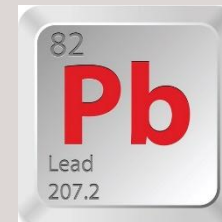# It Happened. What Now?
Managing Through a Crisis
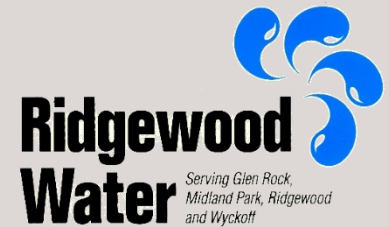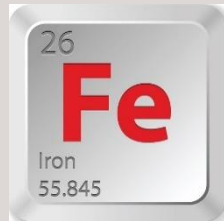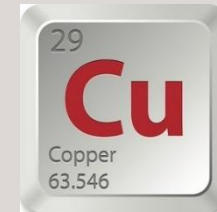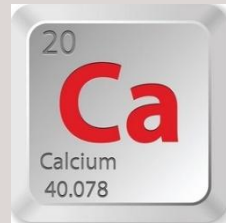
Who we are.

- **Municipally owned water utility**

- **Serve population of 61,700, over 16.7 square miles in northwest Bergen County, including Village of Ridgewood, Borough of Glen Rock, Borough of Midland Park & Township of Wyckoff**

- **Sources: 52 groundwater wells and purchased water to meet summer peak demands**

- **93 facilities, 275 Miles of pipe, 1870 hydrants and 5630 valves**
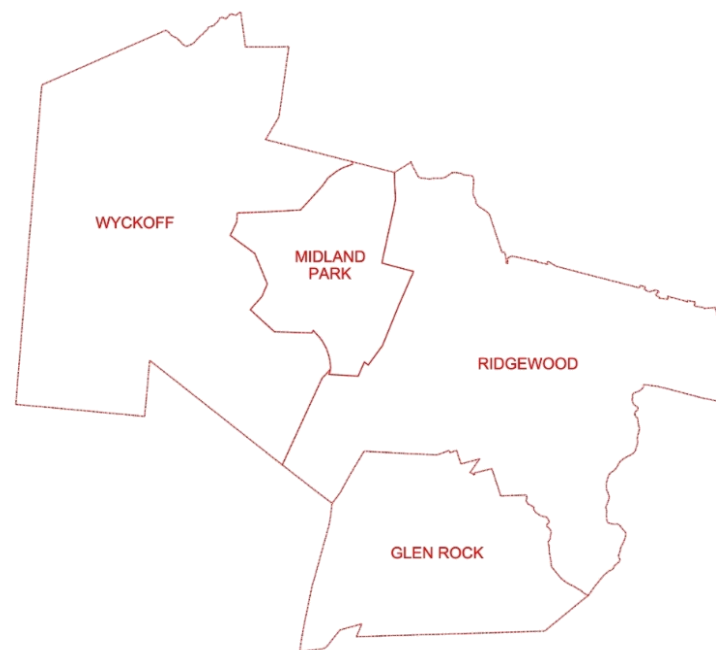
What defines Emergency?

- Types of Emergencies
  - Situations requiring an immediate response
    - Weather related: flood, snow, ice and wind
    - Power outages
    - System Failure (Main break, treatment unit failure)
    - Fire
    - Explosion
    - Chemical Spill/Release
    - Security Breach

  - Situations that have longer durations, sometimes months or years
    - Job actions: strikes, walkouts, sick outs
    - Pandemic
    - Contaminants
    - Budget deficit/Funding shortage

Be Prepared

- Identify risks:
    - Perform a comprehensive vulnerability/ risk and resiliency assessment
    - USEPA requires completion by
        - 3/3/20 for drinking water systems greater than 100,000,
        - 12/31/20 for systems between 50,000 & 99,999, and
        - 6/30/21 for systems between 3,301 & 49,999
- Be resilient:
    - Shore up defenses and address vulnerabilities identified in your assessment
- Have an Emergency Response Plan (ERP):
    - A well crafted plan is your first resource for any emergency
    - USEPA requires completion by
        - 9/30/20 for drinking water systems greater than 100,000,
        - 6/30/21 for systems between 50,000 & 99,999, and
        - 12/31/21 for systems between 3,301 & 49,999.
- Practice: Apply, use and believe in the procedures:
- Keep your plans updated:
    - USEPA requires updates every five years. I recommend that you update your ERP annually and after any incident

