

Emergency Response Planning for Water Systems Serving Up To 3300 People

The following document provides summaries of the evaluations completed at the end of each of four (4) Emergency Response Planning workshops as well as the pilot workshop which was used to trial and modify the workshop content and approach. These workshops were conducted by URI Cooperative Extension and Atlantic States Rural Water and Wastewater Association. The workshops were offered through funding from the Rhode Island Department of Health's Capacity Development Program, Office of Drinking Water Quality and from the Coastal Institute.



THE
UNIVERSITY
OF RHODE ISLAND



Pilot: March 14, 2014 (8:00 am – 1:00 pm)
West Greenwich, RI

Out of 7 attendees, 7 returned a completed survey, a 100% response rate. Overall, the respondents felt that the workshop was very relevant and that the materials presented would help them complete an Emergency Response Plan (ERP). However, a third of respondents were uncertain whether or not they would actually complete and use an ERP.

	No 1	2	3	4	Yes 5	Mean
4. Would you recommend this workshop to others?	0%	0%	0%	28.6%	71.4%	4.71
	Strongly Disagree 1	Disagree 2	Neither Disagree or Agree 3	Agree 4	Strongly Agree 5	
6. This workshop was relevant and practical for my work.	0%	0%	0%	14.3%	85.7%	4.86
7. The pre-workshop materials that I received in the mail were clear and helpful.	0%	0%	50%	16.7%	33.3%	3.83
8. The workshop helped me to understand the importance of developing an ERP.	0%	0%	0%	28.6%	71.4%	4.71
9. I will be able to use what I learned in this workshop to complete an ERP.	0%	0%	0%	14.3%	85.7%	4.86
10. I will complete the plan and use it during an emergency.	0%	0%	33.3%	50%	16.7%	3.83
11. I plan to share the information I learned with co-workers.	0%	0%	0%	66.7%	33.3%	4.33

Written Comments

Individual comments are summarized below for each of the questions requiring a written response. When possible, trends in those comments are noted. Overall, the small sample size and lack of written responses for many questions makes it difficult to find common trends.

Question 12. What was the most useful part of the program?

Many respondents felt that the Guide was the most useful part of the program.

- The guide/manual and associated electronic documents
- Planning Guide
- Identifying available resources/information sharing
- Going over the plan
- The guide book with explanation
- Emergency responders checklist

Question 13. What was the least useful part of the program?

There were only two responses to this question.

- Introductions
- Actually filling out forms during class without access to files

Question 14. What changes would you suggest overall to any of the following:

Information covered

- All was great
- Longer class time
- Good
- Good

Presentation formats

- All was great
- Having laptops to type in info. The Guide seems redundant. Title section tabs.
- Good
- Good

Workshop logistics

- All was great
- Best held in Quonset Point, very close to the center of the state and better temperature in the room
- Good

Pre-workshop mailing and materials

- All was great
- Well done
- Good, maybe stress that the pre-mailing information will be very helpful to complete the booklet sections during the presentation.
- Good- but not necessary to fill out in order to receive value in training class
- Make it relevant to small systems

Question 15. Are there any specific topics you would like to see covered in future training or educational materials?

- Include examples of emergencies and the steps utilities took to correct and return to normal operations.
- Legal issues regarding submetering; legal issues regarding installation and (?) rates for very small pws.

Any final thoughts...

- Very well done. Should have brief follow up on completed guides, maybe online.
- Live long and prosper
- Good session

Summary of Responses Obtained During The Workshop, Using Turning Point Technologies Software

Throughout this pilot workshop, the presenters used Turning Point Technologies to survey the audience about their satisfaction with the workshop. The following pages highlight those responses from workshop attendees. Overall, the attendees seemed very pleased with the workshop, but they indicated that they did not have enough time to complete the sections and that attempting to do so was not practical. During this poll, more than 85% indicated that since this workshop, they planned to have, update, and use an ERP. This number differs from the written survey, where a third of attendees were not certain whether or not they would do that.

Overall, how do you feel about today's workshop?

