

**MONTANA**  
**WATER / WASTEWATER AGENCY RESPONSE NETWORK**  
**(MTWARN)**



**WORKSHOP AND TABLETOP EXERCISE**  
**AFTER ACTION REPORT**

**Ft. Harrison, Montana**

**November 9, 2011**

**Sponsored by:** U.S. Environmental Protection Agency (EPA) and Montana Water/Wastewater Agency Response Network (MTWARN)

**Facilitated by:** Horsley Witten Group, Inc.

## TABLE OF CONTENTS

<b><u>Section</u></b>	<b><u>Page</u></b>
Executive Summary .....	1
Introduction.....	3
Workshop Overview .....	4
Presentation Summary .....	4
Tabletop Exercise Summary.....	5
Lessons Learned.....	5
"Hotwash" Comments.....	9
Workshop Objective Summary.....	10
Conclusion.....	12
<b><u>Appendices</u></b>	
Appendix A: Evaluation Summary.....	13
Appendix B: List of Participants.....	16
Appendix C: Workshop Schedule.....	18
Appendix D: Exercise Synopsis.....	19
Appendix E: Action Planning Guide .....	20

## **EXECUTIVE SUMMARY**

On November 9, 2011 approximately 24 representatives from Montana drinking water and wastewater utilities, U.S. EPA Region 8, the Montana Department of Environmental Quality (DEQ), Montana Disaster and Emergency Services (DES), and representatives from cities and towns across Montana participated in a day-long training event focused on emergency preparedness and response to an incident affecting the water sector. The MTWARN event consisted of presentations in the morning and then participants engaged in a tabletop exercise (TTX) in the afternoon. A facilitated "hotwash" was held immediately following the TTX discussion to collect comments from the players. The exercise was designed to provide participants with an opportunity to discuss the response capabilities of MTWARN and identify strengths, weaknesses, and future training needs of the program.

### **Workshop and Exercise Objectives**

The following objectives were established for this workshop and exercise by the Exercise Design Team (EDT):

1. Exhibit the capabilities of MTWARN to members;
2. Encourage utility management staff to attend the workshop;
3. Introduce MTWARN to prospective members;
4. Provide an opportunity to refine the existing MTWARN Operational Plan; and
5. Discuss how federal assistance works and the need for coordination.

The objectives were successfully met, and descriptions of how each objective was met are provided throughout this After Action Report (AAR) and summarized in the Workshop Objective Summary on page 10 of this document.

### **Presentation Topics**

The following presentations were given during the workshop:

- Introduction to MTWARN by Mike Jacobson, City of Great Falls and the Chair of the MTWARN Steering Committee;
- MTWARN Website Overview by Dusti Lowndes, Montana Department of Environmental Quality (DEQ) and MTWARN Steering Committee;
- 2011 Flood Experiences in Montana's Water Sector and MT DEQ's Support Efforts by Selection and Application of Emergency Response Equipment by Dusti Lowndes, Montana DEQ and MTWARN Steering Committee;
- DES Updates, Recap of Recent Events, and Montana Emergency Response Framework (ESF#3) by Dave Maser, Montana DES;
- Drinking Water Emergency Sampling (DWES) Kits by Joel Felix, Department of Public Health and Human Services (DPHHS); and

- National Incident Management System (NIMS) Overview by Carl Simons, Horsley Witten Group, Inc. (HW).

### **Tabletop Exercise**

The multiagency, multijurisdictional TTX conducted in the afternoon was designed to bring together representatives from the water and public safety sectors to discuss roles and responsibilities during a natural disaster in Montana. Players engaged in a facilitated discussion surrounding preparation for and response to a regional flood. The basic goal was to enhance the capability of MTWARN to respond to any emergency or disaster located within the State of Montana that requires specialized water and wastewater resources.

### **Hotwash / Evaluation**

A facilitated “hotwash” was held immediately following the TTX discussion to collect comments from the players. Participants identified lessons learned and key elements raised during the exercise.

