EMERGENCY SUPPORT FUNCTION (ESF) #3 annex – PUBLIC WORKS AND ENGINEERING

**[Insert County Name]**

Emergency Operations Plan (EOP)

ESF Annex

[Date]

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# DISCLAIMER

This template was created by the Indiana Department of Homeland Security (IDHS) to assist Indiana county emergency management agencies (EMAs) and their stakeholders in the development of an Emergency Operations Plan (EOP).

This template provides ***SAMPLE*** language based off the State Emergency Operations Plan, but IDHS has tailored it for a more county-specific approach. Included are charts and diagrams to assist county emergency managers with identifying and documenting their specific needs. This template follows Federal Emergency Management Agency (FEMA) Comprehensive Preparedness Guide (CPG) 101 and National Incident Management System (NIMS) guidance.

This template can be scaled up or down and **modified to follow each county’s unique organizational structure, activation protocol, threat and hazard assessments and current capability and capacity gaps.** This template follows all federal, state and Emergency Management Accreditation Program (EMAP) guidance.

IDHS welcomes feedback on this template. The goal is to provide county stakeholders with best practices and the most comprehensive product for county EMAs and stakeholders in their planning initiatives.

***REMOVE THIS PAGE PRIOR TO PUBLISHING THE COUNTY DOCUMENT***

# PLANNING AGENCIES

Within each Emergency Support Function (ESF) annex, an agency or organization has been given the designation of primary, supporting, non-governmental or local agency based on their authorities, resources and capabilities. The primary agency identifies the appropriate support agencies that fall under this annex. The primary agency collaborates with each entity to determine whether they have the necessary resources, information and capabilities to perform the required tasks and activities within each phase of emergency management. This includes activations in the county Emergency Operations Center (EOC) and impacted areas. Though an agency may be listed as a primary agency, it does not control or manage those agencies identified as supporting agencies. The agencies listed below are members of the Whole Community Planning Team for this annex.

## PRIMARY AGENCY

**[Insert Name of Primary Agency]**

## SUPPORTING AGENCIES

With coordination from **[Insert County Name]**, supporting agencies will strive to build, maintain, and promote a process of effectively preparing for, protecting against, mitigating against, responding to and recovering from the challenges and demands of hazards which could affect our citizens and communities.

|  |  |
| --- | --- |
| **[Insert name of supporting agencies/ departments/ organizations]** |  |
|  |  |
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|  |  |
|  |  |
|  |  |
|  |  |
| Indiana Department of Homeland Security (IDHS) | United States Army Corps of Engineers (USACE) |
| Indiana State Board of Animal Health (BOAH) | National Weather Service (NWS) |
| Indiana Department of Natural Resources (DNR) | Federal Emergency Management Agency (FEMA) |

# PURPOSE, SCOPE, SITUATION AND ASSUMPTIONS

## PURPOSE

The purpose of Emergency Support Function Public Works (ESF-3) is to provide the resources (personnel, services, equipment, facilities, materials and supplies) to meet the overall public works related needs of the county before, during and after emergency or disaster events. Such events may significantly impact infrastructure systems of the county and local jurisdictions. ESF-3 will coordinate with federal, state, tribal, non-governmental, private and volunteer organizations to provide public works and infrastructure support for response and recovery operations. ESF-3 is critical to facilitate the delivery of services, technical assistance, engineering expertise, construction management and other support to prepare for, respond to and/or recover from a disaster or an incident requiring a coordinated response.

## SCOPE

**[Insert County Name]** and the county Emergency Operations Center (EOC) recognize fifteen (15) Emergency Support Functions (ESF). This annex focuses on ESF-3, Public Works and Engineering. The ESF-3 Annex is intended to be utilized in conjunction with the **[Insert County Name]** Emergency Operations Plan (EOP).

ESF-3 acts to meet the needs of local, state, tribal and federal government agencies; non-governmental organizations; private sector partners; and individuals. The success of this effort requires coordination and networking of available and obtainable public works and infrastructure system resources acquired through contract, lease, purchase, mutual aid or otherwise from outside the inventory or control of participating agencies.

Activities within the scope of ESF-3 functions include:

* Collecting information on pre- and post-incident assessments of public works and infrastructure
* Executing emergency contract support for lifesaving and life-sustaining services
* Providing technical assistance to include engineering expertise and construction management
* Providing emergency repair of damaged public infrastructure and critical facilities.

ESF-3 works closely with the recovery team to coordinate the transition from emergency repairs to long-term restoration activities. State government may need to deploy resources from outside the affected area to ensure a quick, effective response.

