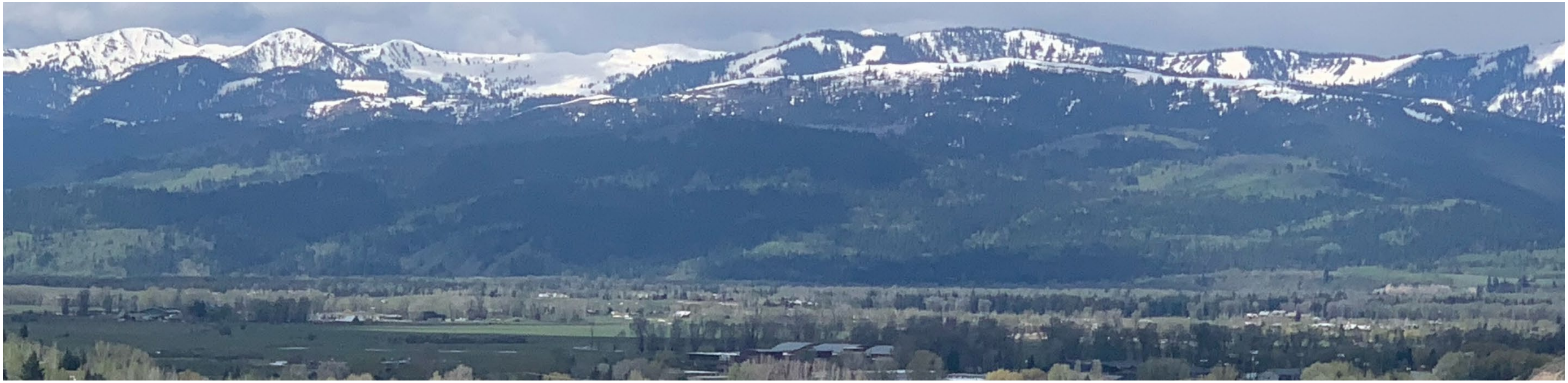

EPA Region 8 – How to Prepare for a Sanitary Survey

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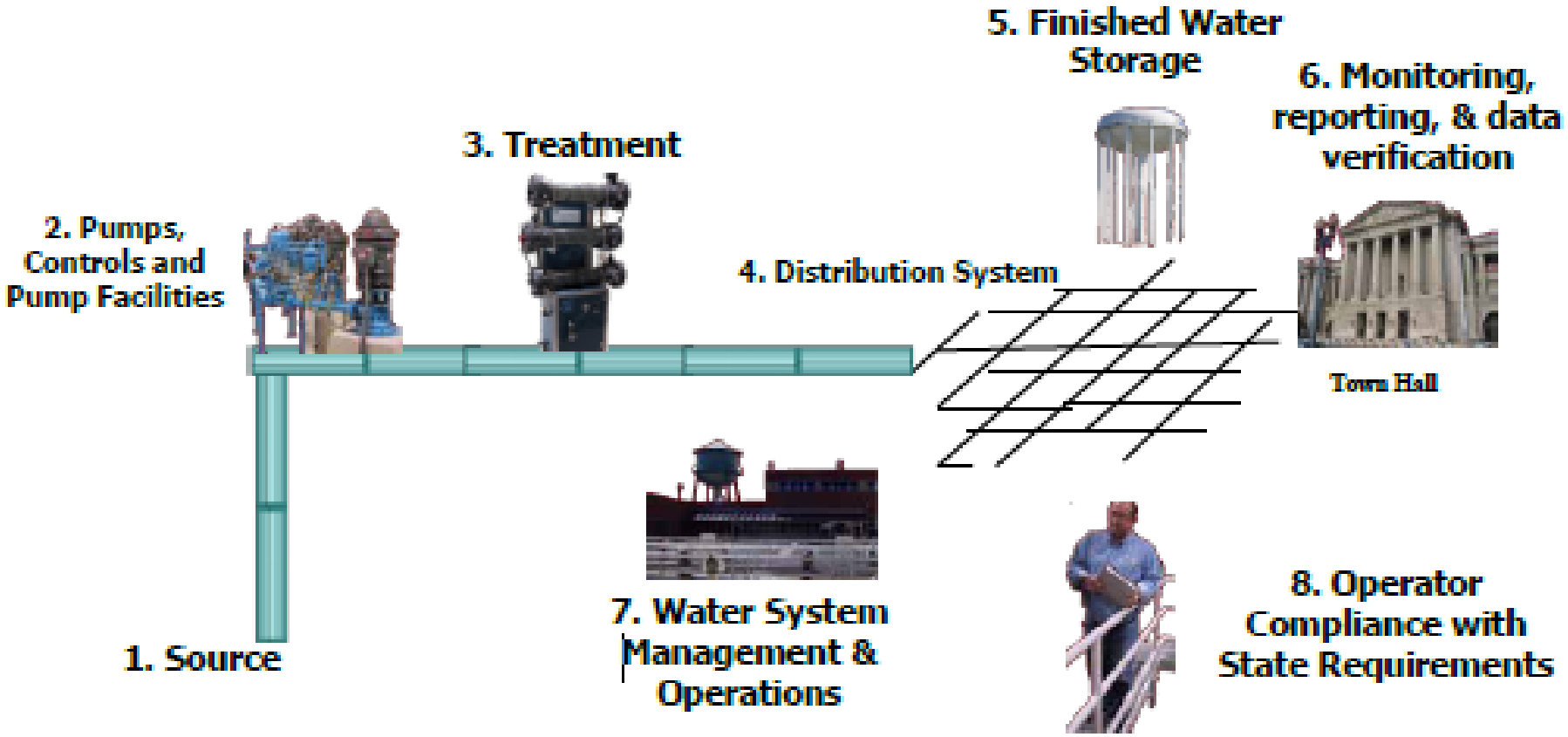
WARWS Conference

