

# ESF #3 Engineering and Public Works

---

Emergency Support Function Annex  
State of Ohio Emergency Operations Plan



**Ohio Emergency Management Agency**  
2855 West Dublin Granville Road  
Columbus, Ohio 43235

**Mission:**

To coordinate activities to mitigate, prepare for, respond to, and recover from disasters.

**Vision:**

A safer future through effective partnerships committed to saving lives and reducing the impact of disasters.

## Table of Contents

Agency Responsibilities .....	4
Coordinating Agency.....	4
Supporting Agencies .....	4
Purpose, Scope, Situation Overview, and Assumptions .....	4
Purpose .....	4
Scope.....	4
Situation Overview .....	5
Assumptions .....	5
Planning and Response Principles .....	5
Whole Community Integration.....	5
Access and Functional Needs .....	5
Federal-level Government.....	5
State-level Government.....	6
Local-level Government.....	6
Non-Governmental Organizations and Private Entities .....	6
Core Capabilities .....	7
Community Lifelines .....	8
Concept of Operations.....	8
Assignments of Responsibility .....	9
Ohio Department of Natural Resources (Coordinating Agency).....	9
Ohio Adjutant General's Department - Ohio National Guard (Support Agency) .....	9
Ohio Department of Administrative Services (Support Agency).....	10
Ohio Department of Commerce, Division of Industrial Compliance (Support Agency).....	10
Ohio Department of Development (Support Agency).....	10
Ohio Department of Health (Support Agency).....	10
Ohio Department of Rehabilitation and Correction (Support Agency).....	10
Ohio Department of Transportation (Support Agency) .....	10
Ohio Emergency Management Agency (Support Agency) .....	10
Ohio Environmental Protection Agency (Support Agency) .....	11
Ohio Housing Finance Agency (Support Agency) .....	11
Ohio Water/Wastewater Agency Response Network (Support Agency).....	11



Public Utilities Commission of Ohio (Support Agency).....11  
Plan Development and Maintenance .....11



## Agency Responsibilities

### Coordinating Agency

Ohio Department of Natural Resources (ODNR)

### Supporting Agencies

Ohio Adjutant General's Department - Ohio National Guard (OHNG)

Ohio Department of Administrative Service (DAS)

Ohio Department of Commerce, Division of Industrial Compliance (DOC-IC)

Ohio Department of Development (Development)

Ohio Department of Health (ODH)

Ohio Department of Rehabilitation and Correction (ODRC)

Ohio Department of Transportation (ODOT)

Ohio Emergency Management Agency (Ohio EMA)

Ohio Environmental Protection Agency (Ohio EPA)

Ohio Housing Finance Agency (OHFA)

Ohio Water/Wastewater Agency Response Network (OHWARN)

Public Utilities Commission of Ohio (PUCO)

## Purpose, Scope, Situation Overview, and Assumptions

### Purpose

- A. Emergency Support Function (ESF) #3 is composed of a grouping of state agencies that support response and recovery activities for state and local public works/engineering following an emergency. There is no single state organization that has oversight over all varieties of public works/engineering assistance that may be required following a disaster.
- B. In general, the Ohio Department of Natural Resources (ODNR) addresses most engineering concerns that are not related to transportation systems; therefore, ODNR serves as the coordinating agency for this function. All support agencies for ESF #3 may be required to report individually on their emergency missions when activated in the Ohio Emergency Operations Center (State EOC), the disaster field office (DFO), or at the site of the disaster.

### Scope

- A. ESF #3 agencies have the capabilities to be involved in the following emergency activities that assist local governments in response and recovery efforts, to include:
  - 1. Damage assessment/substantial damage determination and field inspections.
  - 2. Provision of technical advice.
  - 3. Demolition and stabilization.
  - 4. Infrastructure inspections.
  - 5. Infrastructure evaluations.
  - 6. Repair and other response and recovery contracting.
  - 7. Temporary / permanent construction.
  - 8. Emergency repairs.
  - 9. Debris management.



## Situation Overview

- A. Disasters cause property damage to homes, public buildings, and other facilities. Those structures may require reinforcement, demolition, or isolation to ensure safety. Public utilities may be partially or fully inoperable following disasters. Refer to ESF #12 for energy utility information, ESF #2 for communications information, and ESF #1 for engineering responsibilities related to transportation.
- B. Equipment in the immediate disaster area may be damaged or inaccessible. State government may have to deploy resources from outside the affected area in order to ensure a quick, effective response.

## Assumptions

- A. ESF #3 may prioritize state emergency missions by addressing life-saving and human health issues first.
- B. Rapid damage assessment of the disaster area may be necessary to determine potential workload.
- C. Disposal of materials from debris clearance and demolition activities may be strictly in accordance with applicable rules and regulations, unless emergency environmental waivers are granted by the Director of the Ohio Environmental Protection Agency (Ohio EPA).
- D. All state and local agency requirements remain in effect unless revised by the appropriate authorities in accordance with applicable rules and regulations. Consumer protection programs may be in place to protect citizens.