Responses		
	Percent	Count
Everything was great. Don't change a thing!	71.43%	5
I paid attention most of the time.	28.57%	2
Let's talk about the good, the bad, and the really ugly.	0.00%	0
I wanted to leave at 8:30, but didn't want to make you feel bad.	0.00%	0
Totals	100%	7

Was there sufficient time to complete the sections?

Responses		
	Percent	Count
Too much time – I was falling asleep.	0.00%	0
Just the right amount of time.	16.67%	1
Could have used more.	83.33%	5
Too little time – I was scrambling.	0.00%	0
Totals	100%	6

Did we overlook anything important in the workshop content?

Responses		
	Percent	Count
Not much	50.00%	3
A few things	16.67%	1
A lot	0.00%	0
Too much content already!	33.33%	2
Totals	100%	6

Was it practical to work on the Plan during the workshop?

Responses		
	Percent	Count
Yes	0.00%	0
Somewhat	0.00%	0
No	100.00%	6
Totals	100%	6

Was it useful to refer to the Guide when you were completing sections of the Plan?

Responses		
	Percent	Count
Yes	50.00%	3
Sometimes	33.33%	2
Only as last resort	0.00%	0
No	16.67%	1
Totals	100%	6

Before this workshop, did you already have an ERP that you use and keep updated?

Responses		
	Percent	Count
Yes, used and updated	14.29%	1
Yes, but not updated	42.86%	3
Might have one somewhere	14.29%	1
No	28.57%	2
Totals	100%	7

If you didn't already have one, did this workshop convince you of the need for having, updating, and using an ERP?

Responses		
	Percent	Count
I already had an ERP.	14.29%	1
Yes, I plan to use and update an ERP.	85.71%	6
No, I don't think an ERP is going to help me that much.	0.00%	0
I'm just not sure....	0.00%	0
Totals	100%	7

Would you like any type of follow-up assistance regarding the ERP?

Responses		
	Percent	Count
Definitely!	57.14%	4
I'll get back to you.	42.86%	3
No thanks.	0.00%	0
Totals	100%	7

April 16, 2014 (8:00 am – 12:00 pm)
Harrisville, RI

Out of 18 attendees, 18 returned a completed survey, a 100% response rate. The respondents overwhelmingly indicated that the workshop was very relevant and that the materials presented would help them complete an Emergency Response Plan (ERP).

	No 1	2	3	4	Yes 5	Mean
4. Would you recommend this workshop to others?	0%	0%	0%	5.6%	94.4%	4.94
	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree	
	1	2	3	4	5	
6. This workshop was relevant and practical for my work.	5.6%	0%	0%	27.8%	66.7%	4.5
7. The pre-workshop materials that I received in the mail were clear and helpful.	0%	0%	6.3%	25%	68.8%	4.63
8. The workshop helped me to understand the importance of developing an ERP.	0%	0%	0%	5.6%	94.4%	4.94
9. I will be able to use what I learned in this workshop to complete an ERP.	0%	0%	0%	22.2%	77.8%	4.78
10. I will complete the plan and use it during an emergency.	0%	0%	5.9%	17.7%	76.5%	4.71
11. I plan to share the information I learned with co-workers.	0%	0%	5.6%	11.1%	83.3%	4.78

Written Comments

Individual comments are recorded below for each of the questions requiring a written response. When possible, trends in those comments are noted.

Question 5. Why did you choose that answer? (Referencing Question 4.)

A significant number of respondents commented that the workshop was “informative” and presented a lot of “good information.”

- Excellent info
- Great presentation
- Extremely important and informative
- Very well taught, informative
- The materials were excellent
- Answered many questions – very informative
- Very organized and helpful tool
- Met the needs of what I was here for
- The Planning Guide alone is worth attending
- Workshop has a lot of good information
- Very comprehensive
- A lot of very good information to go over
- It was informative and interesting
- Very well done and good material
- I see it as a necessary requirement
- Informative

Question 12. What was the most useful part of the program?

Many respondents felt that the Guide was the most useful part of the program, and a couple of respondents mentioned the information about WARN.