The views expressed in this presentation are those of the author(s) and do not necessarily reflect the views or policies of the U.S. Environmental Protection Agency.

Sanitary Survey (SS) Overview

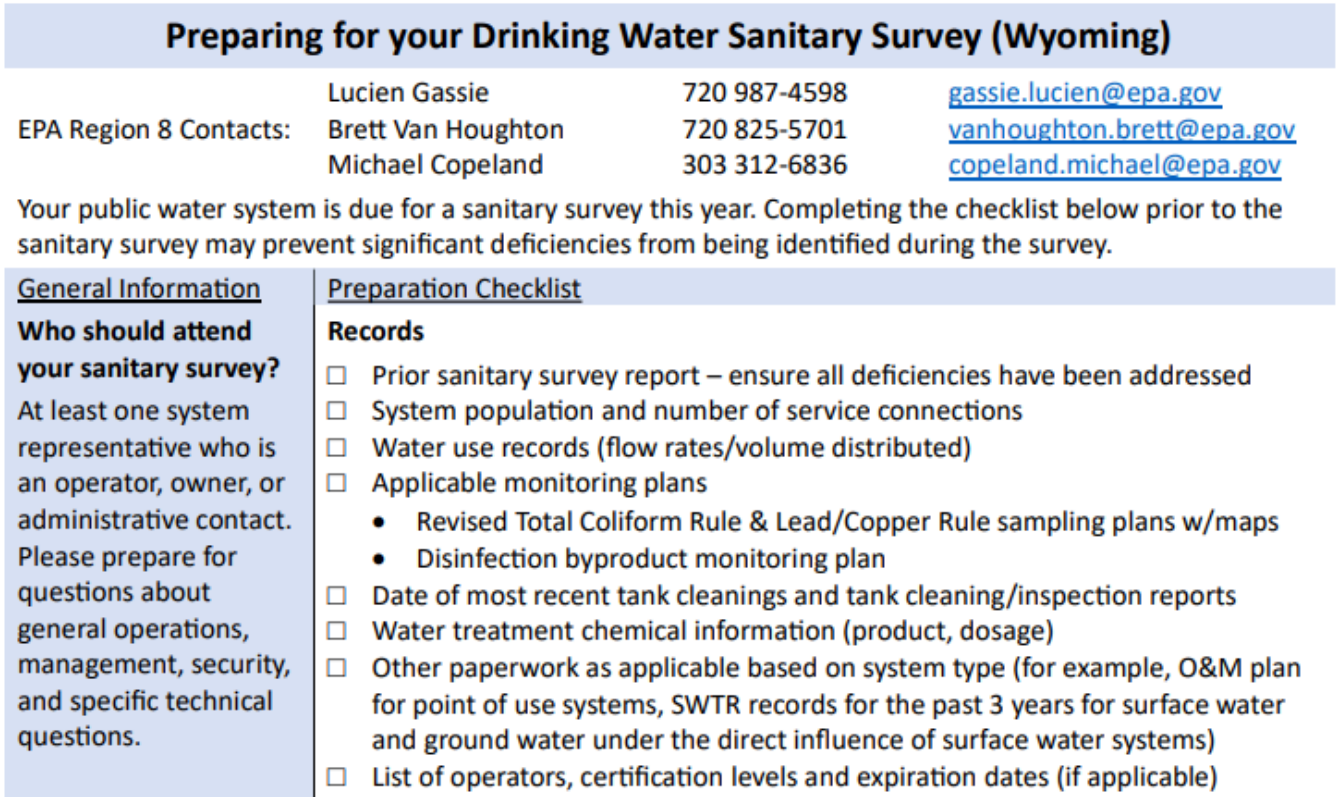
- A sanitary survey is an on-site review of a public water system's:
  - Water source(s)
  - Facilities
  - Equipment
  - Operation and maintenance
- Sanitary surveys assess a system's capability to provide safe drinking water
- Every 3 years for community systems, 5 years for non-community systems

