I. INTRODUCTION
There are many hazards that could require the coordinated response of public and private agencies within Volusia County. Timely and accurate alert notifications to emergency responders and the public are critical during any emergency or disaster. Any communication, notification or warning system may fail; this possibility requires that multiple methods of communication, notification and alerts be available.

a. PURPOSE
This Standard Operating Guideline (SOG) describes the methods for the dissemination of information, alerts and warnings to both responders and the general public. This document describes the various components of the alert/warning system used to communicate emergency or disaster information. The communication methods identified are designated as primary, secondary, or tertiary means of communication with relation to the Emergency Management office; these systems may be the primary means of communication by other organizations. The systems are also classified under their Emergency Management use to initiate, receive, and/or relay alerts to internal and external organizations.

b. SCOPE
This SOG covers communication and notification to the public and the responders in Volusia County. Connectivity of the County Warning Point to the State Watch Office (SWO) aligns information flow from the County into a much larger communication network. Information also flows from the SWO to the County. While the nation’s system of alert, warning, and notification is presented in general terms the scope of this document is centered on actions taken within and by the County itself.

II. ROLES AND RESPONSIBILITIES
Responsibilities for monitoring, communication, notification and warning are shared among many agencies and involve the cooperative efforts of governmental entities as well as public/private partnerships and contracted services with private industry.

A. Organizations
The following organizations and components share notification responsibilities relevant to this SOG:

a) Volusia County Emergency Management Division (VCEMD)
b) Volusia County Sheriff’s Communications Center (County Warning Point)
c) Volusia County I.T. Division and the Financial and Administrative Services Department (ESF-2 Lead)
d) Volusia County Community Information (ESF-14 Lead)
e) State of Florida Division of Emergency Management (State Watch Office)
f) FEMA and the Emergency Alert System (EAS)
g) NOAA, the Storm Prediction Center, and the National Weather Service

B. Monitoring, Detection, Notifications

The Volusia County Sheriff’s Communications Division is the County Warning Point and is responsible for the notification of county personnel as necessary. Information flow enters the Communications Center from a variety of sources such as emergency management officials, municipal law enforcement, Central Florida Information Exchange, private citizens, the National Weather Service, utility providers, and private industry, amongst others. The County Warning Point is manned 24/7/365 and utilizes these resources to maintain a high level of situational awareness.

Detection of actual or suspected hazards often occurs through the consolidated dispatch center which is the County Warning Point. The County Warning Point monitors events unfolding in the County and in turn notifies the County Emergency Management Office and the State Watch Office when State Watch Office guidelines are met.

County Warning Point Detection Includes
- 911
- Law enforcement intelligence units
- Warnings or announcements by the perpetrators
- The characteristics of the event, such as explosion or chemical recognition
- Witness accounts
- The medical or physical symptoms of victims
- Laboratory results from samples taken at the scene or from victim’s bodies
- Monitoring of a community’s morbidity and mortality on a routine basis
- Unexplained disruption or failure of a computer network, telecommunications system or Internet service.

a. Volusia County Emergency Management Division (VCEMD)

The Volusia County Emergency Management Division remains at a Level-3 activation monitoring all hazards: natural, technological and intentional, which may impact the safety and well-being of Volusia County citizens, visitors and property. Volusia County Emergency Management maintains a call down list for notifications of Emergency Management staff by the County Warning Point under State Watch Office Criteria. This call down list
is provided to the County Warning Point and is used to contact Emergency Management Staff during events that meet State Watch Office notification guidelines which encompass all hazards both man-made and natural.

VCEMD monitors NAWAS and EMnet, and also maintains emergency contact lists for all Emergency Support Functions, City Emergency Management Coordinators, Fire Chiefs, Police Chiefs, and the Executive Management Group referred to as the Managers Advisory Group (MAG). VCEMD also monitors email notifications from the National Oceanic and Atmospheric Associations-National Weather Service Office, Central Florida Intelligence Exchange, and the State Warning Point. It is the responsibility of Volusia County Emergency Management to issue flood advisories and initiate flood response actions should they be required.