This report summarizes the results of the workshop and makes recommendations for future improvements to strengthen MTWARN. A summary of participant feedback, including comments and evaluation scores, is provided in Appendix A of this AAR.

## INTRODUCTION

**Exercise Name:** Flood “Rain, Rain, Go Away”  
**Location:** Regional Training Institute  
Ft. Harrison, MT  
**Type of Exercise:** Tabletop Exercise (TTX)  
**Focus:** Intrastate Mutual Aid  
**Exercise Date:** November 9, 2011  
**Exercise Sponsors:** U.S. Environmental Protection Agency (EPA) and Montana  
Water/Wastewater Agency Response Network (MTWARN)

EPA sponsored a one-day MTWARN water sector emergency response workshop hosted at the Regional Training Institute on November 9, 2011 in Ft. Harrison, MT. Refer to Appendix B for a complete list of participants at the workshop. The workshop focused on water sector emergency preparedness and response and consisted of presentations and a facilitated TTX. The morning began with focused presentations on topics related to water sector preparedness and response. Presentation topics and speakers are listed in Appendix C. Representatives from public and private drinking water and wastewater utilities along with response partners from other disciplines, U.S. EPA Region 8, the Montana DEQ, Montana DES, and representatives from cities and towns across Montana then engaged in a facilitated discussion-based exercise utilizing a flood scenario. The exercise scenario was sequenced to promote a discussion of water sector preparedness for and response to a regional flood “Rain, Rain, Go Away” in Montana. The exercise concluded with a “hotwash” during which players were asked to voice their number one lesson learned from the exercise. A summary of “hotwash” comments is provided on page 9. All participants were asked to fill out an evaluation at the conclusion of training. A summary of written evaluation comments is attached as Appendix A. A total of 24 people participated in the TTX.

## WORKSHOP OVERVIEW

Participants arrived at 9:00 a.m. on November 9, 2011 for the workshop. The morning consisted of presentations and the afternoon consisted of a TTX. Carl Simons of HW provided opening remarks and welcomed everyone to the workshop. All of the participants introduced themselves to the other participants and shared their experiences with water sector related incidents.

### Presentation Summary

Mike Jacobson of the City of Great Falls and the MTWARN Chair gave a presentation on MTWARN and the purpose of WARNs as a formalized system of “utilities helping utilities,” which is in place to address mutual aid for the water sector during emergency situations. Mr. Jacobson also explained that responding to a request for assistance is 100% voluntary and there is no obligation to provide assistance. All public utilities are covered by a state mutual aid law when a state emergency is declared. MTWARN members can be both public and private utilities as well as tribal nations, and there is no need for a state emergency to be declared before assistance can be provided.

Dusti Lowndes of the Montana DEQ and a member of the MTWARN Steering Committee gave a presentation on the MTWARN website and Operational Plan. Ms. Lowndes went through all sections of the Operational Plan. She explained that the Operational Plan is still in draft form and welcomed input from the participants for ways to improve the document. In addition, the American Water Works Association (AWWA) Resource Typing Manual was covered. Ms. Lowndes explained that the MTWARN website ([www.mtwarn.org](http://www.mtwarn.org)) is funded by a grant and can be used by utilities to request resources and respond to resource requests from other MTWARN members through an embedded email system. The website has a “Members Only” section where utilities can find the following information:

- News and Events;
- Member Utility Contact Information; and
- Resource Database.

Dusti Lowndes and Shelly Nolan of the Montana DEQ gave a presentation on the 2011 Flood Experiences in Montana’s Water Sector and MT DEQ’s Support Efforts by Selection and Application of Emergency Response Equipment. Ms. Lowndes described the events that led up to the widespread flooding throughout the state earlier in the year which prompted a Presidential Disaster Declaration in the majority of the counties. The DEQ assisted in the response and recovery by collecting information from all affected utilities and providing that information to the State Emergency Coordination Center (SECC).