## SITUATION

ESF-3 may be needed in any of the five (5) phases of emergency management (prevention, protection, mitigation, response and recovery). In the event the county Emergency Management Agency (EMA) Director determines the need for ESF-3 regarding any of the five (5) phases of emergency management, **[Insert Agency Name]** will act as the primary agency. ESF-3 will be responsible for implementing internal Standard Operating Procedures (SOPs) and/or Standard Operating Guides (SOGs) and protocols to ensure adequate staffing and administrative support for field operations, as appropriate and the support of efforts in the EOC. ESF-3 personnel will coordinate the activation and deployment of assets to fulfill specific mission assignments that support essential activities in prevention, protection, mitigation, response and recovery efforts.

### Mission Areas and Core Capabilities

The National Preparedness Goal (NPG) identifies 32 core capabilities that are essential for the execution of the five (5) mission areas of prevention, protection, mitigation, response and recovery. ESF-3 supports the overarching core capabilities of Planning, Operational Coordination and Public Information and Warning, which apply to all mission areas. ESF-3 also supports the core capabilities of Infrastructure Systems, Critical Transportation, Environmental Response/Health and Safety and Logistics and Supply Chain Management. Table 1 describes the core capability actions that ESF-3 most directly supports.

Table . ESF-3 CORE CAPABILITY ACTIONS

|  |  |
| --- | --- |
| **Core Capability** | **ESF #3 – Public works AND ENGINEERING** |
| **PLANNING** | Conduct a systematic process engaging the whole community, as appropriate, in the development of executable strategic, operational and/or community-based approaches to meet defined objectives. |
| **OPERATIONAL COORDINATION** | Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities. |
| **PUBLIC INFORMATION AND WARNING** | Deliver coordinated, prompt, reliable and actionable information to the whole community using clear, consistent, accessible and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard and, as appropriate, the actions being taken and the assistance being made available. |
| **Critical Transportation** | * Provide coordination and response to affect the rapid stabilization and re-establishment of critical waterways, channels and ports. * Clear debris from roads to facilitate response operations. * For incidents involving a blast or explosion associated with a chemical, biological, radiological or nuclear (CBRN) threat agent resulting in a contaminated debris field, support to clear critical transportation routes of CBRN-contaminated debris, during the emergency phase, in consultation with ESF-10. ESF-10 assumes leadership for management. |
| **INFRASTRUCTURE SYSTEMS** | * Prepare for potential public works and engineering requirements. Activities include providing public information, contributing to situational awareness, establishing response teams, leveraging technological tools, training and exercising with partners, establishing private sector contracts and agreements and coordinating with volunteer organizations and other non-governmental partners. * Coordinate and collect information on pre-incident and post-incident assessments of public works and infrastructure. * Execute emergency contract support for lifesaving and life-sustaining services. * Provide emergency repair of damaged public infrastructure and critical facilities. * Support restoration of critical navigation, flood control and other water infrastructure systems, including drinking water and wastewater utilities. * Provide assessment and emergency response support for water, wastewater treatment facilities, levees, dams, buildings, bridges and other infrastructure. * Provide temporary emergency power to critical facilities (e.g., hospitals, water and wastewater treatment and distribution/collection facilities, shelters, fire stations, police stations). * Construct temporary critical public facilities to temporarily replace those destroyed or damaged following a disaster (e.g., schools, local government offices, fire stations, police stations and medical facilities) in coordination with ESF-6. * Assist in the monitoring and stabilization of damaged structures and the demolition of structures designated as immediate hazards to public health and safety. * Provide structural specialist expertise to support inspection of mass care facilities and urban search and rescue operations in coordination with ESF-9. * Manage, monitor and/or provide technical advice in the clearance, removal and disposal of debris from public property and the reestablishment of ground and water routes into impacted areas. For the purposes of ESF-3, the term “debris” includes general construction debris that may contain inherent building material contaminants, such as asbestos or paint. Debris may also include livestock or poultry carcasses and/or plant materials. Work with the Indiana State Board of Animal Health (BOAH), as removal of carcasses can require additional safety measures. * Provide technical assistance to include engineering expertise, construction management, contracting, real estate services and inspection of private/commercial structures. * Provide engineering and construction expertise, responders, supplies and equipment to address flooding, to include providing advance measures in anticipation of imminent severe flooding. * Provide evaluation of Source Water Supplies for Drinking Water Systems. |
| **Environmental Response/Health and Safety** | * Collect, segregate and transport to an appropriate staging or disposal site(s) hazardous materials that are incidental to building demolition debris, such as household hazardous waste and oil and gas from small, motorized equipment; remove and dispose of Freon from appliances; and remove, recycle and dispose of electronic goods. * For incidents involving a blast or explosion associated with a CBRN threat agent resulting in a contaminated debris field, ESF-3, in consultation with ESF-10 and FEMA:   + Provides structural specialist expertise to support inspection of damaged CBRN-contaminated infrastructure and may employ temporary stabilization measures or take other actions necessary to address structural instability concerns.   + Performs demolitions after a determination is made that a building is unstable and creates an imminent hazard to workers and/or after ESF-10, in conjunction with other appropriate local, state, tribal, territorial, insular area and Federal authorities, decides that demolition is the desired cleanup approach. |
| **Logistics and Supply Chain Management** | Execute emergency contracting support for infrastructure related to lifesaving and life-sustaining services to include providing potable water, emergency power and other emergency commodities and services. |