SS Elements


5. Finished Water Storage
6. Monitoring, reporting, & data verification
3. Treatment
2. Pumps, Controls and Pump Facilities
4. Distribution System
Town Hall
7. Water System Management & Operations
1. Source
8. Operator Compliance with State Requirements

Preparing for a SS

- Each system to be surveyed will receive an email months prior to the survey
- Review the email and attachments to prepare for the survey
- 2-page checklist



Preparing for your Drinking Water Sanitary Survey (Wyoming)

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Your public water system is due for a sanitary survey this year. Completing the checklist below prior to the sanitary survey may prevent significant deficiencies from being identified during the survey.

General Information

Who should attend your sanitary survey?

At least one system representative who is an operator, owner, or administrative contact. Please prepare for questions about general operations, management, security, and specific technical questions.

Preparation Checklist

Records

- ☐ Prior sanitary survey report – ensure all deficiencies have been addressed
- ☐ System population and number of service connections
- ☐ Water use records (flow rates/volume distributed)
- ☐ Applicable monitoring plans
  - Revised Total Coliform Rule & Lead/Copper Rule sampling plans w/maps
  - Disinfection byproduct monitoring plan
- ☐ Date of most recent tank cleanings and tank cleaning/inspection reports
- ☐ Water treatment chemical information (product, dosage)
- ☐ Other paperwork as applicable based on system type (for example, O&M plan for point of use systems, SWTR records for the past 3 years for surface water and ground water under the direct influence of surface water systems)
- ☐ List of operators, certification levels and expiration dates (if applicable)

Preparing for a SS

To avoid an "unknown integrity" significant deficiency:

Surveyors are not required to climb above ground or elevated storage tanks. Please check with your surveyor prior to the site visit to determine if you will need to arrange to have system staff or contractors climb your storage tanks to allow for inspection of rooftop components. If your surveyor will not be climbing storage tanks, please have recent (within 1-year) photos of rooftop components available during the survey for review. These photos must include hatch height, hatch gasket (entire perimeter of the hatch), vent height, and vent screening (with a measurement reference in the screen photo).

The surveyor will evaluate the following:

Element	Description
Water source(s)	Evaluate water sources to ensure proper source protection
Treatment facilities	Evaluate treatment processes, facilities, components, and techniques
Distribution system	Evaluate the reliability and safety of the distribution system
Finished water storage	Evaluate the reliability and integrity of finished water storage tanks
Pumps and pump facilities	Evaluate operation and maintenance of water system pumps and pumping facilities
Monitoring, reporting, and data verification	Review paperwork, monitoring plans, and regulatory compliance
System management and operation	Review paperwork and plans to demonstrate that adequate maintenance is performed, and system operational needs are being met
Operator compliance	Review operator status to ensure operator certifications are current and at the appropriate levels