Dave Maser of the Montana DES gave a presentation on DES Updates, Recap of Recent Events, and the Montana Emergency Response Framework (ESF#3). Mr. Maser described the coordination meetings which started in the fall of 2010 when the National Weather Service (NWS) was fairly certain that Montana faced the high likelihood of major flooding in the spring.

Mr. Maser let the participants know that as of the time of the workshop, there has been \$63 million in FEMA damage reimbursement throughout the State. In addition, there is a high likelihood that the State may face heavy flooding in the spring of 2012 as well.

Joel Felix of the Montana DPHHS gave a presentation on Drinking Water Emergency Sampling (DWES) Kits. Mr. Felix showed the participants these kits and explained their purpose and capabilities. The kits have been distributed to utilities throughout the state.

Carl Simons of HW provided an overview of the National Incident Management System and encouraged participants to go online and get the following certifications:

- IS-100.PWb - Introduction to the Incident Command System (ICS 100) for Public Works certification at (<http://training.fema.gov/EMIWeb/IS/is100PWb.asp>).
- IS-700.a NIMS: An Introduction certification at (<http://training.fema.gov/emiweb/is/is700a.asp>).

### **Tabletop Exercise Summary**

Participants engaged in a TTX starting at 2:00 p.m. during the second portion of the day. The attendees sat at tables in a modified U-shaped seating arrangement, allowing participants to see each other and easily engage in group discussions. Will Keefer of HW served as the exercise facilitator. The exercise was based on a regional flood scenario “Rain, Rain, Go Away” which affected multiple towns, cities, and rural water districts across fictional locations in the Missouri River Basin in Montana. These locations, although fictional, were representative of the towns and cities in Montana. Participants discussed the scenario and the water sector response to the damages caused by the flood event.

The “Rain, Rain, Go Away” scenario is described in Appendix D.

### **Lessons Learned**

The following is a summary of the verbal comments provided during the TTX. Comments are not listed in priority order. When the MTWARN EDT meets to review the AAR, members are encouraged to use the Action Planning Guide in Appendix E to set priorities for the suggestions as appropriate. Throughout the exercise participants were given injects, or additional information on the scenario to move the discussion forward. A number of topics occurred repeatedly throughout the exercise, and they include:

#### **Preparedness**

- The National Weather Service (NWS) provides long range flooding forecasts in the fall which both the water sector and emergency management use to plan for the spring flooding season.

- Due to the fact that the state is largely rural, utilities and the Montana Rural Water Systems (MRWS) started staging resources months in advance of the spring 2011 floods to make sure that they were available if needed.
- County DES Coordinators start holding regular meetings in the fall to discuss the potential resource needs in their jurisdictions.
- The DEQ also provides utilities with updates regarding the flooding potential in their area.
- Both emergency management and the water sector have found that keeping the public informed about the risk of flooding in their area has helped them to be more prepared.
- When a flood watch or flood warning is issued in their area, utilities take the following steps:
  - Sandbagging, if necessary – County DES will set up sandbag distribution points.
  - Coordinate with their personnel and adjust schedules.
  - Reduce reservoir levels so they can handle the floodwaters.
- Sandbagging must be a coordinated effort. Utility personnel may be asked to assist with sandbagging at other departmental buildings in the jurisdictions, but they will only be able to help if there are not any other pressing matters at the utility.
- Water utilities should identify all key facilities and critical customers (e.g., hospitals, nursing homes, schools) in their jurisdictions through their vulnerability assessments (VAs).
  - Each utility’s Emergency Response Plan (ERP) should take into account how they will work with these customers during an incident which affects them.
  - Most hospitals have at least two sources of water, in some cases this is just redundant pipelines from the same distribution system.
- Most of the participants agreed that they would give their employees time to contact their families in the initial aftermath of a disaster to check and make sure that they were safe before they had to start work. This is the DES policy – they have found that their employees work more effectively when they know that their families are safe.
  - Some utilities offer incentives for their employees to create family emergency plans.
  - During Y2K, the Lewis and Clark County DES invited families to stay at the EOC.
- County governments are working with their departments to develop Continuity of Operations Plans (COOPs) which designate backup facilities.
  - One utility has put a cache of important supplies in an alternate location in case their primary location is unusable.
- Utilities are recommended to print out hard copies of their contact lists and update them at least yearly, or whenever contact information changes.