## PLANNING ASSUMPTIONS

For successful preparedness and response operations to take place, the following key assumptions are listed to gauge participation and support provided by **[Insert County Name]** stakeholders and those at the state and federal levels:

* Local, county, state and tribal governments are responsible for their own public works and infrastructures and have the primary responsibility for mitigation, preparedness, response, recovery and protection and obtaining required waivers and clearances.
* The private sector owns and/or operates a large proportion of the county’s infrastructure and is a partner and/or lead for the rapid restoration of infrastructure-related services.
* All county, 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.
* In a major disaster or emergency, response and recovery operations may be beyond the county, state and local response capabilities. Federal assistance may be required to identify and deploy resources from outside the affected area to ensure a timely, coordinated effective response.
* Pre-awarded contracts and other emergency contracting vehicles are used to leverage private sector capabilities to support ESF-3 response activities.
* A major disaster may affect the lives of many county and local response personnel and facilities and prevent them from performing their prescribed emergency duties.
* Rapid damage assessment of the disaster area may be necessary to determine potential response.
* Missions regarding life-saving and human health issues will be prioritized first.
* Transmission lines, generation plants and electrical substations may be impacted immediately, leaving thousands without power.
* Public utilities may be damaged and be partially or fully inoperable.
* Compromised underground utilities will affect the overall infrastructure. Damage to pipelines may be extensive.
* Sewage repairs will take at least 10 to 30 days.
* Structures may be destroyed or severely weakened. Homes, public buildings, bridges and other facilities may have to be reinforced or demolished to ensure safety.
* Debris may make streets and highways impassable.

# CONCEPT OF OPERATIONS

## GENERAL CONCEPT

The role of **[Insert County Name]** during emergency response is to supplement local efforts before, during and after a disaster or emergency. Emergency Support Function #3 (ESF-3)shallcoordinate the use of all available public works and infrastructure support resources and equipment in areas impacted by emergencies or disasters, to manage and support the immediate and long-term needs of the county and local jurisdictions.

ESF-3 shall ensure and promote a common operating picture (COP) through communicating with ESFs, the county Emergency Operations Center (EOC) Operations Section and private sector communications partners, as applicable.

## county eoc activation

During an EOC activation, ESFs may be activated depending on the incident and activation level. During a disaster response, each ESF representative in the county EOC will remain under the administrative control of their agency head; however, they will function under the supervision of the county Emergency Management Agency (EMA) Director. Notification of activation will be made via **[EDIT: phone, email and/or text message]**.

The EOC is always activated at a Level IV for Daily Operations; however, the activation level will be elevated for planned events, incidents, disasters or other response operations as needed. Activation level details are outlined in the county Emergency Operations Plan (EOP) Base Plan.

## demobilization of the county eoc

Emergency Support Functions will be demobilized from emergency response as objectives are accomplished and the need for their participation diminishes. During demobilization, it is the responsibility of the ESF primary agency to ensure all paperwork, such as equipment time records, personnel time records, accident reports and mechanical inspections have been completed, are accurate and are submitted to the appropriate EOC personnel.

# organization and assignment of responsibilities

## organization

Emergency Support Function #3 (ESF-3) – Public Works and Engineering works under the Operations Section of the county Emergency Operations Center (EOC). This position is staffed by **[Insert Agency Name]**. In the event of a disaster or emergency involving public works and engineering concerns, local, county, state, federal agencies and private sector organizations will coordinate for an effective response.

Each primary and supporting agency shall maintain internal Standard Operating Procedures (SOPs) and/or Standard Operating Guides (SOGs) or other documents that detail the logistical and administrative priorities deemed necessary to assist in overall county prevention, protection, mitigation, response and recovery operations.

Specific roles and responsibilities of primary and supporting agencies during an incident or event are described below. Tasks include but are not limited to:

## ASSIGNMENT OF RESPONSIBILITIES

### Primary Agency Responsibilities

* Designate and train personnel to serve as the ESF-3 representative in the EOC.
* Provide the coordination of all available resources to assist in critical functions and tasks before, during and after emergency events and disaster situations.
* Work with other state, local or municipal departments to assess the damage to water/sewer infrastructure and buildings/structures in impacted areas and analyze this information to determine the impact of the incident and resource gaps that may exist.
* Provide training for essential personnel who may be called upon to work in potentially impacted areas.
* Coordinate and implement emergency-related response and recovery functions, as required, under statutory authority.