As a hazard becomes more imminent the VCEMD may issue advisories or forward information in order to raise awareness of the potential event among the local response community, and/or partially activate to bring in additional support to establish information flow to the public through additional organizations or ESFs such as ESF-14 Public Information. Response times will vary depending on the scale of the event; however, Public Works will respond immediately to calls from citizens when there is flooding in their neighborhood.

VCEMD maintains the contracted services for Satellite Phones and the Public emergency notification system Code Red Communications. VCEMD also maintains a Memorandum of Understanding with the Volusia Amateur Radio Emergency Services (VolARES) group.

On a quarterly basis, administrative staff update the contact database that contains information for all of the municipalities, ESFs, support staff, and the Manager’s Advisory Group. Each agency provides a primary contact and alternates to reach during an emergency event. This includes groups used on a daily basis as well as advisory groups that are sent information during an event. The contact database and the wide variety of email groups allow us the capability to communicate with all Emergency Management stakeholders, personnel, and elected officials. Testing and correction of failures in the email groups also occurs regularly with email invitations to training and exercises.

Volusia County Emergency Management will ensure annual tests occur including the “Open Text” (formerly Easy Link) system, Satellite Phones, Code Red, the Citizens Information Center number, back-up EOC phone lines, and the SLERS radio.

The current operations section of Volusia County Emergency Management is responsible for review and update of this plan. At a minimum this document will be reviewed by Current Operations staff on a biennial schedule.
b. **Volusia County Sherriff’s Communications Center (County Warning Point, CWP)**

The Volusia County Sheriff’s Communications Center communicates critical information to VCEMD and the State Watch Office (SWO) triggered in accordance with the SWO notification guidelines. The Sherriff’s Communications Center is also the designated County Warning Point (CWP) and is responsible for 24/7 monitoring of the Federal NAWAS (National Alert Warning System), and the State of Florida EMnet. Volusia County Emergency Management Division currently maintains the contract for the Code Red emergency notification system, while the CWP maintains the ability and staffing to distribute alerts with this notification system.

c. **Volusia County Information and Technology Division Financial and Administrative Services Department ESF-2 Communications**

The mission of Emergency Support Function #2, Communications, is to plan and implement a multifaceted communications network to support the functioning of county government at the time of a disaster, including the ability to effectively interface with federal, state and local government agencies and organizations involved in the emergency response and disaster recovery efforts. The communications network must be resilient, redundant, and capable of providing support during any emergency or special situation.

ESF-2 is also responsible for coordinating with VCEMD and the Amateur Radio Emergency Services. Volusia County Communications Department maintains the County’s 800 MHz radio system.

d. **Volusia County Community Information ESF-14 Public Information**

Emergency Support Function 14 disseminates disaster related information to the Public. During times of CEOC activation this is accomplished through news releases and the posting of information to the County’s web site and through communication with a network of Public Information professionals called the Volusia/Flagler Public Information Network (PIN).

e. **State of Florida Division of Emergency Management**

The State Division of Emergency Management operates the State Emergency Operations Center which houses the State Watch Office (SWO). The SWO is a 24/7 operation and serves to provide a single point of information and warning dissemination to Federal, State, and/or Local governmental officials. The Division also provides, utilizes and monitors the EMnet Voice Manager and Message Manager, NAWAS, and is the State entry point for the Emergency Alert System (EAS) messages.

f. **FEMA, and the Emergency Alert System (EAS)**

FEMA, the FCC and NOAA/NWS jointly coordinate the EAS to allow the dissemination of local emergency messages via this system. The EAS is used on AM, FM and Land Mobile Radio Service, as well as VHF, UHF, FiOS (wireline video providers), and cable television including low-power stations.
National Weather Service NOAA Weather Radio System
NOAA's Storm Prediction Center and the National Weather Service are responsible for the preparation and issuance of severe weather forecasts and warnings designed for the protection of life and property of the general public. They are responsible for the operation and maintenance of the NOAA Weather Radio All Hazards (NWR)

III. COMMUNICATION COMPONENTS

1) Radio, Telephone, and Computer Infrastructure

a. County-wide 800 MHz Harris EDACS (Enhanced Digital Access Communications System) radio system

Overview (primary/initiate, receive and relay)
Volusia County currently operates a Harris 800 MHz EDACS Trunking radio system. The system consists of 2 Multi-Site Simulcast radio systems. (System “A” is 14 chs. and System “B” is 16 chs. Totaling 30 chs. to achieve County coverage. It is “Dual Mode” capable allowing both analog and digital voice transmissions. There are over 400 trunked talk groups available. There are approximately 10,000 radios within Volusia County.

