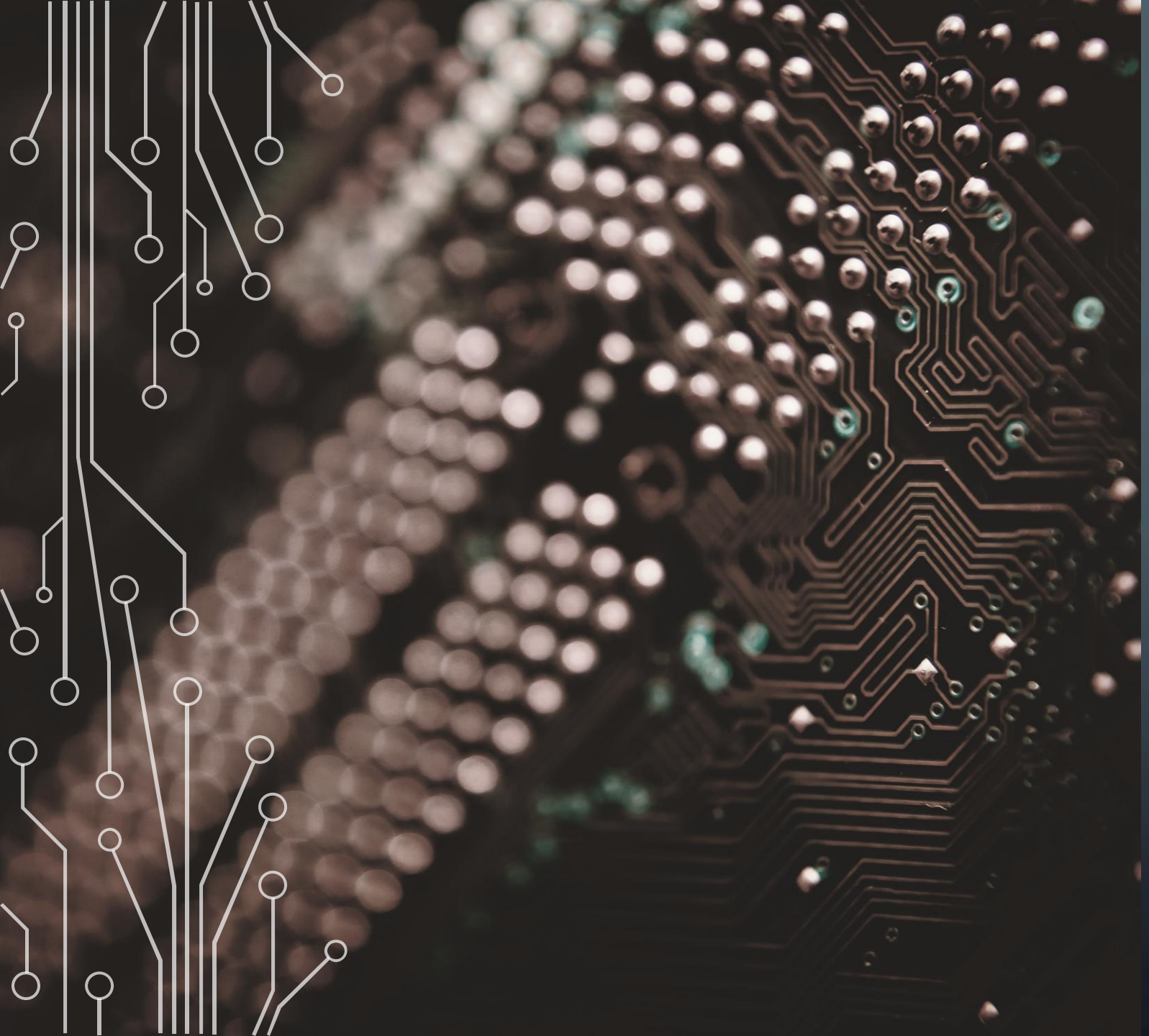
ASSET MANAGEMENT

STEVE OLSON

WATERRUN LLC

BACKGROUND

- Certified Class C Operator for 13 years
- Small town operations
- Founder of WaterRun