Preparing for a SS

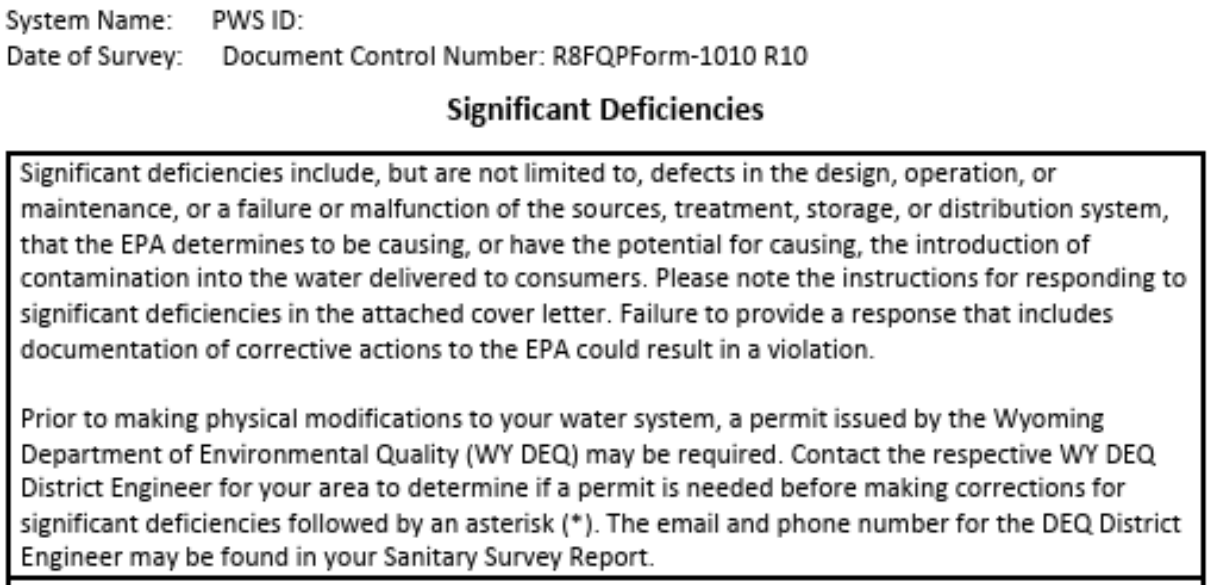
- Have records available for answering survey questions and surveyor review
  - Number of connections/customers
  - Sample plans
  - SCADA data/water flow rates and volumes
  - Storage tank cleaning records
  - O&M plans
  - EPP/ERP
- Make sure all facilities can be accessed and are clean and operational

Significant Deficiencies (SDs)

- GWR – Groundwater Rule (https://www.epa.gov/dwreginfo/ground-water-rule)
- SWTR – Surface Water Treatment Rule (…./surface-water-treatment-rules)
- Significant deficiencies (SDs) include, but are not limited to, defects in the design, operation, or maintenance, or a failure or malfunction of the sources, treatment, storage, or distribution system that EPA determines to be causing or have the potential for causing the introduction of contamination into the water delivered to consumers.

SDs in the Survey Report

- Located starting on the first page of the cover letter, and after the contact info and system details in the report
- 2025 report template available on the WaterOps website: https://www.epa.gov/region8-waterops/wyoming-sanitary-survey-form
- New form is 508 compliant
- Also lists all standard SDs and recs starting on page 7



