

**EMERGENCY SUPPORT FUNCTION #2
COMMUNICATIONS, INFORMATION SYSTEMS AND WARNINGS**

ESF COORDINATOR:	Fire Chief
LEAD AGENCIES:	Fire Department
SUPPORT AGENCIES:	Communications Program Manager/PIO Department of Emergency Management Issaquah Dispatch Center King County Emergency Coordination Center King County Radio Communications Agency Northeast King County Regional Public Safety Communications Agency (NORCOM) Snoqualmie Emergency Communication and Support Team Snoqualmie Information and Technology Washington Emergency Management Division

I. INTRODUCTION

A. Purpose

The purpose of this ESF is to organize, establish and maintain the communications capabilities necessary to meet the operational requirements to respond to disasters and emergencies and to provide guidance regarding the dissemination of warning information.

B. Scope

This ESF addresses the communication assets and procedures of the City of Snoqualmie (City) including 911, 800 MHz radio, City's AM broadcast channel, voice and data links, telephone and cellular systems, National Warning System, ALERT Snoqualmie (provided by King County), and amateur radio. This ESF also addresses assisting industry in restoring the public communications infrastructure. Cyber Security issues are addressed in a separate annex.

C. Situation

Local communications, information systems and warning activities can be hampered due to damaged infrastructure, a surge in use, and/or a loss in capacity. Most public emergencies will create a demand for local communications and information resources to support the response, recovery, and restoration of the communication system. Concurrently, commercial communications facilities may sustain widespread damage.

D. Assumptions

1. The City's Emergency Operations Center (EOC) will activate resources at a level appropriate to the level of risk presented by a perceived or actual public emergency.
2. A public emergency occurring within the region will have a negative impact on the communication network.
3. During a public emergency, the communications and information infrastructure will be impacted, which could limit access to communication resources.
4. A public emergency within or adjacent to the City has the potential to cause loss of life, property, and/or disruption of normal life support.

5. The City may be heavily dependent on outside agencies and vendor assistance in order to repair significant damage to communication and information systems in order to coordinate communications, information, and warning during the immediate and post-disaster period.
6. Infrastructure damage and communications disruptions will inhibit efficient coordination of communications, warning, and information support during the immediate and post-disaster period.
7. The City is heavily dependent on businesses and regional infrastructure to support communications and information needs. This plan depends on the ability for those infrastructures to be operational.
8. Initial damage reports may be fragmented and provide an incomplete picture concerning the extent of damage to communications facilities.
9. Working with the communications industry, assigned staff will restore and reconstruct communications facilities as the situation permits.

E. Policies

1. All activities within ESF 2 – Communications, Information Systems and Warnings will be conducted in accordance with the National Incident Management System (NIMS) and the National Response Framework (NRF).
2. It is the policy of the City to develop a hazard warning system supplemental to, not substituting for; the warning services provided by King County, Washington State and federal agencies. Moreover, citizens are expected to be aware of a hazardous situation for which there is significant media attention, such as severe weather or flooding. Consequently, and supplemental to information being provided by other sources, the City will attempt to make a reasonable effort to warn the public of hazardous situations that could result in a disaster. The reasonableness of the effort will depend on the nature of the hazard, when emergency management officials are made aware of a hazardous situation, the quality and quantity of information available, communications and warning resources available, media attention, and other situational dependent factors. Examples of early warning systems would be to communicate information to citizens by utilizing the City’s AM broadcast channel, social media, ALERT Snoqualmie (provided by King County), and any type of community notification capabilities that are available. In addition to this, if the City has no power, the Snoqualmie Emergency Communication and Support Team (SECAST), an amateur radio team, would be activated to assist in getting critical information to and from the citizens. Social media can also be used by the City Communications Program Manager/PIO in case of a power outage.
3. In accordance with RCW 38.52.110 (1), in responding to a disaster, or the threat of a disaster, the City Administrator and/or Director of Emergency Management 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.
4. As a signatory of the King County Regional Disaster Framework, and through the State of Washington’s Intrastate Mutual Aid System, (WAMAS), and interstate mutual aid system Emergency Management Assistance Compact (EMAC), the City will make resources available to other jurisdictions through the Zone 1 Emergency Coordinator (Z1 EC), King County Emergency Coordination Center (KC ECC) and other agencies in the state, whenever possible.

