



UTAH DEPARTMENT *of*
ENVIRONMENTAL QUALITY
**DRINKING
WATER**

Implementing New Drinking Water Sizing Requirements

November 13, 2018



Utah Public Water System (PWS) Design & Construction Minimum Sizing Standards (Utah Administrative Code R309-510)

Current Minimum Sizing Standards:

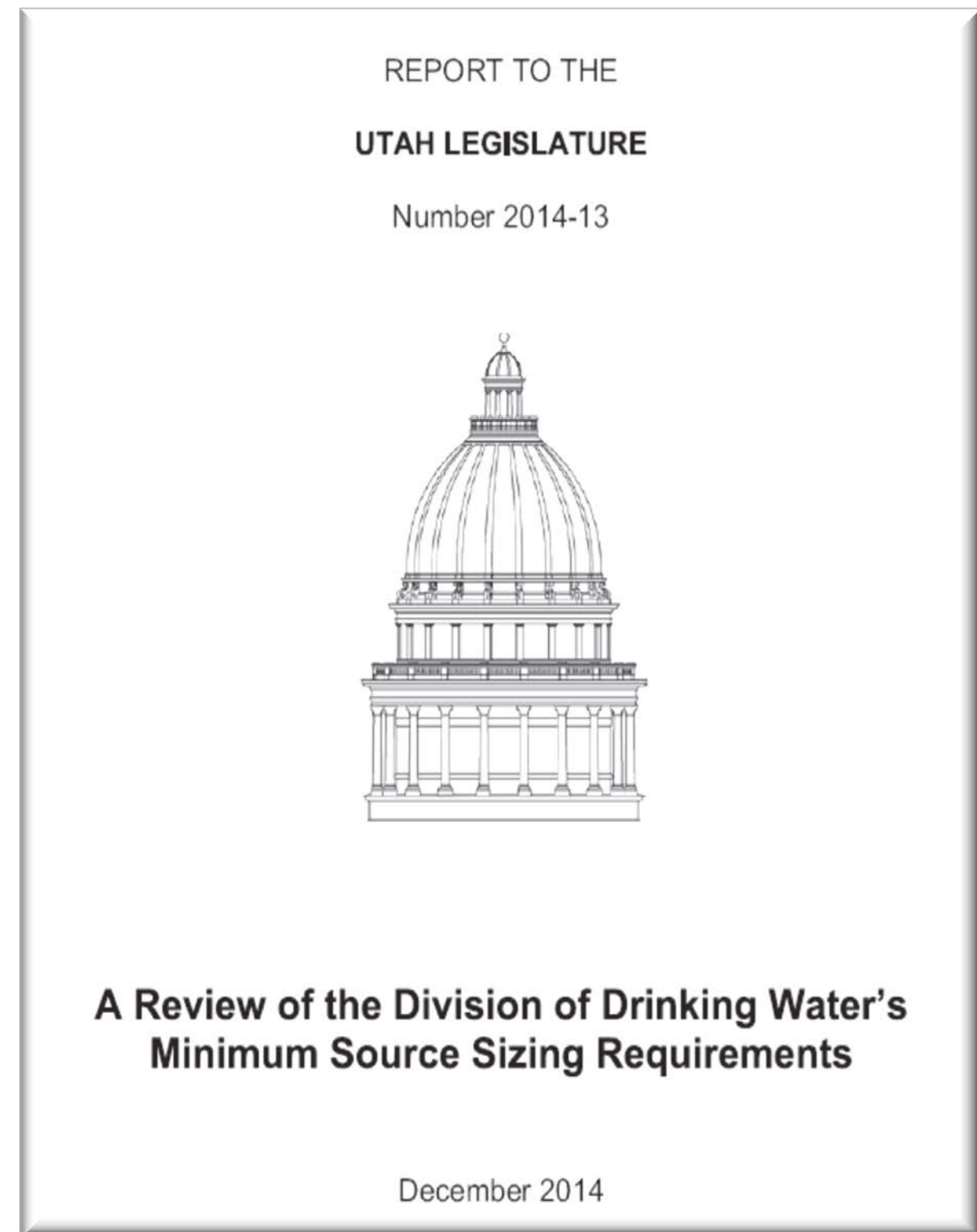
- Source Capacity
- Storage Capacity
- Distribution System Sizing