### **Coordination**

- The DES has established flood task forces during previous flooding events to perform damage assessments.

- Often county and local departments will work together during an incident to sandbag important facilities throughout their jurisdiction. Key water sector facilities include pump stations.
- The DES has worked closely with the U.S. Army Corp of Engineers (USACE) when federal assistance has been provided during previous flooding incidents.
- Dam management is important to consider as part of flood response and recovery. Dams in the state are owned and managed by multiple entities (e.g., federal government, USACE, Bureau of Reclamation, utilities, private companies).
  - Utilities should be in regular contact with these dam owners/managers.
- At some utilities, up to half of the operators are also volunteer firefighters, who may need to respond during incidents in their jurisdiction. Utilities should account for this in their ERPs.
- The Montana Municipal Interlocal Association (MMIA) regularly works with the DEQ in conducting risk analysis.
- At some utilities, water operators are also required to have sewer operator licenses.
  - In the city of Helena, water or sewer operators are eligible to apply for the other license after they have gained a certain number of years of experience.
- EPA, which is the regulator for Tribal Systems, is required to be notified when a low or no water pressure event occurs.
  - The DEQ recommends that utilities contact them if they experience extended low pressure incidents as well.
- EPA and DEQ can issue public notifications on behalf of a utility.

### **Resource Sharing**

- Widespread flooding throughout the state has necessitated the sourcing of resources from outside of the state.
- MTWARN regularly contacted their members to determine if they had any resource needs during the spring 2011 floods.
- MTWARN has yet to provide assistance during an incident.
- It does not take a major crisis/emergency to activate MTWARN; utilities can activate the agreement for any incident that requires resources beyond what they have on hand, such as equipment failures.
- MTWARN fills the gap between when a disaster happens and the time it takes state and federal resources to arrive.
- When a utility receives a request for assistance through MTWARN, they should ask themselves the following questions:
  - What does this utility need?
  - Is my own resource database up-to-date so I can easily check to see if we have what they need?
  - Can we spare what they need?
  - How long will they require my assistance?

- Where will my personnel meet the utility, where will they stay, and what will they eat while they are away?
- If you are the only member utility who receives a request for assistance, make sure to forward that request out to the rest of the MTWARN member utilities.
- It was recommended that MTWARN can help utilities develop task forces that are needed to respond to events (e.g., rescue, damage assessment).
  - In addition, MTWARN can help build the teams comprised of resources from multiple utilities if necessary.
- The following recommendations for updating the MTWARN website were offered by participants:
  - Utilities should be able to list personnel capabilities.
  - A link to the AWWA Resource Typing Manual (<http://www.awwa.org/files/WARN/WWA%20Resource%20Typing%20Manual%20Final%20-%20April%202008.pdf>) should be included.
- MTWARN welcomes associate members to join.
- In addition to contacting MTWARN through the Steering Committee members, utilities can contact MTWARN through the DEQ or their local DES coordinator.
- A utility must sign the Mutual Aid Agreement (MAA) before MTWARN can provide assistance.
- During a large incident, the MTWARN Steering Committee would be responsible for facilitating multiple resource requests.
- Utilities should keep their local DES coordinator informed as to what resources they need during an incident as well as what resources they are loaning out to other utilities.
- Chief elected officials in a jurisdiction may have the final say on whether resources can be loaned to other jurisdictions. Therefore, they should be informed when a utility plans to share their resources.
- The state has utilized multiagency coordination groups to prioritize high need resources.