II. CONCEPT OF OPERATIONS

A. General

1. The City's Emergency Operations Center (EOC) may request assistance through the Z1 EC, KC ECC, or the Washington State Emergency Management Division (WA EMD), as necessary.
2. Routine day-to-day modes of communication will continue to be utilized to the fullest extent possible. This utilization will depend on the survivability of the equipment and service during the disaster.
3. Since partial or total disruption of normal communications may occur during a disaster, the clear definition of primary and alternate modes of communications is vital to any emergency operations activity. The existing telephone service provided through CenturyLink and cellular mobile phone service, and social media, along with the City's AM radio system will provide the basis for attempting to maintain effective communications.
4. The City has access to King County's Alert and Warning system that can call, text, and email emergency information to community members and businesses that will be used as a communication medium to warn the general public of emergency conditions, if available. Notification of citizens regarding emergency information and instructions may also be through ALERT Snoqualmie (provided by King County), if it meets the federal requirements, the City owned AM Broadcast system, the City's website and social media channels, news releases to local and regional media, door-to-door by uniformed City personnel, mobile loud speakers, or any other means available at the time.
5. ALERT Snoqualmie provides emergency information to the public via local radio and television stations and through email, text, and phone. The ~~EAS~~ system may be activated by contacting King County Sheriff's Office Communication Center (KCSO) or King County Emergency Coordination Center (KC ECC). An Amber Alert is an example of what type of warning is eligible for an EAS emergency level of alert and warning. These will be coordinated with the Police Department through their dispatch procedures.
6. 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. The Washington State Warning Point is operated 24 hours a day by the Washington State Emergency Management Division (WA EMD), with the Washington State Patrol as an alternate warning point. The WA EMD will receive information through NAWAS and disseminate that information to King County Sheriff's Office (KCSO), which is a local primary warning point. KCSO will provide that information to the City's Emergency Operations Center.
7. The City is subject to a variety of situations that require rapid dissemination of warning and/or other emergency information to local officials and/or the public. The City will utilize the Central Puget Sound Regional EAS Plan (separately published document) and will follow the procedures outlined in that plan as appropriate.
8. The National Oceanic and Atmospheric Administration (NOAA) weather radios will be located in publicly accessed City buildings such as the City Hall, Fire Department, Police Department; the City's operated recreation centers, school district headquarters and all of the libraries in the City. This list is not meant to be exclusive but an example of locations.
9. Initially, the City's first responders will focus on coordinating lifesaving activities and re-establishing communications and control in the disaster area.
10. Tests of the warning system will be conducted periodically to familiarize government and the public with the system.

B. Organization

1. The Dispatch Communication Center in Issaquah, located at 130 E Sunset Way, Issaquah, WA 98027, is a 24-hour facility, which provides a day-to-day 911 answering point, and provides communications support for the Police Department. The Snoqualmie Fire Department is dispatched by the Northeast King County Regional Public Safety Communications Agency (NORCOM), located at 16100 NE 8th Bellevue, WA 98008. The exchange of information during emergencies will be facilitated through both the Dispatch Communication Centers to the City's EOC.
2. Communication and coordination between all City departments, the City's EOC, field command post(s), and the communication centers (in the EOC at the Fire Dept. and the back-up EOC at the Police Dept.) are critical to the City's ability to effectively coordinate response to a disaster or emergency.
3. Additional volunteer radio nets may be activated as necessary to supplement the City's radio systems, such as local amateur radio operators. The City of Snoqualmie Radio Amateur Civil Emergency Services (RACES), known as the Snoqualmie Emergency Communication and Support Team (SECAST) is activated through the City of Snoqualmie's EOC. In the event of a major emergency, a SECAST operator is pre-designated to the City. Their SOP (Standard Operations Procedures) attached in Appendix A). The City will conduct drills and exercises to test these additional communication capabilities. In addition, team members from SECAST may be deployed to gather and report information and another team that can set up at remote site support like at a shelter, mass feeding site, or established points of distribution (PODs).
4. The Communication Centers are equipped with an emergency generator to supply emergency power to their Centers. The City's EOC is housed in the Snoqualmie Fire Department Headquarters, 37600 SE Snoqualmie Pkwy. It is also equipped with an emergency generator to supply emergency power to the EOC and the fire station when needed. In addition, the City's backup EOC is located in the City of Snoqualmie Police Department and it, too, has an emergency generator.
5. The City's communications capabilities currently available include the following:
 - a) Two-way radios – 800 MHz & VHF (Police, Fire, Public Works)
 - b) Cellular phones for key staff
 - c) Text Messaging
 - d) Commercial Telephone Systems
 - e) Ham radio
 - f) CEMNET (Emergency Management Radio Systems Comprehensive Emergency Management Network) to communicate with the State EOC and King County ECC
 - g) ALERT Snoqualmie (provided by King County)
 - h) Packet Radio
 - i) Runners
6. The Police Department's radio frequencies are on the 800 MHz radio system. The City also has access to multiple mutual aid police frequencies (PSOPS) as well as City and state talk groups.
7. The Fire Department's radio frequencies are on the 800 MHz radio system as well as mutual aid frequencies with neighboring fire agencies.
8. The Parks & Public Works Department utilizes VHF radios with established talk groups that can reach both police and fire personnel.
9. The City utilizes the Central Puget Sound Regional EAS Plan (separately published

