District Profile

Xenia Rural Water District

Dallas County
Hazard Mitigation Plan 2023

Local Planning Team

Table XRW.1: Xenia Rural Water District Local Planning Team

Name	Title	Jurisdiction
Corey Iben	HR & Administration Manager	Xenia Rural Water District

Location and Geography

Xenia Rural Water District supplies water to the Cities of Bouton, Linden, and Minburn, as well as the majority of rural Dallas County. Xenia was established in 1977, with water service beginning in 1982. Xenia provides potable water service to residents of Dallas County that are not served by a municipal water service. There are approximately 3,700 people served.

Capability Assessment

Due to the unique structure of water districts, the typical capability assessment table was not used. The following table summarizes the district's overall capabilities. Xenia Rural Water will continue to utilize existing relationships with local, county, state, and federal agencies in the implementation of mitigation projects.

Table XRW.2: Overall Capability

Overall Capability	Limited/Moderate/High
Financial resources needed to implement mitigation projects	Moderate
Staff/expertise to implement projects	Limited
Public support to implement projects	Limited
Time to devote to hazard mitigation	Moderate

Future Development Trends

In the last five years, Xenia has added service to rural subdivisions and subdivisions within the City of Adel. Additional internal growth is planned for the next five years. There are no plans on any new elevated storage currently. If growth does warrant, new storage may be added.

Critical Infrastructure

Xenia Rural Water District owns a water treatment plant located at 26725 150th St, Woodward. Xenia's business office is located at 23998 141st St., Bouton.

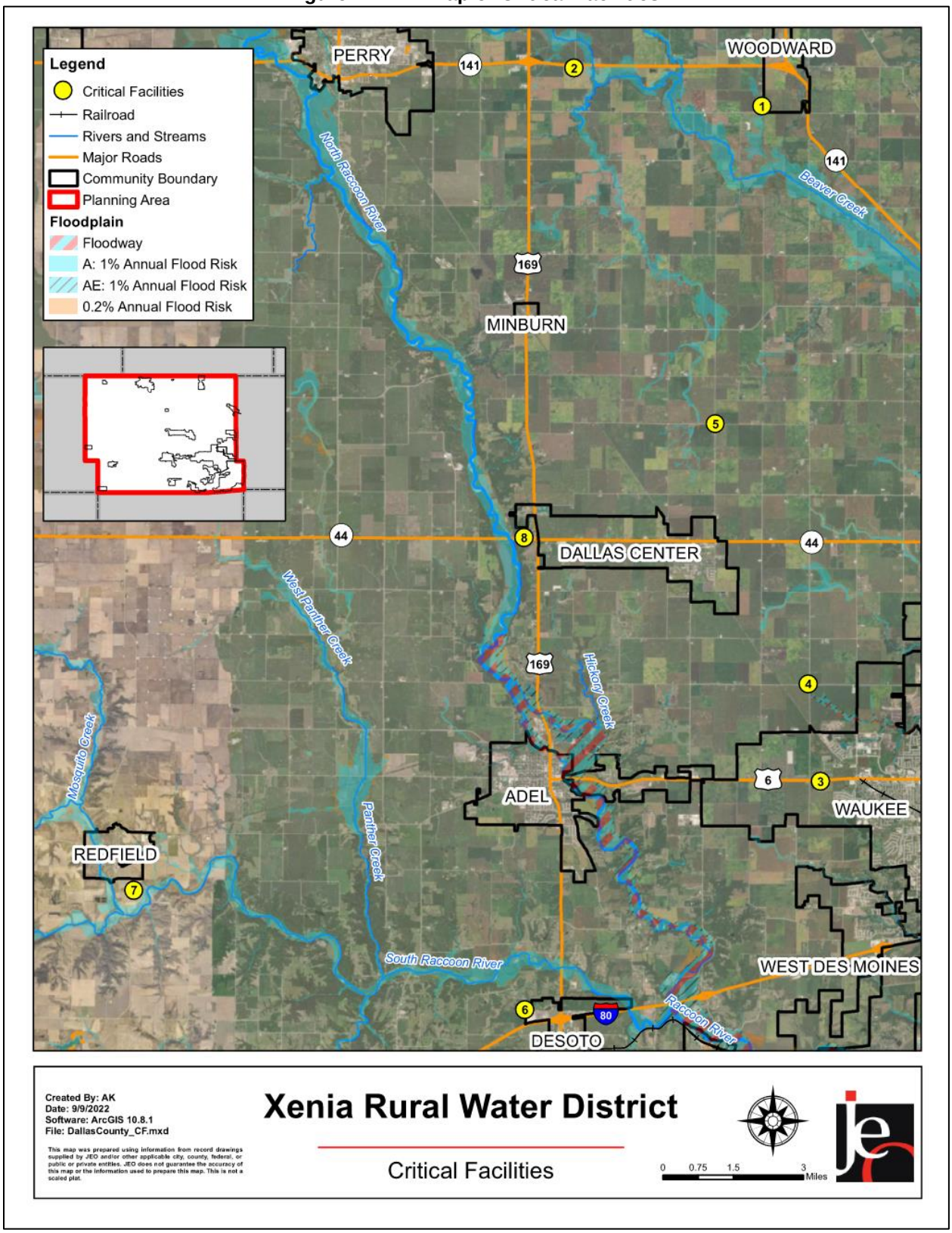
Critical Facilities

The local planning team identified critical facilities that are vital for disaster response, public shelter, and essential for returning the jurisdiction's functions to normal during and after a disaster per the FEMA Community Lifelines guidance. Critical facilities were identified during the original planning process and updated by the local planning team as part of this plan update. The following table and figure provide a summary of the critical facilities for the jurisdiction.

