|  |  |
| --- | --- |
| Pioneer Lookout Water District  Address:  P.O. Box 851  Monument, CO 80132      **Rural Community**  **Assistance Corporation**  ***www.rcac.org*** | **Pioneer Lookout Emergency Response**  **Planning Template for Public**  **Drinking Water Systems**  **Jan 2020** |
|  |

Original source:

*Rural Community Assistance Corporation, Western RCAP, RCAP Safety and Security Education Program*

Emergency Response Planning Template for Public Drinking Water Systems



**RCAP Regional Offices:**

If you need technical assistance to complete your Emergency Response Plan, please contact one of our regional offices listed below.

**Northeast RCAP**



**Western**

**RCAP**

**Midwest**

**RCAP**

**Great Lakes**

**RCAP**

**Southern**

**RCAP**

**RCAP National Office**

**Southeast RCAP**

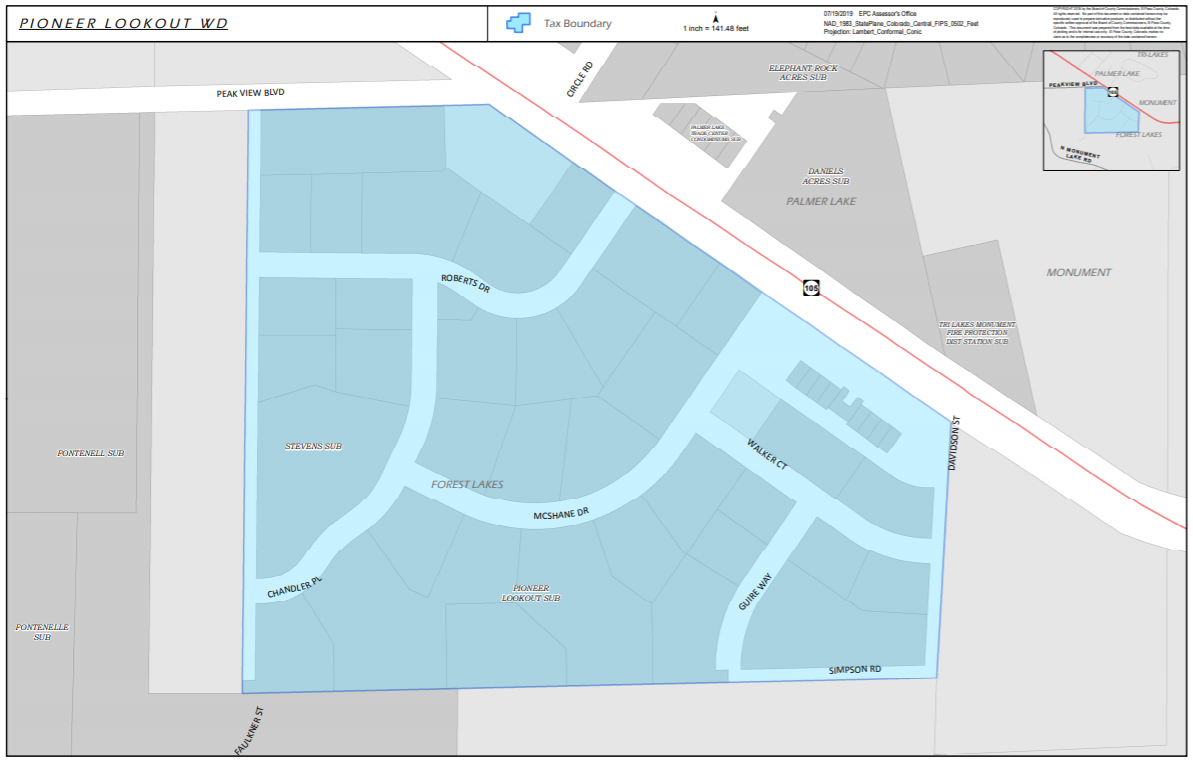
|  |  |  |
| --- | --- | --- |
| **Regional Offices** | **Contact Number** | **Web Address** |
| RCAP National Office | 888/321-7227 | www.rcap.org |
| Western RCAP | 916/447-2854 | www.rcac.org |
| Southeast RCAP | 866/928-3731 | www.southeastrcap.org |
| Great Lakes RCAP | 800/775-9767 | www.glrcap.org |
| Southern RCAP | 479/443-2700 | www.crg.org |
| Northeast RCAP | 800/488-1969 | www.rcapsolutions.org |
| Midwest RCAP | 952/758-4334 | www.map-inc.org |

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For additional copies of this publication, call 888/321-7227or visit RCAP’s web site at *www.rcap.org.*

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P I O N E E R L O O K O U T W D



## Planning Template

# Introduction

Preparing an emergency response plan is an essential part of managing a drinking water system. Rural Community Assistance Partnership, Inc has developed this template for public water systems serving 3,300 population or fewer to help them develop such plans

# Section 1. System Information

Keep this basic information easily accessible to authorized staff for emergency responders, repair people, and the news media.