System Name: PWS ID:
Date of Survey: Document Control Number: R8FQPForm-1010 R10

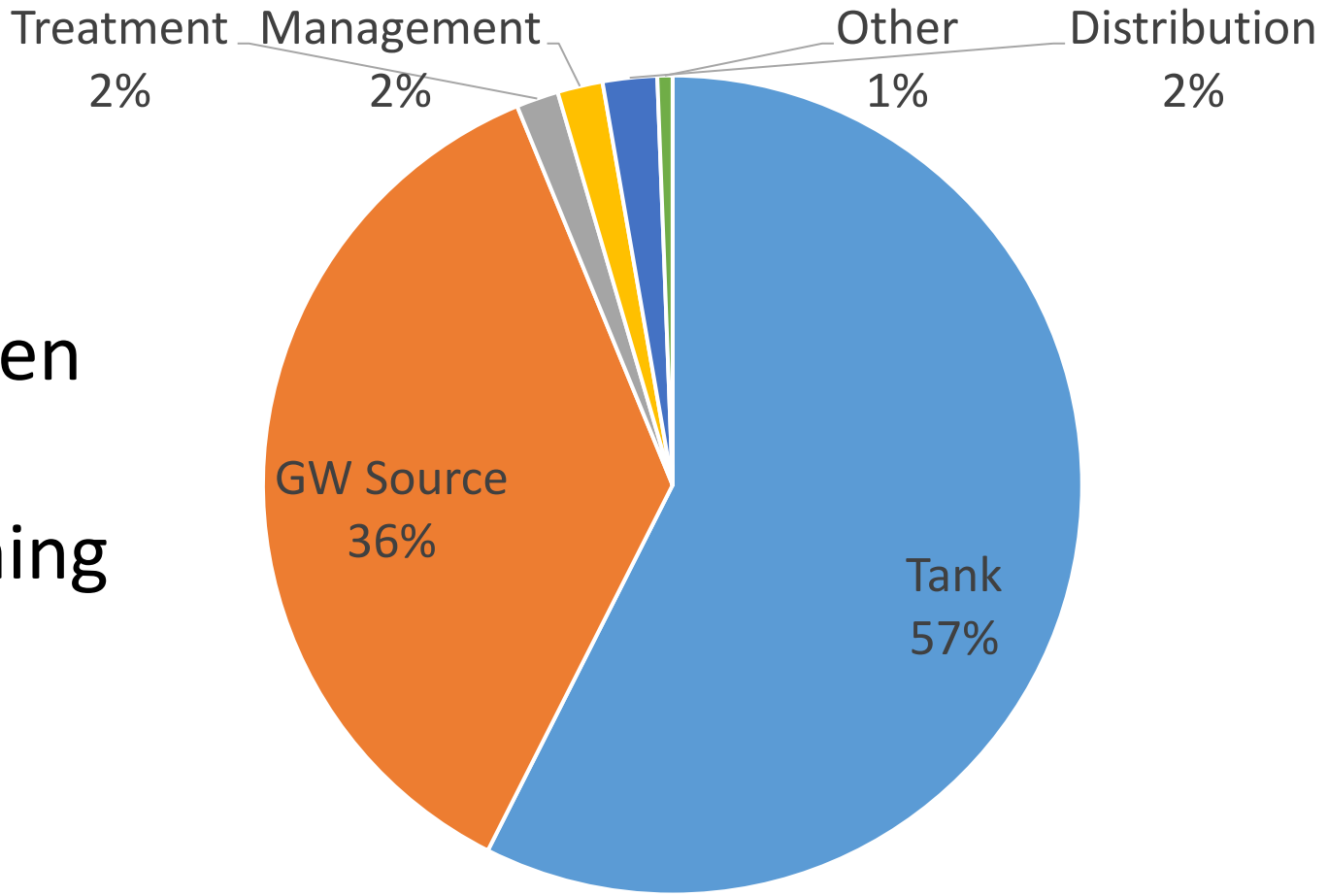
Significant Deficiencies

Significant deficiencies include, but are not limited to, defects in the design, operation, or maintenance, or a failure or malfunction of the sources, treatment, storage, or distribution system, that the EPA determines to be causing, or have the potential for causing, the introduction of contamination into the water delivered to consumers. Please note the instructions for responding to significant deficiencies in the attached cover letter. Failure to provide a response that includes documentation of corrective actions to the EPA could result in a violation.

Prior to making physical modifications to your water system, a permit issued by the Wyoming Department of Environmental Quality (WY DEQ) may be required. Contact the respective WY DEQ District Engineer for your area to determine if a permit is needed before making corrections for significant deficiencies followed by an asterisk (*). The email and phone number for the DEQ District Engineer may be found in your Sanitary Survey Report.