- Easily understood
- Utilizing the Planning Guide to locate information for different scenarios
- Power Point presentation; verbal explanation
- The materials and resources
- Planning Guide and WARN info
- Going through the binder
- Learning about WARN
- The Planning Guide
- It was all good
- Whole presentation
- All of it
- Information and resources
- I like the structure of the Plan
- Receiving the Planning Guide
- ERP

Question 13. What was the least useful part of the program?

While there were not many comments provided for this question, the individual answers with respect to the presentation and the ERP itself warrant review.

- It was all useful

- Seemed a bit much for such a small system that we operate
- YouTube videos
- None. Good class
- Slideshow with Homer

Question 14. What changes would you suggest overall to any of the following:

All respondents to this question grouped the four categories together and did not distinguish between them in their replies. The one exception is noted below under Workshop Logistics. There were no substantive changes suggested, but substantial praise was offered!

Information covered/Presentation formats/Workshop logistics/Pre-workshop mailing and materials

- None
- Done very well
- No complaints
- No complaints
- Nothing
- Good information and presentation from class

Workshop logistics

- Get rid of squeaking chair 😊

Question 15. Are there any specific topics you would like to see covered in future training or educational materials?

There were no responses to this question.

Any final thoughts...

- The class was very well presented
- Nicely done
- The workshop was wonderful and will be useful guide
- Good class
- Great presentation, very informative and helpful to help us expand our current ERP
- Very informative
- Great job by all
- Tom is a good presenter. Good class
- Well done
- Thank you

April 17, 2014 (8:00 am – 12:00 pm)
South Kingstown, RI

Out of 10 attendees, 9 returned a completed survey, a 90% response rate. The respondents overwhelmingly indicated that the workshop was very relevant, that it helped them understand the importance of developing an ERP, and that the materials presented would help them complete an ERP.

	No 1	2	3	4	Yes 5	Mean
4. Would you recommend this workshop to others?	0%	0%	0%	11.1%	88.9%	4.89
	Strongly Disagree 1	Disagree 2	Neither Disagree or Agree 3	Agree 4	Strongly Agree 5	
6. This workshop was relevant and practical for my work.	0%	0%	0%	33.3%	66.7%	4.67
7. The pre-workshop materials that I received in the mail were clear and helpful.	0%	0%	22.2%	33.3%	44.4%	4.22
8. The workshop helped me to understand the importance of developing an ERP.	0%	0%	0%	0%	100%	5
9. I will be able to use what I learned in this workshop to complete an ERP.	0%	0%	0%	0%	100%	5
10. I will complete the plan and use it during an emergency.	0%	0%	12.5%	12.5%	75%	4.63
11. I plan to share the information I learned with co-workers.	0%	0%	11.1%	22.2%	66.7%	4.56

Written Comments

Individual comments are recorded below for each of the questions requiring a written response. When possible, trends in those comments are noted. However, given the small sample size for this workshop and the lack of responses for many questions, it is difficult to draw broad conclusions.

Question 5. Why did you choose that answer? (Referencing Question 4.)

- Course was very informational and benefited even the smallest water system operator.
- Very comprehensive
- Good info
- Great presentation
- Tom was a great instructor with very pertinent information delivered in an interesting way.
- Helpful

Question 12. What was the most useful part of the program?

Many respondents felt that the Guide was the most useful part of the program, and several respondents mentioned the specific information about responding to emergencies.

- Work book
- The Plan
- Organizing the responses to emergencies
- All
- Responding to emergency events
- Handouts (Great!)
- ERP Guide Manual
- Vulnerability
- The order in which you take the emergencies A-Z which steps to take first and so on.

Question 13. What was the least useful part of the program?

- Lunch
- None
- NA
- None
- NA

Question 14. What changes would you suggest overall to any of the following:

Most respondents to this question grouped the four categories together and did not distinguish between them in their replies. The exceptions are noted below.