Risk & Resiliency
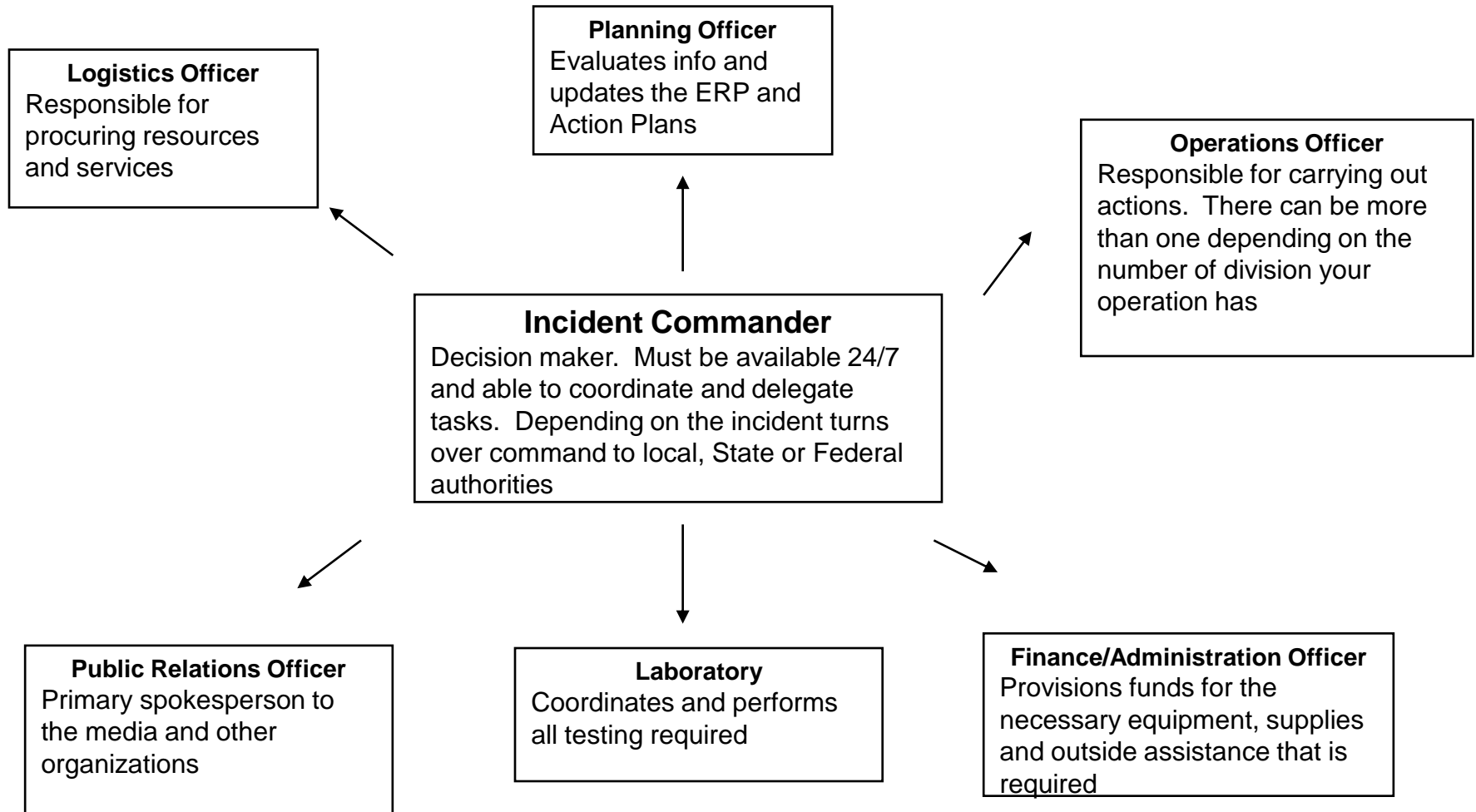
- What is your risk to malevolent acts and natural hazards?
- What is the resiliency of your system against these risks?
  - Example: Power loss. Do you have back up power? Where? How many? Are these assets maintained? How are they fueled, protected, controlled?
- Financial Support for the system
- Operation and Best Management Practices
- Maintenance of Asset Management

