Best Management Practices for
Pressure Event Operational Decisions

Example Service Outage Scenarios:

1. Source Water Outage
2. Water Storage Outage
3. Pump Station Failure
4. Electrical Malfunction
5. Accidental Valve Operation
6. Transmission/Distribution Main Pipeline or Intertie Failure (see Repairing Water Mains BMP)

Service Interruption Thresholds:

1. Maintain acceptable service pressure - *best*
2. Maintain positive pressure throughout affected service area - *desirable*
3. Loss of positive system pressure – *less desirable*
4. Loss of positive service pressure – *least desirable*

Management Scenarios:

1) Prevent service outages with backup facilities and power, maintain acceptable operating pressure - *best*

a) Recognize service interruption immediately, reported either by staff, customers, or through auto monitoring/alarms
b) Engage standby facilities/power or activate interties to maintain service
c) Verify service pressure, and chlorine residuals if applicable

2) Recognize service outage and correct as soon as possible, maintaining positive service pressure - *desirable*

a) Recognize service interruption, either reported by staff, customers, or through auto monitoring/alarms
b) Make temporary or permanent corrective actions to restore service
c) Verify service pressure, and chlorine residuals if applicable

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3) Loss of positive mainline pressure, chlorinated & non-chlorinated systems - *less desirable*

Shut off service meters before a loss of positive system pressure, and re-establish pressure

a) Recognize loss of system pressure
b) Notify affected water users of service outage
c) Shut off customer services before positive pressure is lost
d) Make temporary or permanent corrective actions to restore system pressure
e) Flush affected area to remove any infiltrated water, disinfect affected area, and flush to restore system chlorine residuals and verify system pressure
f) Coliform bacteria samples: Collect a coliform bacteria sample after chlorine residual returns to baseline (zero for unchlorinated systems) to ensure corrective action effectiveness. Mark as a "special sample" and retain in utility records for 2 years.
g) If the post-corrective action coliform sample result shows the presence of coliforms, resample per coliform sampling procedures. If second sample results show presence of coliforms, contact state drinking water program to consult on corrective action.
h) Turn on meters and restore service.

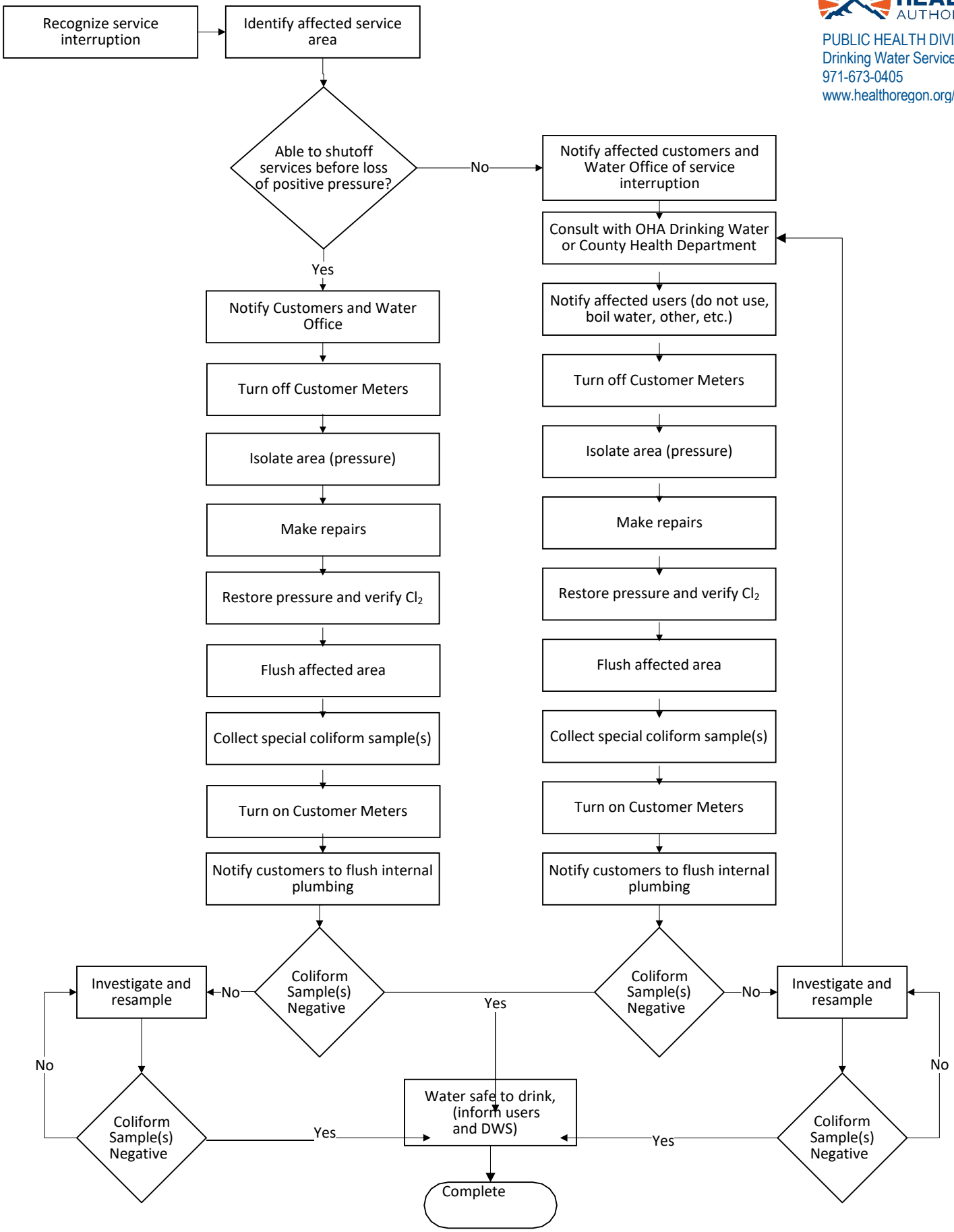
4) Loss of positive service pressure, chlorinated & non-chlorinated systems - *least desirable*

Unable to shut off service meters before positive service pressure loss, isolate and re-establish pressure

a) Identify affected service area.
b) Notify affected users to take personal protective action (boil water or use bottled water). If all affected users cannot be quickly notified, conduct additional wider notification by media or other means.
c) Notify and consult with state drinking water program.
d) Shut off customer services.
e) Make temporary or permanent corrective actions to restore service pressure.
f) Flush affected area to remove any infiltrated water, disinfect affected area, and flush to restore system chlorine residuals and verify service pressure.
g) Coliform bacteria samples: Collect a coliform bacteria sample after chlorine residual returns to baseline (zero for unchlorinated systems) to ensure corrective action effectiveness. Mark as a "special sample" and retain in utility records for 2 years.
h) If the post-corrective action coliform sample result shows the presence of coliforms, resample per coliform sampling procedures. If second sample results show presence of coliforms, contact state drinking water program to consult on corrective action.
i) Notify your drinking water regulator or state drinking water program of absent sample results and that advisory will be lifted. Notify media if the affected area is extensive.
j) Notify customers advisory is lifted and to flush all household taps for at least 2 minutes.

Pressure Event Flow Chart

OREGON HEALTH AUTHORITY
PUBLIC HEALTH DIVISION
Drinking Water Services
971-673-0405
www.healthoregon.org/dws



Note: Multiple operations can be done concurrently provided public health and safety is the priority. If questions, contact OHA Drinking Water Services or Local Public Health Authority

Developed by OHA DWAC April 2025