### System information

|  |  |  |
| --- | --- | --- |
| **System Identification**  **Number** | PWSID: CO0121625 |  |
| **System Name and Address** | PIONEER LOOKOUT WATER DISTRICT  639 ROBERTS DRIVE MONUMENT, CO 80132 |  |
| **Directions to the System** | West on Highway 105 turn  Left at Roberts Drive and the well house is on the corner of Chandler & Roberts |  |
| **Basic Description and**  **Location of System**  **Facilities** | The Pioneer Lookout Water system has one ground water well and is located at Lot 5 Blk 6 in the Pioneer Lookout Subdivision |  |
| **Location/Town** | Pioneer Lookout Subdivision  El Paso County |  |
| **Population Served and**  **Service Connections from**  **Division of Drinking Water**  **Records** | \_\_\_100\_\_\_\_\_ people | \_\_43\_\_\_\_ connections |
| **System Owner** | PIONEER LOOKOUT SUBDIVISION |  |
| **Name, Title, and Phone**  **Number of Person**  **Responsible for**  **Maintaining and**  **Implementing the**  **Emergency Plan** | DAVID WILLARD, Director | \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone  \_719-244-5593 \_ Cell  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pager |
| **Location of treatment and distribution schematics and operations manuals** | Tom Tharnish  Certified Technician | 2685 Walker Court  Monument, CO 80132 |

# Section 2. Chain of Command – Lines of Authority

**The first response step** in any emergency is to inform the person at the top of this list, who is responsible for managing the emergency and making key decisions.

### Chain of command – lines of authority

|  |  |  |
| --- | --- | --- |
| **Name and Title** | **Responsibilities During an Emergency** | **Contact Numbers** |
| TOM THARNISH | Assess the system’s facilities and operations in the field. Organize and carry out repairs | Cell:719-499-1126 |
| LYNN SPEAR | Responsible for overall management and decision making for the water system.  Assign responsibility to oversee and carry out notifications. | Cell: 719-499-1190 |
| MARY BOWMAN | Handle incoming phone calls and administrative support. Contact customers.  Assemble comprehensive call-up list with names and contact numbers | Cell: 719-650-1830 |
| BONNIE SANDS | Assist with contacting customers | Cell: 719-321-9197 |
| DAVID WILLARD | Responsible for Maintaining and Implementing Emergency Plan | Cell: 719-244-5593 |

# Section 3. Events that Cause Emergencies

The events listed below may cause water system emergencies. They are arranged from highest to lowest probable risk.

### Events that cause emergencies

|  |  |  |
| --- | --- | --- |
| **Type of Event** | **Probability or Risk (High-Med-Low)** | **Comments** |
| Winds/Thunderstorms | High | System is vulnerable to high wind events. Power is disrupted |
| Ice Storms | Med | Broken pipes and damaged pump house |
| Drought | Med | Need to plan for decrease in well yield during dry summers. |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# Section 4. Emergency Notification