First Audit Report of Minimum Sizing Standards

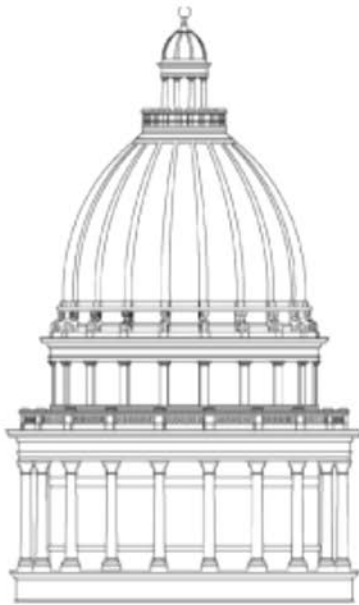
Legislative Audit Report (2014 December)

- Re-evaluate indoor and outdoor water use standards **based on actual water use data**



Second Audit Report of Minimum Sizing Standards

REPORT TO THE
UTAH LEGISLATURE
Number 2017-16



An In-depth Follow-up of
The Division of Drinking Water's
Minimum Source Sizing Requirements

December 2017

Legislative Audit Follow-up (2017 December)

- Difficult To develop new statewide standards
- DDW is exploring an alternative approach to regulating minimum sizing
- **New legislation** and rules may be required to enact a new regulatory framework

Legislative Revisions to Utah Code 19-4 in 2018

19-4-104 Water Use Data Reporting

- CWSs serving ≥ 500 people must report water use data to DWRi annually
- **Peak Day Source Demand**, **Average Annual Demand**, **Total Number of Retail ERCs**, and **Quantity of Non-Revenue Water**

19-4-114 Minimum Sizing

- DDW sets **system-specific** minimum sizing requirements
- System-specific sizing based on **reported water use data, engineering study** or historical data

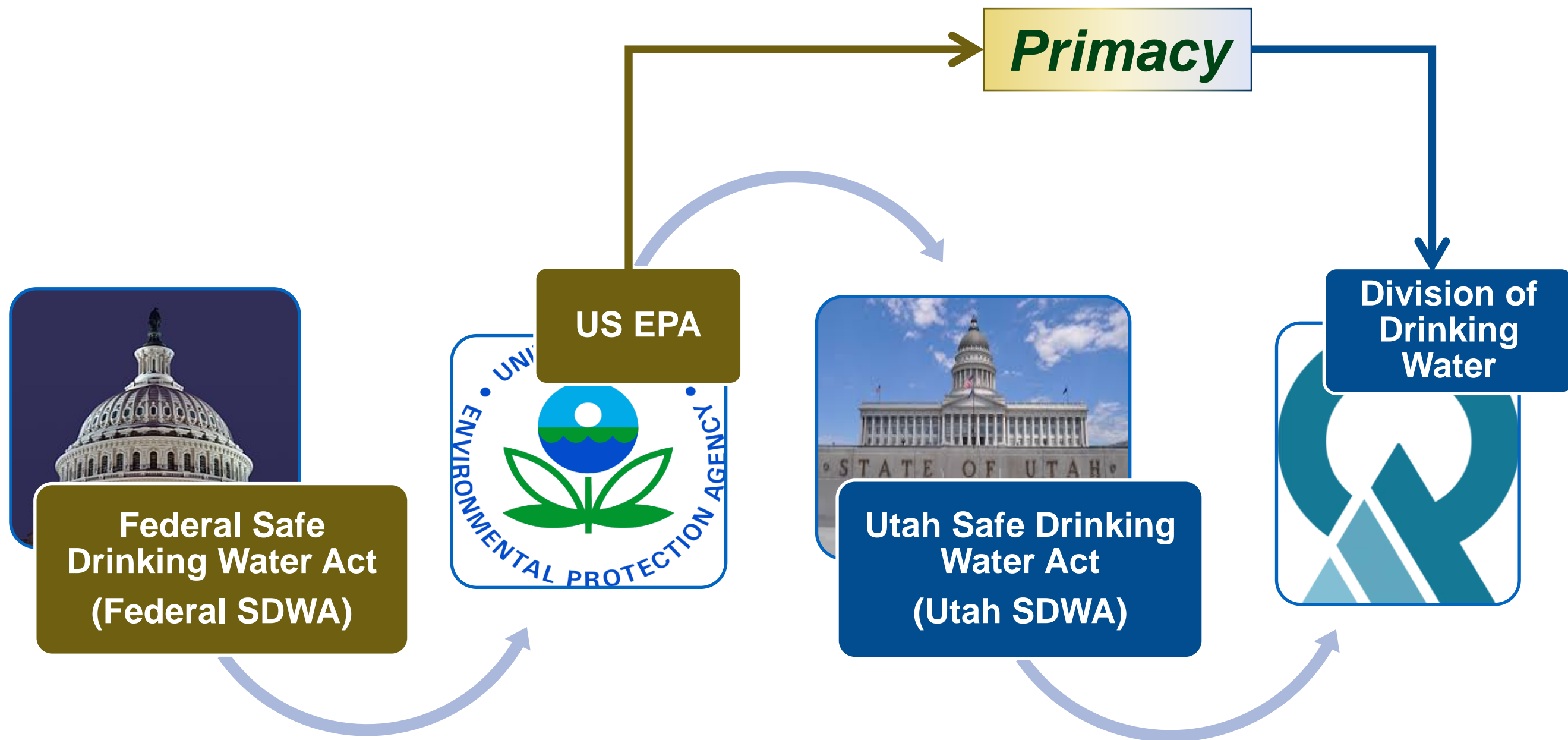
Regulations (Rules)