### **Communication**

- The news media was instrumental in getting information out to the public regarding how to prepare for the spring 2011 flooding events.
- Local news media may only provide regional coverage, so MTWARN can provide updates to utilities as to what is happening to utilities in other areas of the state.
- Communication with local responders and agencies is essential for information sharing.
- All participants agreed that communication would be difficult if landline and cellular telephone service stopped working.
- It is sometimes possible to send a text message on a cell phone even when the cell phone is not sending or receiving calls because a text message requires less bandwidth.
- Many agencies including local emergency management are still trying to figure out how to utilize social media (e.g., Facebook, Twitter) for public notifications.
  - In some areas, the number of users of social media may be too small to actually and effectively reach many citizens.

- Aging Horizons, a statewide TV program aimed at the elderly, has been effectively used to communicate public notifications to the older population in the state.
- Emergency Management has used the Emergency Alert System (EAS) to communicate public notifications.
- Other jurisdictions have used “Reverse 911” type systems as well. They can send targeted notifications to specific areas.
- One utility has used “runners” to send important messages if no other communication systems are functioning.
- Some agencies ask that in the event of an incident where all communication systems are down, their personnel should just report directly to the office where they will receive their assignments or be asked to come back at a later time if they are not needed right away.
- The participants were reminded that their radios systems will be affected by narrow banding in 2013. More information can be found at the following website: [www.fcc.gov/narrowbanding](http://www.fcc.gov/narrowbanding).

### **Power Loss / Generator Capability**

- Power loss can be common during an emergency. Water and wastewater utilities should discuss power restoration priorities with both their provider and the local Emergency Manager.
- Most utilities represented do not have enough generators on hand to run their operations, but many have investigated options to source them during an incident.
- When requesting a generator, utilities should have an electrician available to assist in installation.
- Participants recommended that generators be tested under load at least twice per year.
- Some utilities keep up to two weeks worth of fuel on hand specifically for their generators.

### **Other**

- Utilities should make sure they track all costs during an incident because you never know from the outset of an incident whether you will be filing for FEMA disaster reimbursement.

### **“Hotwash” Comments**

At the conclusion of the discussion the facilitator asked each player to discuss their number one lesson learned from the TTX, including ways to improve their utilities and MTWARN’s response to incidents. Overall, participants were pleased with the TTX. A summary of comments is presented below, and in some instances duplicate comments were combined:

- This was a great introduction to MTWARN and participants were appreciative of the educational opportunity.
- MTWARN should further develop their relationship with DES and other response partners. By raising the organization's profile, other agencies will think of contacting MTWARN when water sector utilities need resources.
- One participant said that they are going to let the tribal nations in the state know that it would be beneficial for them to join MTWARN.
- This workshop reinforced how important communication and coordination is during an incident.
- This workshop opened many participants' eyes as to the many resource options available to utilities during an incident.
- This was a great opportunity to hear from other utilities and learn about what they are doing.
- Several participants said that they were going to go back to their jurisdictions and suggest that they consider joining MTWARN.
- Several participants commented that their jurisdictional plans and ERPs needed to be reviewed and possibly revised based on the lessons learned from the exercise.

At the conclusion of the training day participants were asked to fill out an evaluation form. Of the 24 participants, 19 filled out the forms. Participants rated the overall training using a scale of 1-5 (1=Strongly Disagree, 3=Agree, and 5=Strongly Agree). When asked if the workshop was a valuable use of their time, the average score was 4.2.

Written evaluation comments and a detailed compilation of participant evaluations can be found in Appendix A.

### **Workshop Objective Summary**

There were several objectives established for this workshop and exercise. Following each objective is a summary of how that objective was achieved:

1. Exhibit the capabilities of MTWARN to members.

The workshop included a number of informative presentations which described MTWARN, the Mutual Aid Agreement, the website, and the Operational Plan. The TTX discussion highlighted how MTWARN would function during an incident and provided an opportunity for the participants to discuss details of the Operational Plan which may need to be further clarified in an updated version.