### Supporting Agency Responsibilities

* Identify necessary equipment, technologies or capabilities required to prepare for or respond to new or emerging threats and hazards to public works facilities and infrastructure.
* Provide information or intelligence regarding trends and challenges to public works and engineering capabilities within **[Insert County Name]**.

### EOC ESF-3 Responsibilities

Please see primary agency responsibilities above and additional responsibilities below:

* Process and coordinate requests for public works resources.
* Report damage to infrastructure as a result of the event.
* Coordinate the restoration and recovery of critical public works facilities.
* Provide situation reports through WebEOC to the SEOC.
* Participate in briefings, as needed.
* Manage the financial aspects of ESF-3.

# EMERGENCY SUPPORT FUNCTION GENERAL TASKS

The following tables are comprised of essential tasks that may need to be completed by Emergency Support Function #3 (ESF-3) in all phases of emergency management. These tasks have been created as a guide to follow for the primary and support agencies of ESF-3. They have been developed as a tool to address potential challenges and unique risks that may be faced during times of emergency and disaster in **[Insert County Name]**. It will be the responsibility of ESF-3 to ensure the tasks outlined here are accurate and reflect their overall ability to manage, support and deploy resources.

Table . ESF-3 PREVENTION TASKS

|  |  |
| --- | --- |
| **ESF #3 – PREVENTION TASKS** | |
| **TASK #** | **TASK SUMMARY** |
| **1** | Anticipate and identify emerging and/or imminent threats through observation and situational awareness. |
| **2** | Share relevant, timely and actionable information and analysis with local authorities through an established reporting system. |
| **3** | Provide for the security of all off-site communications nodes such as towers and associated support equipment. |
| **4** | Ensure the security of equipment, facilities and personnel through continual assessments of capabilities and vulnerabilities. |
| **5** | Continue to upgrade and improve prevention capability through planning, training and exercise. |
| **6** | Continue to monitor changing trends in activity and aggressive behavior at the local, state and national level and adjust prevention tasking as it applies to this Emergency Support Function. |

Table . ESF-3 PROTECTION TASKS

|  |  |
| --- | --- |
| **ESF #3 – PROTECTION TASKS** | |
| **TASK #** | **TASK SUMMARY** |
| **1** | Develop, validate and maintain SOPs or guidelines for both routine and emergency operations. Key operational concerns include, but are not limited to:   * Identification and assessment of equipment, supplies, resources and critical public works infrastructure. * Proactively assisting water and wastewater utilities in the development of programs to ensure sustainability of operations. * Alert, notify and activate personnel for work in the field or within the EOC. * Emergency communications and reporting procedures. |
| **2** | Develop and conduct training and education programs for ESF-3 personnel. Key training program considerations include, but are not limited to:   * Assessing critical public works infrastructure which includes structures, buildings, equipment, supplies and resources. * Working in the field during emergency operations. * Working in an EOC during emergency activations. * WebEOC or other specialized computer applications. * Emergency communications and reporting procedures. * National Incident Management System / Incident Command System. * Continuity of operations. * Mapping and GIS computer applications. |
| **3** | Develop and maintain a roster of essential primary and support agency contacts for ESF-3 to be used in the event of emergency operations. Ensure critical information (address, telephone, cell, facsimile, email, etc.) is provided. |
| **4** | Develop lists of resource needs and work toward eliminating these shortfalls by identifying funding, identifying partnerships or performing other necessary steps. |
| **5** | Coordinate with agencies that may offer rapid deployment of resources or services as they relate to short and long-term emergency public works. |
| **6** | Train, and if appropriately certified, coordinate with ESF-3 personnel on routine and emergency safety standards for both field operations and EOC activations. |
| **7** | Identify alternate equipment and resources for continuity of operations and essential public works statewide. |
| **8** | Consult appropriate legal staff regarding any legislation, policies and administrative rules that relate directly to public works structures/buildings, equipment and assets during emergencies or disasters. |

Table . ESF-3 MITIGATION TASKS

|  |  |
| --- | --- |
| **ESF #3 – MITIGATION TASKS** | |
| **TASK #** | **TASK SUMMARY** |
| **1** | Support the inspection and repair of public levees and dams by state and local jurisdictions. |
| **2** | Identify areas that have been or are currently prone to significant hazards and determine the impact on public works. |
| **3** | Identify new partnerships or funding sources to reduce or eliminate resource shortfalls or gaps for public works problems, issues and concerns. |
| **4** | Establish partnerships with other federal, state, local and municipal entities that share public works and building code responsibilities. |
| **5** | Identify gaps in and coordinate mutual aid agreements, letters of understanding or contracts with departments, organizations or private entities that may offer rapid deployment of resources or services as they relate to short and long-term emergency public work’s needs. |
| **6** | Recommend the maintenance and enforcement of building code standards and engineering specifications for buildings/structures related to short and long-term emergency management. |
| **7** | Identify, establish and maintain routine and emergency safety standards for all public works personnel that comply with federal and state requirements and policies. |
| **8** | Identify, establish and maintain alternate public works facilities, equipment and assets for continuity of operations to provide essential public works services countywide. |
| **9** | Develop and implement activities relating to public works and engineering during emergencies or disasters to mitigate the identified threats. |
| **10** | Identify training gaps and needs relating to public works and engineering during emergencies or disasters. |
| **11** | Provide recommendations, when appropriate, for legislation, policies and administrative rules that mitigate identified hazards that relate directly to public works during emergencies or disasters, this ESF and its ability to provide emergency assistance or equipment. |