- Executive agencies carry out laws through the development and enforcement of regulations
- DDW director may grant an exception to rule
- Example: Utah Administrative Code R309-510, Minimum Sizing Requirements

Statutes (Utah Code)

- A law enacted **by a legislative body** of a government
- DDW director does not have the authority to grant an exception to statute
- Example: Title 19, Chapter 4, Sections 104 and 114 (**Utah Code 19-4-104 & 114**)

Safe Drinking Water Act – Primacy



Legislative Revisions of Utah Code 19-4

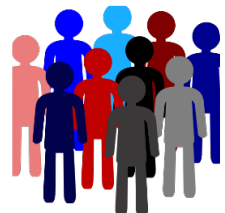
Effective July 21, 2018

Water systems affected & implementation phases

Community Water Systems (CWS)



1st Phase: CWSs serving > 3,300 people



2nd Phase: CWSs serving 500 – 3,300



3rd Phase: CWSs serving < 500 people

Legislative Revisions to 19-4-114

System-Specific Minimum Sizing Requirements

How and when CWSs submit & report the data for sizing?

Water System Type	PWS Submits <u>At Least Most Recent 3 Years</u> Data to DDW	DDW Sets System-Specific Min. Sizing
CWSs Serving > 3,300 People	No later than 3/1/2019	—
CWSs Serving 500 – 3,300	No later than 3/1/2023	No later than 10/1/2023
CWSs Serving < 500 People	<i>“The director shall establish a schedule to transition from statewide sizing standards to system-specific standards”</i>	
Non-CWSs	<i>“The director shall establish minimum sizing standards for PWSs that are not community PWS”</i>	

Utah Code 19-4-104 (Annual Data Reporting)

Consequence of Not Reporting Water Use Data Annually

Community water systems serving 500 people or more:

- Collect accurate water use data, and
- Report the data to Division of Water Rights (DWRi) Annually

Require a **certified operator**, or a **professional engineer** performing the duties of certified water operator, to **verify by certification or license number the accuracy of water use data** reported by a CWS

[Rule R309-400] **50 points** for **PWS** if failing to:

- submit water use data required by a state agency, or
- verify the accuracy of the data by including a certification by a certified operator or a professional engineer

Utah Code 19-4-114(1) (Minimum Sizing)

Consequences of Not Submitting Information Needed for Sizing

CWSs serving over 3,300 people, by March 1, 2019:

- Submit at least most recent 3 years of water use data, OR
- Submit an engineering study (or historical data)

→ Otherwise DDW will **assess administrative points**

DDW must establish system-specific minimum sizing requirements if a **CWS serving over 3,300 people** submits **plans for “substantial addition or alteration”** after March 1, 2019

→ Review of **the plans for “substantial addition or alteration” projects** **will be completed after** DDW has received the “information necessary to establish system-specific sizing requirements”

Legislative Revision 19-4-114 (Minimum Sizing)

Wholesale Water Suppliers are exempt from 19-4-114

A wholesale water supplier is exempt from this section if the wholesale water supplier serves:

- a) a total population of more than 10,000; and
- b) A wholesale population that is 75% or more of the total population served

Wholesale water suppliers still need to comply with the **water use data reporting** requirement per 19-4-104(1)(c)(iv)

Public Water System (PWS) Minimum Sizing

Current

Indoor Use Standard



+

Outdoor Use Standard



<u>Current Statewide Standards</u>	Source Sizing (per ERC)		Storage Sizing (per ERC)
Indoor	Peak Day Demand	800 gallons/day	—
	Avg. Yearly Demand	400 gallons/day (146,000 gallons/year)	400 gallons
Outdoor (Zone 4 Example)	Peak Day	3.96 gpm per irrigated acre	—
	Average Yearly	1.87 acre-ft/yr /irr. acre	2,848 gallons
Fire Suppression	—		Determined by fire code official
Emergency	—		Determined by water systems