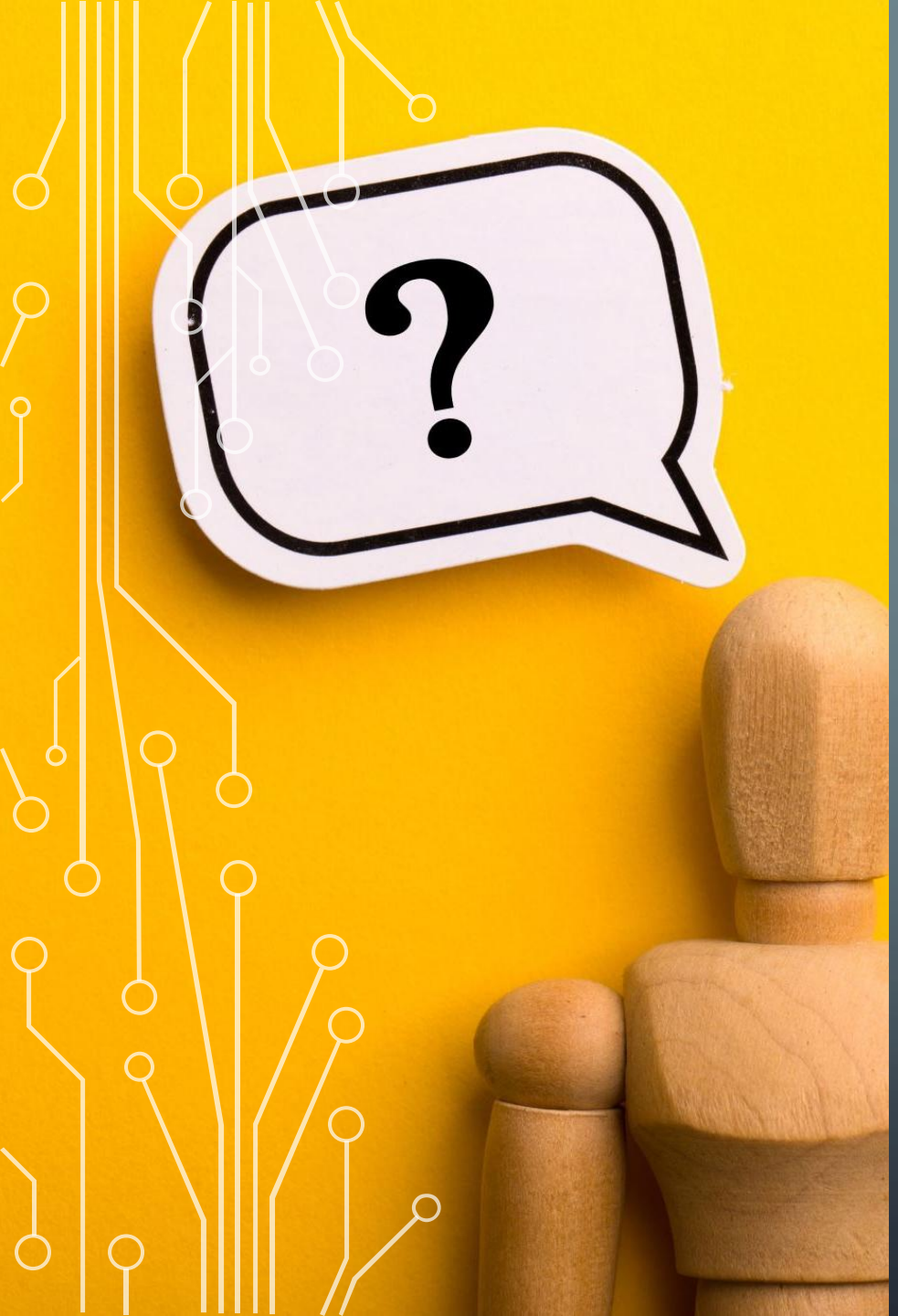
OVERVIEW

- Why Asset Management
- Evolution
- Practical Implementation
- Summary

?WHY?

Meet Compliance

Easily prepare accurate budgets, document your assets' condition, and preparing for future needs.



WHY?

1

Build **RESILIENCY** for the **UNEXPECTED**

2

Identify and **SOLVE** capacity **ISSUES**.

3

Encourage **KNOWLEDGE** Sharing.

INVENTORY OR ASSET MANAGEMENT

Inventory is merely a status indicator of what materials you currently have on hand. This is helpful to ensure you are properly prepared for any problems which are bound to arise.

We have been maintaining inventories for a long time, and it has served us just fine for years.

Believe it or not, the town I took over for 13 years ago did not have an identified inventory system. How many of us are still in this boat?

AT A BASIC LEVEL

Asset Management:

Is a planning process that ensures that you get the most value from each of your assets AND have the financial resources to rehabilitate and replace them when necessary.