Table . ESF-3 RESPONSE TASKS

|  |  |
| --- | --- |
| **ESF #3 – RESPONSE TASKS** | |
| **TASK #** | **TASK SUMMARY** |
| **1** | Activate SOPs or guidelines for emergency operations that consider:   * The assessment, staging, use, status and sustainability of facilities, equipment, supplies and other resources. * Assessing critical public works infrastructure which includes structures, buildings, equipment, supplies and resources. * The alert, notification and activation of personnel for work in the field or within the EOC. * Activate call-down list. * Emergency communications and reporting procedures. |
| **2** | Activate ESF-3 personnel for such mission essential tasks as:   * Assessing critical infrastructure which includes structures, buildings, equipment, supplies and resources following emergencies or disasters. * Assisting with or dispatching engineers/building inspectors to an identified public works need, including the need for equipment. * Assisting with or coordinating emergency demolition, dredging or floating plant operations. * Providing temporary power and generator support. * Coordinating emergency contracting, construction management and real estate and engineering services, including the procurement of construction material and equipment. * Assisting in finding spare repair parts and chemical treatment stockpiles from other treatment facilities. * Assisting in locating additional trained staff to supplement ESF-3 staffing. * Responding to the field for emergency operations. * Working in an EOC during emergency conditions. * Supporting local, district or statewide Incident Command structures. * Activating continuity of operations plans. |
| **3** | Evaluate the ability to communicate with ESF-3 personnel and implement alternate communications if primary systems are down. |
| **4** | Assist in the identification of damages to critical public works infrastructure which includes structures, buildings, equipment, supplies and resources within the county that may adversely impact the welfare of the general public and response personnel. Information to be collected may include:   * Power outages of critical public works infrastructure. * Coordination with EOC Logistics for generator needs. * List impacted critical care, government and mass care facilities. * Status of alternative communication systems. * Develop a restoration of public works plan if substantial damage is sustained. * Estimated times of restoration and/or deployment. |
| **5** | Work with ESF-12 (Energy) to coordinate the restoration of critical public works infrastructure. |
| **6** | Work with ESF-13 (Public Safety and Security) and ESF-1 (Transportation) to coordinate traffic control for improved response to an emergency or disaster. |
| **7** | Develop and implement activities to prevent additional public works related damage during response. |
| **8** | Coordinate rapid damage assessments of the disaster area to determine the potential workload and identify priorities for repairs. |
| **9** | Coordinate emergency environmental permits and exemptions, which may be needed for the disposal of materials from debris clearance and demolition activities. |
| **10** | Work with ESF counterparts at the local, state, regional and national levels, as well as NGO’s and private businesses/industries, as needed. |
| **11** | Post situation reports and critical information in WebEOC during activations. |

Table . ESF-3 RECOVERY TASKS

|  |  |
| --- | --- |
| **ESF #3 – RECOVERY TASKS** | |
| **TASK #** | **TASK SUMMARY** |
| **1** | Work with county and local entities to maintain alternate means of public works infrastructure, develop plans to inspect and repair critical infrastructure and monitor deployed personnel, equipment and resources. |
| **2** | Work to eliminate shortfalls or resource gaps that were identified in response to an emergency or disaster. |
| **3** | Establish partnerships and identify funding sources to address resource shortfalls or gaps for emergency/disaster public works issues and concerns. |
| **4** | Maintain open and ongoing communication with other federal, state, local and municipal entities that were impacted by the emergency or disaster and assist in their overall efforts for recovery operations. |
| **5** | Assess mutual aid agreements, letters of understanding or contracts with departments, organizations or private entities that may have been utilized during the response and determine if those agreements need to be updated or revised. |
| **6** | Assess the current level of training on emergency safety standards for public works personnel to determine the appropriate application and compliance with federal and state requirements and policies. |
| **7** | Assess the current engineering and building code standards for essential short and long-term emergency public works needs based upon the lessons learned from the most recent emergency/disaster response. |

# COMMUNITY LIFELINES [remove if county is not using lifelines]

**[Insert County Name]** has adopted the Federal Emergency Management Agency’s (FEMA) eight (8) community lifelines into our prevention, protection, mitigation, response and recovery activities. Lifelines are services that enable the continuous operation of critical government and business functions and are essential to human health and safety or economic security.