**Notification call-up lists -** Use these lists to notify first responders of an emergency.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Emergency Notification List** | | |  |
| **Organization or Department** | **Name & Position** | **Telephone** | **Night or Cell Phone** | **Email** |
| **Local Law Enforcement** | El Paso County Sheriff | 719-390-5555 |  |  |
| **Fire Department** | Tri-Lakes | 719-481-2436 |  |  |
| **Emergency Medical Services** | Tri-Lakes Fire | 911 |  |  |
| **Water Operator (if contractor)** | TOM THARNISH  CERTIFIED OPERATOR |  | 719-499-1126 | [kedct@comcast.net](mailto:kedct@comcast.net) or ttharnish@tomgov.org |
| **EPA Contact** | Robert Clement | 303-312-6653 |  | Clement.robert@epa.gov |
| **Hazmat Hotline** |  |  |  |  |
| **Interconnected**  **Water**  **System** |  |  |  |  |
| **Neighboring Water System (not connected)** | Monument | 884-8037 |  |  |
| **RCAP Contact** |  |  |  |  |
| **Rural Water Contact** |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Priority Customers** | | |  |
| **Organization or Department** | **Name & Position** | **Telephone** | **Night or Cell**  **Phone** | **Email** |
| **Hospitals or Clinic(s)** | N/A |  |  |  |
| **Public or Private Schools** | N/A |  |  |  |
| **Wastewater**  **Treatment Plant** | N/A |  |  |  |
| **Adult Care**  **Facility** | N/A |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **State, Federal or Tribal Notification List** | | | | |
| **Organization or Department** | **Name & Position** | **Telephone** | **Night or Cell**  **Phone** | **Email** |
| **State or Tribal**  **Police** | State Police  EPCO Sheriff Dispatch | 719-544-2424  719-390-5555 |  |  |
| **Regulatory Agency**  **State/Federal/Tribal** | Colorado Department of Public Health & Environment | 1-800-518-5608 |  |  |
| **Authorized Testing Laboratory** | Colorado Analytical Lab | 1-303-659-2313 |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Service / Repair Notifications** | | |  |
| **Organization or Department** | **Name & Position** | **Telephone** | **Night or Cell**  **Phone** | **Email** |
| **Electric Utility Co.** | IREA | 1-844-IREA-FIX |  | WWW.IREA.COOP |
| **Electrician** |  |  |  |  |
| **Gas/Propane Supplier** | BLACK HILLS ENERGY | 1- 888-890-5554 | 1-800-694-8989 |  |
| **Water Testing Lab.** | Colorado Analytical Lab | 1-303-659-2313 |  |  |
| **Sewer Utility Co.** | PALMER LAKE SANITATION | 719-481-2732 |  |  |
| **Telephone Co.** |  |  |  |  |
| **Plumber** |  |  |  |  |
| **Pump Supplier** | George Woods  COLORADO PUMP | 1-303-688-6462 |  |  |
| **“Call Before You**  **Dig”** | 811 |  |  |  |
| **Rental Equipment Supplier** |  |  |  |  |
| **Chlorine Supplier** | TREATMENT TECHNOLOGY | 1-303-816-1114 |  |  |
| **Other Chemical Supplier** |  |  |  |  |
| **Well Drilling Co.** | George Woods  COLORADO PUMP | 1-303-688-6462 |  |  |
| **Pipe Supplier** |  |  |  |  |
|  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Media Notification List** | | |  |
| **Organization or Department** | **Name & Position** | **Telephone** | **Night or Cell**  **Phone** | **Email** |
| **Newspaper - Local** | Tribune | 687-3006 |  |  |
| **Newspaper –**  **Regional/State/Tribal** | Our Community News | 488-3455 |  | www.ocn.me |
| **Radio** |  |  |  |  |
| **Radio** |  |  |  |  |
| **TV Station** |  |  |  |  |

### Notification procedures

#### Notify water system customers of potential water shortage

|  |  |
| --- | --- |
| **Who is**  **Responsible:** | The water system manager is ultimately responsible for making the decision to notify customers regarding a potential water shortage and the need for water restrictions. |
| **Procedures:** | * Confer with key staff to verify problem. * Develop a message to be deliver to customers via email or verbally * Water system operator continue to investigate problem and make repairs as necessary. * Water system operator continuously updates the water system manager on water shortage * Once water shortage is resolved, re-notify customers and Instruct them to flush their plumbing upon return to service. |

#### Alert local law enforcement, state, federal, or tribal drinking water officials, and local health agencies

|  |  |
| --- | --- |
| **Who is**  **Responsible:** | Water System Operator |
| **Procedures:** | Will notify local primary agencies concerning emergencies and seek guidance on consulting with other agencies.  Email [cdphe.wqacutes@state.co.us](mailto:cdphe.wqacutes@state.co.us) |

#### Contact service and repair contractors

|  |  |
| --- | --- |
| **Who is**  **Responsible:** | Lynn Spear, President |
| **Procedures:** | Contact vendor and authorize the investigation or work of the water issues. |

#### Contact neighboring water systems, if necessary

|  |  |
| --- | --- |
| **Who is**  **Responsible:** | Water Operator, Tom Tharnish |
| **Procedures:** | Call Monument Water |

#### Procedures for issuing a health advisory

|  |  |
| --- | --- |
| **Who is**  **Responsible:** | Water Operator |
| **Procedures:** | Contact CDPHE Acute Hotline 1-877-518-5608 |

#### Other procedures as necessary

|  |  |
| --- | --- |
| **Who is**  **Responsible:** | Bonnie Sands |
| **Procedures:** | Mobilize volunteers to notify residents |

# Section 5. Effective Communication

Communication with customers, the news media, and the general public is a critical part of emergency response.

### Designated public spokesperson

Designate a spokesperson (and alternate) and contact your local primacy agency for delivering messages to the news media and the public.