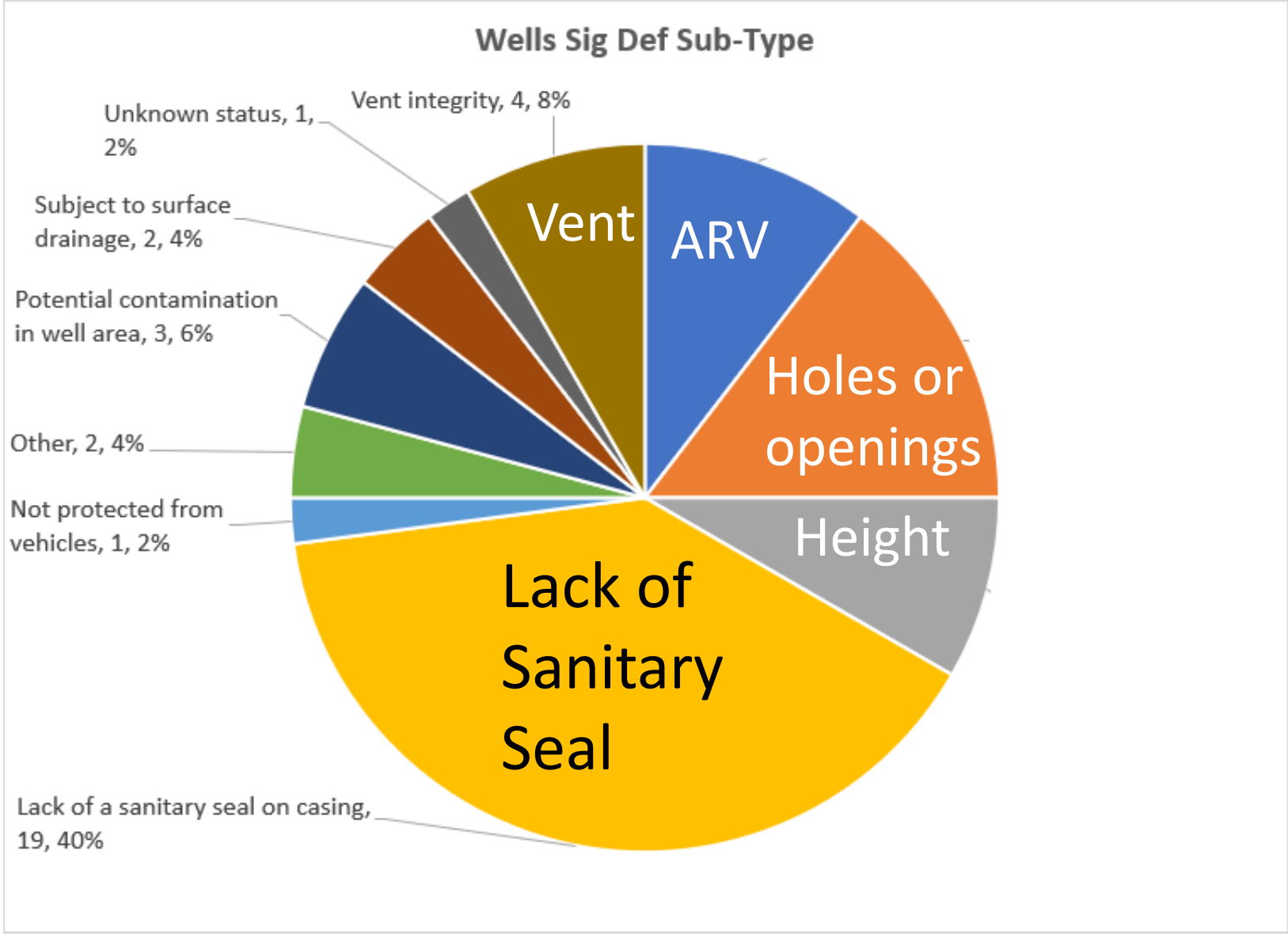
Open SDs at WY Systems by Type

As of April 2025, 836 open Wyoming significant deficiencies at all Wyoming water systems.