2. Encourage utility management staff to attend the workshop.

In many cases, utility management personnel will make the decision as to whether their utility should join MTWARN. There were several management representatives (as well as

operators) present at the workshop and they were able to gain a good understanding of the purpose of MTWARN. As a result, several of the non-member utilities expressed interest in joining MTWARN.

In addition, utility management from member utilities were able to gain a better understanding of the roles and responsibilities of being a named contact for their utility.

3. Introduce MTWARN to prospective members.

There were several non-MTWARN members at the workshop and they were able to learn about the purpose and capabilities of MTWARN. There were several detailed presentations which showed why being a signatory to a mutual aid agreement like MTWARN could be beneficial during future flooding incidents. Overall, MTWARN was presented as another option available for water sector utilities to receive the specialized resources needed during an incident. The TTX discussion highlighted how MTWARN could be utilized by the members. Several non-members requested more information regarding joining MTWARN and it is expected that several will join in the future. This was the first introduction of MTWARN to the County DES coordinator for Lewis and Clark County and he was very interested in sharing this information with other DES coordinators and potentially becoming an associate member.

4. Provide an opportunity to refine the existing MTWARN Operational Plan.

Dusti Lowndes described the sections of the Operational Plan during a presentation and invited the participants to comment on how to improve the plan before it is finalized. MTWARN has not yet had to facilitate assistance during an incident, so the workshop provided an opportunity to demonstrate how MTWARN would function in the future. During the TTX, participants offered the following comments that they believe would improve the document:

- It was recommended that MTWARN can help utilities develop task forces that are needed to respond to events (e.g., rescue, damage assessment).
- MTWARN can help build the teams comprised of resources from multiple utilities if necessary.
- The following recommendations for updating the MTWARN website were offered by participants:
  - Utilities should be able to list personnel capabilities.
  - A link to the AWWA Resource Typing Manual should be included.

5. Discuss how federal assistance works and the need for coordination.

Throughout the workshop, the Spring 2011 floods were referenced and participants shared their stories as to how they worked with the federal government resources and went through the FEMA disaster reimbursement process.

Overall, this workshop and exercise successfully met the objectives that were defined in advance. The event allowed many of the participants to meet as a group for the first time, evaluate their current capabilities, become more comfortable with their roles and responsibilities, and identify opportunities for enhancement. Additional planning, training, and exercises can ensure that personnel maintain and enhance their level of preparedness.

## CONCLUSION

The November 9, 2011 MTWARN Workshop, which included both presentations and a TTX, succeeded in bringing together a number of MTWARN response partners and achieved the goals set forth for this event. Communication between response partners during the TTX will aid in future responses. Overall, participants agreed that the workshop was a valuable use of their time. The following are the after action items which will occur in the future as a result of the workshop:

- The MTWARN Steering Committee has offered to partner with utilities and help them conduct their own TTXs using the EPA Tabletop Exercise Tool for Water Systems CD which was distributed to all of the participants at the workshop. In addition, the CD can be accessed via the following website:  
[http://yosemite.epa.gov/ow/SReg.nsf/description/TTX\\_Tool](http://yosemite.epa.gov/ow/SReg.nsf/description/TTX_Tool).
- MTWARN was invited to send a representative to speak at next year's Montana DES Governor's Conference on Emergency Management.
- Dusti Lowndes has offered to set up a webinar at a later date to further describe to utility personnel how to use MTWARN.

In addition, as a result of the workshop, it is expected that there will be several new members that will join MTWARN which will further strengthen the network.

## APPENDIX A: EVALUATION SUMMARY

Out of the 24 participants, a total of 19 turned in written evaluations, which are summarized in the following tables.

