Intro to Distribution Systems

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Primary Function

- Transport water from the treatment facility to the customer
- Adequately and Reliably
Piped Systems

- Types of Pipe
  - Gray Cast Iron Pipe
  - Ductile Cast Iron Pipe
Pipe continued

▲ AC - Asbestos Cement
Pipe

- Steel Pipe
- PVC
Special Pipe

- Arctic Pipe
- Wood Pipe
Valves

- Function
  - Control Pressure
  - Control Flow
  - Regulate levels in reservoirs
  - Isolate sections of line
  - Prevent Backflow
Valve Connections

- Over 2 inch valves are
  - threaded, glued, soldered
  - Mechanical joint and hub
Gate Valves

- Movable closure
- Single and double discs
- Seats
Stems on Gate Valves

- Rising or non-rising
- OS&Y
Maintenance

- Operate all valves once a year
Air Valves

- Air and Vacuum valves
- Air Release Valves
- Combination Valves
Air Vacuum Valves
Maintenance

- Inspection
- Freeze protection
- Obstruction
Globe Valves

- Main Control Valves
- Altitude valves
Maintenance
Maintenance
Plug and Ball Valves
Check Valves

- Prevent Backflow
- Maintain priming in pumps
Maintenance
Backflow Prevention
Fire Hydrants
Storage Reservoirs

Operation and Maintenance
Customer Service

- Meters
Tapping and Repairing
Clean water always