ASSET MANAGEMENT

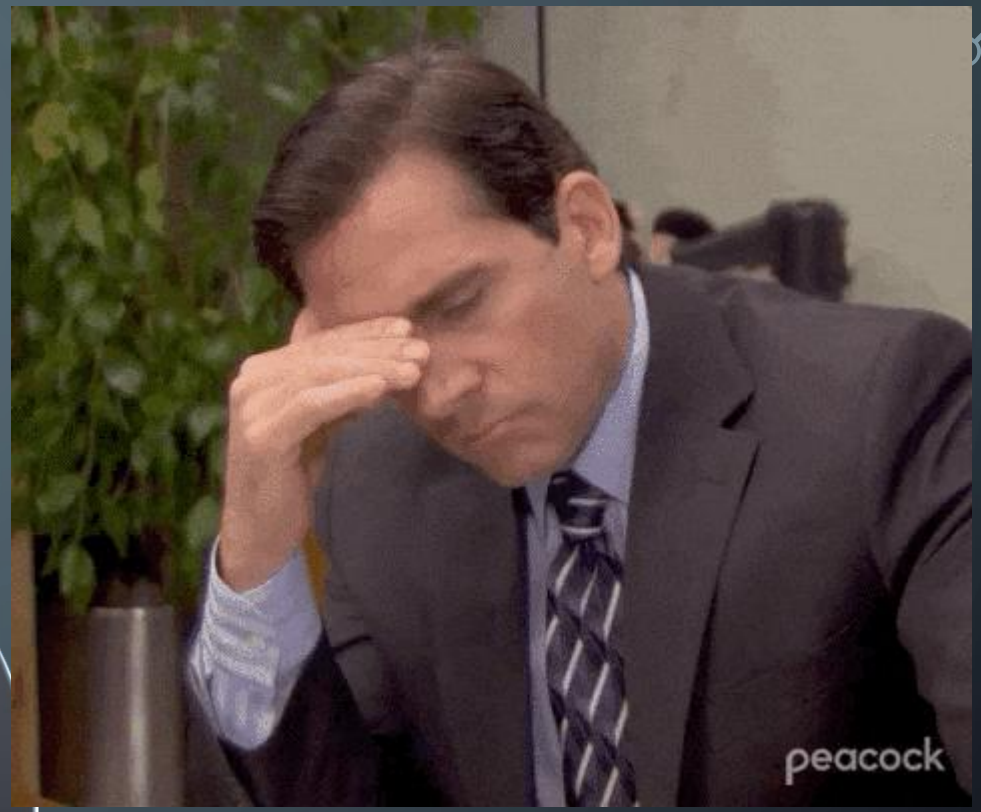
Inventory

+

Useful Service Life

→

Asset Management



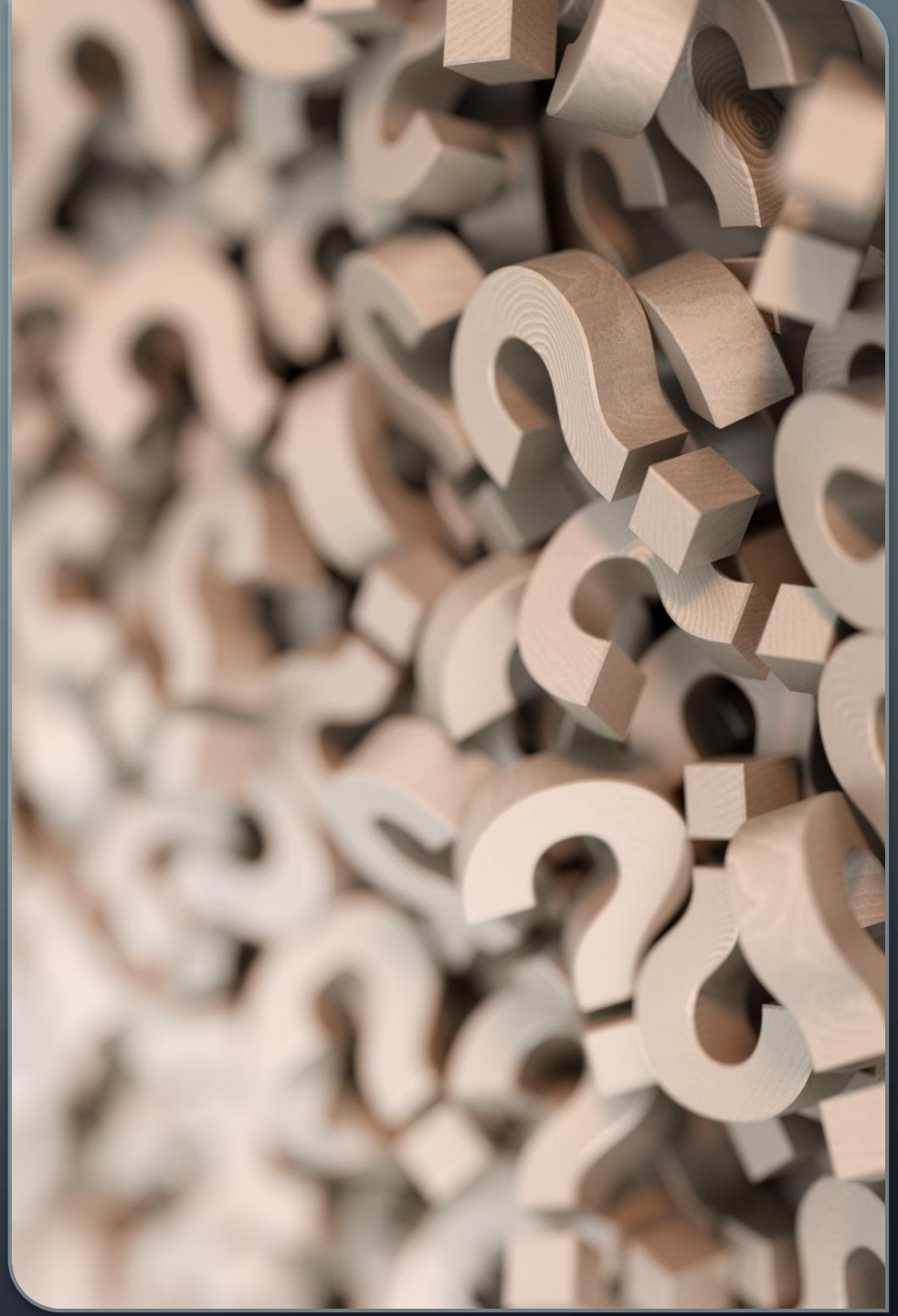
HOW WILL HAVING AN ASSET MANAGEMENT SYSTEM HELP ME?

Improve Financial Health

Strategic Planning

Forecast Modeling

Ensure Compliance



FORECAST MODELING BENEFITS

Projections

- Calculate current and future financial projections.

Revenue

- Implementing an asset management plan can provide financial projections and to see if rates and other revenue streams are enough for safely providing clean water to customers.

Planning

- A commitment of time and money spent in the short term to make cost-effective decisions will help lead a system to saving money over the long term.

AT SOME POINT, CONTINUING TO **REPAIR** THE ASSET WILL **NO LONGER BE COST-EFFECTIVE**

AND YOU WILL NEED TO **REHABILITATE OR REPLACE IT**

EVOLUTION

Asset management systems have evolved over time from a simple pen/paper tags to in-depth computerized software systems.