Emergency Response Plan

- The plan includes the actions, procedures, and identification of personnel and equipment that can be implemented or utilized to significantly lessen the impact of an emergency situation

- The plan identifies the:
  - Emergency Response Team
  - Communication Procedures
  - System Priorities
  - Resources
  - Alternate Supply Chains
  - Interim Actions
  - Emergency Situations and Response Outlines

- The plan should be updated and practiced on an annual basis

Emergency Response Team & Roles

Planning Officer
Evaluates info and updates the ERP and Action Plans

Logistics Officer
Responsible for procuring resources and services

Operations Officer
Responsible for carrying out actions. There can be more than one depending on the number of division your operation has

Incident Commander
Decision maker. Must be available 24/7 and able to coordinate and delegate tasks. Depending on the incident turns over command to local, State or Federal authorities

Public Relations Officer
Primary spokesperson to the media and other organizations

Laboratory
Coordinates and performs all testing required

Finance/Administration Officer
Provisions funds for the necessary equipment, supplies and outside assistance that is required
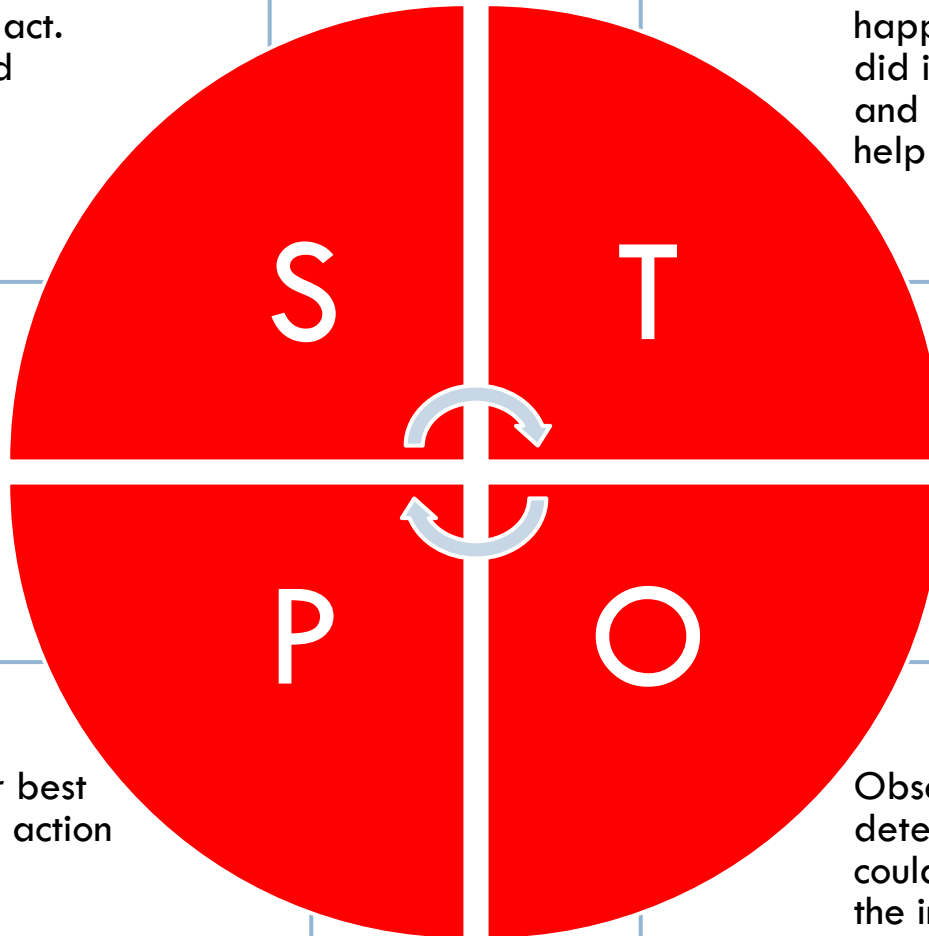
Communication Procedures

