

EMERGENCY SUPPORT FUNCTION #2
Communication, Information and Warning Systems

ANNEX COORDINATOR:

Thurston County Emergency Management

JOINT PRIMARY AGENCIES:

Thurston 911 Communications (TCOMM 911)
Thurston County Emergency Management

SUPPORT AGENCIES:

Thurston County ARES/RACES
Thurston County Information Technology
Thurston County Sheriff's Office
Fire Agencies

I. INTRODUCTION

A. Purpose

Emergency Support Function (ESF) 2 describes how the county will provide for, support and enhance technology for emergency communications systems; alert, warning and notification systems and redundant communications systems during all phases of the emergency management cycle, including response and recovery operations.

B. Scope

ESF 2 coordinates establishment and maintenance of an effective communications and warning systems for use in a disaster. This ESF also monitors the overall status of the county's communications infrastructure and coordinates provision of redundant, temporary communication as required.

II. POLICIES

- A. The County relies on the hazard warning capabilities of federal and state government, industry, and the media. Citizens are expected to be aware of a hazardous situation for which there is significant media attention, such as severe weather or flooding. When there is a demonstrated need, particularly if timeliness is crucial to protect life and property, the county may supplement existing warning systems. Supplemental measures will depend on the nature of the hazard, the quality and quantity of information available, resources available, media attention, and other situational factors. Supplemental measures, including, but not limited to the use of Limited English Proficiency (LEP), and Americans with Disabilities Act (ADA) compliant technology will

focus on enhancing or amplifying the information being provided through existing sources and, to the extent practicable, upon participatory systems activated at the neighborhood or community level. In Thurston County, this includes the Spanish and Vietnamese population.

- B. In accordance with RCW 38.52.110 (1), in responding to a disaster, or the threat of a disaster, the Board of County Commissioners is directed to utilize the services, equipment, supplies, and facilities of existing departments, offices, and agencies of the state, political subdivisions, and all other municipal corporations thereof including but not limited to districts and quasi municipal corporations organized under the laws of the state of Washington to the maximum extent practicable, and the officers and personnel of all such departments, offices, and agencies are directed to cooperate with and extend such services and facilities upon request notwithstanding any other provision of law.
- C. Two-way voice/data radios will be used in accordance with the State Interoperability Executive Committee (SIEC) Interoperability Plan to ensure operability between local and state agencies.
- D. No guarantee of a perfect system is implied by this plan. As assets and personnel may be overwhelmed, Thurston County can only endeavor to make every reasonable effort to respond to a hazardous event based on the situation, and on information and resources available at the time.

III. SITUATION

A. Emergency/Disaster Conditions and Hazards

A natural or human-caused emergency or disaster may occur that requires dissemination of warning or notification to local officials and the general public. Emergency information may include information about evacuation, sheltering in place, protective actions, or where to go for assistance.

A large-scale incident may result in a surge of users of the local telecommunications infrastructure resulting in jammed cell and landline phone capability, high-speed internet bandwidth degradation, etc., which may reduce the effectiveness of the Emergency Coordination Center and /or other county departments.

The most likely hazards to occur in Thurston County are:

- Earthquake
- Flood
- Landslide
- Storm
- Wildland Fire

B. Planning Assumptions

1. Reliable communication capabilities are necessary at all levels of government for day-to-day communication, warning of impending disasters, disaster response and recovery operations, search and rescue operations, and coordination between the state, local governments, and response agencies. Local first responders have identified frequencies to be utilized for operation coordination, direction and control communications.
2. Amateur radio operators will be available in an emergency or disaster through Thurston County ARES/RACES and are equipped at the Thurston County ECC.
3. Communications assistance may also be provided by the state or federal government.
4. Routine day-to-day modes of communication will be utilized to the degree that they survive the disaster.
5. A large-scale incident may result in a surge of users of the local telecommunications infrastructure resulting in jammed cell and landline phone capability, high-speed internet bandwidth degradation, etc., which may reduce the effectiveness of the Emergency Coordination Center and /or other county departments.
6. Notification of a threatening situation may come from the National Weather Service, via NOAA Weather Radio, the media, the amateur communications community, or the public.
7. Initially, Thurston County will focus on coordinating lifesaving activities and reestablishing communications and control in the disaster area.
8. Initial reports of damage will be fragmented and provide an incomplete picture of the extent of damage to telecommunication facilities.
9. Weather, damage to roads and bridges, and other factors will restrict entry of emergency communications nodes into the area.
10. Tests of local warning systems will be conducted periodically to familiarize government and the public with their use.

