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Severe Weather Action Plan for Recreation Areas

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Purpose

This technical note provides information to assist project managers and program coordinators in establishing a severe weather action plan in park attendant/park host-managed areas. Various aspects of the action plan cited have been used in the field, and positive feedback from the public has been received. The action plan cited is from the Corps of Engineers' Lake Sidney Lanier in Buford, GA.

Background

During summer 1994, at approximately 1:30 a.m., one of Lake Sidney Lanier's campgrounds withstood a direct hit from a tornado. Even though the campground park attendants had notified the campers earlier in the evening of the possibility of severe weather in the region, numerous minor injuries were suffered, and damage to private and government property was in the thousands of dollars. Because the park attendants on duty had a weather radio, they were able to notify the visitors of the oncoming danger. This warning possibly helped avoid much more serious injuries and even loss of life.

Assessment of the Incident

Two critical factors were raised as a result of this incident. The primary consideration was the cliché "when seconds count"; the other concern was the amount of responsibility placed on the contract park attendants during the periods when staff members are unavailable.

The first task was to identify how to counter the time element. The practice at the time of the incident was for the Project Management Office to monitor a weather warning radio during normal duty hours. During the recreational season, these hours are from 8:00 a.m. until midnight 7 days a week. However, the critical question was,

How long does it take for the radio dispatcher to call and notify all of the affected areas, and who was going to notify the recreation areas during the off-duty periods.

The solution to this dilemma was to purchase weather monitors for each entry station of Lake Lanier's eight campgrounds. These radios have a warning signal designed to sound when a "Severe Weather Advisory" is issued by the National Weather Service (NWS). The weather monitor is tuned to the NWS station in Atlanta, GA (162.55 MHz), with capability to receive the Athens, GA (162.400 MHz), and Macon, GA (162.475 MHz), stations. The park attendants are instructed to leave the weather monitor in a stand-by mode, especially during periods of potentially adverse weather conditions.

The second element of the dilemma concerned the park attendants' ability to interpret the information received over the weather monitor. When broadcasting weather information, the NWS uses the names of counties, cities, or communities to identify locations. Furthermore, a code is used to identify certain conditions and what is anticipated to follow. Thus, many of the contractors, who are not native to the Lake Lanier region, would be unfamiliar with both the NWS terminology and the location names.

Elements of a Project's Severe Weather Action Plan

Lake Lanier's Severe Weather Action Plan is divided into three categories: location, terminology, and procedures. All three of these components must be illustrated in a manner that is easy for the park attendant to comprehend and is suitable for the park attendant to disseminate to the visiting public. The primary goal of the action plan is to sufficiently cover all of the elements in a clear and straightforward manner.

Location

The location component was developed by visiting a county Emergency Management office located near the project. This office provided a map identifying all of Georgia's 159 counties. Another map, from a local telephone directory, identified the major communities in the 20-county Atlanta Metropolitan Statistical Area. These two elementary maps represented a tremendous tool for helping the park attendants know where they are and, in turn, disseminate the locations given by the NWS.

Terminology

The primary concern in this section of the plan is to identify the terminology that applies to the region. The NWS, along with the Federal Emergency Management Agency and the American Red Cross, have produced several publications that identify all of the terms used.

These publications, which may be obtained from any of these agencies, provide a wealth of information. One series, called "A Preparedness Guide," is written for each of the storm types monitored by the NWS. Each guide illustrates very well the various actions one should take and the terminology used to describe the storm.

The two most critical terms everyone must be familiar with are "Watch" and "Warning." When conditions are favorable for severe weather, a Watch is issued to notify individuals to be alert. National Weather Service personnel use information from weather radar, spotters, and other sources to issue Warnings for areas where severe weather is imminent. Individuals in the warning area should take immediate action to protect life and property.

Procedures

Once a severe weather advisory has been issued by the NWS, the Project Management Office should immediately notify all park attendants, hosts, and rangers of the nature of the weather advisory. Standard procedure dictates that the park attendant/host is to advise the visiting public of the nature of the weather advisory. The park attendant informs the public that, if the weather becomes too severe, it is recommended that they go the nearest restroom for shelter.