Table . WATER SYSTEMS LIFELINE DEFINITION, COMPONENTS AND ESSENTIAL ELEMENTS OF INFORMATION (EEI)

|  |  |  |
| --- | --- | --- |
| **LIFELINE WATER SYSTEMS** | **DEFINITION** | |
| A picture containing text, sign  Description automatically generated | Systems that include water and wastewater systems that provide safe, potable water for drinking and the collection and treatment of water from sewer systems and runoff from streets to ensure lakes, rivers and streams are not contaminated. | |
| **COMPONENTS AND ESSENTIAL ELEMENTS OF INFORMATION (EEIs)** | | |
| **POTABLE WATER INFRASTRUCTURE** | | **WASTEWATER MANAGEMENT** |
| * Operating status of all potable public and private water supply systems and infrastructure * Operating status of water control systems (i.e., dams, levees, storm drains, intake, treatment, distribution and discharge systems) * Estimated number of people impacted by system disruptions | | * Operating status of all public and private wastewater systems and infrastructure * Operating status of wastewater control systems (i.e., storm drains, intake, treatment and discharge systems, lift stations, etc.) * Estimated number of people impacted by system disruptions. |

# LIFELINE AND ESF OBJECTIVES AND TASKS TIMELINE

Table . ESF-3 GENERAL TASKS

| **Objective** | **Support needed from** | **Mission-essential tasks** |
| --- | --- | --- |
| **TIMELINE: 0–24 hours** | | |
| To maintain the common operating picture (COP) and contribute to the incident action plan (IAP) | — — | Deploy ESF-3 representative to the EOC within 2 hours and be briefed. |
| — — | Report the status and capabilities of all ESF-3 agencies to the EOC to prioritize needs. |
|  | — — | Gather intelligence for summarizing and placement into WebEOC; support developing the state incident action plan (IAP). |
| — — | — — | Field requests to provide assistance and resources as needed. |
| — — | ESF-2 | Establish contact with all utilities impacted for situational analysis and resource pooling. |
| — — | — — | Ascertain that the ESF-12 private-sector partners are executing their emergency operations plans (EOPs). |
| **TIMELINE: 24–72 HOURS** | | |
| To continue maintaining the COP and contributing to the IAP | — — | Provide situational information to the EOC |
| — — | Report the status and capabilities of all ESF-3 agencies to the EOC in order to prioritize needs. |
| — — | — — | Obtain the amount of fuel required to respond and restore. |
| — — | ESF-1 | Determine safe routes from ESF-1 before entering the impacted counties. |
| **TIMELINE: BEYOND 72 HOURS** | | |
| — — | 811 | *Field crews and supervisors:* Establish 811 coordination early on to avoid compounding the problem of outages. |
| To continue maintaining the COP and contributing to the IAP | — — | Provide situational information to the EOC |
| — — | Continue to prioritize needs and begin to assess priorities for recovery. |

Table . ESF-3 TASKS FOR SAFETY AND SECURITY

| **LIFELINE OBJECTIVE** | **ESF OBJECTIVE** | **SUPPORT NEEDED FROM** | **MISSION-ESSENTIAL TASKS** |
| --- | --- | --- | --- |
| **TIMELINE: 0–24 HOURS** | | | |
| To ensure life safety and security for population and responders | — — | — — | Request that USACE and Indiana DNR, Division of Water, identify any dams and levees with high hazard potential that have failed. More importantly, identify those that have not yet failed but have sustained damages making failure imminent or likely. |
| * USACE * DNR | Immediately begin to determine the degree of damage to dams and levees. |
| * USACE * DNR | Coordinate with USACE and the Indiana DNR, Division of Water, to begin releasing water from failing or near-failing dams and levees with high hazard potential. |
| NWS | Report failing and near-failing dams to the NWS for issuance of a flash flood warning. |
| To provide effective firefighting capabilities | To assess the location and impact of damage to water facilities, water mains and sewer systems within 24 hours | ESFs 2, 4 | Determine whether critical fire hydrants have working pressurized lines. |
| — — | Based on the status of water systems, identify where firefighting capabilities have been negatively affected by an incident and share this information with ESF-4 (Firefighting). |
| To begin stabilizing critical infrastructure functions for water and wastewater | ESF-1 | Restore water to critical fire hydrants with temporary repairs to facilities, substations and distribution lines. |
| **TIMELINE: 24–72 HOURS** | | | |
| To extinguish fires | To restore water distribution and sewer collection facilities | ESF-1 | Continue to restore water to critical fire hydrants with temporary repairs to facilities, substations and distribution lines. |
| To ensure life and safety in search-and-rescue efforts | — — | — — | Deliver safety briefings along with technical briefings |
| — — | Shore and crib unstable structures, using proper hydraulic equipment, to enable searching. |
| To protect the health and safety of the public and responders | — — | * USACE * DNR | Continue to coordinate with subject matter experts to begin releasing water from failing or near-failing dams and levees with high hazard potential. |
| — — | Report failing and near-failing dams to the NWS for issuance of a flash flood warning. |
| **TIMELINE: BEYOND 72 HOURS** | | | |
| To reduce risk in impacted areas | — — | * USACE * DNR | Continue to coordinate with USACE and the Indiana DNR, Division of Water, to begin releasing water from failing or near-failing dams and levees with high hazard potential. |
| NWS | Report failing and near-failing dams to the NWS for issuance of a flash flood warning. |
| — — | Coordinate disposal sites for debris. |
| To finish extinguishing fires and begin clean-up | — — | — — | Continue to inform ESF-4 of water issues for firefighting. |