The basis of an asset management system remains the same.

What do I currently have and how long will it last?

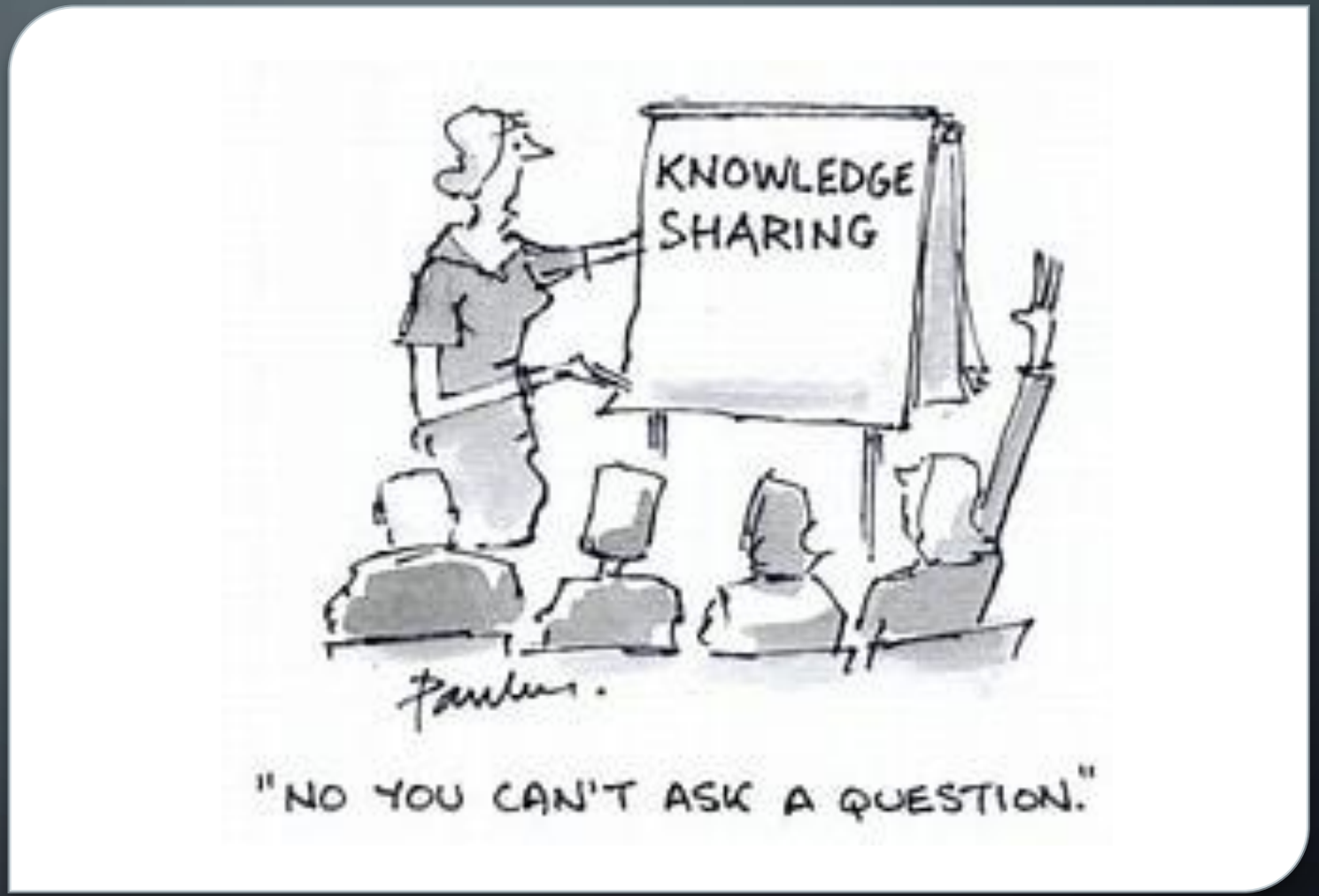
EVOLUTION

STARTING SMALL AND GROWING FROM WHAT YOU LEARN ALONG THE WAY MAY BE THE BEST STRATEGY, ESPECIALLY FOR SMALLER SYSTEMS

REVIEWS OF YOUR CURRENT SYSTEM SHOULD BE COMPLETED ON A ROUTINE BASIS

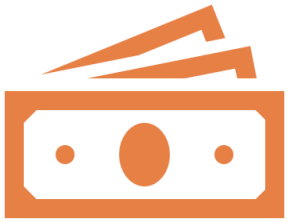
A GOOD ASSET MANAGEMENT PLAN IS NEVER “COMPLETE”

KNOWLEDGE SHARING IS EMPOWERING



EVOLUTION

- It is essential to take into the process the **strategic goals** and propagate these through tactical and **operational objectives**.
- It is important to **incorporate different visions** across the organization.
- A clear path must be **shared** within the different teams, including **managers and the board**.



The extent of your asset management plan will rely heavily on how in depth you want to take it

PRACTICAL IMPLEMENTATION

ASSET DEFINITION

ASSETS ARE ESSENTIALLY ALL THE

EQUIPMENT, BUILDINGS, LAND, PEOPLE, AND OTHER COMPONENTS

NEEDED TO DELIVER SAFE AND CLEAN WATER

EXAMPLES INCLUDE

FIRE HYDRANTS, VALVES, WATER TOWERS AND METERS

ASSET DEFINITION

An asset is anything that you own that has value.