In the event of a failure this system will revert fail-soft and continue trunking. As a backup to total system failure, there is access to 5 conventional State Mutual Aid frequencies, Volusia County’s UHF MEDCOM system and a portable trailer radio system with a 100’ tower.

Volusia County maintains regional interoperability with 5 surrounding counties with the existing system and interoperability to unlimited users with the use of communications equipment designed to cross patch systems and frequencies. (ie. FIN and VIDA Gateway).

As a 3rd level of backup, we have a Standalone 5ch. Trunked system at EVAC ambulance for redundancy and use for special events.

Application
This system is suitable for public safety communications and notifications across all hazards to those individuals utilizing both the mobile and portable radio system.

Testing
This is a daily use system. Preventative maintenance is done every 6 months, conducting extensive testing of every component in the system.

b. Telephone Systems (Land-line, Fax, TTY/TDD)
Overview (primary/initiate, receive and relay)
The Volusia County Emergency Management Division maintains land-line telephones on the County's digital switch as well as analog lines. In the event of failure of the internal switching network, a system of analog direct dial telephones are available. Facsimile machines are available in the CEOC and Message Center and a TTY/TDD device is operational to facilitate communications with the hearing impaired.

Application
This system is suitable for communications and notifications across all hazards to those individuals utilizing land-line telephone systems including facsimile and TTY/TDD devices.

Testing
This is a daily use system and the back-up phone lines and CIC number are tested annually by VCEMD staff.

c. Cellular Phone

Overview (secondary/initiate, receive and relay)
Volusia County currently provides cellular phone service to Emergency Support Function Leads through Sprint and ATT. A list of cellular phone contact numbers for all ESFs is maintained by VCEMD.

Application
This system is applicable across all hazards for notification to those possessing cellular phones.

Testing
This is a daily use system. The phone contact lists are updated quarterly by the VCEMD.

d. Satellite Telephones

Overview (secondary/initiate, receive)
A contract for satellite radio/telephones is maintained by VCEMD. Base units are located in the CWP and CEOC. Portable units can be issued to key personnel. County Communications also has a satellite communication trailer (Trak-Star) capable of both voice and data transmission.

Application
This system is applicable across all hazards.

Testing
This system is tested annually. The telephone system is tested by placing calls via the satellite telephones to local telephone numbers.
e. Computer Systems (Internet, Email, Cellular Broadband Aircards)

**Overview (primary/initiate, receive and relay)**
Computer networks and the ability to communicate via Internet based applications and E-mail is widespread and is utilized for daily business use.

VCEMD staff maintain multiple email groups that are used during times of emergency. Many of these groups are used on a regular basis and updates are made upon email failure.

Many have portable access to the Internet and E-mail through the use of laptop computers and wireless broadband services. Email failures in these groups are addressed.

In addition to the standard email lists Volusia County Emergency Management maintains E-Update, which allows the Public to sign up for email alerts through the VCEMD web site: [http://volusia.org/emergency/](http://volusia.org/emergency/).

Volusia County Emergency Management Staff also receive alerts and warnings from the State Watch Office specific to Volusia County via the FDEM email alert notification system in alignment with the State Watch Office notification standards.

**Application**
This system is applicable across all hazards and is especially useful for providing information about impending events. The State Watch Office email groups provide timely notifications which continue through incidents specific to Volusia County. This information is produced in

**Testing**
These are daily use systems and are tested in nearly real time. However, the email notification groups and contact database that Emergency Management Maintains is updated quarterly. Also, all of the groups are tested at least twice a year with the release of Hurcon 2 on June 1\(^\text{st}\) and Hurcon 1 on November 30\(^\text{th}\).

2) Internal Notifications and Public Warnings

a. **Public Emergency Notification system Code Red Communications (primary to public)**

**Overview (initiate and relay)**
Code Red) provides an emergency telephone notification system. This is an extremely high-speed telephone communication service available for emergency notifications. The system is capable of delivering customized pre-recorded emergency messages directly to homes and businesses at the rate of up to 60,000 calls per hour.
Access to this system is gained through contact with the County Warning Point (CWP) on a 24/7 basis.

