

Illinois Emergency Operations Plan

ESF 3 – Public Works and Engineering

Appendix X-2 Water and Wastewater Management

Illinois Emergency Management Agency and
Office of Homeland Security

September 23, 2026



Illinois Emergency Management Agency
and Office of Homeland Security



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 State of Illinois Managed Plan Emergency Support Function (ESF) # 3 Appendix X-2 Water and Wastewater Management		
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State ESF - # 3 Coordinator	Support Agencies & Organizations
Illinois Department of Transportation (IDOT)	Illinois Department of Agriculture (IDOA) Illinois Department of Natural Resources (IDNR) Illinois Department of Public Health (IDPH) Illinois Emergency Management Agency & Office of Homeland Security (IEMA-OHS) Illinois Public Works Mutual Aid Network (IPWMAN) Illinois Water/Wastewater Agency Response Network (ILWARN)
Primary State Agencies & Organizations	
Illinois Environmental Protection Agency (IEPA)	
Federal ESF - # 3 Coordinator	
Department of Defense (DOD)	



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Record of Changes

When changes are made to this document, the following procedures will be followed:

1. Changes will be issued by the Inter-Agency Strategic Planning Cell at IEMA-OHS and transmitted to agencies, personnel, and other designees specified by the IEMA-OHS Director or designee via electronic means.
2. When a change is made, an entry will be made in the following log:

CHANGE NUMBER	DATE ENTERED	PAGES OR SECTIONS CHANGED	ENTERED BY
1	September 2025	Biannual Review	Glenn Smith



1. Introduction

1.1. Purpose

- 1.1.1. To provide strategic and operational guidance and coordinate state technical assistance and support to Authorities Having Jurisdiction (AHJ) for the purpose of ensuring the viability of potable and wastewater infrastructure.

1.2. Scope

- 1.2.1. This annex addresses state support to potable and wastewater infrastructure following a natural, human-caused, or technological disaster, to include:
 - 1.2.1.1. Situational awareness of the condition of potable and wastewater infrastructure and availability of supplies during and after a disaster.
 - 1.2.1.2. Compilation and dissemination of situational reports.
 - 1.2.1.3. Identification of the need for, issuance, and monitoring of water use advisories, including boil orders.
 - 1.2.1.4. Public works support water supply and wastewater infrastructure, including the provision of pumps, generators, etc.
 - 1.2.1.5. Identification of the need for and technical support of AHJs in the provision of bulk distribution of potable water and treatment devices.
 - 1.2.1.6. Testing of public and private potable water infrastructure.
- 1.2.2. For this annex, water and wastewater infrastructure will include treatment facilities, distribution systems, and collection systems.
- 1.2.3. This annex does not address:
 - 1.2.3.1. Water-borne illness; see Annex 8, Public Health, Healthcare, EMS, and Behavioral Health Services.
 - 1.2.3.2. Hazardous material incidents affecting water and wastewater infrastructure; see ESF-10, Oil and Hazardous Materials Response.
- 1.2.4. Operational considerations for the bulk distribution of potable water and treatment devices; see ESF-6 X-3, Distribution of Emergency Supplies.



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- 1.2.5. The provision of portable sanitation systems; see ESF-8, Public Health, Healthcare, EMS, and Behavioral Health Services.

1.3. Policy

- 1.3.1. IEPA will maintain an oversight and technical assistance role in all known situations of contamination of water and wastewater infrastructure.
- 1.3.2. Procedures for utilization, control, and use of state-activated resources will incorporate operational priorities that include, but are not limited to:
- 1.3.2.1. Protection of life.
 - 1.3.2.2. Public health and safety.
 - 1.3.2.3. Property protection.
 - 1.3.2.4. Environmental protection.
 - 1.3.2.5. Restoration of essential utilities.
 - 1.3.2.6. Restoration of essential program functions.
 - 1.3.2.7. Coordination as appropriate.
- 1.3.3. To the extent possible, implementation of prevention, protection, response, and recovery processes will be consistent with federal and industry guidance.
- 1.3.4. Implementation of this annex will not supersede federal laws, rules, and regulations.

1.4. Situation

- 1.4.1. A disaster has occurred, resulting in the disruption of water and/or wastewater infrastructure.