11. In the event that public instructions need to be translated, the provision of interpreters will be coordinated through the ECC and the Crisis Clinic.

IV. CONCEPT OF OPERATIONS

A. General

Thurston 911 Communications (TCOMM911) will serve as Thurston County's 24-hour communication center to receive notifications of emergency or disasters and activate ESF 2. Communications during emergencies and disaster situations will be carried out using the established communications systems used in day-to-day operations to the degree that they survive the disaster and continue to afford adequate communications within the county. Primary and backup methods for each key communication requirement will be designated

Once activated, emergency communications are also provided through the Thurston County Emergency Coordination Center, located at 9521 Tilley Road SW, Olympia, WA 98512

The Emergency Alert System (EAS) operates through local radio and cable TV stations and is intended to provide local officials with the means to disseminate prompt, reliable emergency information, instructions, and warnings in the event of an emergency or disaster.

1. KAYO Radio, Olympia, 96.9 FM
2. KXXO Radio, Olympia, 96.1 FM
3. KAOS at The Evergreen State College, Olympia, 89.3 FM
4. COMCAST, Olympia

Thurston Community Alert (TC Alert) is Thurston County's primary emergency notification system and houses the Integrated Public Alert and Warning System, which included the Emergency Alert System (EAS) and Wireless Emergency Alerts (WEA). The system, can be activated by TCOMM911, Thurston County Emergency Management and select fire and law enforcement officials.

B. Organization

1. Thurston 911 Communications (TCOMM911) is located at 2703 Pacific Avenue SE, Olympia, Washington. TCOMM911 functions as the county-wide 911 Public Safety Answering Point (PSAP), and provides dispatch services for all law enforcement, fire and emergency medical agencies within Thurston County with the exception of Washington State Patrol (WSP). TCOMM911 also serves as the initial communications, alert, and warning point for Emergency Management. See Attachment 2, Thurston 911 Communications, for a description of the TCOMM911 organization and services

2. When a disaster or threat of disaster occurs, the ECC may be activated, based on the size and complexity of the incident.
3. In the event that the primary ECC is damaged or unusable, the backup ECC is co-located with TCOMM911 at 2703 Pacific Avenue SE, Olympia, WA.

C. Procedures

1. Activation of ESF 2 can be through TCOMM911 or Thurston County Emergency Management when a significant impact to the communications infrastructure is expected or has occurred.
2. The receipt and dissemination of warning information may use any or all of the following methods:
 - The National Warning System (NAWAS), established by the federal government, is the primary means of receiving and disseminating warning(s) to state and local officials within Washington State. The Washington State Warning Point is operated 24 hours a day by the Washington State Emergency Management Office, with operational assistance provided by the Washington State Patrol. Thurston County's NAWAS receiving point is TCOMM 911, a 24-hour facility.
 - The Emergency Alert System (EAS) is comprised of AM and FM radio and TV broadcast stations. It provides for the alerting of participating station and dissemination of standardized emergency information until the emergency subsides. The EAS can be activated by any level of government.
 - Thurston Community Alert (TC Alert) is Thurston County's primary mass notification method to citizens during times of emergency. Citizens can be notified via landline phone, cell phone, text or email.
 - Fire District and Law Enforcement apparatus can provide warnings along specific routes using public address systems and sirens. These would be effective as an alternative to door-to-door notification.
 - Social Media (Facebook, Twitter, Nextdoor, etc.)
 - Activation of ARES/RACES for emergency radio communication.
 - Activation of volunteer resources to provide door to door communications. Care would be taken to keep unprotected workers from entering hazardous areas to disseminate warning.
 - Print and electronic media, news releases, bulletin and sandwich boards, posting of signs can provide an effective method of disseminating emergency information. Electronic media can be

helpful in issuing bulleting to inform the public or emergency conditions with or without formal activation of the EAS.

- Groups, such as the Disaster Assistance Council (DAC) that routinely work with special populations (e.g., hearing impaired, LEP, physically handicapped, etc. may assist in the dissemination of emergency information to such groups.
3. Situation monitoring will be ongoing and consist of the accumulation, display, and evaluation of relevant information, release of appropriate public information advisories, and alerting response agencies and organizations of the situation. A list of media and agencies targeted for receipt of advisories and warnings is included on Attachment A.

D. Prevention & Mitigation Activities

1. ESF2 primary and support agencies will regularly inspect facilities to identify potential damage from high probability hazards and identify mitigation strategies.
2. Redundant radio communications systems are located throughout the county and remote stations can be set up on very short notice.
3. For specific mitigation initiatives, reference the Hazard Mitigation Plan for the Thurston Region.