**Application**
This system is capable of emergency notifications to the Public and Responders across all hazards. It is also capable of targeting vulnerable populations and houses the special needs registry contact list.

**Testing**
The system is maintained and operated by the CWP and used on average more than 10 times per month. The system is also tested by VCEMD at least annually.

b. **HAM Radio Communications**
**Overview (secondary/initiate, receive and relay)**
Volusia ARES radio operators may be used for communications between the CEOC and public shelters during activations. They may also be used as backup communications in the event of a complete communications infrastructure failure. Capabilities include local VHF/UHF, long-haul HF and digital communications services. Amateur Radio also serves as SkyWarn for Severe Weather Storm Spotters.

**Application**
This system is applicable across all hazards.

**Testing**
The Volusia County Amateur Radio Emergency Service (VolARES) group is responsible for maintaining and testing the system. They hold a weekly on-air voice and digital net test. This system is also tested during special events activations of the County EOC.

c. **National Warning System (NAWAS)**
**Overview (primary) (initiate, receive and relay)**
The National Warning System (NAWAS) is a 24-hour continuous private line telephone system used to convey warnings to Federal, State and local governments. A NAWAS telephone set is monitored 24/7 at the CWP. NAWAS is also monitored at the CEOC during standard business hours and 24 hours during full activation.

**Application**
This system provides a notification method between the SWO and CWP. When the County EOC is activated for planned events NAWAS may be the means of notification to the SWO that the CEOC is activating. This system may also be used to notify the SWO of un-planned activations.
**Testing**
This system is tested weekly and documented in the State Watch Office summary.

d. EMnet Voice Manager and Message Manager

**Overview (primary) (initiate, receive and relay)**
The Emergency Management Network Voice Manager (EMnet VM) and Message Manager (MM) constitute the SWO’s primary backup communications system for voice and data communication to the counties and other state agency emergency management facilities. The EMnet MM receives weather bulletins from the local NWS office as well as other EAS bulletins. The EMnet VM provides voice communications between County Warning Points, the County EOCs, NWS Offices, and the State Watch Office.

**Application**
This system is applicable for communication with the SWO, County Emergency Management Offices, NWS Offices, and plugs in to the Integrated Public Alert and Warning System (IPAWS) and the Emergency Alert System (EAS).

**Testing**
Weekly tests are conducted and documented in the State Watch Office summary. VCEMD staff also conducts weekly line checks.

e. Citizen Information Center Disaster Hotline

**Overview (primary) (receive and relay)**
Volusia County’s non-emergency Citizen Information Line is a one-stop information and assistance center that answers questions, coordinates complaints, handles designated requests for services and serves as a means for rumor control in Volusia County. During CEOC activations it is a 24/7 conduit for citizens to report non-emergency disaster related issues or receive important information prior to, during and following a disaster or major emergency. The CIC is located in the County EOC.

**Application**
This system is useful for receiving and passing non-911 type information to the public. TTY/TDD equipment is available to facilitate communication with the hearing impaired.

**Testing**
This is a daily use system. However, this phone line is open and re-routed to the County EOC during times of disaster.

f. All Hazards NOAA Weather Radio (NWR)
Overview (secondary for EM/initiate, receive and relay)
NWR broadcasts National Weather Service (NWS) warnings, watches, forecasts and other non-weather related hazard information 24 hours a day. During an emergency, NWS forecasters interrupt routine broadcasts and send a special tone activating local weather radios. Weather radios equipped with a special alarm tone feature sound an alert to give you immediate information about a life-threatening situation. NWR broadcasts warnings and post-event information for all types of hazards: weather (e.g., tornadoes, floods), natural (e.g., earthquakes, forest fires and volcanic activity), technological (e.g., chemical releases, oil spills, nuclear power plant emergencies, etc.), and national emergencies (e.g., terrorist attacks). Working with other Federal agencies and the Federal Communications Commission’s (FCC) Emergency Alert System (EAS), NWR is an all-hazards radio network, making it the most comprehensive weather and emergency information available to the public. Life-threatening weather emergency messages are alerted on NWR. Many of those same weather-related emergency messages are also broadcast via the EAS. Volusia County is served by KIH26 operating on 162.4 MHz and the County S.A.M.E. code is 012127.