### Designate a spokesperson and alternates

|  |  |
| --- | --- |
| **Spokesperson** | **Alternate** |
| Lynn Spear | Mary Bowman |

# Health advisories

During events when water quality and human health are in question, it may be necessary to issue a health advisory that gives advice or recommendations to water system customers on how to protect their health when drinking water is considered unsafe. These advisories are issued when the health risks to the consumers are sufficient, in the estimation of the water system, state or tribal, or local health officials, to warrant such advice.

Health advisories usually take the form of a drinking water warning or boil water advisory. Communication during these times is critical. Health advisories should always be well thought out and provide very clear messages.

The U.S. Environmental Protection Agency has put together a number of tools, including fact sheets, brochures, forms, and templates to help prepare for a health advisory. These are on the web at: <http://www.epa.gov/safewater/pn.html>

# Section 6. Response Actions for Specific Events

In any event, there are a series of general steps to take:

1. Analyze the type and severity of the emergency;
2. Take immediate actions to save lives;
3. Take action to reduce injuries and system damage;
4. Make repairs based on priority demand, and
5. Return the system to normal operation.

The following tables identify the assessment, set forth immediate response actions, define what notifications need to be made, and describe important follow-up actions.

#### A. Power outage

|  |  |
| --- | --- |
| **Assessment** | Pioneer Lookout Water System is vulnerable to power outages. The system does not have a back-up generator. |
| **Immediate Actions** | 1. Assess whether the outage will be more than 6 hours 2. Implement water shortage response actions to inform customers to cut back on water usage until power is restored. |
| **Notifications** | 1. IREA – let them know that the power is out. 2. Customers – cut back on water until power is restored. |
| **Follow-up Actions** | 1. Inspect facilities to ensure proper operation. 2. Update ERP as needed. |

#### B. Distribution line break

|  |  |
| --- | --- |
| **Assessment** | Water Operator and Vendor to investigate |
| **Immediate Actions** | Direct vendor to fix the line break |
| **Notifications** | Residents affected by the line break |
| **Follow-up Actions** | Disinfection and sampling of water line after back in service,.  Update ERP as needed. |

#### C. Chlorine treatment equipment failure

|  |  |
| --- | --- |
| **Assessment** | Operator |
| **Immediate Actions** | 1. Isolate equipment and repair or replace. 2. Test for chlorine residual at normal sampling points, and in water storage. 3. As indicated by tests, dose water in storage with chlorine, flush system, or both. |
| **Notifications** | Local government occupational safety and health agency and environmental authorities if spill occurs.  Local primacy agency if inadequate chlorine residual is found. |
| **Follow-up Actions** | Retest for residual chlorine and microbial contamination, Update ERP as needed |

#### D. Treatment equipment

|  |  |
| --- | --- |
| **Assessment** | Operator |
| **Immediate Actions** | Investigate and affect repairs as necessary |
| **Notifications** | District Manager |
| **Follow-up Actions** | Notify CDPHE as necessary |

#### E. Source pump failure

|  |  |
| --- | --- |
| **Assessment** | Operator |
| **Immediate Actions** | Restart pump and check control panel for causes, have electrician review controls and pump starter, repair or replace pump if required. |
| **Notifications** | Residents if pump is down over 24 hours to reduce water usage. |
| **Follow-up Actions** | Notification of residents when pump is repaired and water service is back to normal. Update ERP as needed. |

#### F. Microbial (coliform, *E. coli*) contamination

|  |  |
| --- | --- |
| **Assessment** | Operator |
| **Immediate Actions** | 1. Conduct follow up sampling. 2. Disinfect system through storage reservoirs and flushing system through blow offs/hydrants throughout the system. |
| **Notifications** | Public notification as per guidance by local primacy agency and in accordance with the Safe Drinking Act. |
| **Follow-up Actions** | Send notice to local primacy agency in accordance with the Safe Drinking Water Act. Update ERP as needed. |

#### G. Chemical contamination

|  |  |
| --- | --- |
| **Assessment** | Operator |
| **Immediate Actions** | Decontaminate clothing |
| **Notifications** |  |
| **Follow-up Actions** |  |

#### H. Vandalism or terrorist attack

|  |  |
| --- | --- |
| **Assessment** | Operator determines severity of the incident |
| **Immediate Actions** | 1. Call County Sheriff’s Office 2. Notify local primacy agency if necessary 3. Assess damage and take necessary action; (a) Fix or repair damage (b)) Provide additional protection against future actions (c) Mobilize volunteers to notify residents of vandalism to watch for future actions. |
| **Notifications** | Activate volunteer notification system if necessary. |
| **Follow-up Actions** | Completion of repairs, return system to normal. Update ERP as needed. |