E. Preparedness Activities

1. ESF 2 agencies regularly test communications equipment through weekly and monthly testing, and exercises with State EM and other counties. After action reports are utilized to include corrective actions.
2. TCOMM911 maintains appropriate plans and procedures to ensure, to the extent practicable, the integrity of emergency communications systems.
3. Telecommunications and infrastructure restoration services that can quickly restore communications in the case that damage is done to telecommunications infrastructure are pre-identified.
4. Weekly Comprehensive Emergency Management Network (CEMNET) tests are performed primarily on frequencies 45.200 MHz, 45.360 MHz and 45.480 MHz, to ensure communication capability with State EM and other emergency management agencies.
5. Thurston County ARES/RACES performs quarterly exercises to test the capabilities of the emergency radio network.

6. The Thurston County Local Emergency Communication Committee (LECC) created an EAS Plan and continually work to identify new methods of communication dissemination through a collaboration of local, state and regional partners. Implementation of the Communications Plan is done through the Emergency Management Council (EMC), which includes members of emergency response agencies within the county.
7. Thurston County Emergency Management and TCOMM911 maintain the EAS activation plan which outlines the process for issuing an EAS message.
8. Thurston County Sheriff's Office maintains an Amber Alert plan which outlines the process for issuing an Amber Alert.
9. Telecommunication Devices for the Deaf (TDD) capability has been identified through the Washington Relay Service by dialing 711 or 1-800-833-6388, and is readily available for the deaf population.
10. Coordination with ESF #15 will take place for communications with LEP populations and in accordance with the Office of Financial Management, Forecasting Division.
11. Identified county staff has been granted Government Emergency Telecommunications Service (GETS) and Wireless Priority Service (WPS) communication capability.
12. Resources to provide emergency communications available are identified in Section VI.A.

F. Response Activities

1. Thurston Communications (TCOMM911) will serve as the primary communications link between the ECC and the local 911 response resources. TCOMM911 Dispatch will also relay emergency notifications to county officials and responders in accordance with their approved communications protocols.
2. TCEM staffs an After Hours Duty Officer to responds to incidents after normal business hours. The Duty Officer has the ability to activate the Emergency Alert System as well as general and Wireless Emergency Alerts.
3. TCEM will maintain communications with the state, neighboring jurisdictions and other agencies utilizing the CEMNET and amateur radios to maintain voice and digital communication with neighboring jurisdictions as well as the State EOC.

4. Provision of communication-related activities will take into account populations with Limited English Proficiency (Spanish and Vietnamese) and be planned for according to state and federal regulations and guidance.
5. Public information, advisories, and warnings will be in a variety of formats and languages, and made accessible to those with alternate communication needs as defined in ESF 15 – External Affairs.
6. Amateur radio both inside the ECC and within the community will be utilized in the event of telecommunications failure. Law enforcement are capable of communicating with amateur radio through their police radios.
7. WebEOC will be utilized to track incident response and provide for a common operating picture.
8. The use of the Tactical Interoperability Communication Plan (TICP) across response agencies will provide interoperable communications resources including contact information and compatible frequencies available within the region.
9. In the event of telecommunications equipment failure, TCOMM911 has pre-identified resources available for redundancy and for repair of equipment in the Thurston 911 Communications Continuity of Operations Plan.

G. Recovery Activities

1. Continue to utilize primary and alternate communication and warning system to coordinate recovery activities.
2. Restore telecommunication and information system infrastructure.
3. All agencies and departments will return to normal operations when normal systems and facilities are restored.
4. Create After Action Reports (AARs)

V. RESPONSIBILITIES

A. Joint Primary Agencies

Ensure the maintenance of a reliable communications system for emergency notification.

B. Specific Primary Agency Responsibilities

1. Thurston 911 Communications
 - a. Develop and maintain appropriate plans and procedures to ensure, to the extent practicable, the integrity of emergency communications systems

- b. Develop and maintain procedures to share disaster related information with the ECC, when activated
- c. Assist with the dissemination of information and warnings as requested by the ECC Manager.
- d. Participate in communications drills/exercises or other appropriate training with ECC.
- e. Establish and maintain procedures for issuing public warning via EAS.
- f. Monitor and test the National Warning System regularly
- g. Maintain Continuity of Operations Plan (COOP) for Thurston 911 Communications.

