



We work with others to protect the health of the people of Washington State by ensuring safe and reliable drinking water.



CCC HAZARD SURVEYS

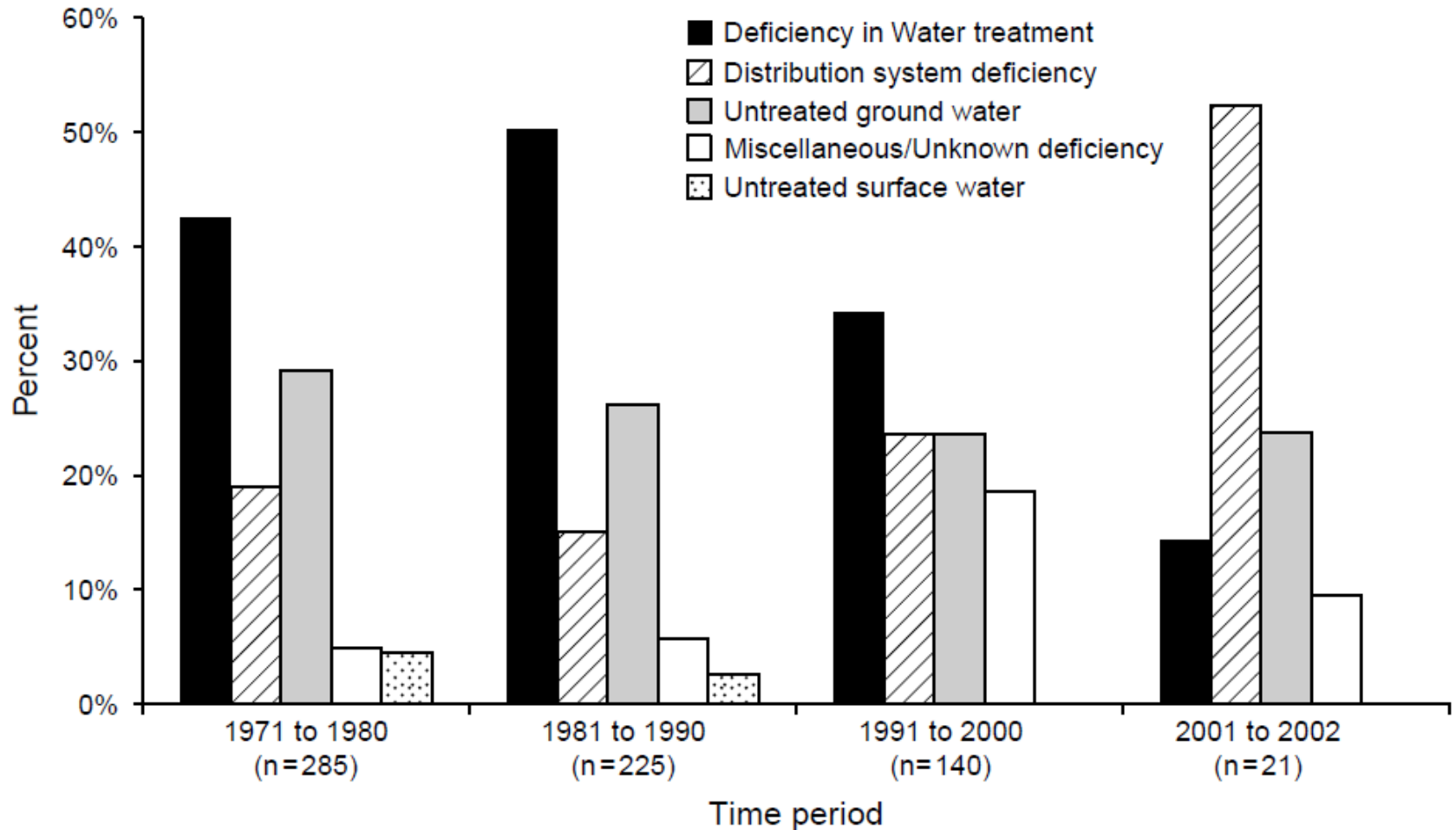
PNWS-AWWA CONFERENCE

Office of Drinking Water

Washington CCC Rules

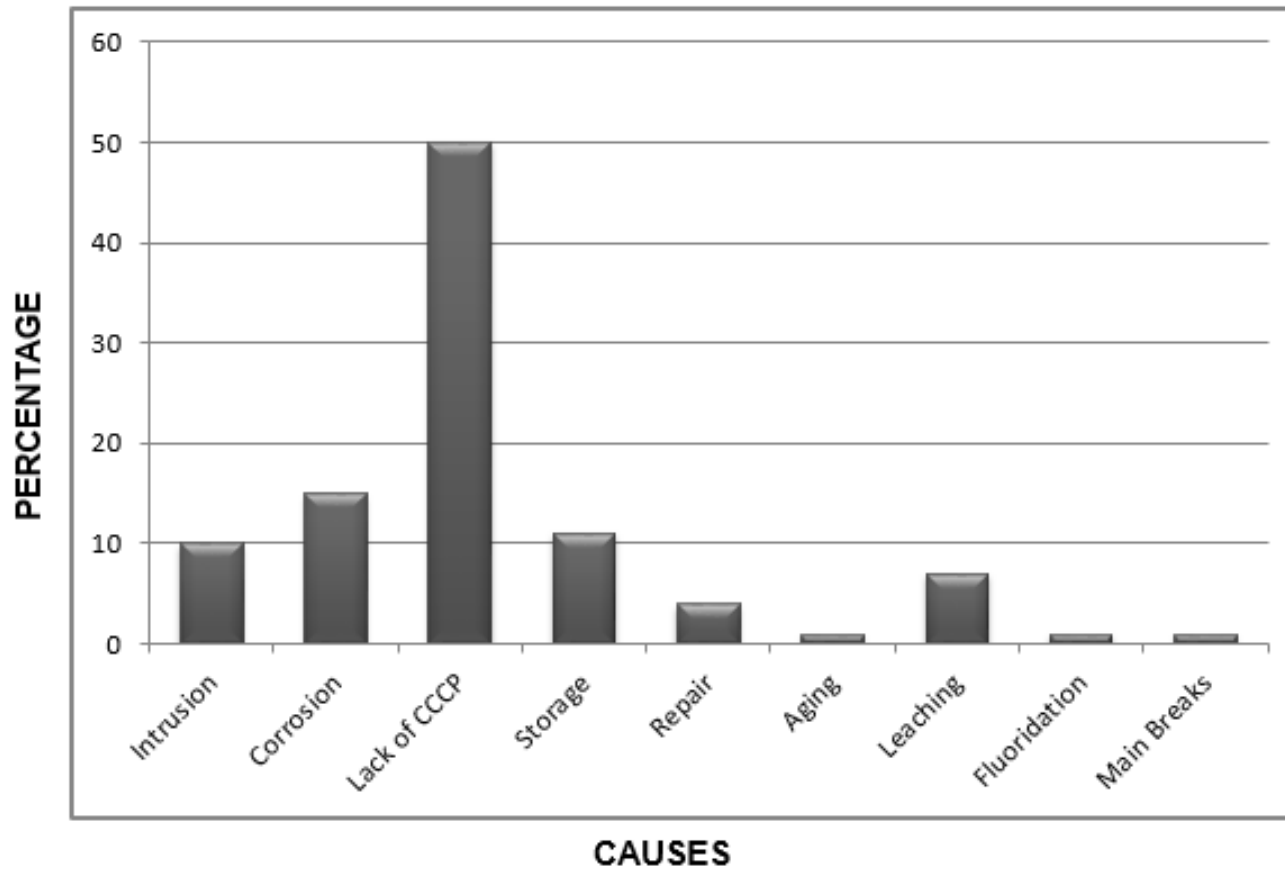
- WAC 246-290-490 (Drinking Water CCC)
- WAC 246-292 (CCS/BAT Duties & Test Reports)
- WAC 173-240 (Wastewater Treatment Facilities)
 - Criteria for Sewage Works Design
- WAC 173-219 (CCC Reclaimed Water)
- Uniform Plumbing Code (inside buildings)
- WAC 51-56 (amendments to the UPC)
- WAC 246-215 (food rule)