1.5. Assumptions

- 1.5.1. Local Authorities Having Jurisdiction (AHJ) or private sector entities are contacting IEMA-OHS, IEPA, or IDPH for state support and/or restoration of water and wastewater infrastructure.



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- 1.5.2. Sampling, monitoring, inspection, and laboratory analysis of water and wastewater infrastructure are required.
- 1.5.3. Disruption of water and wastewater infrastructure will result in the distribution of contaminated water.
- 1.5.4. Individuals are contacting the AHJ for support and/or restoration of water and wastewater infrastructure.
- 1.5.5. Disruption of privately held and/or individually owned water infrastructure will occur without the knowledge of the state.
- 1.5.6. Disruption of water and wastewater infrastructure will result in the need for coordinated mass care operations.
- 1.5.7. Bypass of sanitary treatment facilities will occur.
- 1.5.8. Disruptions to water and wastewater infrastructure will require evaluation and monitoring to determine:
 - 1.5.8.1. Effects on public and private water supplies.
 - 1.5.8.2. Effects on the environment.
 - 1.5.8.3. Necessity of bulk distribution of potable water.

2. Concept of Operations

2.1. General

- 2.1.1. State agencies will assess the hazards or potential hazards and report such assessments to the SEOC.
- 2.1.2. The SEOC will coordinate the integration of state agencies, private sector resources, and non-governmental organizations into water and wastewater management operations.
- 2.1.3. When local and private sector resources are capable of coordinating and managing restoration efforts, the SEOC will identify the need for and provide state technical assistance and laboratory analysis.



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- 2.1.4. The declaration of a boil order is the responsibility of the local AHJ. Any communication with the public must be clear and accessible, regardless of any physical, mobility, visual, hearing, cognitive, or financial needs, abilities, or impairments, and available by a variety of methods.
- 2.1.5. When private sector resources can respond to the disruption of water and wastewater infrastructure, the state will provide technical support to infrastructure operators.
- 2.1.6. Verification that a disruption to water and wastewater infrastructure is resolved will be required before a return to full or incremental operations.

2.2. Notification, Alert, and Warning (NAW)

- 2.2.1. Notification of state agencies and organizations will be carried out in accordance with ESF – 2 Appendix X-1, Notification, Alert, and Warning.
- 2.2.2. Primary and support agencies are responsible for internal and support partner notification.
- 2.2.3. For facilities regulated by the state, release notifications will be carried out in accordance with local, state, and federal laws, rules, regulations, policies, and procedures.
- 2.2.4. Primary and support agency SEOC Representatives will identify situations affecting environmental safety.

2.3. Activation

- 2.3.1. The SEOC Management and Coordination SOP will be used to determine staffing levels necessary for response and recovery to water and wastewater infrastructure disruption.

2.4. Communications

- 2.4.1. Communications throughout response and recovery will be conducted in accordance with standard operating procedures and managed using established procedures, processes, and policies outlined in ESF – 2, Communications.
- 2.4.2. Communications will be conducted in a NIMS-compliant manner utilizing clear text and frequencies coordinated with the SEOC.



2.5. Resource Management

- 2.5.1. Resource management and logistics will be carried out in accordance with ESF – 7 Resource Management and Logistics.
- 2.5.2. Resource management includes mutual aid and assistance agreements, the use of federal and state teams, and resource mobilization protocols.

2.6. Reporting Requirements

- 2.6.1. Information, intelligence, and situation reporting will be conducted in accordance with SEOC Management and coordinating SOPs.
- 2.6.2. Reporting requirements will be coordinated and managed through each agency having enabling authority in accordance with state and federal laws, rules, regulations, policies, and procedures.
- 2.6.3. Reporting requirements will be compliant with the Illinois Administrative Code.

2.7. Organization

2.7.1. Direction and Control

- 2.7.1.1. State agencies and external organizations retain operational control of water and wastewater operational resources.
- 2.7.1.2. The Governor, or designee, has the authority to exercise overall coordination of resources belonging to the state.
- 2.7.1.3. The SEOC is the single point of coordination for state support of water and wastewater operations.
- 2.7.1.4. The SEOC Manager, or designee, may coordinate the use of county or local jurisdiction resources assigned missions and tasking for water and wastewater operations when so authorized or requested.
- 2.7.1.5. The SEOC Manager, or designees, will coordinate with local, state, federal, and private organizations in developing water and wastewater operations plans and processes.