Will be
replaced

Public Water System (PWS) Minimum Sizing

Indoor Use Standard

Outdoor Use Standard

Current

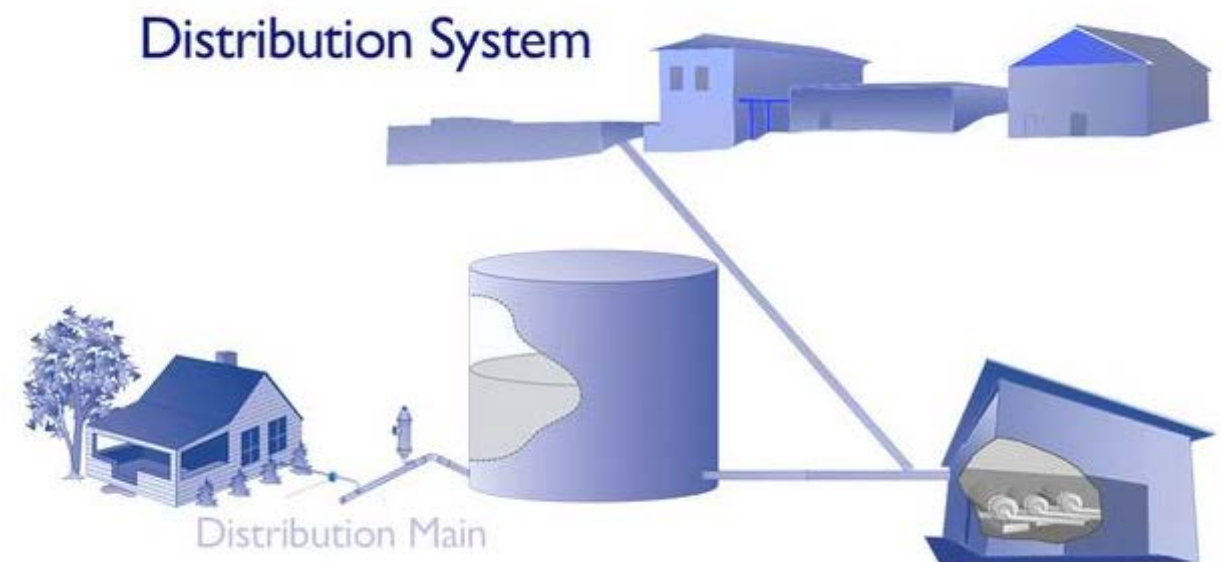


+



Future

Combined



PWS Minimum Sizing – Source

✓ *Peak Day Demand*

✓ *Average Yearly Demand*

Current



Future

✓ *Peak Day Demand*

✓ *Average Annual Demand*

PWS Minimum Sizing – Storage

**Equalization Storage =
One Average Day Demand**

Current

Indoor Use

+

Outdoor Use



Future