Waterborne Disease



CCC Concerns

CAUSES OF DISTRIBUTION SYSTEM OUTBREAKS
(1981-2002)



Backflow Incidents

1. The investigation of an e-coli positive sample identified a rainwater catchment used for “non-potable” uses in a small church.
2. A hand-dug well used for “non-potable” uses in a small restaurant cross-connected to the building plumbing.
3. 4 instances of Compressed air injected into the distribution system through a lawn irrigation system. Air compressors were incorrectly hooked to backflow assembly test cocks to winterize lawn sprinkler systems.
4. An investigation of “muddy” water reports revealed a customer using compressed air to blow-out the fire sprinkler system in a small business.

The Costs of Backflow Incidents

- Your customers could get sick
- You can be subject to litigation
- Loss of consumer confidence
- Hours, flushing, disinfection, sampling...
- May not be able to acquire SRF loans
- Could face actions against your certification
- Regulatory noncompliance

Hazard Surveys

- Mailing or on-site? Existing or New Construction?
- Partnership between surveyor, building owner, and regulator.
- Understand why you're there and don't overwhelm the building owner.
- Get as much information as possible before the survey.
- Start at source and go to each point of use

What you Need

- Smart Phone for “new” things, approved assemblies, ASSE codes, call-a-friend
- Take pictures and document, pen and paper, talk to people, business cards, ID badge
- Flashlight, laser pointer, extra batteries, multi-tool, mirror
- PPE- hard hat, goggles, boots, hearing protection, confined space entry equipment, fall protection
- Template report (water uses, cross connections, degree of hazard, existing protection, reference codes and regs, recommendations, date/location, who was there, disclaimer)

What to Look For

- Irrigation systems
- Solar heating systems
- Boilers
- Auxiliary water supplies
- Livestock watering
- Fire systems
- Water treatment equipment