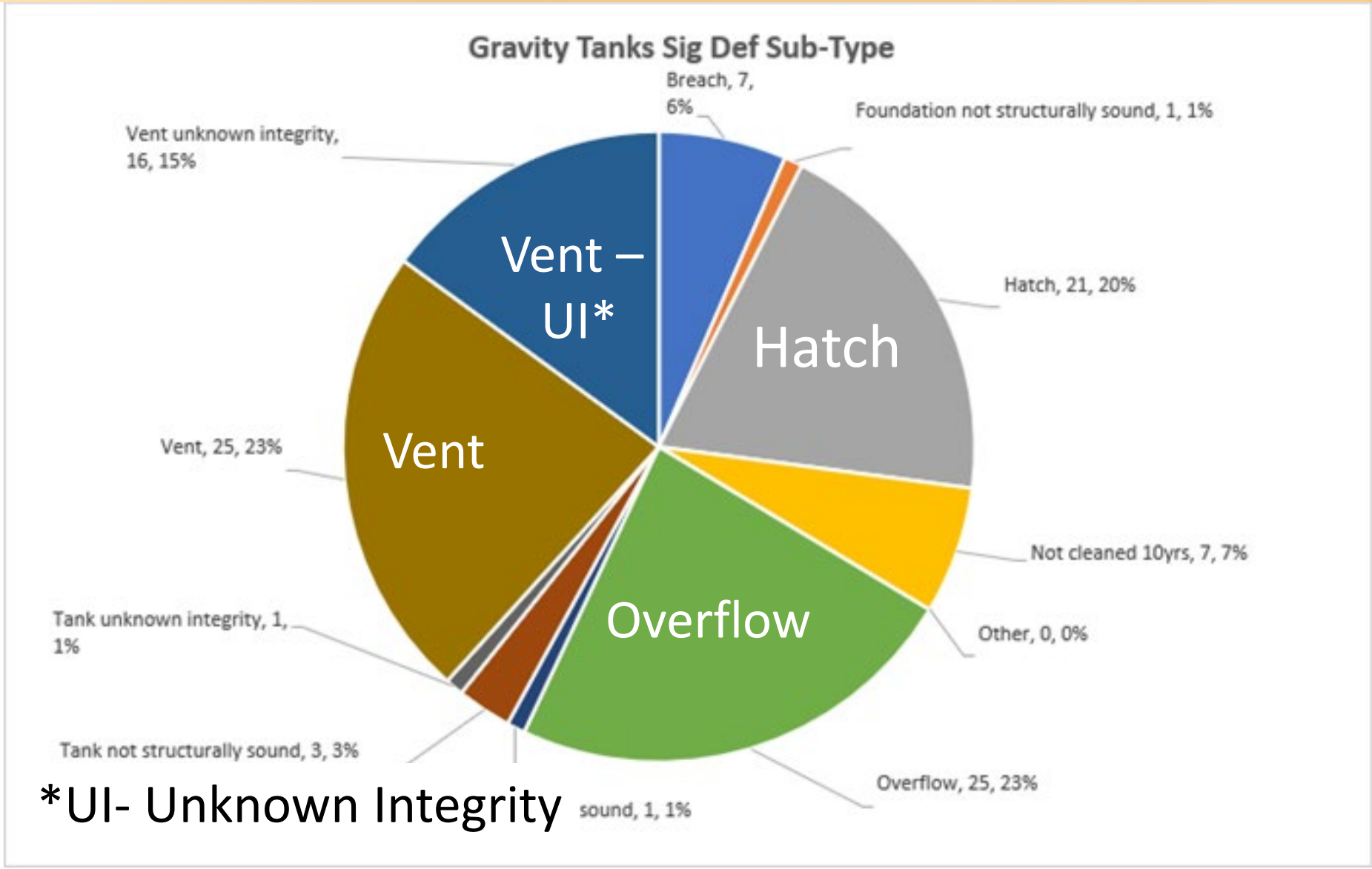
Open SDs at R8 Systems by Type

Wells - open Wyoming Significant Deficiencies



Open SDs at R8 Systems by Type

Gravity Storage Tank - Wyoming Significant Deficiencies



*UI- Unknown Integrity

After the SS

- The draft survey documents prepared by the surveyor are reviewed by EPA Region 8
- The water system will receive a final survey report at some time after the sanitary survey**
- A 6-month initial timeframe is allotted to correct any significant deficiencies identified in the sanitary survey – extensions may be requested if the system needs more time
- If the water system doesn't respond to the EPA within 6 months of receiving SDs, a notice of violation will be sent

What's New?

- EPA staff can provide training and mitigate SDs for water systems
- EPA staff doing more surveys – can identify/assist with SDs on site
- Results:

In 2024, approximately 350 SDs were mitigated at approximately 90 Wyoming public drinking water systems due to EPA staff providing on-site training materials while conducting the survey

Estimated to save over 200 hours of FTE time closing deficiencies – huge increase in efficiency

What's New?

Photo #WL01-4: [redacted] - Well Vent

Vent was screened with #16 mesh at the time of survey, but replaced with #24 mesh. EPA provided materials.

Photo #ST01-4: [redacted] - Hatch gasket

Gaps in gasket repaired during survey. EPA provided materials.