**Equalization Storage =
One Average Day Demand**

Combined

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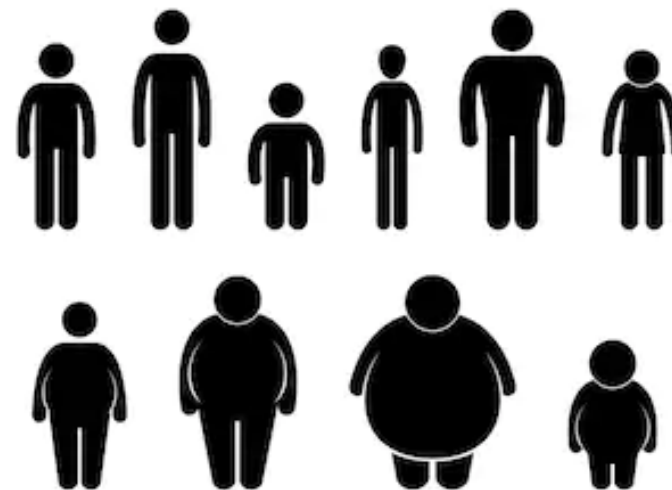
PWS Minimum Sizing

Current



***“Statewide”
Minimum Sizing
Standards***

Future



***“System-Specific”
Minimum Sizing
Requirements***

Annual Water Use Data & Minimum Sizing

Community Water Systems
(CWSs)

Division of Drinking Water
(DDW)



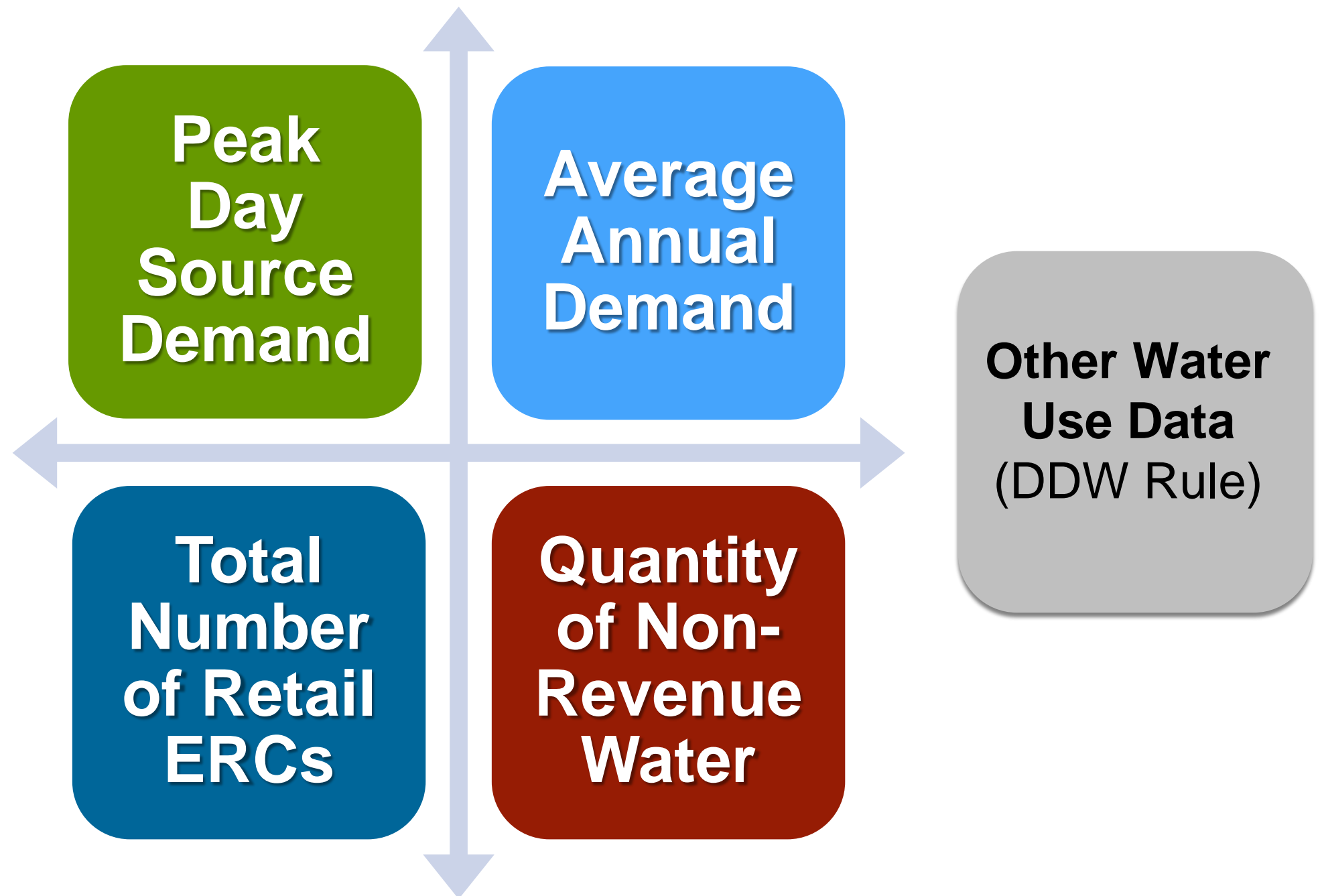
Division of Water Rights
(DWRi)