PRIMARY SLUDGE

NONPOTABLE WATER

POTABLE WATER

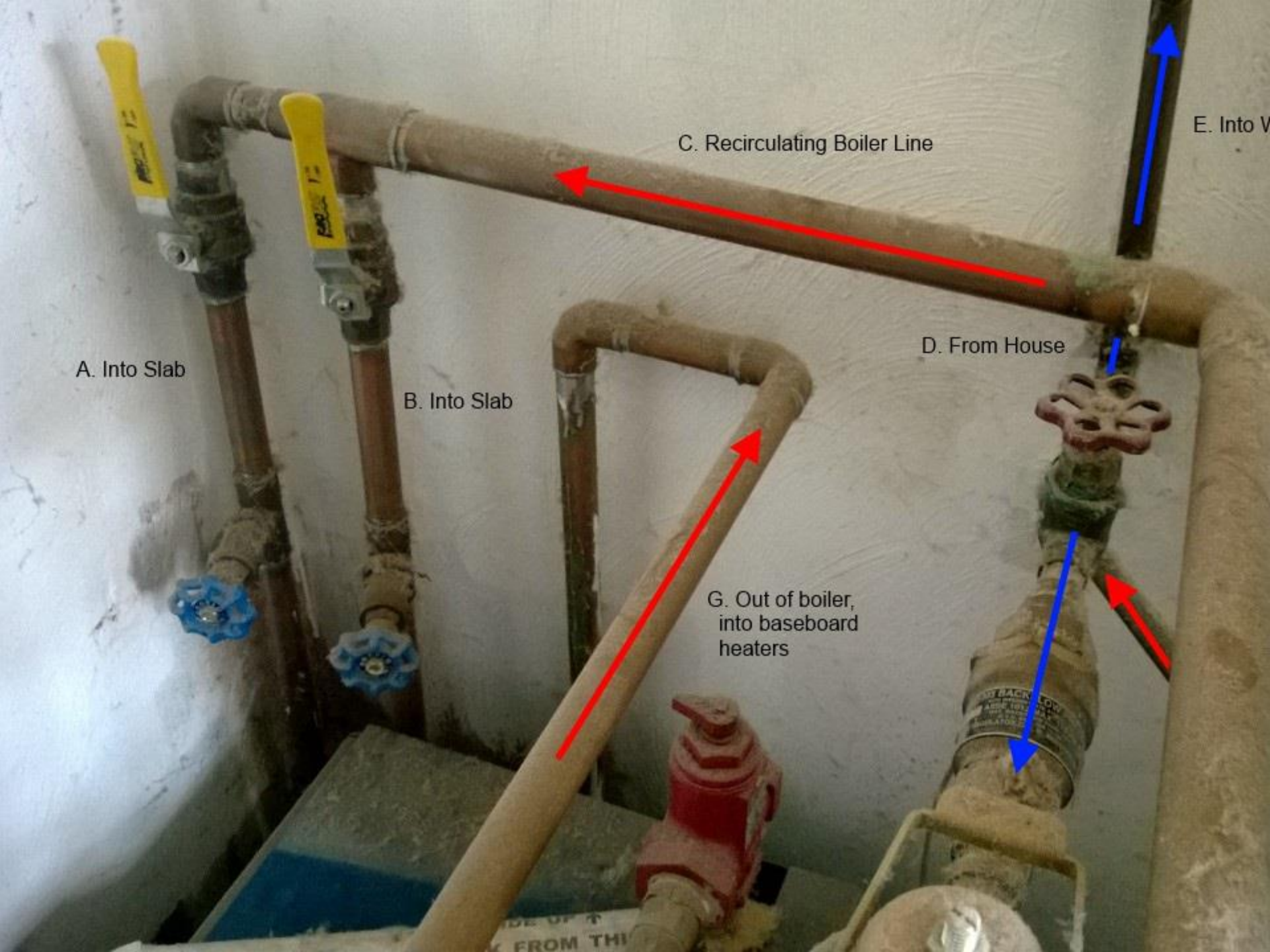
SERVICE AIR

INSTRUMENT AIR

MIXED LIQUOR

CLA

RECLAIMED WTR



A. Into Slab

B. Into Slab

C. Recirculating Boiler Line

D. From House

E. Into V...

G. Out of boiler,
into baseboard
heaters





ELECTRIC
TRACED

43

OS



POTABLE WATER

DANGER
NON-POTABLE
WATER
DO NOT DRINK

PLANT WATER



← WATER, CITY NONPOTABLE



RETURN ACTIVATED SLUDGE

700070 A...





WATTS



0111588
100292863

Reduced Pressure Zone
Assembly
Scan for product
