **Section V. Inventory of Emergency Equipment Available**

1. **City owned equipment:**

 1. 1988 Ford Firetruck (Including Sherman County Rural equipment stored in Brewster)

 2. 5205 JD tractor, loader and small backhoe attachment.

 3. Retrieval winch assembly with Fall protection and harness

 4. Firefighting equipment and personnel gear

 5. Power generators: portable unit with 5,000 watt and 15,000 watt (Fire Station)

 6. 4” trash pump, 3” trash pump

 7. Grader 1983 A-500 Gallion

 8. A500 Gallion Grader

 9. 2012 Peterbilt truck with 20 yd Heil trash compactor box with a dumpster

 lift

### **Locally owned equipment and supplies:**

 1. Payloaders (Ag Sun LLC, Carpenter Cattle Co.)

 2. West Hale Township (Grader and loader tractor)

 3. Water supply tanks and delivery trucks (Frontier Ag and ADM elevators)

 4. Portable PTO driven and gas powered generators (farmers)

 5. Irrigation water wells (Farmers)

### **Equipment available through the State of Kansas**

1. Chlorinators (through KDHE and KRWA)

2. Federally owned units such as portable filter plants, portable storage tanks, etc. (through Bureau of Water Supply) and National Guard.

**Section VI. Vulnerability of System (Disaster Response)**

### **Drought- Water Shortage-As determined by the Mayor and or City Council**

1. The City’s Ordinance will go into effect regulating the non-essential use of water during an emergency upon authorization from the Mayor and or Council.

2. Public and media notification of water conservation will be relayed.

 3. Attempt to obtain water from, County Emergency Preparedness.

### **Accidental Spills or Contamination**

5. Mayor or Public official shall contact 911.

6. Mayor or Public official will assess the situation and notify KDHE, Regional EPA Office, or Office of Emergency Preparedness of extent of damage.

7. Establish communications through the Thomas County Sheriff’s Office, fire, news media, and general public.

8. The City Superintendent or designated official shall make sure that all sources of uncontaminated water and work to ensure that the potable water storages are full.

9. When or if hazardous substances contaminate the water supply at the well location, the Superintendent or designee shall stop raw water from being pumped from that location until review and secured.

10. Utilize if possible the 50,000 gallon storage tank supply.

11. Upon direction of Mayor, the City shall purchase bottled water for consumption or provide water from alternate source to the public.

12. Transport water into City from another source if needed.

### **Treatment Plant and Auxiliary Power**

13. Power outage due to natural or man-made disaster.

a. The City will utilize a generator and restore electricity to water and wastewater systems as needed.

b. The City will ascertain from the Midwest Energy officials when power will be restored.

14. Excessive damage to City and Buildings

a. City Mayor, council or appointed agent will assess damages and establish communication with news media and general public.

b. The City’s ordinance will go into effect regulating the non-essential use of water during an emergency upon recommendation by the licensed water operator and authorization from the Mayor or designe .

c. Upon direction of Mayor, the City Superintendent will notify KDHE and Bureau of Water of any anticipated needs.

d. The City Superintendent or officials will isolate distribution system and utilize water storage.

e. The Mayor, will authorize a work force to repair damages to bring plant or plants back on line.

### **Distribution System**

15. Transmission Main Damage

a. Isolate main and repair.

16. Storage Tank Damage

a. The City’s Ordinance will go into effect regulating the non-essential use of water during an emergency upon authorization from the Mayor, council or Superintendent, if needed.

b. Isolate tank by closing valve at bottom of tank.

c. Place needed pressure gauges and relief valves on hydrants for wasting in order to maintain a constant pressure.

d. Contact tower Maintenance Company. Utility Service Contractors/SUEZ from Pittsburg, Ks.

e. We have installed a new submersible water supply west of Brewster ¾ of a mile on the north side of Manchester Road.

f. As of October 2020 we have a new 30,000 gallon in ground storage tank to give us additional water supplies in event of a serious catastophy if it should happen.

g. With the new supply storage we will have a backup generator to further keep our water supply on line (not yet purchased).

### **Terrorist Threats**

17. Notify Operator and Sheriffs office of threat and coordinate with civil defense personnel to provide protection at POE, booster station, and storage tank.

### **Radioactive Fallout**

18. Contact Office of Emergency Preparedness for information as to the possibilities of contamination to the system.

19. The City’s ordinance will go into effect regulating the non-essential use of water during an emergency upon authorization from the Mayor, council or Superintendent, if needed.

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20. Utilize stored water until system is okay for use.

# **Section VII. Water Rationing**

1. Refer to City Ordinance in Article 4 Section15-401 in the Water Conservation section.

**Community Water Requirements for Water During Emergency Condition:**

**STAGE 1:** Population 288 x 5 Gallons per capita per day = 1440 gallons per day.

 (Potable water for human consumption-drinking and cooking only)

**STAGE 2**: Population 288 x 25 Gallons per capita per day = 7200 gallons per day.

 (Potable water for human consumption and general sanitation only)

**STAGE 3:** Population 288 x 40 Gallons per capita per day = 11520 gallons per day. (Increased usage for human consumption, general sanitation plus reserves for fire defense) **FIRE RESERVES NEEDED: 25,000 gallons**.

**STAGE 4:** Conditions near normal. Usage is relative to the PWS system production capacity.

**Section VIII. Emergency Contacts**

### **City Contacts**

* **MAYOR Rex Jamison 785-694-8114 mobile**
* **City Superintendent Mike Schultz 785-462-1447 mobile**
* **City Clerk Daryl Ann Jorgensen 785-694-2268 home**
* **City Superintendent Office 785-694-2205**

 **Fax 785-694-2811**

### **Emergency Services**

* **Thomas County Sheriff 785-460-4570 or 911**
* **Thomas County EMT 911**
* **Thomas County Emergency 785-460-4516**

 **(Management office)**

* **Thomas County Health Dept. 785-460-4596**
* **Thomas County Highway Dept. 785-460-4562**

### **Federal and State Agencies**

**Kansas Department Health & Environment 785-625-5663**

**NW District Office- Hays**

**Kansas Department Health & Environment 785-296-5503**

**Public Water Supply Section- Topeka**

**Kansas Adjutant General Department 785-274-1409**

**Division of Emergency Management- Topeka**

**Environmental Protection Agency 913-551-7423**

**Region 7- Kansas City, KS**

**Kansas Rural Water Association 785-336-3760**

**Homeland Security 1-800-237-3239**

### **Services:**

* Communications - S&T Telephone Cooperative 785-694-2256
* Fuel – Frontier Ag 785-694-2281, Brewster LLC 785-462-1447
* Repair Mechanic – Tom Aschennbrenner 785-694-2213
* Food –
* Housing –
* Health –
* Lumber

### **Media**

* KXXX / KQLS radio Colby, Ks. 785-462-3305
* Colby Free Press (Official newspaper) 785-462-3963

# Section IX. Annual Review

Annual Review Sign Off Sheet:

It shall be required that this policy be reviewed annually by the City of Brewster Mayor and City Council and City Superintendent.

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| **Date Reviewed** | **Signature of Chairman** | **Signature of Operator** |
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| **Date** | **Signature** | **Position** |
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