Not everything a utility has may be considered an asset that needs to be tracked in the inventory.

It really is up to each individual system and each individual operator.

Can be as detailed or thorough as you make it.

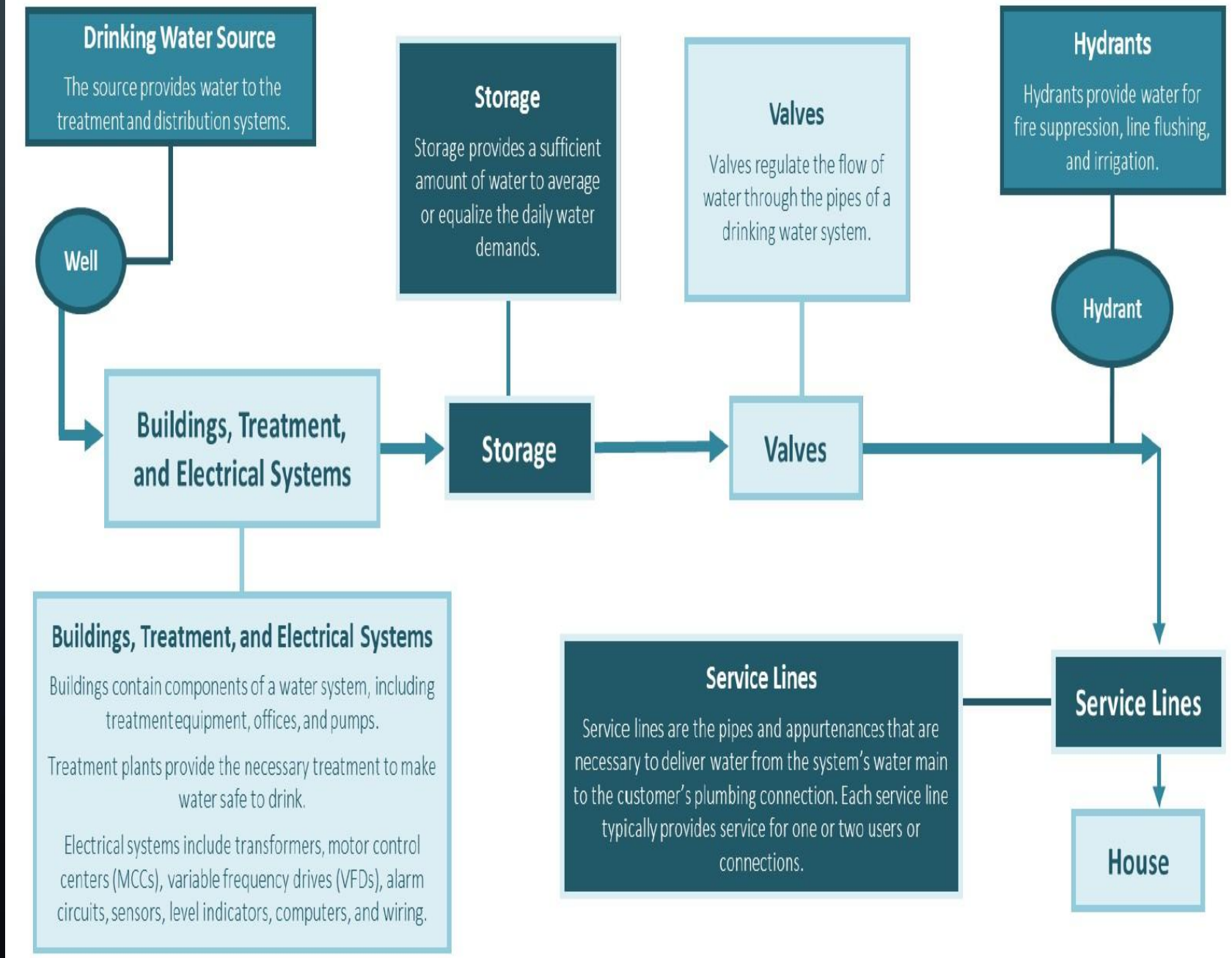
QUESTIONS TO ASK

- What does the utility own?
- Where is it?
- What is its condition?
- What is its remaining value?
- What is its remaining useful life?
- Ranking the criticalness of each asset.

GOALS

- It is important to select goals for the system **regarding how the utility would like the system to provide** service to customers.
- These goals get into **what you want your assets to provide** for your customers and help to prioritize activities.
- Must be something you will be **able to do year after year.**

SIMPLE ASSET INVENTORY



PRIORITIZATION OF ASSETS

- How soon will you have to replace an asset? (its remaining useful life)
- How important the asset is to the provision of safe drinking water? (its impact on public health)
- How important the asset is to the operation of the water system? (can other assets do the same job?)

CNN US Crime + Justice Watch Listen

Atlanta mayor declares state of emergency following water main breaks, hospital that moved patients resumes normal operations

By Amanda Musa, Rebekah Riess, Ashley R. Williams, Sara Smart, Raja Razek and Jamiel Lynch, CNN

5 minute read · Updated 5:58 PM EDT, Sun June 2, 2024

PRIORITIZATION OF ASSETS

- 30 inch water main
- 80 years old
- Serving 22,000 people

CHALLENGES FACED

- Determining the best (or optimal) **time to rehabilitate/repair/replace** aging assets.
- **Increasing demand** for services.
- Overcoming **resistance** to rate increases.
- Diminishing resources.
- Rising **service expectations** of customers.
- Increasingly stringent **regulatory requirements**.
- Responding to **emergencies** due to asset failures.
- Protecting assets.