Information covered/Presentation formats/Workshop logistics/Pre-workshop mailing and materials

- None
- Nice Job
- None
- All Good

Information covered

- Significant

Presentation formats

- Adequate

Workshop logistics

- Great

Pre-workshop mailing and materials

This response might have been intended as a general suggestion:

- Longer class

Question 15. Are there any specific topics you would like to see covered in future training or educational materials?

- Sanitary survey

Any final thoughts...

- This course was well needed.

May 6, 2014 (8:00 am – 12:00 pm)
Tiverton, RI

Out of 9 attendees, 8 returned a completed survey, an 89% response rate. The respondents overwhelmingly indicated that they would recommend the workshop, that is was relevant and practical for their work, and that the materials presented would help them complete an ERP.

	No 1	2	3	4	Yes 5	Mean
4. Would you recommend this workshop to others?	0%	0%	0%	25%	75%	4.75
	Strongly Disagree 1	Disagree 2	Neither Disagree or Agree 3	Agree 4	Strongly Agree 5	
6. This workshop was relevant and practical for my work.	5.6%	0%	0%	25%	75%	4.75
7. The pre-workshop materials that I received in the mail were clear and helpful.	0%	0%	14.3%	42.9%	42.9%	4.29
8. The workshop helped me to understand the importance of developing an ERP.	0%	0%	0%	25%	75%	4.75
9. I will be able to use what I learned in this workshop to complete an ERP.	0%	0%	12.5%	12.5%	75%	4.63
10. I will complete the plan and use it during an emergency.	0%	0%	0%	28.6%	71.4%	4.71
11. I plan to share the information I learned with co-workers.	0%	0%	0%	28.6%	71.4%	4.71

Written Comments

Individual comments are recorded below for each of the questions requiring a written response. When possible, trends in those comments are noted, although the sample size is so small that reaching general conclusions can be difficult.

Question 5. Why did you choose that answer? (Referencing Question 4.)

Several respondents commented that the workshop was “very informative.”

- Because it was something I needed can put to good use
- Very informative
- Helpful information, networking
- I firmly believe in planning, especially for safety
- Not bad for someone with no info
- I found it very informative and helpful
- Very informative, safety first

Question 12. What was the most useful part of the program?

Many respondents felt that the Guide was the most useful part of the program, and a couple of respondents noted that simply learning about the importance of an ERP was useful.

- Dealing with loss of pressure- the importance of having an emergency plan
- Guide book and template
- Simply learning the importance of an ERP and finding the useful template
- Learning different resource phone #s and about WARN
- The handout info
- The ERP Guide I think was the most useful
- Understanding chain of procedure

Question 13. What was the least useful part of the program?

While there were not many comments provided for this question, the individual answers with respect to the presentation warrant review.

- Homework pre program
- Flipping through the plan to find page numbers
- The PowerPoint paperwork
- Nothing

Question 14. What changes would you suggest overall to any of the following:

All respondents to this question grouped the four categories together and did not distinguish between them in their replies. There were no changes suggested!

Information covered/Presentation formats/Workshop logistics/Pre-workshop mailing and materials

- None
- Nothing
- All was excellent

Question 15. Are there any specific topics you would like to see covered in future training or educational materials?

- Water system installation inspection for operators inspecting water system developments such as piping, valves, hydrant chlorination procedure, etc.
- No

Any final thoughts...

- Very helpful
- Good presenter, helpful information
- The training was very informational

May 7, 2014 (8:00 am – 12:00 pm)
West Greenwich, RI

Out of 14 attendees, 14 returned a completed survey, a 100% response rate. The respondents overwhelmingly indicated that they would recommend the workshop, that it was relevant and practical for their work, and that the materials presented would help them complete an ERP.