2. Emergency Management

- a. Activate and implement alert, warning and notification systems a required to effectively notify appropriate stakeholders and citizens, including first responders.
- b. In coordination with TCOMM911, conduct tests and exercises of the communication and warning systems.
- c. Establish and maintain a secondary location for emergency radio communications.
- d. Identify redundant warning capability.
- e. Coordination between support agencies within the county to establish and maintain effective and reliable communication methods.
- f. Include consideration of special populations such as the handicapped, the elderly and infirm, schools, day care centers, and nursing homes and limited English populations.
- g. Coordinate public information and warnings with local jurisdictions and surrounding counties, as appropriate.
- h. Maintain the ECC in a configuration to support the warning system and efficient and effective communications.
- i. Include communications and warning as part of the county-wide emergency management training program.
- j. Ensure that staff are pre-identified and adequately trained to fulfill their delegated function within the county ECC, including the use of specialized communications technology.
- k. Coordinate public information and instructions, and media relations as defined in ESF-15 External Affairs.

C. Support Agencies

1. Thurston County ARES/RACES

- a. Provide mobile radio operators capable of field operations to establish a communications link between the ECC and other agencies.
- b. Relay messages via radio communications when other standard communications fail.
- c. Provide redundant amateur radio communications systems throughout the county and remote stations can be set up on very short notice.

- d. Provide damage assessment and situation reports to the ECC from areas in Thurston County.
 - e. Serve as Neighborhood Association liaison to provide communication points throughout the community.
 - f. Test communication equipment and ensure it is in good working order.
2. Thurston County Central Services/Information Technology
 - a. Develop and maintain appropriate plans and procedures to ensure, to the extent practicable, the integrity of the county telephone system
 - b. Monitor the status of the county's communication infrastructure during or following any disaster.
 - c. Coordinate and assign resources necessary to respond to an incident that impacts communications infrastructure.
 3. Thurston County Sheriff's Office
 - a. In coordination with Emergency Management, develop and maintain procedures to provide communications and warning support and services when requested from the ECC.
 - b. Make Search and Rescue units and volunteers available to the ECC to assist in the warning effort.
 - c. Utilize a Public Information Officer (PIO) to disseminate information via news releases.
 - d. In coordination with ARES/RACES, provide on-scene (in-vehicle) radio communications as an emergency communication tool when all other methods fail.
 2. Fire Agencies
 - a. In coordination with TCEM, develop and maintain procedures to provide communications and warning support and services when requested from the ECC.
 - b. In coordination with TCEM, train personnel in proper warning methods such as public address systems, sirens, etc.

VI. RESOURCE REQUIREMENTS

A. The communication capabilities presently available to Thurston County include:

1. 911 Public Safety Answering Point (PSAP)
2. National Warning System (NAWAS) land line-voice located in TCOMM911.
3. Internet communications (Facebook, Twitter, Nextdoor, etc.)

4. Amateur Radio Emergency Services (ARES) and Radio Amateur Civil Emergency Services (RACES), radio and teletype/packet system via amateur (ham) frequency bands
5. Comprehensive Emergency Management Network (CEMNET)
6. Thurston County Internal Emergency Radios
7. Integrated Public Alert and Warning System (IPAWS)
 - Emergency Alert System (EAS)
 - Wireless Emergency Alerts (WEA)
8. Thurston Community Alert (Powered by Rave)
9. Commercial telephone (regular, cellular, wireless, and satellite telephone)
10. News Media Release
11. Public Safety Land Mobile Radio System

- B. In severe and/or extended disaster operations, the Federal Emergency Management Agency’s Mobile Emergency Radio Service is available upon request.

VII. REFERENCE AND SUPPORT PLANS

- A. Hazard Mitigation Plan for the Thurston Region 3rd Edition (2017)
- B. Homeland Security Region 3 Tactical Interoperability Communications Plan (TICP)
- C. Revised Code of Washington (RCW) 38.52, Emergency Management
- D. TCOMM911 Continuity of Operations Plan
- E. Thurston County Comprehensive Emergency Management Plan
- F. Thurston County CEMP ESF 15 Annex: External Affairs
- G. Thurston County Central Services Continuity of Operations Plan
- H. Thurston County Central Services/Information Technology Disaster Recovery Plan (Under Development)
- I. Thurston County Duty Officer Procedures Manual
- J. Thurston County Emergency Coordination Center Procedures
- K. Thurston/Mason Communications Plan
- L. WA State Interoperability Executive Committee (SIEC) Interoperability Plan
- M. Washington State Comprehensive Emergency Management Plan

VIII. TERMS AND DEFINITIONS

ARES – Amateur Radio Emergency Services

Basic Plan – The basic plan is the plan component of the CEMP that provides an overview of the jurisdiction’s emergency planning strategies. It describes expected hazards, outlines agency roles and responsibilities, and explains how the jurisdictions keeps the plan current. Functional annexes focus on the missions for specific emergency support functions.