	<u>Strongly Disagree</u>	<u>Agree</u>	<u>Strongly Agree</u>
	(1	2	3 4 5)
	<u>Average*</u>		
1. The Tabletop Exercise (TTX) was well structured and organized.			4.0
2. The TTX helped to define the roles and responsibilities of the MTWARN in regards to resource management during an incident affecting the water sector.			4.1
3. The workshop provided an opportunity to discuss the MTWARN Mutual Aid Agreement and the MTWARN website.			4.3
4. The exercise provided an opportunity to build relationships between MTWARN members and non-members.			4.4
5. The exercise provided an opportunity to identify potential gaps in planning at your own agency.			4.3
6. The exercise encouraged interagency cooperation.			4.3
7. Overall, the tabletop exercise was a valuable use of my time.			4.2

**MTWARN Tabletop Exercise Participant Evaluation Responses (November 2011)**

<b>Question 1</b>	<b>The Tabletop Exercise (TTX) was well structured and organized.</b>				
	<b>1-Strongly Disagree</b>	<b>2</b>	<b>3- Agree</b>	<b>4</b>	<b>5- Strongly Agree</b>
	0	0	6	7	6
<b>Question 2</b>	<b>The TTX helped define the roles and responsibilities of the MTWARN in regards to resource management during an incident affecting the water sector.</b>				
	<b>1-Strongly Disagree</b>	<b>2</b>	<b>3- Agree</b>	<b>4</b>	<b>5- Strongly Agree</b>
	0	1	2	10	6
<b>Question 3</b>	<b>The workshop provided an opportunity to discuss the MTWARN Mutual Aid Agreement and the MTWARN website.</b>				
	<b>1-Strongly Disagree</b>	<b>2</b>	<b>3- Agree</b>	<b>4</b>	<b>5- Strongly Agree</b>
	0	0	2	9	8
<b>Question 4</b>	<b>The exercise provided an opportunity to build relationships between MTWARN members and non-members.</b>				
	<b>1-Strongly Disagree</b>	<b>2</b>	<b>3- Agree</b>	<b>4</b>	<b>5- Strongly Agree</b>
	0	0	2	7	10
<b>Question 5</b>	<b>The exercise allowed an opportunity to identify potential planning gaps at your own agency.</b>				
	<b>1-Strongly Disagree</b>	<b>2</b>	<b>3- Agree</b>	<b>4</b>	<b>5- Strongly Agree</b>
	0	0	5	4	10
<b>Question 6</b>	<b>The exercise encouraged interagency cooperation.</b>				
	<b>1-Strongly Disagree</b>	<b>2</b>	<b>3- Agree</b>	<b>4</b>	<b>5- Strongly Agree</b>
	0	0	3	7	9
<b>Question 7</b>	<b>Overall, the tabletop exercise was a valuable use of my time.</b>				
	<b>1-Strongly Disagree</b>	<b>2</b>	<b>3- Agree</b>	<b>4</b>	<b>5- Strongly Agree</b>
	0	0	3	9	7

**Comments**

(Comments are not listed in any priority order.)

1. Thanks!
2. I thought this was a very worthwhile training/day spent.
3. Well done, Thanks.

**APPENDIX B: LIST OF PARTICIPANTS**

<b>Count</b>	<b>Name</b>	<b>Title</b>	<b>Agency</b>	<b>Affiliation</b>
1	Don O. Anderson	Water Treatment Operator	City of Helena	Water/Wastewater Utility
2	Thomas B. Danenhower	Risk Management Specialist	Montana Municipal Interlocal Authority (MMIA)	Other
3	Joel Felix	Chemical Terrorism Laboratory Coordinator	State of Montana	State Government
4	Joseph H. Finch	Certified Operator	City of Helena	Water/Wastewater Utility
5	Galen L. Horswill, Jr.	Public Works Director	City of Deer Lodge	Local Government
6	Danny H. Hoyt	Board Member/ Treasurer	Gore Hill County Water District	Water/Wastewater Utility
7	Michael W. Jacobson	Plant Manager	City of Great Falls	Water/Wastewater Utility
8	Robert H. Kompel	Public Works Director	City of Glasgow, Montana	Local Government
9	Dan D. Kramer	Wastewater Technician	Montana Rural Water Systems (MRWS)	Association
10	Russell D. Leu	DPHHS Environmental Lab Supervisor	Montana Department of Public Health and Human Services (DPHHS)	State Government
11	Dusti F. Lowndes	Security and Emergency Preparedness Coordinator	Montana Department of Environmental Quality (DEQ)	State Government
12	David E. Maser	ESF Coordinator	Montana Disaster and Emergency Services (DES)	State Government
13	Sienna W. Meredith	Environmental Scientist	EPA Region 8	Federal Government