	No 1	2	3	4	Yes 5	Mean
4. Would you recommend this workshop to others?	0%	0%	0%	14.3%	85.7%	4.86
	Strongly Disagree 1	Disagree 2	Neither Disagree or Agree 3	Agree 4	Strongly Agree 5	
6. This workshop was relevant and practical for my work.	5.6%	0%	7.1%	42.9%	50%	4.43
7. The pre-workshop materials that I received in the mail were clear and helpful.	0%	0%	23.1%	23.1%	53.9%	4.31
8. The workshop helped me to understand the importance of developing an ERP.	0%	0%	0%	14.3%	85.7%	4.86
9. I will be able to use what I learned in this workshop to complete an ERP.	0%	0%	7.1%	21.4%	71.4%	4.64
10. I will complete the plan and use it during an emergency.	0%	0%	23.1%	7.7%	69.2%	4.46
11. I plan to share the information I learned with co-workers.	0%	0%	7.1%	14.3%	78.6%	4.71

Written Comments

Individual comments are recorded below for each of the questions requiring a written response. When possible, trends in those comments are noted, although the sample size is so small that reaching general conclusions can be difficult.

Question 5. Why did you choose that answer? (Referencing Question 4.)

The significant majority of respondents commented positively on the workshop information and instructor.

- Was good not perfect
- Extremely valuable information for all PWS
- Very informative/Tom Bahun
- Instructor very knowledgeable
- Professional, kept me interested
- Very informative and so important
- Very thorough, great information
- Great information and structure to develop and ERP
- Lots of information to put together a ERPG
- Good presentation and PowerPoint
- Instructor and info
- Informative, well organized and presented
- Thought provoking, gets the wheels turning

Question 12. What was the most useful part of the program?

Many respondents felt that addressing emergency scenarios was very useful, and many commented on the materials provided.

- Addressed our situation
- Sectional review of Guide and template, and review of emergency scenario and workshop
- All
- Materials
- Materials provided
- To be aware of the importance of this program/WARN introductory was very useful
- Going through the scenarios as a group
- Going through the planning guide in class. It made me more aware that a better Emergency Response Plan needs to be put together for our system.
- All
- Bringing up situations
- Resource materials/Pace of delivery of information

Question 13. What was the least useful part of the program?

There was only one substantive comment provided to this question, although it's meaning is somewhat unclear.

- Oversized
- N/A
- N/A
- N/A

Question 14. What changes would you suggest overall to any of the following:

Almost all respondents who answered this question grouped the four categories together and did not distinguish between them in their replies. There was only one change suggested to Workshop Logistics.

Information covered/Presentation formats/Workshop logistics/Pre-workshop mailing and materials

- Good/Thanks
- None
- None/Well Done
- None
- None/Well Organized!

Workshop logistics

- 9:00 start time would be easier or even 8:30 due to travel time to training locations

Question 15. Are there any specific topics you would like to see covered in future training or educational materials?