Table . ESF-3 TASKS FOR FOOD, HYDRATION AND SHELTER

| **LIFELINE OBJECTIVE** | **ESF OBJECTIVE** | **SUPPORT NEEDED FROM** | **MISSION-ESSENTIAL TASKS** |
| --- | --- | --- | --- |
| **TIMELINE: 0–24 HOURS** | | | |
| To ascertain the status of water and wastewater systems, especially for emergency-care facilities and shelters | (Same as lifeline objective) | — — | Begin compiling information about the functional status of all water and wastewater treatment facilities and their systems within the affected area. If still functional, does the facility have emergency back-up power, or is a generator needed? Can the facility be made operational in 10 days? |
|  | — — | Receive and log status of facilities and preliminary damage assessments. |
|  | ESF-12 | Determine the status of power to each water and wastewater facility. |
|  | To assess the location and impact of damage to water facilities, water mains and sewer systems within 24 hours. | — — | As soon as possible, begin to prioritize water and wastewater facilities for repair. |
|  | — — | Within the known affected area, identify major hazardous-material (hazmat) storage sites or locations where the release of hazmat could affect drinking water supplies (well heads and water intakes) using databases, geographic information system (GIS) and damage reports |
| To begin stabilizing critical infrastructure functions for water and wastewater | (Same as lifeline objective) | — — | *Field crews and supervisors:* Make every effort to maintain water pressure and keep water potable. |
| ESF-12 | With ESF-12, assemble a utilities task force that will form strike teams for work on water, sewer, electric and natural-gas systems. |
| ESFs 1, 12, 13 | Water and wastewater contractors  *Utilities task force:* Form strike teams that include (a) workers to repair water, sewer, electric and natural-gas systems, (b) security and (c) as needed, a road crew. |
| To provide life-sustaining and human services to the affected population | To assess the location and impact of damage to water facilities, water mains and sewer systems within 24 hours | ESFs 2, 6 | Determine whether shelters have water and wastewater service. |
| To begin stabilizing critical infrastructure functions for water and wastewater | ESFs 1, 6 | Restore water and wastewater to shelters with temporary repairs to facilities, substations and distribution lines. |
| **TIMELINE: 24–72 HOURS** | | | |
| To restore temporary water and wastewater services to critical facilities and large-population areas | To restore water at priority locations: critical facilities and locations easy to reach | ESF-1 | Assemble and deploy teams for engineering inspection and verification of worthiness. |
| — — | Determine status of all water and wastewater facilities, including electricity needs. Prioritize facilities providing service to hospitals, nursing homes and designated shelters. |
| — — | Determine the engineering support needed to assess damage to water and wastewater systems with continuing evaluation due to aftershocks. |
| — — | Deploy water restoration teams, based upon need and priority. |
| ESFs 5, 8 | Test water in coordination with local health departments to ensure its potability for public use |
| ESF-7  Water and wastewater contractors | Request additional resources for public works and engineering through the state, as necessary. |
| To restore water distribution and sewer collection facilities to critical infrastructure within 48–96 hours. | Water and wastewater contractors | Work with utility strike teams to restore water and wastewater services in island areas and critical facilities to relieve shelters of many evacuees |
|  |
| To deliver mass-care services for survivors and pets | — — | ESF-7 | Ask ESF-6 (Mass Care) where bulk water operations are needed and coordinate delivery |
| — — | Based on the status of water and wastewater systems, evacuation may begin. If so, coordinate with numerous ESFs. |
| **TIMELINE: BEYOND 72 HOURS** | | | |
| To restore necessary infrastructure systems for water and wastewater | To restore water distribution and sewer collection facilities to outlying areas within 30 days. Additional permanent repairs will take place during the recovery phase. | — — | Determine the best route for pipe transport into the impacted area. |
| Water and wastewater contractors | Continue to repair water and wastewater systems, supplying electric generators as needed, based on priorities. |
| * USACE * FEMA | Continue to coordinate with state and federal agencies for emergency assistance. |
| ESF-7 | Request additional resources for public works and engineering through the state and established mutual aid |
| To have clean water available to all counties | (Same as lifeline objective) | Water and wastewater contractors | *Field crews and supervisors:* Make every effort to maintain water pressure and keep water potable. |
| Water and wastewater contractors | Continue coordination with private companies about issues with water, sewage restoration |
| To sustain and refine life-sustaining services and needs assessments | — — | — — | Continue to ask ESF-6 (Mass Care) where public water services are needed to support shelter operations. |