#### I. Reduction or loss of water in the well

|  |  |
| --- | --- |
| **Assessment** | Operator |
| **Immediate Actions** | 1. Monitor well production and check for system leaks or increased demand on system that could cause well stress 2. Check water level in well through air line and record measurement and trends. |
| **Notifications** | Have a volunteer notify residents to curtail water usage to inside use only until problem is solved. |
| **Follow-up Actions** | Notify residents that the water system is back to normal operation.  Update ERP as needed. |

#### J. Drought

|  |  |
| --- | --- |
| **Assessment** | 1. Operator reviews well production and system trends 2. Static water level measurements show decline in water levels in the well. |
| **Immediate Actions** | Curtail outside watering, notify residents of problem. |
| **Notifications** | Use volunteer to notify residents to curtail water usage to inside use only until problem is solved. |
| **Follow-up Actions** | System returns to normal by notifying residents. Update ERP as needed. |

#### K. Flood

|  |  |
| --- | --- |
| **Assessment** | N/A, tank and wellhouse are located at the highest point of the district |
| **Immediate Actions** |  |
| **Notifications** |  |
| **Follow-up Actions** |  |

#### L. Earthquake

|  |  |
| --- | --- |
| **Assessment** | Water Operator |
| **Immediate Actions** | Evaluate conditions of wellhouse and distribution system |
| **Notifications** | CDPHE |
| **Follow-up Actions** |  |

#### M. Hazardous materials spill in vicinity of sources or system lines

|  |  |
| --- | --- |
| **Assessment** | Water Operator |
| **Immediate Actions** | Notify Hazmat at El Paso County |
| **Notifications** | Notify residents to stay clear of area affected |
| **Follow-up Actions** | Notify residents when area and / or spill is contained and it is deemed safe to return |

#### N. Electronic equipment failure

|  |  |
| --- | --- |
| **Assessment** | Operator |
| **Immediate Actions** | Bring in contract to fix controls. |
| **Notifications** | Residents if controls have failed for a lengthy time and water problems exist. |
| **Follow-up Actions** | If residents were originally notified of problem, inform them that the problem has been resolved. Update ERP as needed. |

#### O. Cyber attack

|  |  |
| --- | --- |
| **Assessment** | Determine the severity of the attack |
| **Immediate Actions** | 1. Assess damage and direct computer system repairs as needed. 2. Repair hardware components (if necessary), replace software, as necessary, install improved electronic security, as necessary. |
| **Notifications** | Contact the board president. If determined necessary, contact State Warning Pont, local law enforcement, and local primary agency. |
| **Follow-up Actions** | Report completion of repairs to board president. Update ERP as needed. |

#### P. Other

|  |  |
| --- | --- |
| **Assessment** |  |
| **Immediate Actions** |  |
| **Notifications** |  |
| **Follow-up Actions** |  |

# Section 7. Alternative Water Sources

#### Intertie to adjacent water supply system

|  |  |
| --- | --- |
| **Water Systems Within One-Quarter Mile of our System** | **Feasibility of Connecting** |
| Town of Monument | Minimal |
|  |  |

#### Alternate source(s) of water

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Alternative Sources** | **Names** | **Phone** | **Availability** | **Is the Water Safe for**  **Drinking?** |
| **Bottled water Suppliers for**  **potable water use** |  |  |  |  |
| **Tanker trucks in the area available to deliver bulk water**  **for non potable use** |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

# Section 8. Returning to Normal Operation

#### Returning to normal operations

|  |  |
| --- | --- |
| **Action** | **Description and Actions** |
| Inspect, flush, and disinfect the system | Water system operator inspect all system facilities, ensure all water quality tests have been done and the system has been flushed and disinfected if necessary. Water system operator makes a report to the water system manager and both makes the decision on the current condition of the system. |
| Verify water quality | Water system manager verifies water quality sampling results. |
| Coordinate with local primacy agency | Water system manager coordinates with local primacy agency on system condition and water quality results. |
| Notify customers | Water system manager meets with water system operator and communications lead to write notice to customers. Water system manager directs communications lead to distribute public notice |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |



**Disclaimer**

This document contains information on how to plan for protection of the assets of your water system. The work necessarily addresses problems in a general nature. You should review local,

state, tribal (if applicable), and federal laws and regulations to see how they apply to your

specific situation.

Knowledgeable professionals prepared this document using current information. The authors make no representation, expressed or implied, that this information is suitable for any specific

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at their water systems.

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