If the advisory is merely a "Watch," the park attendant/host is responsible for notifying the public during routine patrols. If the advisory has been elevated to a "Warning" status, the park attendant/host is instructed to immediately notify as many visitors as possible of the situation. The park attendants/hosts are instructed that if severe weather occurs during the hours after the gates have closed, they may elect to leave the gates open for visitors to leave if they wish. Park rangers routinely assist the park attendants/hosts with this task if possible.

The park attendants/hosts carry out these duties as best they can. However, under no circumstances are the park attendants/hosts to carry out these procedures if they feel their safety is in jeopardy.

Weather Radios

After the tornado incident in the summer of 1994, a suggestion was made to consider the practicality of placing weather warning radios in the campground entry stations. The practice at that time was for the radio dispatcher at the project office to monitor the radio. However, two important situations arose. First, how would the park attendants and park hosts be notified during periods when the staff was off-duty? Second, which parks would be notified first? The actions of the park attendants that summer night illustrated that the park attendants were quite capable of disseminating the information released by the NWS and could quickly take the necessary steps to notify the campers.

A decision was made to purchase weather alert radios. Three critical elements were addressed in selecting a system. The radio had to have the ability to switch to any of the three NWS channels, it must have an "alert" warning mode, and finally, it must be operable with either alternating or direct current. Several models in various price ranges were inspected. The system that best met the criteria and was selected was a Midland Weather monitor (model 74-102). The radios, which cost approximately $35, were purchased locally at a franchised Radio Shack store.

The project's ordering officer required authorization from the Mobile District's Information Management (IM) office prior to approval of the purchase. This was required since these items were not included in the current Communications Plan for

the Lake Sidney Lanier Project. A call was made to the IM office, a verbal waiver was granted, and the purchases were approved.

Ten radios were purchased and issued to the park attendants and park hosts in the field in spring 1995. The radios were mounted to the wall in an area of the entry station where the best reception was obtained. This location varied at each entry station. The park attendants and park hosts have provided positive feedback to the program, and many purchased weather radios for their living quarters.

A proposal was made to place weather radios in areas accessible to the general public. This idea was conceived during a stop at a State of Alabama Welcome Center. In the interior lobby of the comfort station is a speaker mounted to the wall with a red button next to the speaker. The visitor presses the button, and a radio tuned to the local NWS station gives the regional weather forecast continuously. Alongside the speaker is a state map identifying the area.

The State of Alabama Highway Department was contacted regarding the specifics of the radios and where they could be obtained. The Highway Department stated they used old truck two-way radios and mounted these radios to the back side of the interior wall. A timer switch was connected to the speaker, which allows the weather forecast program to play for a specified amount of time, generally 2 minutes.

The communications group assigned to the project was contacted and questioned about the possibility of building a similar system. An inspection was made of the various buildings and styles around the project, and it was determined that this idea was not practical. However, a similar system could be built using a weather monitor, connected to a speaker with a timer relay and placed inside a waterproof metal box. This box could be mounted on the exterior wall of a facility. Authorization was granted by the Project Manager to build one system, to see if the radio had practical applications and how much of a problem would be generated by vandals. The one system was built in late summer 1995, at a cost of approximately $175, and installation was postponed until spring 1996. This system is being evaluated and, as funds allow, other systems will be installed where they would be most effective.

Advantages of Plan Implementation

Prior to installation of the weather alert radios and implementation of the project's Severe Weather Action Plan, park attendants and park hosts were always uncertain if they were taking the appropriate action. Based on the future projections of manpower reductions and funding restrictions, it is much more likely that park attendants and park hosts will have to initially respond to these incidents. This plan gives the park attendant and park hosts clear and concise guidelines on how to obtain the weather information they need, how to interpret that information, and what actions to take in the event of a weather emergency.

In fall 1995, a true test was given to the plan with arrival of Hurricane Opal to the area. The plan was implemented very successfully, and only a few minor modifications to the plan were required. The park attendants and park hosts were very comfortable with the directives, and several campers commented that this was the first time they had been kept as well informed as they were.

Summary

Severe weather situations have not changed in their scope in the past, nor will they change in the future. However, the technological advances made in the past several decades give the public a much better understanding of what is about to occur. With the use of weather alert radios and the development of Severe Weather Action Plans, the loss of life and property can be greatly reduced.

Point of Contact

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