resources and to



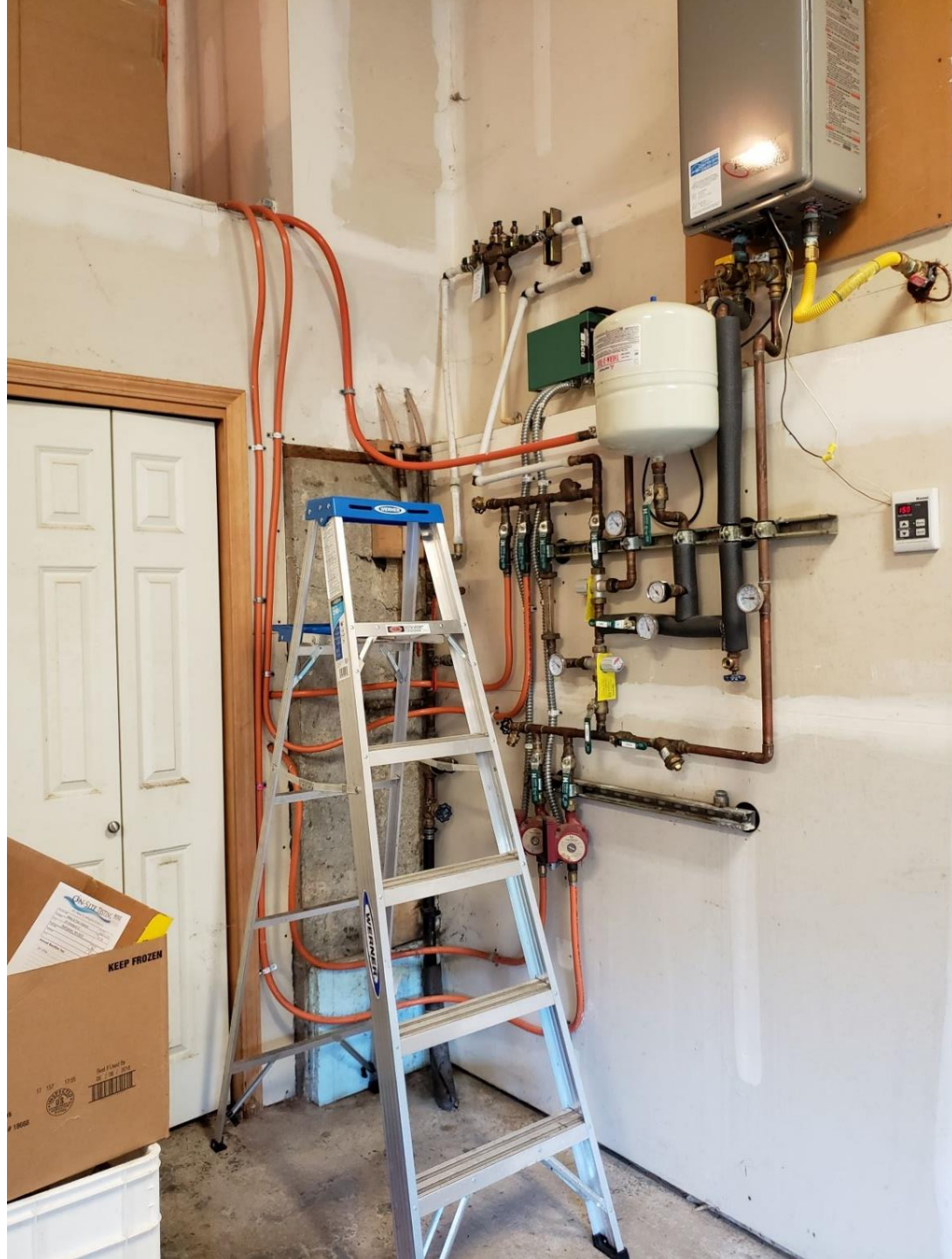


Limpiar el Disp

- 1. To disconnect the **empty box**.
- 2. Press both white buttons on Quick Disconnect.
- 3. Pull Blue Ring back.
- 4. Position box on shelf with perforation for spout.
- 5. Press in on the thumb...

bag-in
How to change a...







Two RPBA's located
behind cabinet

Cabinet Wall





37
8/20

TEST TAG
DATE
TECHNICIAN

TEST TAG

DATE TESTED: _____

TECHNICIAN: _____

TEST	TEST RESULT	TEST DATE

SAFETY
EYE PROTECTION
Wear eye protection at all times.