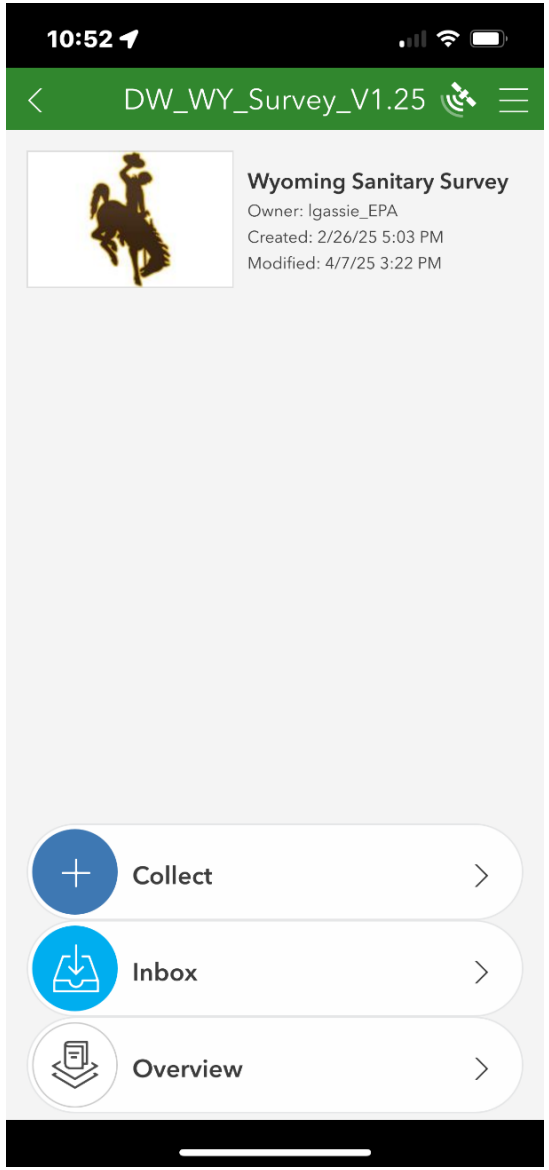
Significant Deficiency Photos

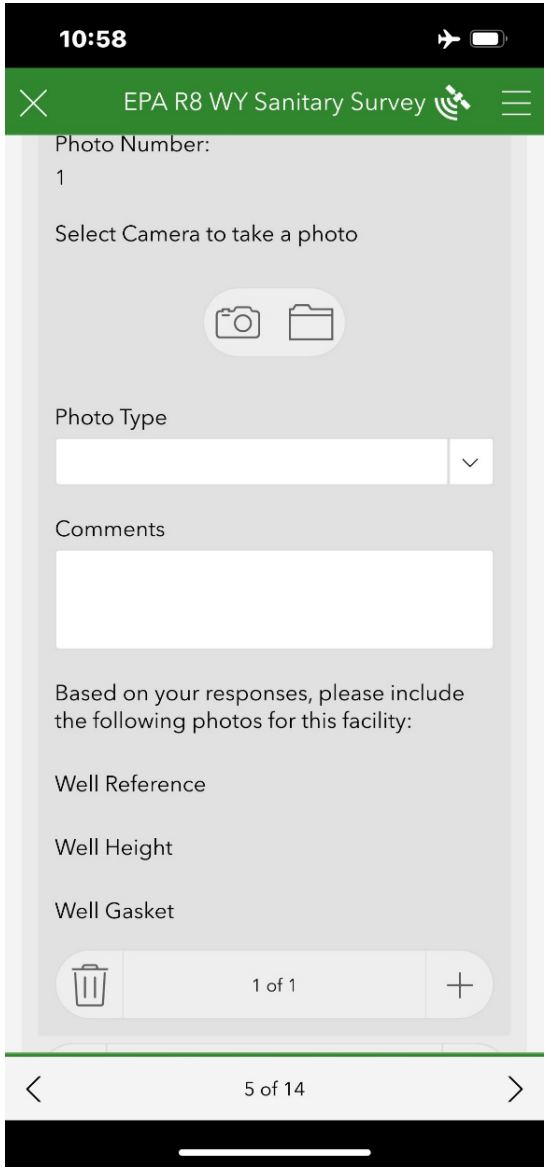
Photo #WL06-5: [redacted] - (Well Openings)

The conduit has separated from the cap where it was taped. The gasket is several layers of material thick.

What's New?

- EPA R8 developed a sanitary survey mobile app
- App has dynamic input, hiding or showing questions based on responses
- Indicators for field observations vs. office questions
- Improve accuracy and decrease time spent figuring out which sections apply





What's New?

- Reports printed from the app are basically ready for mailing
- Additional staff - EPA in the field more, increased efficiency
- Delegation of signing surveys down to staff level
- Automated mailing system
- Results:

2024 vs 2021 (year with closest completion) – 600% increased efficiency

Year	Surveys Mailed	Fastest Time	Average Time
2024	219 (95%)	0 days (same day mailing)	124 days
2023	16 (8%)	78 days	422 days
2022	139 (66%)	108 days	774 days
2021	207 (100%)	93 days	857 days

Questions?

EPA Region 8 Drinking Water Websites

Drinking Water Online: https://www.epa.gov/region8-waterops/

Drinking Water Watch: https://sdwisdww.epa.gov/DWWR8WY

THANK YOU!

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