BOCC – Board of County Commissioners

CEMP – Comprehensive Emergency Management Plan – Policy level framework to support emergency response activities in Thurston County.

Continuity Plans – Plans that provide the efforts to ensure the capability exists to continue essential component functions across a wide range of potential emergencies that could disrupt normal operations.

DAC – Disaster Assistance Council.

EAS – Emergency Alert System – A national warning system designed to alert the public of emergencies over radio and television broadcast.

ECC – Emergency Coordination Center – A centralized location where all aspects of response and recovery for emergencies are coordinated.

EM – Emergency Management – The function charged with creating the framework within which communities reduce vulnerability to hazards and cope with disasters.

ESF – Emergency Support Function. A grouping of governmental and certain private sector capabilities into an organizational structure to provide support, resources, program implementation, and services that are most likely needed to save lives, protect property and the environment, restore essential services and critical infrastructure, and help communities recover following incidents.

FEMA – Federal Emergency Management Agency – Government agency whose primary purpose is to coordinate response to disasters that have occurred in the United States and that overwhelms the resources of local and state authorities.

GETS – Government Emergency Telecommunications Service. Provides national security and emergency preparedness entities priority use in situations when the landline network is congested and the probability of completing a call is reduced.

IPAWS – Integrated Public Alert and Warning System – The nation's alert and warning infrastructure, integrating local systems that use Common Alerting Protocol.

JIS/JIC – Joint Information System/Joint Information Center. The JIS integrates incident public affairs into a cohesive organization to provide consistent, coordinated, accurate, accessible, timely and complete information during incident operations. A JIC is the central location that facilitates operation of a JIS.

LECC – Local Emergency Communications Committee

NAWAS – National Warning System – An automated telephone system used to convey warnings to federal, state and local governments.

NIMS – National Incident Management System – A comprehensive, national approach to incident management.

NWS – National Weather Service – Provides weather, water and climate data, forecasts and warnings.

PIO – Public Information Officer – Spokespersons for certain government agencies.

RACES – Radio Amateur Civil Emergency Services – Amateur radio operators who provide emergency radio communications in times of emergency.

SBA – Small Business Administration

TCEM – Thurston County Emergency Management

TCOMM911- – Thurston 9-1-1 Communications. A non-profit intergovernmental corporation providing 9-1-1 service to all citizens within Thurston County and providing dispatch services to all law enforcement, fire service and medic one agencies within Thurston County.

TCSO – Thurston County Sheriff’s Office

TICP – Tactical Interoperability Communications Plan

WEA - Wireless Emergency Alerts

WPS – Wireless Priority Service provides National Security / Emergency Preparedness personnel priority access and prioritized processing in all nationwide and several regional cellular networks, greatly increasing the probability of call completion.

IX. APPENDICES/ATTACHMENTS

Attachment A – Communication Capabilities

Attachment A Communication Capabilities

Thurston County Emergency Management
9521 Tilley Rd. SW, Olympia WA

- Station #1 - VHF/UHF Radio with Signalink and PC Laptop - Used to send/receive digital information via radio (email, pictures, spreadsheets)
- Station #2 - VHF/UHF Radio - Used for voice Net Control Operations on OARS repeater system (primary)
- Station #3 - VHF/UHF Radio - Used for voice Net Control Operations on ARES District 3 Net, Wa. state EMD net
- Station #4 - HF radio with Signalink and PC laptop - Used for combined voice and digital operations to communicate with Washington State Emergency Net (WSEN) and DHS SHARES HF stations
- Station #5 - HF Radio - dedicated to voice and digital communications with DHS/FEMA on 60m
- CEMNET Radio

Thurston County Emergency Services Building
2703 Pacific Ave., Olympia WA 98502

- Station #1 - VHF/UHF Radio with Signalink - **PC Needed** - Used to send/receive digital information via radio (email, pictures, spreadsheets)
- Station #2 - VHF/UHF Radio - Used for voice Net Control Operations on OARS repeater system (primary)
- Station #3 - VHF/UHF Radio - Used for voice Net Control Operations on ARES District 3 Net, Wa. state EMD net
- Station #4 - HF radio with Signalink - **PC Needed** - Used for combined voice and digital operations to communicate with Washington State Emergency Net (WSEN) and DHS SHARES HF stations
- Station #5 - HF Radio - dedicated to voice and digital communications with DHS/FEMA on 60m- **Antenna Needed**
- CEMNET Radio