2.7.2. Coordinating Elements



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- 2.7.2.1. State Unified Area Command (SUAC) and State Area Command (SAC) elements may be deployed by the SEOC to coordinate information and resource requirements for operations.
- 2.7.2.2. Coordination between private sector organizations and the state will be maintained through the SEOC and the Business Emergency Operations Center (BEOC).
- 2.7.2.3. The SEOC Private Sector Representative will coordinate the inclusion of the Private Illinois Water/Wastewater Agency Response Network resources and disaster intelligence into state water and wastewater operations.

2.7.3. Federal Coordination

- 2.7.3.1. Under a Presidential Declaration of a major disaster or emergency, IEMA-OHS will coordinate the inclusion of federal assets into the state's water and wastewater operations.
- 2.7.3.2. Federal agencies may investigate or initiate a response to a water and wastewater incident without a state request or state concurrence.
- 2.7.3.3. The Federal On-Scene Coordinator (OSC) becomes the principal point of contact for the federal response and is invested with specific authorities and responsibilities defined in law.
- 2.7.3.4. The Federal OSC does not have to be on scene to exercise those authorities or act on those responsibilities.
- 2.7.3.5. State agencies may maintain an on-scene presence during a federalized response to assist the federal responder(s), to provide a representative function for state-managed activities, or to represent the state's interests.
- 2.7.3.6. Requests for federal assistance will be initiated under the authority of the National Contingency Plan and in accordance with the following:
- 2.7.3.7. The Integrated Regional Contingency Plan for certain oil spills and for hazardous substances, and
- 2.7.3.8. The Area Contingency Plan for spills of oil to surface waters.



- 2.7.3.9. SEOC Agency Representatives, state agencies, boards, and commissions will coordinate with federal counterparts in accordance with the enabling authority.

3. Roles and Responsibilities

3.1. State ESF Coordinator

3.1.1. Illinois Department of Transportation (IDOT)

- 3.1.1.1. Coordinates the utilization of required ESF-3 support to execute missions presented by the SEOC manager.
- 3.1.1.2. Coordinates, integrates, and manages overall State efforts for ESF 3 – Public Works and Engineering.
- 3.1.1.3. Manages and updates resource availability for ESF 3 – Public Works and Engineering.
- 3.1.1.4. Assists in planning during activations and updates to the overall ESF plan.

3.2. Primary State Agency/Organization

3.2.1. Illinois Environmental Protection Agency (IEPA)

- 3.2.1.1. Provide technical assistance on operational capabilities and assessing damage to public water supply systems and wastewater treatment facilities.
- 3.2.1.2. Provide technical assistance in assessing and evaluating threats to public health, public welfare, and the environment, including overall minor disruptions that may cause a disproportionately significant impact on specific users, resulting from damage or loss of critical infrastructure, including:
 - 3.2.1.2.1. Public and privately owned water supply systems.
 - 3.2.1.2.2. Publicly and privately owned sewage treatment systems.
 - 3.2.1.2.3. Threats of effects on surface and ground waters.



- 3.2.1.3. Identify the need for and coordinate the inclusion of specialized capabilities available through the SEOC as appropriate.
- 3.2.1.4. Coordinate laboratory testing to determine conventional pollutants, drinking water contaminants, and hazardous substances.
- 3.2.1.5. Provide situational awareness on the condition of affected public and privately-owned water supply systems and sewage systems.
- 3.2.1.6. Coordinate and provide public information, crisis communications, and rumor control with the SEOC, ensuring all public communications are clear and accessible regardless of physical, mobility, visual, hearing, cognitive, or financial needs, abilities, or impairments.

3.3. Support State Agencies/Organizations

3.3.1. Illinois Department of Natural Resources (IDNR)

- 3.3.1.1. Provide resources to conduct law enforcement patrols, damage assessment of water control structures, and other emergency protective measures.
- 3.3.1.2. Provide engineers and technical staff to provide damage assessment assistance for dams that are under the IDNR-Office of Water Resources authority, levees, and other water control structures during the emergency response phase.

