

Disaster Preparedness and Emergency Management

By Shawn Steveson, Source Water Technician

Have you ever considered the impact that an extreme event could incur on your water system or home town? Do you have a plan in place to effectively address some of the potential situations? Regardless of the answer the need for preparation is becoming increasingly apparent. Although we live in an information age, emergency situations can put us into a technological dark age rather quickly.

This past year has posed serious problems for many parts of our own country in regards to disaster events. Many of these occurrences show us how little power we have to combat nature. Floods and mudslides in California due to a shift in precipitation distribution caused residents to lose lives and millions of dollars in property. Huge accumulations of snow in the east and central United States caused a whole gamut of problems. Not to mention some of the disaster situations in Asia. The vast majority of us don't think about it, until it happens close to home.

All locations have inherent dangers associated with them, in Oregon the primary large scale concerns should include flood, seismic occurrences (earthquake & Tsunami), and volcanic disasters. The scope of an emergency can vary substantially in terms of impact and severity. All of the previous mentioned potential disasters are large scale concerns but, an emergency can be as small as an interruption of service and the associated inability to provide water to critical customers.

Although all of these aforementioned events are typically out of our control on a grand scale, the way the situation is responded to and the organization associated with that response are controllable. Emergency management is a realistic goal that each system should take the appropriate amount of time to address. Most situations are not on a disaster scale but, small scale problems can create a lot of stress for operators and administrations. The need for detailed criteria in terms of Standard Operating Procedures (SOPs) is a big part of managing an emergency. The establishment of SOPs should be accomplished at a local management or government level when

possible. With these known policies to follow, the emergency response process will be easier to handle.

The state of Oregon has made Vulnerability Assessments (VA) and Emergency Response Plans (ERP) mandatory for all public water systems by **June 30, 2005**. The VA can only determine what your system weaknesses are based upon the inputs provided. Keeping this in mind, the additional perspective of someone assisting with the VA and ERP could prove to be invaluable. When performed with a realistic approach the VA and ERP can help prioritize your resources and address some of the shortcomings associated with your system procedures and equipment. Deliberate acts can be accounted for to a degree but, many circumstances beyond our foresight can create a dilemma. Since these events are volatile, the need for preparation in terms of long range plans or contingency is a necessity regardless of state mandates.

The four factors that should be considered when drafting an ERP are as follows:

- ❖ **Preparing- this could constitute just having a logical order to follow-SOPs, ERP etc.**
- ❖ **Mitigating- by making things less intense and spreading the workload out the situation will be manageable.**
- ❖ **Responding- knowing who to call and what their responsibilities are-either in-house staff or outside will decrease response time.**
- ❖ **Recovery- the goal is to get back online and or clean-up as fast as possible- these plans will help with all of the above.**

There are several options available to assist creating an Emergency Response Plan and minimum requirements can be met with the use of the SEMS software and templates. Achieving a responsible level of preparedness will require going beyond the minimum bounds of the requirements. Forming a team to address the pertinent issues and spread out the workload should be used whenever applicable. Using someone involved in the local government on your team is recommended and has the potential to

open unforeseen doors in realizing the multiple responsibilities of a water system in an emergency situation as well as some of the systems needs.

OAWU can assist with questions regarding the Vulnerability Assessment and the Emergency Response Plan. Please contact us if you have any questions.

Oregon Association of Water Utilities
www.dialoregon.net/~oawu
503-873-8353