- Emergency Observed
- Incident Commander notifies Team
- Notify outside affected agencies and authorities
- Plan action(s)
- Public Notification
  - Email blasts
  - Website
  - Social Media
  - Press
  - Reverse 911

STOP

- Stop and think before you act. Be calm and don't panic

- Think about what happened, how did it happen and who can help

S

T

P

O

- Plan your best course of action

Observe and determine what could result from the incident

RIDGEWOOD WATER - REAL LIFE EXAMPLES

PFAS
- New Regulated Contaminant

COVID
- Pandemic

RIDGEWOOD WATER - REAL LIFE EXAMPLES

PFAS

- New Regulated Contaminant

What is PFAS?

☐ Hundreds of PFAS (Per- and Polyfluoralkyl Substances) compounds including PFOA, PFOS & PFNA

☐ Man-made chemicals that have been used for fire fighting and to make carpets, clothing, fabrics for furniture, paper packaging for food and other materials that are resistant to water, grease or stains

Why is PFAS an Emergency?

- System wide testing revealed that PFAS was widespread in the system and present in every groundwater well and purchased sources

- NJDEP established MCL's, requiring treatment be established within one year after the first MCL violation occurs

  - Requires reimaging the system layout, as many well properties have no room for treatment

- Lack of information for Public Education

- Costs and availability of treatment methods

STOP

- Variation in guidelines issued by EPA and NJDEP, and evolving test methods that now allowed lower detections
  - EPA Health Advisory Limit of 70 ppt, combined for PFOA & PFOS
  - NJDEP Guidance & eventually MCL's of 14 ppt and 13 ppt, respectively for PFOA & PFOS
  - What is the treatment?
  - How long will it take to permit and build?
  - How do we communicate this all to the public?
- What does it cost?

THINK

- Where did PFAS come from?
  - Will it go away over time?
- Partner with NJDEP, professionals and peers to discuss options?
- Can we substitute with purchased water?
  - From who, where and how much?
  - Does the purchase water have the contaminant?
  - What affect will more purchased water have on water quality and corrosion?
- Where can we find land to build treatment?
  - What affect will the new treatment have on hydraulics?
  - What affect will it have on the water quality, especially corrosion control?

OBSERVE

- Health affects?

- Affect on water quality parameters?

- Winter vs. Summer concentrations?

- What is the schedule?

- How much will it cost?
  - How much will rates go up?