Division of Water Resources
(DWRe)

Water Use Data – Anticipated Agency Timeline

When	Action	Who
October – December	Prepare for upcoming year (active systems, system boundaries, population served)	DDW, DWRi, DWRe
January	Send forms requesting previous year's actual water use data	DWRi
January - March	Assist & visit water systems	DWRi
March 1	Deadline for water systems to submit the form to DWRi	DWRi
March	Water systems that have not reported are identified in DDW database	DWRi, DDW
April – July	Continue to assist & visit systems	DWRi
July	50 deficiency points are assessed to water systems that fail to submit the completed form	DDW
July – August	Review and validate data	DWRe
August - December	Contact & visit systems identified by DWRe to validate data	DWRi
December	Publish data	DWRi
Ongoing	Remove assessed points from systems that report	DDW
Ongoing	Analyze data to set system-specific sizing standards	DDW

Utah Code 19-4-104 (Annual Data Reporting)



Utah Code 19-4-114 (System-Specific Minimum Sizing Requirements)

Information necessary for setting system-specific minimum sizing requirements can be based on one of the following:

**Annual
Water Use
Data**

- **At least most recent 3 years of actual water use data**

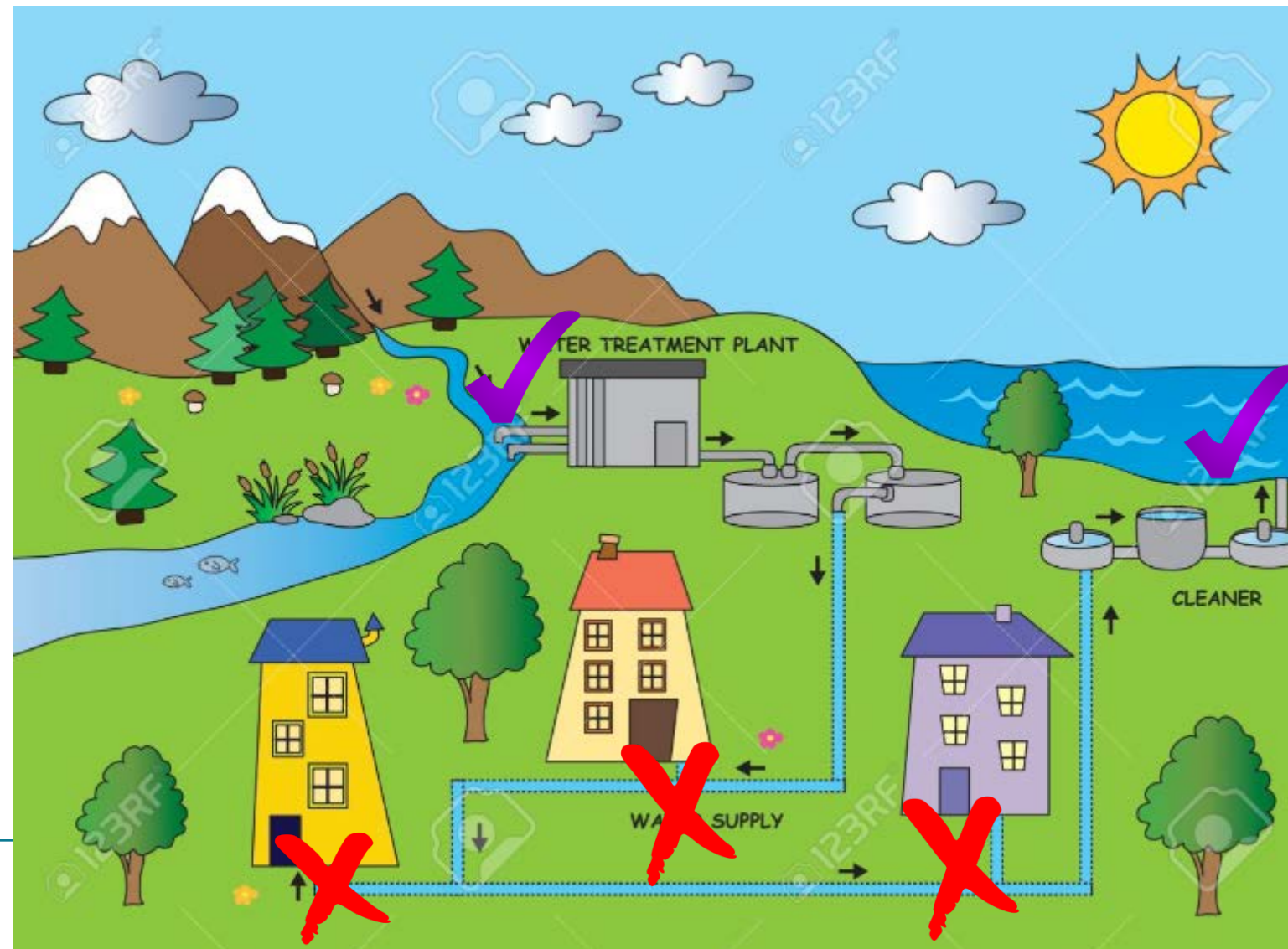
Alternatives

- **Engineering Study**
- **Historical Data**

Utah Code 19-4-104 (Annual Data Reporting)

Average Annual Demand

- Total quantity (in gallons) of drinking water produced for a public water system in a year
- Based on data metered at water sources (not at service meters of retail connections)



What Can PWS Do to Prepare for New Requirements



Resources

Division of Drinking Water Website

https://deq.utah.gov/division-drinking-water

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Links

- Home
- About Us
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- Emergency Response
- Compliance
- Operator Certification
- Backflow & Cross Connection
- Lead Review

News & Announcements

Public Comment Open for Proposed Backflow Certification and Cross Connection Control Program Rule Changes [↗](#)
(10/4/2018)–The Division has proposed rule changes to the Backflow Certification and Cross Connection Control programs that would take effect January 1, 2019.

New Water Use Data Collection and Reporting Requirements for Public Water Systems (2018 Revisions to Utah Code 19-4) [↗](#)
(07/21/2018)–Revisions to the Utah Safe Drinking Water Act, Utah Code 19-4, became effective on July 21, 2018. The revisions impose new requirements on Public Water Systems to collect and report water use data to the state of Utah.