PRIORITIZATION OF ASSETS

- Ranking assets enables future compilation of an **Improvement Replacement Plan** based upon a myriad of features.
- There **is no one correct way** to prioritize your assets.
- Most often, assets are prioritized based on their **remaining useful life**. However, this is not the only way to prioritize your assets and may not be the best way for your system.

PRIORITIZATION OF ASSETS

Not all assets are equal in importance to the utility

Example:

- A small water or wastewater pipe that serves a few houses is not as important to a utility as a single pump that supplies the entire water system

COMPONENTS OF CRITICALITY

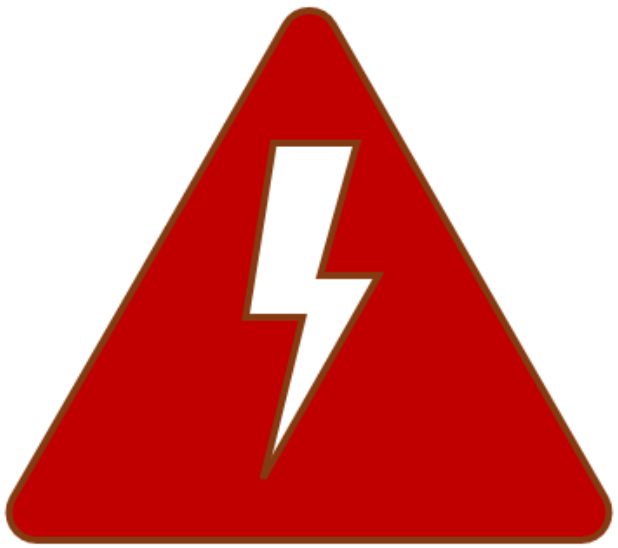
1. LIKELIHOOD THAT A GIVEN ASSET WILL FAIL

AND

2. THE CONSEQUENCES IF THE ASSET DOES FAIL

ONE POSSIBLE PRIORITIZATION SCHEME

IN ORDER FROM MOST CRITICAL ASSETS TO THE LEAST CRITICAL:



- Existing threat to public health, safety, or environment
- Potential public health, safety, or environmental concern
- Internal safety concern or public nuisance
- Improved system operations & maintenance (O&M) efficiency
- It would be nice to have...

OPTIMIZING WATER SYSTEMS: ASSET CARE & LIFE CYCLE COST

Water systems that take care of their assets are more likely to ensure safe and reliable drinking water for their customers.

The lowest life cycle cost is the most appropriate cost for rehabilitating, repairing, or replacing an asset.

HOW DO I PLAN FOR THE FUTURE?

DETERMINE HOW MUCH IT WILL COST TO REHABILITATE AND REPLACE ASSETS AS THEY DETERIORATE.

YOU WILL NEED CONSIDERABLE LEAD-TIME TO BUDGET.

COSTS OF NEW ASSETS CAN CHANGE FROM YEAR TO YEAR.

IT IS EASIER TO PUT ASIDE $500 A YEAR TO REPAIR OR REPLACE A STORAGE TANK RATHER THAN PAY THOUSANDS TO REPLACE IT WHEN IT FAILS.

PLANNING

IF YOU FAIL TO PLAN,
YOU PLAN TO FAIL.

motifake.com

ASSET MANAGEMENT IS A **PLANNING PROCESS**

- If you would describe Asset Management easily, it would be a plan
- If you don't plan, you will always be falling behind

WHY DON'T UTILITIES PERFORM WATER ASSET MANAGEMENT?

Lack of mandate. When there is no state or federal requirement to perform asset management, it becomes a lower priority.

Lack of financial resources. This comes as no surprise, as all utilities face the challenge of doing more with fewer resources.

Lack of human resources. Small staffs are already responsible for maintaining hundreds of miles of pipeline infrastructure, pumping stations, and treatment plants. Retirements have also caused a loss in institutional knowledge.

Fast-changing technology. Utilities may not have the most current tools and/or expertise to use them and upgrade their systems regularly.

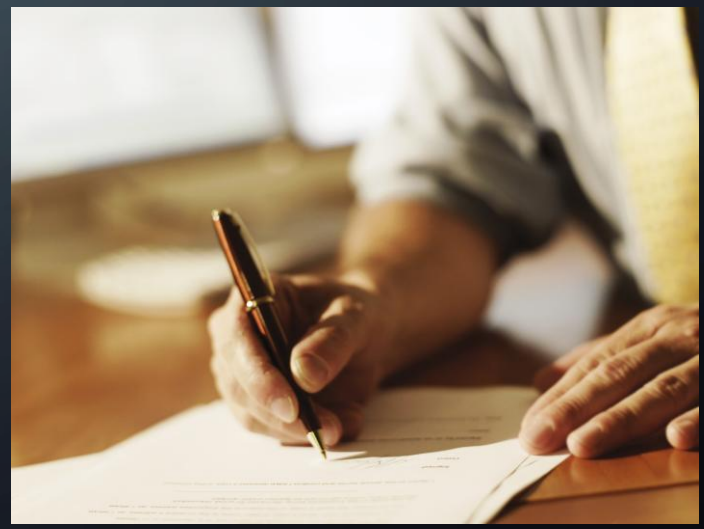
Lack of leadership or champion for asset management. Without the leadership of someone invested in asset management, it will likely not get done.