## Planning and Response Principles

### Whole Community Integration

- A. This section describes how ESF #3 relates to other elements of the whole community. “Whole Community” preparedness not only represents the community, but also involves the community and engages the full capacity of the private and non-profit sectors, including businesses, faith-based and advocacy organizations, and the general public in conjunction with government partners.

### Access and Functional Needs

- A. A critical component of “Whole Community” is the inclusion of community members with Access and Functional Needs (AFN) and disabilities in planning efforts. While the term “Access and Functional Needs” may include people with disabilities, it also includes people with limited English language proficiency, diverse cultures, children and the elderly, and those who rely on others for transportation (including those who cannot self-evacuate), among others.

### Federal-level Government

- A. Federal ESF #3 may be activated for emergencies in Ohio requiring federal assistance. The federal ESF #3 team is composed of the following organizations:
  1. Department of Defense, U.S. Army Corps of Engineers (Coordinator)
  2. Department of Homeland Security/Federal Emergency Management Agency (Primary)
  3. U.S. Department of Agriculture



4. U.S. Department of Commerce
5. U.S. Department of Defense
6. U.S. Department of Energy
7. U.S. Department of Health and Human Services
8. U.S. Department of Homeland Security
9. U.S. Department of the Interior
10. U.S. Department of Labor
11. U.S. Department of State
12. U.S. Department of Transportation
13. U.S. Department of Veterans Affairs
14. U.S. Environmental Protection Agency
15. General Services Administration
16. U.S. Nuclear Regulatory Commission
17. American Red Cross
18. Tennessee Valley Authority
19. Corporation for National and Community Service

### State-level Government

- A. Ohio's state-level ESF #3 agencies will coordinate with the federal ESF #3 team by working with them within the EOC, in the DFO, and by providing them with emergency missions that are beyond the capabilities of ESF #3.
- B. ODNR is the state liaison organization between Ohio and the U.S. Army Corps of Engineers.
- C. The Adjutant General's Department - Ohio National Guard (OHNG) is the state liaison organization between Ohio and National Guard Bureau, U.S. Army North and/or U.S. Northern Command.
- D. ESF #3 organizations will request assistance as needed during emergencies, following emergency management assistance compact (EMAC) request procedures.

### Local-level Government

- A. Local-level emergency requests for state public works/engineering resources and services communicated to the State EOC will be directed to ESF #3 personnel for action.
- B. Local emergency management directors will ensure that local personnel skilled in engineering and public works will be pre-identified and assigned to coordinate with state ESF #3 personnel during emergencies.

### Non-Governmental Organizations and Private Entities

- A. ESF #3 will coordinate with ESF #7 to identify private organizations that may be needed for specific services during emergencies. Coordination and approval will be obtained with appropriate fiscal and executive personnel within each organization and the State EOC/DFO before a commitment to a private provider is made.



## Core Capabilities

This plan directly supports a variety of core capabilities, as identified in the National Preparedness Goal. Core capabilities highlighted in gray are directly applicable to the focused efforts of this plan.

CORE CAPABILITIES	PREVENTION	PROTECTION	MITIGATION	RESPONSE	RECOVERY		
	PLANNING						
	PUBLIC INFORMATION AND WARNING						
	OPERATIONAL COORDINATION						
	INTELLIGENCE AND INFORMATION SHARING		COMMUNITY RESILIENCE		INFRASTRUCTURE SYSTEMS		
	INTERDICTION AND DISRUPTION		LONG TERM VULNERABILITY REDUCTION		CRITICAL TRANSPORTATION	ECONOMIC RECOVERY	
	SCREENING, SEARCH, AND DETECTION		RISK AND DISASTER RESILIENCE ASSESSMENT		ENVIRONMENTAL RESPONSE/ HEALTH AND SAFETY	HEALTH AND SOCIAL SERVICES	
	FORENSICS AND ATTRIBUTION	ACCESS CONTROL AND IDENTITY VERIFICATION		THREATS AND HAZARDS IDENTIFICATION	FATALITY MANAGEMENT SERVICES		HOUSING
		CYBERSECURITY			FIRE MANAGEMENT AND SUPPRESSION		
		PHYSICAL PROTECTIVE MEASURES			LOGISTICS AND SUPPLY CHAIN MANAGEMENT		
RISK MANAGEMENT FOR PROTECTION PROGRAMS AND ACTIVITIES		MASS CARE SERVICES					
SUPPLY CHAIN INTEGRITY AND SECURITY		MASS SEARCH AND RESCUE OPERATIONS					
		ON-SCENE SECURITY, PROTECTION, AND LAW ENFORCEMENT					
		OPERATIONAL COMMUNICATIONS					
		PUBLIC HEALTH, HEALTHCARE, AND EMERGENCY MEDICAL SERVICES					
		SITUATIONAL ASSESSMENT					



## Community Lifelines



ESF #3 contributes to the stabilization of the Safety and Security; Food, Hydration, Shelter; Transportation; and Water Systems lifelines to the community.