Lead Sampling in Schools [↗](#)
In 2017, the EPA sent a letter recommending that schools test their drinking water for lead. The Utah Department of Environmental Quality (DEQ) and the

Resources

Division of Drinking Water - Guidance Documents

https://deq.utah.gov/drinking-water/legislative-revisions-to-utah-code-19-4-in-2018-new-water-use-data-collection-and-reporting-requirements-and-setting-system-specific-sizing-requirements

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UTAH DEPARTMENT of
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**DRINKING
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Backflow & Cross
Connection

Plan Review

Legislative Revisions to Utah Code 19-4 in 2018 – New Water Use Data Collection and Reporting Requirements and Setting System-Specific Sizing Requirements

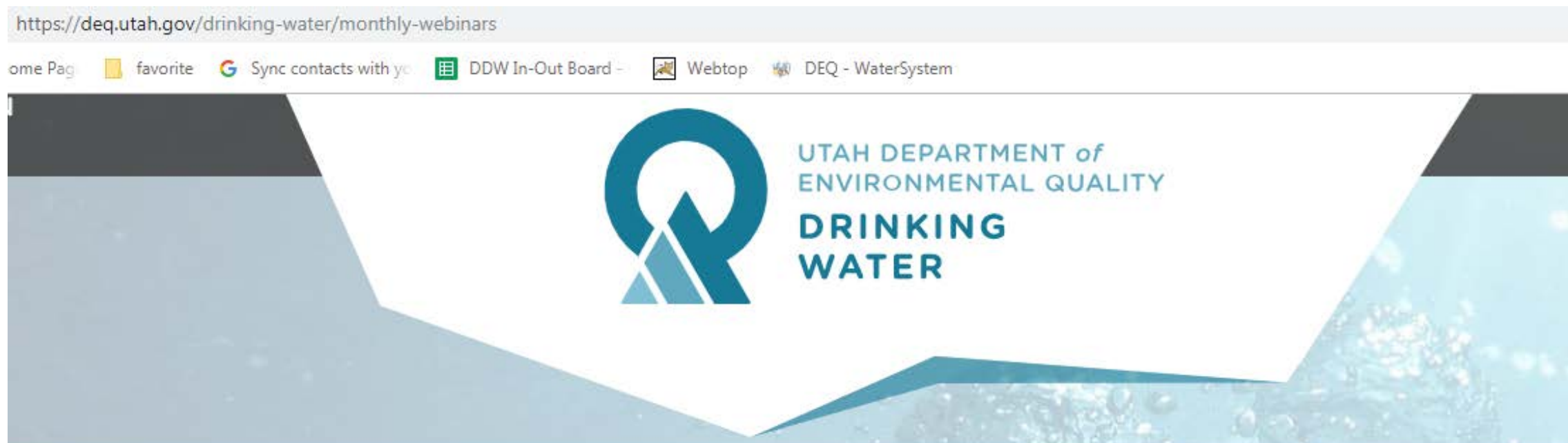
Revisions to the *Utah Safe Drinking Water Act*, Utah Code 19-4, enacted by the 2018 Legislature became effective on July 21, 2018. The revisions impose new requirements on public water systems to collect and report water use data to the state of Utah and specify the type of data that are required to be reported. The revisions also require the Division of Drinking Water (DDW) to use the water use data to establish system-specific source and storage minimum sizing requirements. The system-specific requirements will replace current statewide standards in phases. DDW is working on revising the current minimum sizing rule (R309-510) to implement the new requirements accordingly.

Information about new requirements imposed by the revisions to Utah Code 19-4 can be found below:

- [General Guidance for Water Use Data Reporting](#)
- [Detailed Guidance for Water Use Data Reporting and Setting System-Specific Minimum Sizing Requirements \(Draft\)](#)
- [Notice to Community Water Systems Serving Greater than 3,300 Persons – Water Use Data Reporting Due March 1, 2019](#)
- [Summary of New Requirements by Water System Size and Type](#)
- [Division of Water Rights – Water Use Program](#) (for reporting water use data)

Resources

Division of Drinking Water – Monthly Webinars



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Monthly Webinars

Every month, Drinking Water is live with a topic that is important to drinking water professionals. We invite speakers to present about their area of expertise. Watching these 30 minute videos can get you .05 CEUs if you fill out the corresponding form.

Division of Drinking Water on Youtube

Follow us on  Youtube to get notifications of when we go LIVE.

Scroll down to see past videos.

Utah Division of Drinking Water

Utah Administrative Code R309-510

Minimum Sizing Requirements



- Rule Change Timeline: 2020 approximation

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