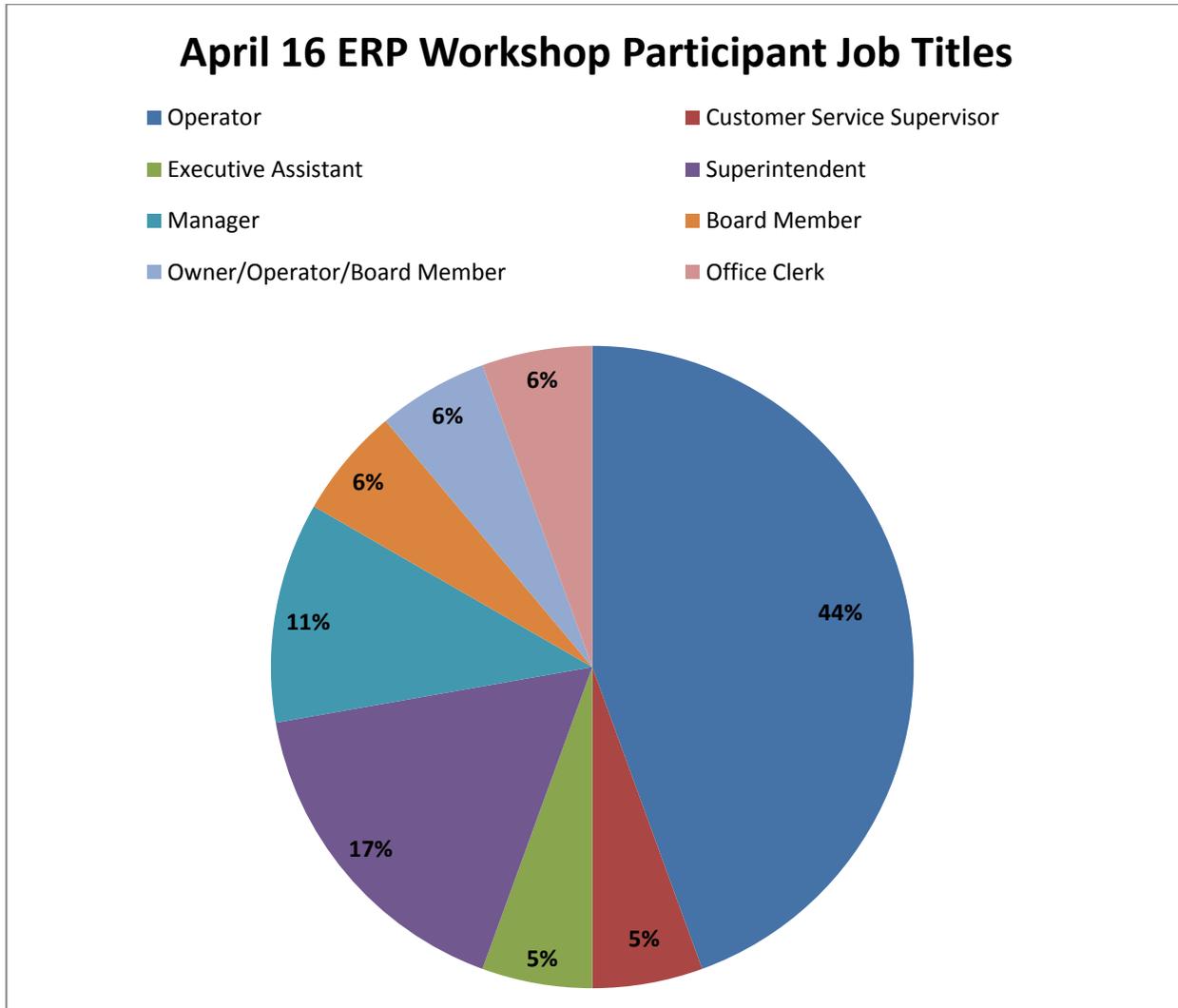
- VFD seminar and training

Any final thoughts...

- Good school very useful
- Great job
- Excellent course

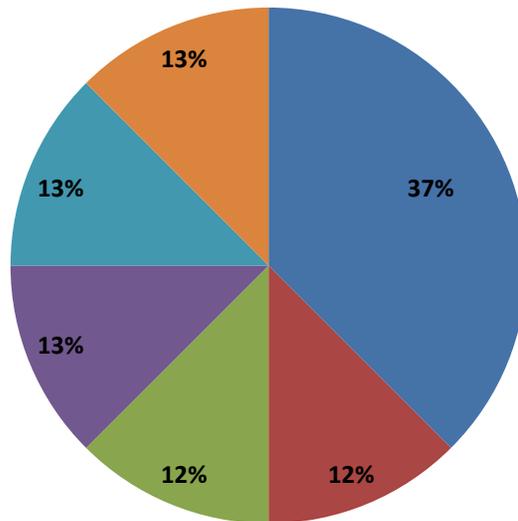
Respondent Demographics

The survey had an optional section for respondents to share their job titles. The following charts show the results for each workshop. The significant majority of respondents at each workshop were operators.