## Concept of Operations

- A. The Ohio Emergency Management Agency (Ohio EMA) will notify elements of ESF #3 when public works and engineering capabilities are required for state assessment, response, and recovery activities during emergencies. Full or partial activation of ESF #3 will depend upon the requirements for response and recovery.
- B. Personnel from ESF #3 coordinating and support agencies are prepared to staff the State EOC on a 24-hour basis, and provide personnel and equipment as applicable for emergency response and recovery activities at the disaster site.
- C. Additional public works and engineering services and equipment may be contracted on an emergency basis when required for response and recovery operations.
- D. Close coordination is maintained between ESF #3 agencies during emergencies in order to:
  1. Prioritize response and recovery missions.
  2. Share and update information.
  3. Ensure expedient response and recovery actions.
  4. Avoid redundant activities.
  5. Ensure a unified effort when working with federal, local, and private agencies and organizations.
  6. Provide accurate information to other agencies in the State EOC and at the site of the emergency.
- E. Each ESF #3 agency is responsible for providing logistical support to their personnel and for tracking and maintaining equipment and supplies.
- F. ESF #3 resources may be pre-positioned depending upon the nature of the hazard.
- G. Equipment will receive maintenance and repairs, and be stored in protected locations during response and recovery in order to ensure maximum, safe usage.
- H. ESF #3 will coordinate with ESF #7 - Resource Support and Logistics, and ESF #5 - Information and Planning, when establishing staging areas for public works and engineering personnel, equipment, and supplies. This will ensure that the best sites are identified and established and that site locations, contact numbers, and capabilities are distributed to personnel needing this information.
- I. The Ohio Water/Wastewater Agency Response Network (OHWARN) can provide local public and private water suppliers with access to regionally-based utility-to-utility resources (engineering,





plant operations, and distribution) to assist with the restoration of public and private water supply infrastructure.

- J. If sufficient assistance is not available via in-state sources, further assistance and resources can be accessed through U.S. WARN. These resources can be accessed either through local mutual aid agreements, through direct requests from local EMAs to OHWARN, or through the State EOC.
- K. The Ohio Rural Water Association (Association) provides free or affordable technical assistance and training to communities with less than 10,000 population, with support from the U.S. Department of Agriculture, Ohio EPA, the Ohio Water Development Authority, and their member utilities. The Association can provide free on-site technical assistance to Ohio's rural communities' water and wastewater systems in emergency and non-emergency response situations.
- L. Deactivation of ESF #3 can be a long-term process, extending deep into the recovery phase since public works and engineering projects may require many months of activity. Deactivation will be coordinated between state executives and local officials of ESF #3 agencies.
- M. The OHNG can assist in the provision of utility support operations, to include setting-up and maintaining generators, light sets, water posts, and other engineering tasks to support utility demands at emergency facilities and service locations.

## Assignments of Responsibility

- A. ODNR is the coordinating agency for ESF #3, and will be responsible for working with support agencies to ensure that there is a seamless integration of, and transition between, preparedness, response, and recovery activities. During a State EOC activation where ESF #3 is activated, ODNR will coordinate and report on ESF #3 – related missions and operations.

## Ohio Department of Natural Resources (Coordinating Agency)

- A. Coordinate personnel and equipment for the following public works/engineering emergency activities.
- B. Provide information on state water resources.
- C. Inspect dikes, levies, dams, and related structures.
- D. Coordinate debris removal.
- E. Support emergency access to remote and forested areas.
- F. Coordinate floodplain management operations related to the effects of flooding and water drainage system impacts.
- G. Coordinate with the Ohio Building Officials Association (OBOA) on conducting field assessments of damaged structures for substantial damage determinations.
- H. Serve as the primary liaison between the State of Ohio and the U.S. Army Corps of Engineers.
- I. Coordinate with ESF #3 team members to identify missions for the federal ESF #3 team.

## Ohio Adjutant General's Department - Ohio National Guard (Support Agency)

- A. When a Governor's declaration has been issued, provide general and unique services.
- B. Provide personnel and equipment, as available, for the following public works/engineering emergency activities:
  - 1. Debris removal.



2. Damage assessment.
3. Demolition and/or emergency repairs or stabilization of unsafe public structures.
4. Engineering reconnaissance.
5. Delivery of potable water.
6. Assist with emergency drainage problems.
7. Assist in the provision of utility support operations; including setting-up and maintaining generators, light sets, water posts, and other engineering tasks to support utility demands at emergency facilities and service locations.