Table . ESF-3 TASKS FOR HEALTH AND MEDICAL

| **LIFELINE OBJECTIVE** | **ESF OBJECTIVE** | **SUPPORT NEEDED FROM** | **MISSION-ESSENTIAL TASKS** |
| --- | --- | --- | --- |
| **TIMELINE: 0–24 HOURS** | | | |
| * To provide public health and medical services to people in need throughout the disaster area * To assist with fatality management in the disaster area | To ascertain the status of water and wastewater systems, especially for emergency-care facilities and shelters | ESFs 2, 8 | Determine whether critical medical facilities have water and wastewater service. |
| Local water and wastewater agencies | Ascertain the locations of damaged water and wastewater infrastructure serving critical medical facilities. |
| To begin stabilizing critical infrastructure functions for water and wastewater | ESFs 1, 6 | Restore water and wastewater to critical medical facilities with temporary repairs to facilities, substations and distribution lines. |
| **TIMELINE: BEYOND 72 HOURS** | | | |
| To increase the capacity of hospitals to resume health services | To restore water distribution and sewer collection facilities | — — | Prioritize strike team restoration services to medical facilities with the highest impact. |

Table . ESF-3 TASKS FOR COMMUNICATIONS

| **LIFELINE OBJECTIVE** | **ESF OBJECTIVE** | **SUPPORT NEEDED FROM** | **MISSION-ESSENTIAL TASKS** |
| --- | --- | --- | --- |
| **TIMELINE: 0–24 HOURS** | | | |
| To transmit public information and warning messages to survivors in the disaster area within 12 hours of the incident | To harmonize public information to show estimated time of restoration and any ongoing public safety issues within six (6) hours by coordinating with the joint information center (JIC). | — — | Inform the EOC of status and estimated restoration time of water systems. |
| — —  — — | Activate a public information officer (PIO) for coordination and information release. |

Table . ESF-3 TASKS FOR HAZARDOUS MATERIAL

| **LIFELINE OBJECTIVE** | **ESF OBJECTIVE** | **SUPPORT NEEDED FROM** | **MISSION-ESSENTIAL TASKS** |
| --- | --- | --- | --- |
| **TIMELINE: BEYOND 72 HOURS** | | | |
| To finish containment and cleanup of hazmat releases | — — | — — | Provide water pressure sufficient to assist with cleanup of hazardous materials as soon as possible. |

# Appendix A – REFERENCES, RELATED PLANS AND PROCEDURES

## references

* [FEMA’s ESF #3– Public Works and Engineering Annex](https://www.fema.gov/sites/default/files/2020-07/fema_ESF_3_Public-Works-Engineering.pdf)
* State of Indiana ESF #3 – Public Works and Engineering Annex, 2025

## related plans

* **[Insert County Name]** Emergency Operations Plan (EOP), year
* **[List related plans]**

## STANDARD OPERATING PROCEDURES

* **[List related SOPs]**

# Appendix B – ACRONYMS [ADD TO AS NEEDED]

|  |  |
| --- | --- |
| **ACRONYM** | **FULL DESCRIPTION** |
| **BOAH** | Indiana State Board of Animal Health |
| **CBRN** | Chemical, Biological, Radiological or Nuclear |
| **COP** | Common Operating Picture |
| **DNR** | Indiana Department of Natural Resources |
| **EMA** | Emergency Management Agency |
| **EOC** | Emergency Operations Center |
| **EOP** | Emergency Operations Plan |
| **ESF** | Emergency Support Function |
| **FEMA** | Federal Emergency Management Agency |
| **GIS** | Geographic Information Systems |
| **IAP** | Incident Action Plan |
| **IDHS** | Indiana Department of Homeland Security |
| **JIC** | Joint Information Center |
| **NGO** | Non-Governmental Organization |
| **NPG** | National Preparedness Goal |
| **NWS** | National Weather Service |
| **PIO** | Public Information Officer |
| **SEOC** | State Emergency Operations Center |
| **SOG** | Standard Operating Guide |
| **SOP** | Standard Operating Procedure |
| **USACE** | United States Army Corps of Engineers |
| **WebEOC** | Web Emergency Operations Center |