14	Julie G. Muscutt	Ten Mile Treatment Plant Water Treatment Operator III	City of Helena	Water/Wastewater Utility
15	Shelley Nolan	PWS Program Manager	Montana Department of Environmental Quality (DEQ)	State Government
16	Earl Q. O'Leary	Water Distribution Operator	City of Helena	Water/Wastewater Utility
17	Dennis Peppenger	Board Member/President	Gore Hill County Water District	Water/Wastewater Utility
18	Kerry L. Schmelzer	Environmental Specialist	EPA Region 8	Federal Government
19	Donna M. Seaton	City Clerk/Treasurer	City of Deer Lodge	Local Government
20	Keith E. Smith	Public Works Director	City of Hamilton	Local Government
21	Paul Spengler	DES Coordinator	Lewis and Clark County Disaster and Emergency Services (DES)	Local Government
22	Tony Tacke	Safety	Mountain Water Company	Water/Wastewater Utility
23	Gerald Ulmen	Board Member	Gore Hill County Water District	Water/Wastewater Utility
24	Angela Yonce	Industrial Engineer/Safety Technician	Mountain Water Company	Water/Wastewater Utility

## **APPENDIX C: WORKSHOP SCHEDULE – NOVEMBER 9, 2011**

8:30 a.m. – Check-In

9:00 a.m. – Welcome and Introductions

- Review of Administrative Details and Agenda
- Participant Introductions

9:15 a.m. – Introduction to MTWARN

9:45 a.m. – MTWARN Website Overview

10:15 a.m. – Break

10:30 a.m. – “2011 Flood Experiences in Montana’s Water Sector & MT DEQ’s Support Efforts”

Dusti Lowndes and Shelley Nolan, DEQ PWS

10:55 a.m. – “DES Updates, Recap of Recent Events, and the Montana Emergency Response Framework (ESF#3)”

Dave Maser, DES

11:20 a.m. – “Drinking Water Emergency Sampling (DWES) Kits”

Joel Felix, DPHHS

11:45 a.m. – National Incident Management System (NIMS) Overview

Carl Simons, HW

12:00 p.m. – Lunch

1:00 p.m. – Tabletop Exercise Overview, Objectives, and Ground Rules

1:15 p.m. – Scenario Discussion

2:30 p.m. – Break

2:45 p.m. – Scenario Discussion

4:00 p.m. – “Hot wash” Session

4:15 p.m. – Evaluations and Closing

4:30 p.m. – Adjourn

## APPENDIX D: EXERCISE SYNOPSIS

### Scenario Narrative

**Date:** Monday April 15<sup>th</sup>  
**Time:** 1100 hours

The winter in most of Montana has been characterized by below average temperatures and above average snowfall which has yielded a thick snowpack heading into the spring. So far it has been warmer than normal and the National Weather Service has issued a special weather statement that rivers and streams throughout the Missouri River Basin, especially the Musselshell River, are swollen to flood stage due to earlier than usual snow melts. They are monitoring a system which could bring heavy rain and flooding to the entire area by Thursday.



**APPENDIX E: ACTION PLANNING GUIDE**

MTWARN can use the chart below to identify priority actions/tasks/follow-up requirements and assign responsibilities for each.

<b>Action/Task/ Follow-up</b>	<b>Responsible Individual or Agency</b>	<b>People Who Should Be Involved</b>	<b>Resources and Possible Sources</b>	<b>Short Term Activity</b>	<b>Long Term Activity</b>