- document) and will follow the procedures outlined in that plan as appropriate.
10. The King County Sheriff's Office (KCSO) will serve as the primary warning point for the National Warning System throughout King County. Alternate originators include KC Office of Emergency Management (KC OEM), NORCOM, and the Seattle Office of Emergency Management.
 11. The National Warning System (NAWAS) is the primary system utilized by the Federal Government to disseminate warning information. Warnings received over NAWAS are received at the Washington Warning Point, which in turn disseminates the warning to local warning points. These warnings are disseminated over the ACCESS (Teletype) system, and received at the King County Emergency Coordination Center (KC ECC), which is monitored 24-hours a day. In addition, SEOC will disseminate warning information to all authorized emergency management and first responders state wide.
 12. The City will generally take the following order of priority of systems for status and repair:
 - a) 800 MHz Public Safety Radio network
 - b) City-owned VHF Radio System
 - c) Telephone network:
 - a. City's EOC
 - b. Public Safety (Police Dept. and Fire Dept.)
 - c. Voicemail
 - d) Data communications network including fiber
 - e) E-mail and messaging
 - f) City's Internet connection
 - g) City's website (www.ci.snoqualmie.wa.us)
 - h) City's data center
 - i) Enterprise Computing
 - j) Desktop computing
 - k) Social Media Sites (Facebook, Twitter, etc.)
 - l) Community social media sites (Yahoo, NextDoor, etc.)
 - m) Community Notification Boards (traplines)

The City's communications infrastructure has the following components:

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Component	Description	Support and Maintenance
Microwave	Not Available	Not Available
Fiber	Point-to-Point fiber that facilitates the delivery of voice and data between city facilities	None
Radio – 800 MHz Public Safety and Emergency Management	City owns a number of 800 MHz radios that are issued to their operations staff, emergency management and mounted in key vehicles.	King County Radio System (206) 205-8191 (206) 205-1375 fax
Radio – TRIS	TRIS is the Tri-County Radio Interoperability System. TRIS was implemented in 2005 using a combination of federal funds and urban area security initiative funds. TRIS allows some public safety answering points (PSAPs) to patch talk groups between these radio networks in the urban area: King County 800 MHz trunked, Snohomish Emergency Radio System (SERS), Tacoma 800 MHz radio, Port of Seattle 800 MHz radio, Washington State Patrol, and the Federal Integrated Wireless Network (IWN), which supports a number of DOJ and DHS agencies, including FEMA.	King County Radio Communication Services 401 Fifth Ave. Seattle, WA 98104 Office: 206-263-8111
VHF Radio System	The City of Snoqualmie owns and operates a VHF radio system. The frequencies are 155.9475 repeater, 155.8350 simplex and 154.1900 simplex.	Paul Graham and Robert Keeton at Snoqualmie Police Dept.
Communications Van	Snoqualmie’s Auxiliary Communications Team	Paul Graham and Robert Keeton - Team Leaders
Telephone Network	Integrated Services Digital Networking ISDN- Internally maintained and externally connected to CenturyLink Company	CenturyLink Communications

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Data Communications	Internal to City of Snoqualmie	City of Snoqualmie Information Technology Department
Internet connection	King County Institutional Network (I-Net)	Coordinated through City of Snoqualmie Information Technology Department
Intergovernmental network	King County Institutional Network (I-Net)	Coordinated through City of Snoqualmie Information Technology Department
Wireless data network—Public Access	Internal via KC-I-Net	Coordinated through City of Snoqualmie Information Technology Department
Wireless data network—Internal City wireless access points	Internal via KC-I-Net	Coordinated through City of Snoqualmie Information Technology Department
Wireless data network for mobile computing network	Internal via Verizon	Coordinated through City of Snoqualmie Information Technology Department
I-Phone	Verizon	Coordinated through City of Snoqualmie Information Technology Department
Cellular telephones	Verizon	Coordinated through City of Snoqualmie Information Technology Department