Application
This system is used to automatically inform and alert regarding high winds, severe weather, wildland/urban wildfire conditions, and other weather related events. Non-weather related hazard information can also be disseminated via the Weather Radios.

Testing
Weekly tests are conducted by the National Weather Service and are coordinated with VCEMD.

g. National Emergency Alert System (EAS)

Overview (secondary for EM/initiate, receive and relay)
The Emergency Alert System (EAS) is a national public warning system that requires broadcasters, cable television systems, wireless cable systems, satellite digital audio radio service (SDARS) providers and, direct broadcast satellite (DBS) service providers to provide the communications capability to the President to address the American public during a National emergency. The system also may be used by state and local authorities to deliver important emergency information such as AMBER alerts and weather information targeted to a specific area.

Application
This system is applicable to all hazards. VCEM can request that emergency messages be disseminated via the EAS by notifying the SWO and the local Primary LP-1 Control Station, WPOZ-FM or the local NWS office.
Testing
Testing of the EAS is the responsibility of the SWO and the Local Primary LP-1 Control Station. Monthly tests are conducted by the SWO and the Local Primary LP-1 Control Station. Digital television and cable providers, along with Sirius XM satellite radio, IBOC, DAB and digital radio broadcasters have been required to participate in the EAS since December 31, 2006. The last nationwide test was conducted November 9, 2011 2pm EST.

h. Commercial Broadcast Media
   Overview (primary for EM/initiate, receive and relay)
Volusia County is served by several broadcast television stations representing all the major networks and a multitude of AM/FM radio stations. All stations maintain equipment capable of receiving alerts broadcast through the EAS system.

   Application
Use of this system is applicable across all hazards to alert and warn the public of impending or occurring emergency events or to disseminate emergency information.

Testing
This is a daily use system.

i. Integrated Public Alert and Warning System (IPAWS)
   Overview (secondary for EM/initiate, receive and relay)
Federal, state, territorial, tribal, and local alerting authorities may choose to use IPAWS and may also integrate local systems that use Common Alerting Protocol (CAP) standards with the IPAWS infrastructure. IPAWS gives public safety officials an effective way to alert and warn the public about serious emergencies using the Emergency Alert System (EAS), the Commercial Mobile Alert System (CMAS), NOAA Weather Radio (NWR), and other public alerting systems from a single interface. This interface can be reached through EMnet or Code Red.

   Application
This system integrates many of the commonly used communication components including cell phones and television. The primary focus of this system is to allow federal officials to communicate over large geographical areas. However, local authorities could access this system to alert or warn residents of the County.

Testing
This system integrates multiple programs which are tested independent of each other.

j. **Person-to-Person Contact**
   **Overview (secondary/initiate, receive and relay)**
   Person-to-person or door-to-door contacts can be made with field personnel such as Firefighters and Law Enforcement Officers. Typically methods employed would be by use of PA systems on Fire Apparatus and/or Patrol Cars.

**Application**
This system is especially useful to notify neighborhoods and large groups of people in the events of high winds, hazardous materials incidents, flooding, wildland/urban wildfires, droughts and terrorism.

**Testing**
This is a daily use system.

k. **SLERS (State Law Enforcement Radio System)**
   **Overview (tertiary/initiate, receive, and relay)**
   Florida's Statewide Law Enforcement Radio System (SLERS) is a single, unified radio network that meets the radio voice communications needs of state law enforcement officers and other participating agencies throughout the state. SLERS is a 800/700 (aircraft) MHz system consisting of 200 microwave sites, RF multi-sites, and RF simulcast sites. The SLERS all-digital radio network covers over 60,000 square miles (including 25 miles offshore) with 98% mobile coverage and portable coverage in selected areas. The VCEOC and the FDEM Regional Coordinators have these radios.

**Application**
This system can be used to communicate with the Florida Division of Emergency Management Regional Coordinators.

**Testing**
This is a daily use system and Volusia County Emergency Management will ensure it is tested at least annually.