MANY OPTIONS EXIST…

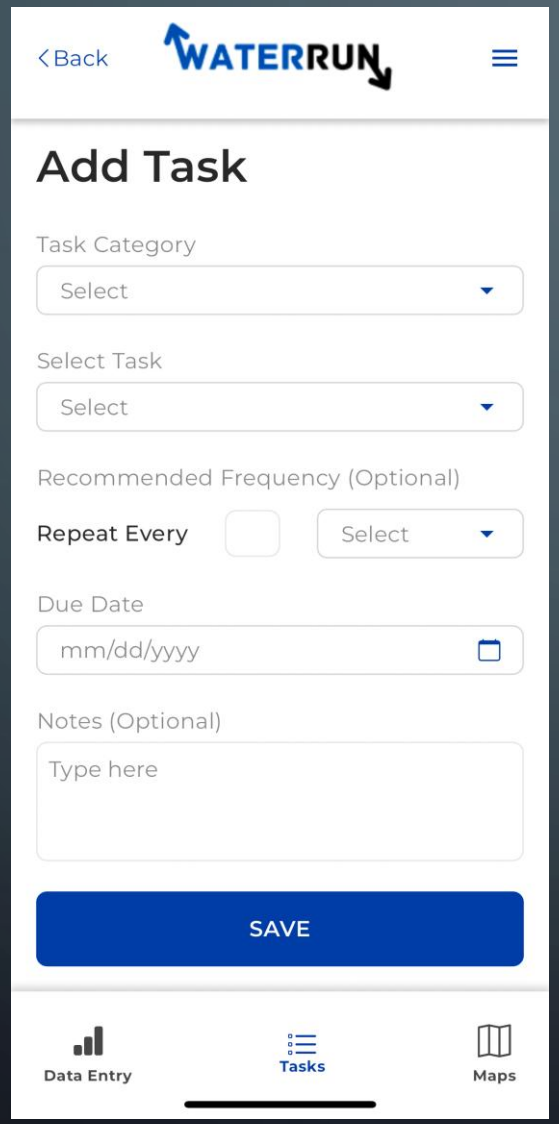
USG WATER SOLUTIONS

WR

OPENGOV



SOLUTION: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WATERRUN
Add Task
Task Category
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Select Task
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Recommended Frequency (Optional)
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SAVE
Data Entry
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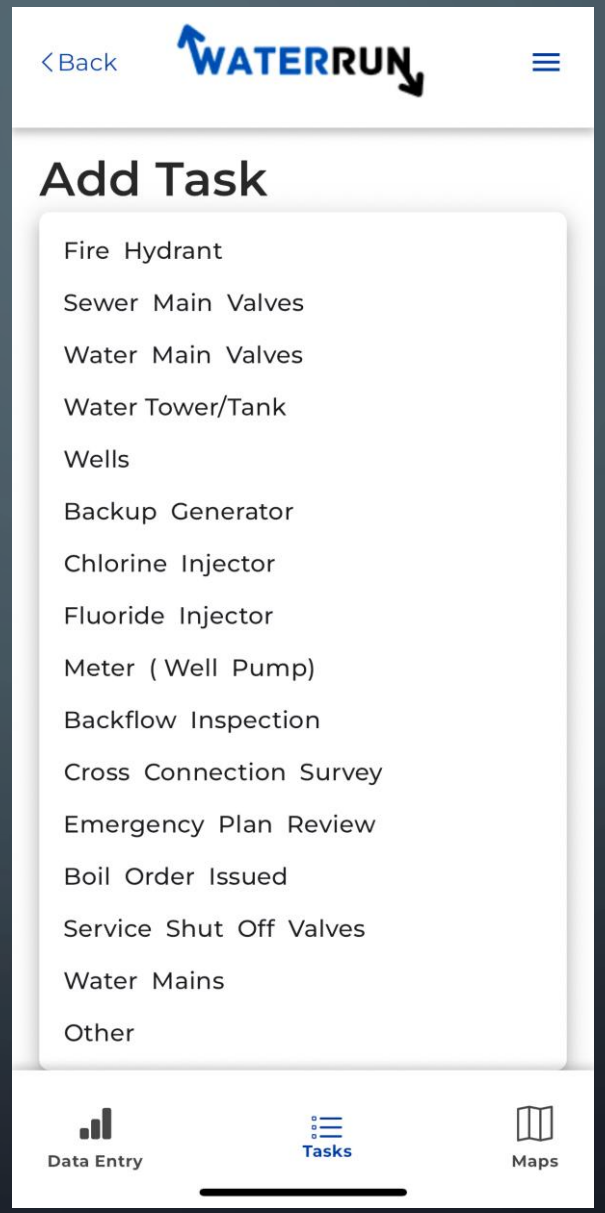
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Wells
Backup Generator
Chlorine Injector
Fluoride Injector
Meter (Well Pump)
Backflow Inspection
Cross Connection Survey
Emergency Plan Review
Boil Order Issued
Service Shut Off Valves
Water Mains
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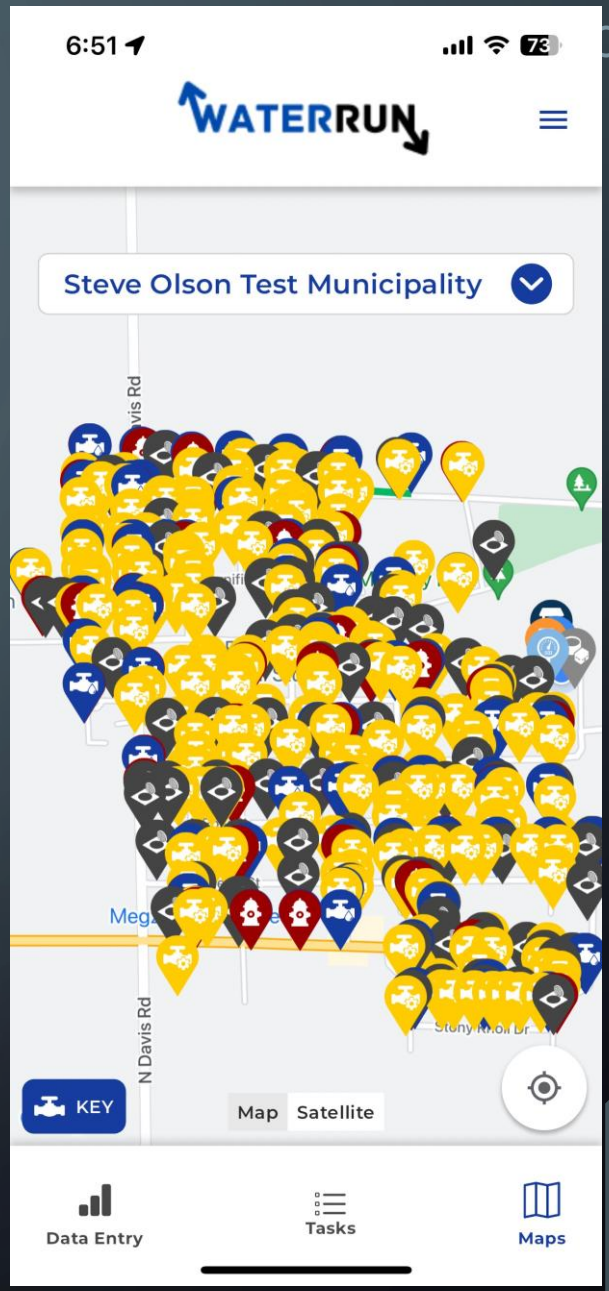
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BENEFITS