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Text Messaging	Verizon-limited usage to key personnel	Coordinated through City of Snoqualmie Information Technology Department
Paging (Fire)	Via NORCOM	North East King County Regional Public Safety Communications Agency (NORCOM)
Paging (non- Fire)	King County Alert and Warning system accessed through King County Office of Emergency Management and key staff in the City are trained to use the staff notification portion	King County Office of Emergency Management
Phone-based Community Notification System	A City owned and/or subscribed third party vendor phone based notification system	City of Snoqualmie Information Technology Department
Electronic mail	Internal to the City of Snoqualmie	City of Snoqualmie Information Technology Department
SharePoint	Key EOC staff will have access to the King County SharePoint Site for assisting with managing information and resource requests during an activation of the EOC.	King County Office of Emergency Management
Snoqualmie's City Website and Social Media Channels	Provide information for residents, businesses, and visitors.	Coordinated by the Public Information Officer(s) or Communication Program Manager

Communications for special needs and vulnerable populations will depend upon the specific needs and general functions of individual departments. The following communications methods are available for department use:

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Communications Method	Description	Potential Applications
City Telephone	<p>Private telephone network internal to City government. Connections to public switched and cellular networks, including long distance.</p> <p>The City operates a 24 hour, 7 days a week phone number to respond to emergencies needing City assistance.</p>	All applications to populations with land-line or cellular telephones
TTY Capability	The City also has a TTY line for the deaf and hard of hearing that can be accessed during business hours that the City is open. After business hours, the City relies on the King County Sheriff's Dispatch center's TTY line to relay and needs that are received by them for city services.	Ability to receive information from the deaf and hard of hearing
Community Notification	Outbound telephone dialing and messaging mechanism, with limited response capability. Access to King County's Alert and Warning system through King County OEM or City-owned or contracted messaging system.	All applications to populations with land-line telephones, cell phones or pagers
Auxiliary Communications Services	Ham radio operators (volunteers) who will be stationed at critical sites during a disaster.	Communication to community centers and other assembly sites
Internet: E-Mail	Computer communications to populations with computer and data networking capability, active communications	Communication to populations whose e-mail address a City department knows
Internet: Web	Information – mostly one-way, passive	Communication to any population with an Internet connection and web browser

City's Social Media Sites	Provide notices of information on City's Facebook, Twitter, and other social media channels as available. May also be used as two-way communication via discussion posts on the 'wall' and/or Discussion Posts.	Communication to any population with an Internet connect and web browser
Runners	People can physically go and notify people 'in person'. Police, Fire, and CERT Personnel may assist with this. This can include verbal and printed material.	Communicate "face-to-face"

C. Actions

1. Preparedness

- a) Conduct planning with partner agencies to refine communications, information systems, and warning operations.
- b) Prepare and maintain emergency operating procedures, resource inventories, personnel rosters and resource mobilization information necessary for implementation of the responsibilities of the lead agency.
- c) Manage inventory of equipment and other pre-designated assets that are essential to meet communications of special-needs groups.
- d) Assign and schedule sufficient personnel to manage communication functions for an extended period,
- e) Ensure lead agency personnel are trained in their responsibilities and duties,
- f) Develop and implement emergency communications, information systems and warning strategies.
- g) Develop and present training courses for all personnel.
- h) Maintain liaison with support agencies.
- i) Conduct All Hazards exercises involving communications, information systems and warning systems.

2. Response

- a) Coordinate operations in the EOC and/or at other locations as required.
- b) Coordinate needs and response actions with all agencies who manage communication functions.
- c) Establish and maintain a system to support on-scene direction/control and coordination with EOC, King County ECC, the State EOC or other coordination entities as appropriate.
- d) Coordinate with support agencies to develop, prioritize and implement strategies for the initial response to EOC requests.
- e) Establish communications with appropriate field personnel to ensure readiness for timely response.
- f) Evaluate and task the communications, information systems, and warning support requests for threatened and/or impacted areas.

- g) Implement Disaster Assessment Teams to determine post-event effect on emergency services, functional group resources and the ability to perform Continuity of Operations for essential functions.
- h) Participate in EOC briefings, development of Incident Action Plans and Situation Reports, and meetings.
- i) Coordinate with support agencies, as needed, to support emergency activities.
- j) Obtain other resources through the King County Regional Disaster Plan or access the Statewide Intrastate Mutual System and/or the Mutual Aid Agreements.
- k) Coordinate with the Zone 1 Coordinator and the King County Office of Emergency Management to obtain resources and facilitate an effective emergency response among all participating agencies.
- l) Monitor and direct communication resources and response activities to include pre-positioning for response/relocation due to the potential impact(s) of the emergency.