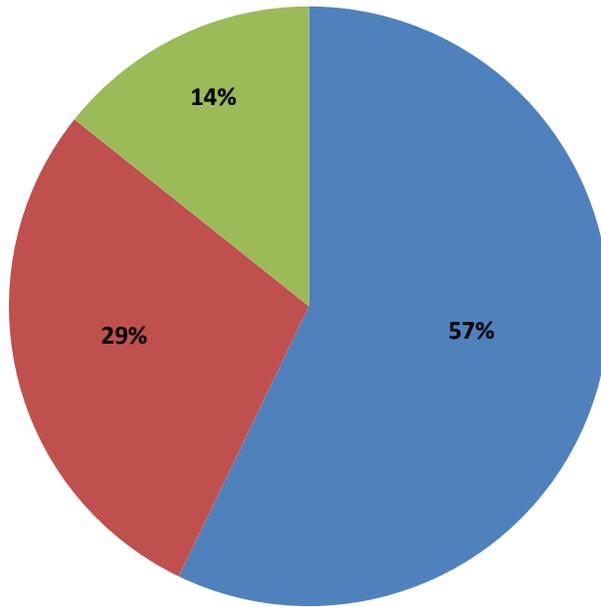
April 17 ERP Workshop Participant Job Titles

- Operator
- Board Member
- Owner
- Assistant Director of Natural Resources
- Owner and Operator
- Water Distribution Operator



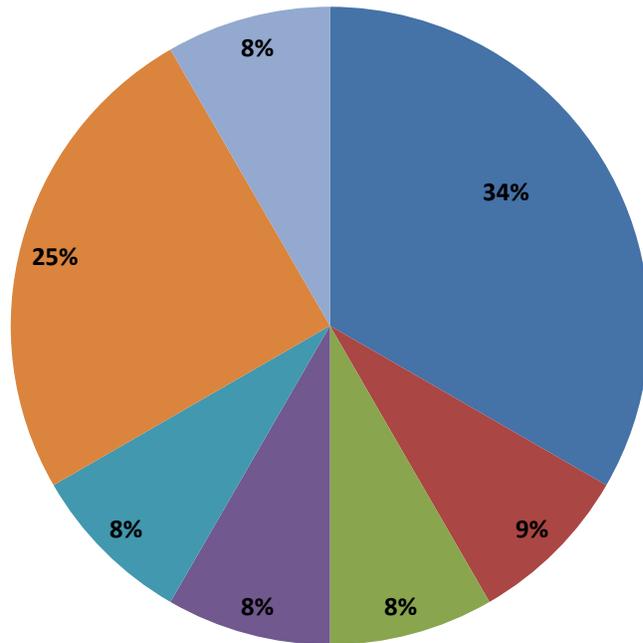
May 6 ERP Workshop Participant Job Titles

■ Operator ■ Superintendent ■ Board Member



May 7 ERP Workshop Participant Job Titles

- Operator
- Maintenance
- Utilities Work Leader
- Laborer
- Owner
- Engineer
- President



Survey Instrument

Emergency Response Planning for Water Systems Serving up to 3,300 People

1. Name (optional) _____

2. Water System (optional) _____

3. Job Title (i.e. Water System Owner, Operator, Board Member) _____

4. On a scale of 1- 5 (with 5 being Yes and 1 being No) would you recommend this workshop to others? Please circle your response

No					Yes
1	2	3	4	5	

5. Why did you choose that answer?

Please circle your response to each item below using the following scale:

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

- | | | | | | |
|---|---|---|---|---|---|
| 6. This workshop was relevant and practical for my work. | 1 | 2 | 3 | 4 | 5 |
| 7. The pre-workshop materials that I received in the mail were clear and helpful. (<i>Workshop logistics, Vulnerability Assessment</i>) | 1 | 2 | 3 | 4 | 5 |
| 8. The workshop helped me to understand the importance of developing an Emergency Response Plan. | 1 | 2 | 3 | 4 | 5 |
| 9. I will be able to use what I learned in this workshop to complete an Emergency Response Plan. | 1 | 2 | 3 | 4 | 5 |
| 10. I will complete the plan and use it during an emergency. | 1 | 2 | 3 | 4 | 5 |
| 11. I plan to share the information I learned with co-workers. | 1 | 2 | 3 | 4 | 5 |

Continued

12. What was the most useful part of the program?

13. What was the least useful part of the program?

14. What changes would you suggest overall to any of the following:

- **Information covered**

- **Presentation formats**

- **Workshop logistics**

- **Pre-workshop mailing and materials**

15. Are there any specific topics you would like to see covered in future training or educational materials?

Any final thoughts ...