Table XRW.3: Critical Facilities

CF #	Name	Mass Care (Y/N)	Generator (Y/N)	Floodplain (Y/N)
1	Woodward Water Treatment Plant	N	Y	Y (1%)
2	Office	N	Y	N
3	West Hickman Pump Station	N	Y	N
4	Waukee Pump Station	N	Y	N
5	Dallas Center Pump Station	N	N	N
6	De Soto Pump Station	N	Y	N
7	Dexter Pump Station	N	Y	N
8	Hwy 44 Pump Station	N	N	N

Figure XRW.1: Map of Critical Facilities



Governance

Xenia Rural Water District is governed by a Board of Directors consisting of seven members. Revenue is generated through water sales. Positions within the district include:

- General Manager
- HR & Administration Manager
- Controller
- Distribution Manager
- Supply & Treatment Manager
- Water Technicians
- GIS Technician
- Mechanic
- Construction Operators
- Treatment Plant Operators
- Customer Service Representatives
- Meter Reader
- Custodian

Plan Integration

Xenia Water District has an emergency response plan that covers their hazard mitigation plan. This plan fully all remote sites. Current protective measures, redundancies, and issue correction procedures are outlined within the plan.

Hazard Prioritization

The hazards discussed in detail below were selected by the local planning team from the county hazard list as relevant hazards for the district. The local planning team prioritized the selected hazards based on historical hazard occurrences, potential impacts, and the district's capabilities. For more information regarding regional hazards, please see *Section Four: Risk Assessment*.

Human Infectious Diseases

The major concern associated with this hazard is if there is an outbreak, such as Covid, it could impact personnel staffing for the district, thereby affecting its ability to operate the water system effectively. The water district has not experienced any large outbreaks within the organization. However, with only 28 staff members, any significant outbreak that results in a large number of employees being unable to work could cause a major problem for the district.

Infrastructure Failure

The local planning team identified this hazard of concern due to the possibility of damage or failure to district facilities. Infrastructure failure could cause interruptions of service to the district's members. According to the district's planning team, Xenia experienced a water main break that caused 20 homes and businesses to be without water in June of 2018. The main break was caused by the erosion of the banks of the river due to flooding along the Raccoon River north of Adel that cause the main to pull apart. Temporary piping was installed to restore service until the water line could be replaced. After floodwaters receded, the temporary pipes were replaced with new permanent pipe and the total cost of the repair was $19,000. Depending on the area the main break occurred, the amount of people impacted could have increased. To avoid infrastructure failure, the erosion of the river and stream banks throughout the district are routinely checked to ensure the pipeline is not exposed or in danger of becoming exposed. If the depth of the pipe

becomes shallow, the water lines are re-bored and placed at a proper depth to avoid future risks or impacts to the lines.

Severe Winter Storms
Severe winter storms are a regular part of the climate and weather for the region. According to the NCEI, there were 79 winter storm events in Dallas County from 1996 to 2021. Severe winter storms include blizzards, ice accumulation, heavy snow, and winter storms. These storms can cause power outages during bitterly cold temperatures, road closures, and economic impacts. Severe storms can take out power services, impacting the treatment plant and pumping stations. Most sites have onsite backup power generators, and some sites are set up for portable units. Severe weather can also impact personnel's ability to access these sites. Over the past few years, the water district has not experienced any impacts from a severe winter storm that resulted in financial impacts to their services. Xenia Water District has a portable generator that can be taken to sites that lose power during a storm. The larger and more important sites have onsite backup generators in place. Actions have been taken to reduce future risks and impacts from water storms.

Mitigation Strategy

New Mitigation and Strategic Actions

Mitigation Action	**Backup Generators**
Description	Provide backup generators where needed.
Hazard(s)	All hazards
Estimated Cost	$75,000+
Funding	General Budget
Timeline	2-5 years
Priority	Medium
Lead Agency	Xenia Rural Water District
Status	Not started

Mitigation Action	**Bank Stabilization**
Description	Stabilize banks along streams and rivers; this may include, but is not limited to: reducing bank slope, addition of riprap, installation of erosion control materials/fabrics
Hazard(s)	Infrastructure Failure, Flooding
Estimated Cost	$50,000
Funding	General Budget
Timeline	2-5 years
Priority	Medium
Lead Agency	Xenia Rural Water District
Status	Not started

Plan Maintenance

Hazard Mitigation Plans should be living documents and updated regularly to reflect changes in hazard events, priorities, and mitigation actions. These updates are encouraged to occur after every major disaster event, alongside community planning documents (e.g., annual budgets and Capital Improvement Plans), during the fall before the HMA grant cycle begins, and/or prior to other funding opportunity cycles begin, including CDBG, Water Sustainability Fund, Revolving State Fund, or other identified funding mechanisms.

The water district's planning team is responsible for reviewing and updating this planning profile as changes can occur before or after a major event. The plan will be reviewed bi-annually and as needed.