3. Recovery

The City Administrator may appoint a Recovery Coordinator to manage the City's recovery process and a Recovery Task Force made up of City staff and representatives from key organizations and community groups who have a vested interest in the community's recovery to assist in the recovery process and advise on matters related to recovery. The Recovery Task Force will be dynamic in nature, with involved personnel changing as projects and needs change. The duty of Recovery Coordinator may also be assigned to varying personnel as needed and appropriate. In addition, the City will work with all major communications providers to as quickly and efficiently as possible recover all communications system back to their normal operating conditions. See PD Dispatch and FD Dispatch Standard Operating Procedures.

4. Mitigation

- a) Mitigation activities for this ESF are covered in the City of Snoqualmie's Hazard Mitigation Plan.

III. Responsibilities

A. Lead Agency

1. Fire Department

- a) Develop and maintain warning procedures for the City.
- b) Disseminate warning information received through NWS or NAWAS to local emergency officials in accordance with Dispatch/ Communication Center standard operating procedures.
- c) Maintain all available EOC communication equipment in serviceable and ready condition.
- d) Assure proper working order of all equipment and frequencies through tests or normal day-to-day operations.

- e) Be prepared to move to a remote receiving and monitoring site should the City's communication systems fail.
- f) Arrange for additional or alternate communications capabilities as necessary.
- g) Activate staff of primary communications center.
- h) Establish communications capabilities with all City departments and outside agencies as necessary.
- i) Provide assistance with dissemination of warning information through all available communication systems.
- j) Direct emergency communications support activities of the City.
- k) Advise EOC on the status and capabilities of whole emergency communications system.
- l) Prepare and maintain emergency operating procedures, resource inventories, personnel rosters and resource mobilization information necessary for implementation of the responsibilities of the lead agency.
- m) Query wireless providers and local media for damage reports.
- n) Assess the need for, and obtain telecommunications industry support as required.

B. Support Agencies

1. Emergency Operations Center

- a) Coordinate the dissemination of warning information through all available communication systems.
- b) Develop and maintain warning procedures for the City.

2. Information and Technology Department

- a) Maintain all available departmental equipment in serviceable and ready condition.
- b) Assure proper working order of all departmental equipment and frequencies through tests or normal day-to-day operations.
- c) Develop and maintain an inventory of departmental communications capabilities and resources.
- d) Provide communications support as requested.

3. Communications Program Manager and Public Information Officer(s)

- a) Provide support for emergency communications to the public by disseminating news releases, media statements, radio scripts, ALERT Snoqualmie scripts; posting to City social media channels; posting to community-based social media sites as available; making personal contact with media and providing media interviews as needed; and coordinating press conferences as needed.

4. King County Emergency Coordination Center – KC ECC

- 1. Activate EAS network for public information and warning.
- 2. Activate CEMNET (two-way VHF radio system for state to KC ECC communications).
- 3. Activate volunteer radio networks as necessary.

5. Washington State Emergency Management Division
 - a) Maintain overall responsibility for planning and coordinating the emergency communications program within the state as identified in the Washington State Comprehensive Emergency Management Plan and the Washington State Emergency Communication Development Plan.
 - b) May facilitate emergency communications through other state communications assets.
 - c) Operate the State Emergency Operations Center (SEOC) 24 hours a day as the primary warning point for the FEMA National Warning System (NAWAS), with operational assistance provided by the Washington State Patrol.
 - d) May activate the EAS to disseminate emergency information to the public.
 - e) Provide coordination of State resources to provide support when local jurisdictions, as appropriate, when all local, regional and county resources have been expended.
 - f) Facilitate the requisition of resources from other states through the Emergency Management Assistance Compact (EMAC).
 - g) Request and coordinate Federal resources through the Federal Emergency Management Agency (FEMA).

4. Snoqualmie Emergency Communications and Support Team (SECAST)
 - a) Provide staffing and support under the Communications Unit at the EOC.
 - b) Coordinate the activation and use of emergency nets using appropriate frequencies.
 - c) Maintain and implement appropriate SOPs (Standard Operating Procedures) to support Ham Radio utilization, in coordination with EM Coordinator. (See Appendix A)
 - d) Serve as content experts on acquisition, maintenance, and use of appropriate equipment and resources to support Ham Radio utilization, including, but not limited to, HF SSB/CW, SL Repeater, Six M FM, UHF FM, VHF FM, and VHF Packet.

IV. APPENDICES

A. SECAST Operating Policies and Plan