PLAN

- ☐ Prepare an engineering master plan to treat the contaminant
- ☐ Seek out the sources of the contaminant and stop it at the source
- ☐ Recover funds to pay for treatment
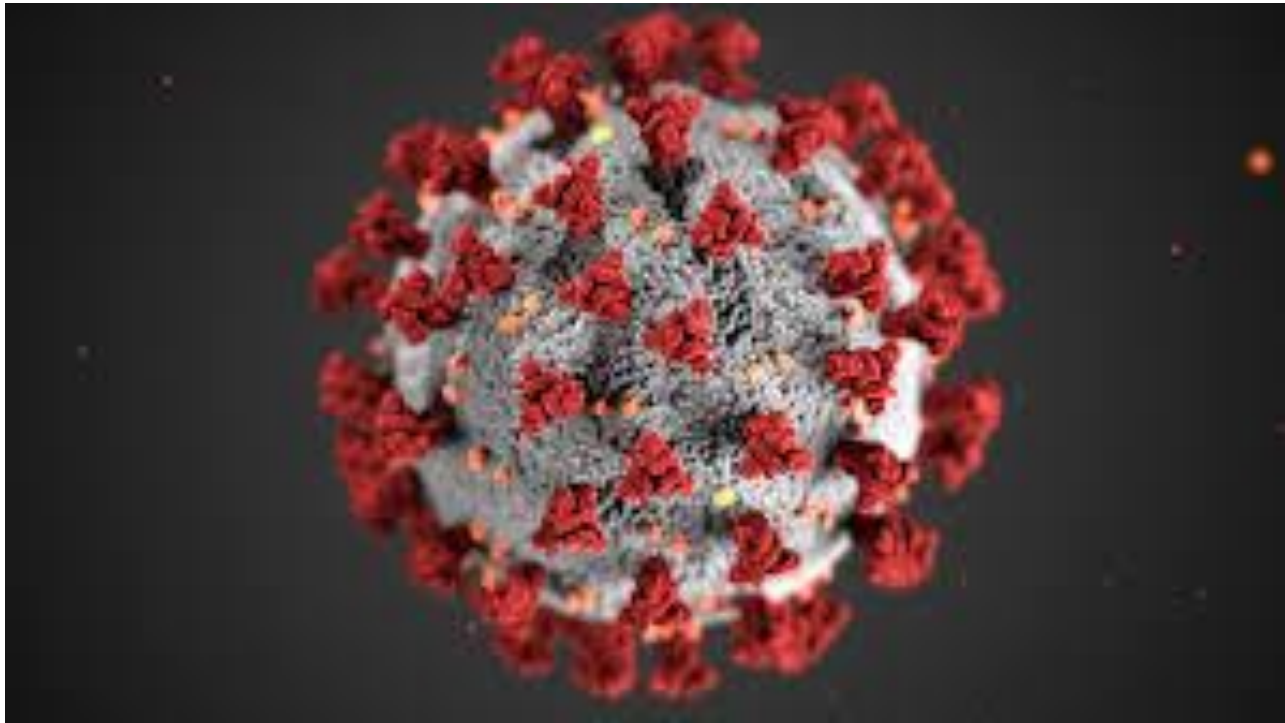- ☐ Communicate and be transparent
- ☐ Build it

RIDGEWOOD WATER – REAL LIFE EXAMPLES

COVID

- Pandemic

What is COVID?

What made COVID an emergency?

- Concern for threat to workforce and possible mass sick outs due to virus spread and severe affects
- Concern for customers, contractors, vendors and public accessing our buildings
- Lack of PPE and controls
- Lack of information on the virus and best practices for handling spread
- Handling of house calls and leak emergencies
- Possible affect on supply chain, causing shortages on parts, chemicals, testing and more
- Effects on capital improvement plans and construction projects

STOP

- Being posed for what to come was critical for COIVD, as the ramp up to the emergency declaration occurred slowly

- We knew about the virus, but not much was being talked about in NJ, until the first week of March and then the Governors Emergency declaration of March 9th

THINK

- We corresponded in February with our local OEM and DOH, but no one had any guidance. County and State resources were silent

- We turned to our ERP. Held our first table top meeting on February 27th, with the management team

- Executed a full emergency on March 5th and met with the ERP team to implement emergency procedures

OBSERVE

- As more information became available in March, social distancing became the key observation to protect transmission

- Masks were identified as the best protection, but it was unclear if anything else but an N95 was effective, and N95 masks became impossible to find

PLAN

- Cancelled all employee travel
- Created shifts and segregated all employees one to a vehicle and socially distant within buildings
- Separated members of the ERP and relocated essential employees to preserve core operations
- Closed all buildings to public
- Started daily update call with staff to preserve collaboration and review safety protocols
- Procured additional PPE and cleaning products and protections
- Created an employee health questionnaire

SUMMARY

- Be prepared
- Have a plan
- STOP
  - Stop
  - Think
  - Observe
  - Plan
- Follow up and learn

THANK YOU!

Richard Calbi Jr.

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