Prolonging asset life and aiding in rehabilitation/repair/ replacement decisions through

Efficient and focused operations and maintenance.

Meeting consumer demands with a focus on system sustainability.

Setting rates based on sound operational and financial planning.

Budgeting focused on activities critical to sustained performance.

Meeting service expectations and regulatory requirements.

Improving response to emergencies.

Improving security and safety of assets

IMPLEMENTING

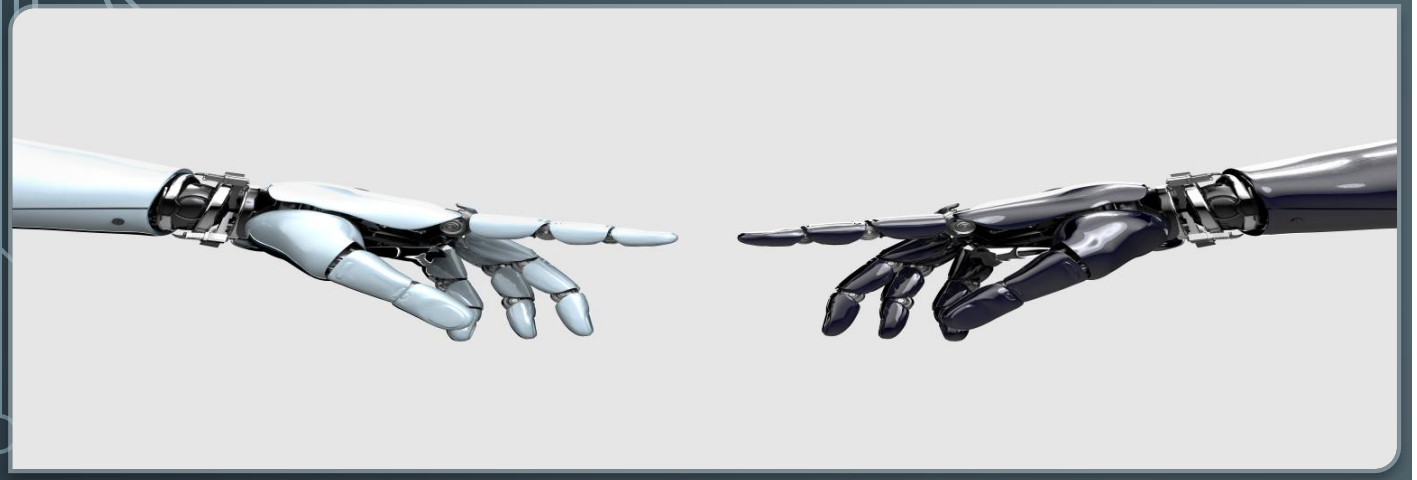
PLAN	• Five core questions framework (short-term) • Revise asset management plan (long-term)
DO	• Implement asset management program • Most Important??
CHECK	• Evaluate progress, changing factors and new best practices
ACT	• Take action based on review results

SUMMARY

- Developing an asset management plan **will help to improve** system functionality
- **Updating** your plan is a necessity to have current structures
- Keep **open communications** with your public bodies for future planning
- **Something** is better than nothing
- **Keep moving forward**

SUMMARY

- Continued status quo is **not sustainable**
  - Increases the risk of future **costly repairs**
  - **Reactive** mode
- Each system is going to be **different**



CONTACT DETAILS

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