### **Ohio Department of Administrative Services (Support Agency)**

- A. Provide technical assistance for inspections, emergency repairs, or demolition of damaged public buildings.

### **Ohio Department of Commerce, Division of Industrial Compliance (Support Agency)**

- A. Provide building inspectors as needed at the site of the emergency.
- B. Provide information to State EOC personnel on industries affected by the disaster.

### **Ohio Department of Development (Support Agency)**

- A. Coordinate with private contractors and identify federal, state, and local programs that can be used to support ESF #3 assessment, response, and recovery operations.

### **Ohio Department of Health (Support Agency)**

- A. Coordinate with Ohio EPA and local agencies to maintain and/or restore sanitation standards for public works facilities in impacted areas.

### **Ohio Department of Rehabilitation and Correction (Support Agency)**

- A. Provide prison work crews to serve as manpower labor for debris removal and other manual labor emergency-related activities.
- B. Provide equipment in the form of backhoes, shovels, wheel barrows, tractors, rakes, power tools, axes, power saws, and other manual labor tools.

### **Ohio Department of Transportation (Support Agency)**

- A. Conduct and/or support debris clearance operations on interstates (IS), U.S. routes (US), and State Routes (SR).
- B. Upon a Governor's declaration, support local debris operations, as available.
- C. Conduct and/or support necessary short-term and long-term repair operations on IS, US and SR transportation routes.
- D. Provide technical recommendations as requested by ESF #3 agencies during emergencies.

### **Ohio Emergency Management Agency (Support Agency)**

- A. Notify elements of ESF #3 when public works and engineering capabilities are required for state assessment, response, and recovery activities during emergencies.
- B. Provide coordination for debris management and long-term recovery operations.



### **Ohio Environmental Protection Agency (Support Agency)**

- A. As needed, inspect, evaluate, and provide assistance to public water works during state-declared emergencies.
- B. Provide regulatory oversight and technical assistance on debris management, including all solid waste (e.g., scrap tires, vegetative or woody debris, general refuse, garbage, home furnishings, etc.), demolition debris, infectious waste, and hazardous waste (household hazardous waste should be managed separately to the extent practical).
- C. Coordinate with the Ohio Department of Health Bureau of Environmental Health & Radiation Protection (ODH BEHRP) – RAD waste management and disposal issues.
- D. Coordinate with ODH and local agencies to assist in the restoration of sanitary conditions through proper management and disposal of sewage and other waste streams.
- E. Support and provide technical assistance to public water supplies and public wastewater works in impacted areas.
- F. Provide technical assistance and support for chemical and petroleum releases or other issues of environmental concern.

### **Ohio Housing Finance Agency (Support Agency)**

- A. Provide technical assistance in support of ESF #3 response and recovery operations.
- B. Provide staff resources through field offices to conduct housing damage assessments.
- C. Provide staff resources for staffing of disaster recovery centers.

### **Ohio Water/Wastewater Agency Response Network (Support Agency)**

- A. Provide and facilitate connections to mutual aid-based resources for response to incidents that impact public and private water and wastewater utilities.
- B. Provide technical and material assistance to public utilities and incident responders.

### **Public Utilities Commission of Ohio (Support Agency)**

- A. Provide emergency coordination for information between public works and the Ohio EOC as needed during emergencies.
- B. Support evaluation and repair of public utilities' systems following state-declared emergencies.

## **Plan Development and Maintenance**

A. This plan will be reviewed subsequent to incident or exercise use, at the request of coordinating or support agencies, but no less often than every four years. Such requests are to be directed to the planner as assigned by the Ohio EMA. Reviews will be conducted by partner representatives with reference to after action reports, exercise data, federal doctrine, and other appropriate laws or regulations. Revisions will be sent through the chain of command for approval and documented in the record of changes table located within this plan. The Ohio EMA planning supervisor and Ohio EMA EOC manager are authorized to approve and notify partners of changes.



Record of Changes				
#	Date	Section	Author	Description
001	2013, 2017, 2018	ESF-3 – Engineering and Public Works.	Ohio EMA Planning Section	This plan was updated to account for a small number of operational and assignment of responsibility changes.
002	2013, 2017	ESF-3, Tab A – Debris Management Plan	Ohio EMA Planning Section	In the update of this plan, changes were made in the Concept of Operations and Assignment of Responsibilities sections. These changes more-accurately reflect how debris response operations are carried out.
003	2014, 2018	ESF-3, Tab B – Water Retention Structure Failure Response Plan	Ohio EMA Planning Section	Minor changes were made to this plan to discuss the history of dam and levee failures in Ohio, to give a better accounting of the causes of dam failures, and to better align the plan’s concepts of operation with the current operating environment.
004	2022 – 2024	All	Christen Swayer-Cunningham	Reformat and revision of all plan elements of the Ohio EOP