3.3.2. Illinois Department of Public Health (IDPH)

- 3.3.2.1. Provide technical assistance and guidance on sample collection and testing of private water wells for bacterial contaminants, ensuring outreach and resources are accessible to rural, underserved, and limited-English proficiency communities.
- 3.3.2.2. Provide technical support for sampling of non-community public water supplies and other IDPH-regulated facilities, prioritizing the needs of at-risk populations, including those in healthcare, childcare, and long-term care settings.
- 3.3.2.3. Provide technical guidance on treatment and processes for emergency hauling, handling, and disinfection of drinking water, incorporating



accessibility considerations for individuals with medical dependencies on clean water.

3.3.2.4. Provide environmental health technical assistance and support, including but not limited to:

3.3.2.4.1. Interpreting environmental data with a health-based focus, ensuring findings are communicated clearly to all community members.

3.3.2.4.2. Providing accessible guidance on preventing or reducing hazardous exposures, using multiple formats and languages to reach diverse populations.

3.3.2.5. Coordinate with the SEOC to provide public information, crisis communications, and rumor control, ensuring messaging is timely, culturally competent, and accessible to individuals with disabilities, limited English proficiency, and other communication needs.

3.3.3. Illinois Emergency Management Agency & Office of Homeland Security (IEMA-OHS)

3.3.3.1. Coordinate with county emergency management agency officials, affected local governments, and private sector organizations for the collection, receipt, analysis, and dissemination of situational awareness and disaster intelligence information.

3.3.3.2. Assist in determining impacts resulting from damage or loss of critical infrastructure, including minor impacts that disproportionately impact those with physical, mobility, visual, hearing, cognitive, or financial needs, abilities, or impairments.

3.3.3.3. Develop and maintain maps, visual aids, and displays.

3.3.3.4. Coordinate and provide public information, crisis communications, and rumor control, ensuring that all public communications are clear and accessible regardless of physical, mobility, visual, hearing, cognitive, or financial needs, abilities, or impairments.



- 3.3.3.5. Coordinate the inclusion of mutual-aid resources required for water and wastewater response and recovery in coordination with IEPA.

3.3.4. Business Emergency Operations Center (BEOC)

- 3.3.4.1. Coordinate the acquisition of private sector resources that may be necessary to support water and wastewater operations.
- 3.3.4.2. Coordinate activities of the state with private utility owners.

3.3.5. Illinois Department of Agriculture (IDOA)

- 3.3.5.1. Assist with the contracting/procurement of personnel and equipment to assist in emergency removal of debris, demolition, temporary protection of roads and bridges, temporary protection of essential public facilities, water supply, and sanitation.
- 3.3.5.2. Coordinate and provide public information, crisis communications, and rumor control, ensuring that all messaging is accessible, culturally and linguistically appropriate, and inclusive of individuals with access and functional needs.

3.3.6. Illinois Public Works Mutual Aid Network (IPWMAN)

- 3.3.6.1. Coordinate directly with public utilities through existing mutual aid agreements.
- 3.3.6.2. Provide resources to supplement water and wastewater operations throughout response and short-, intermediate-, and long-term recovery with consideration of potential medical, functional, or other additional needs or requirements of the public.
- 3.3.6.3. Provide information on resource availability and resources deployed as requested.

3.3.7. Illinois Water/Wastewater Agency Response Network (ILWARN)

- 3.3.7.1. Coordinate directly with public and private utilities through existing mutual aid agreements.



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- 3.3.7.2. Provide resources to supplement water and wastewater operations throughout response and short-, intermediate-, and long-term recovery with consideration of potential medical, functional, or other additional needs or requirements of the public.
- 3.3.7.3. Coordinate mutual aid operations with the SEOC through the SEOC Private Sector LNO.
- 3.3.7.4. Provide information on resource availability and resources deployed as requested.
- 3.3.7.5. Maintain situational awareness of water and wastewater operations through the BEOC.

4. Authorities

- 1. Environmental Toxicology Act (P.A. 84-987) 415 ILCS 75/1 et seq., as amended.
- 2. 29 IL Adm. Code 620, as amended.
- 3. 77 IL Adm. Code 900, as amended.

5. References

- 1. Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. § 5121 et seq., as amended.
- 2. National Response Framework (NRF), as amended.
- 3. National Disaster Recovery Framework (NDRF), as amended.
- 4. Title 35, Tiered Approach to Corrective Action Objectives (TACO), as amended.

6. Acronyms & Definitions

- 1. For all definitions and acronyms addressed in this plan, please refer to the IEOP Base Plan, Appendix X-7 Glossary of Terms.