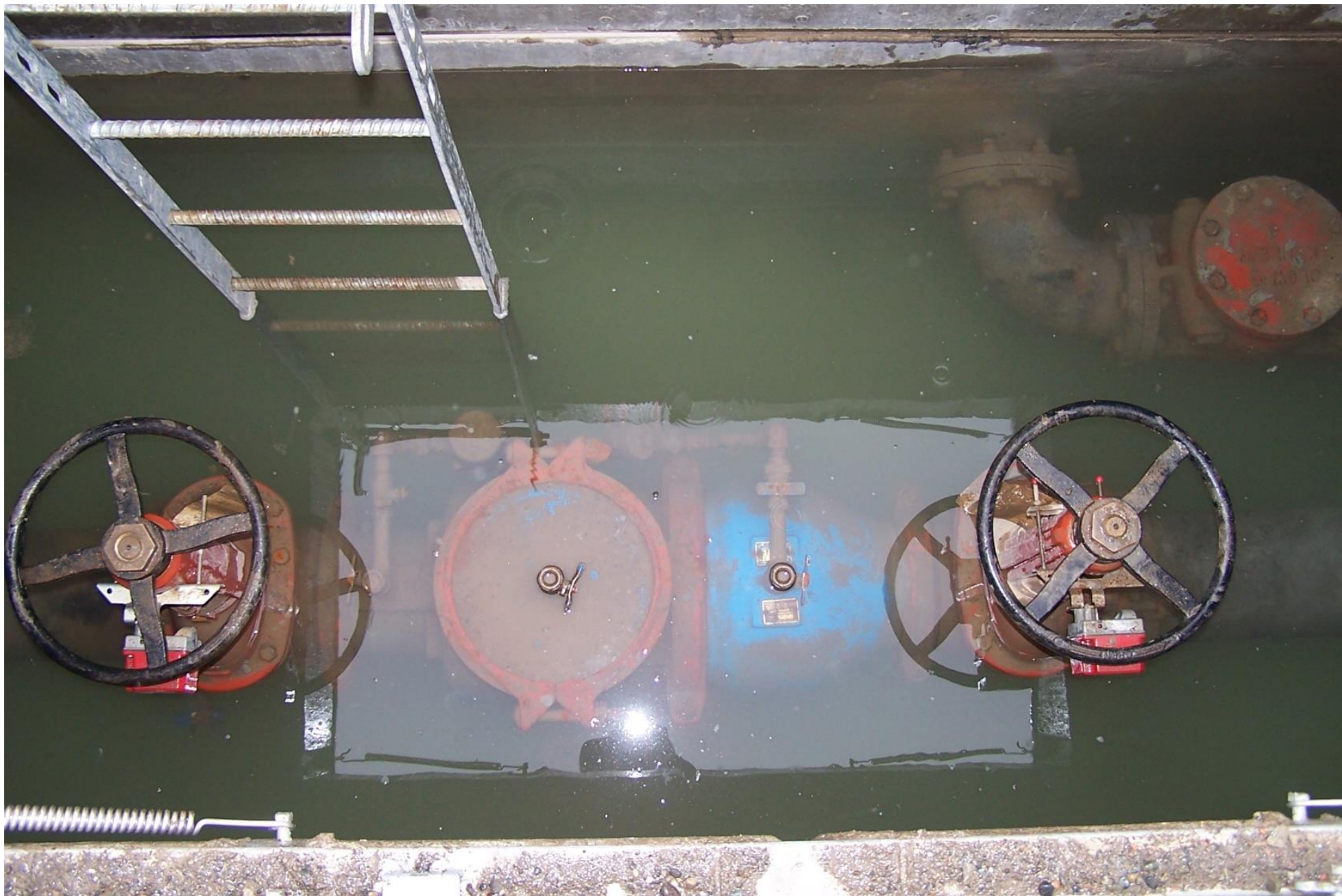


13 9:17 AM






24. 2. 2003





Inlet to holding
tank for
booster pump



Potable
water fill line

Splash
protection
for electrical
equipment



Potable fill for
below ground
reclaimed
water holding
tank

[Redacted] w/w
Plant
Lab building









Potable water used for WAS flush and pump seal water



RPBA



OST
ON-SITE TESTING
Municipal Gas System
10/1/2000
10/1/2000
10/1/2000
10/1/2000









POT

WU

DANGER
DO NOT OPEN

AMERICAN
HOSE CO.

ON OFF WIKEN Fig. 1016















PRESSURE VACUUM BREAKER

MODEL 770

SER NO [REDACTED]

PAT NO

2722948
FEBCO LA CAL





JANET SHAMLIAN

©CBS NEWS CORRESPONDENT

©CBS EVENING NEWS WITH NORAH O'DONNELL

NATIONAL BACKFLOW PREVENTION DAY - August 16, 2023



Contact Information



Bill Bernier

Waterworks Operator Certification
and Training Section Manager

360-236-3562

william.bernier@doh.wa.gov

doh.wa.gov/DrinkingWater



handle: WADeptHealth