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## **Valve Exercising Program Guidance**

Per AWWA G200-15 Distribution Systems Operation and Management, section 4.2.5, a valve exercising program is to follow AWWA Manual M44 and the manufacturer's recommended procedure and include at least the following elements:

- 1) A goal for the number of transmission valves to be exercised annually based on the percentage of the total valves in the system.
- 2) A goal for the number of distribution valves to be exercised annually.
- 3) A goal that 100% of the valves are tested within a certain time frame (recommend 1x/5 years).
- 4) Measures to verify that the goals are met and written procedures for action if the goals are not attained.
- 5) Critical valves in the distribution system shall be identified for exercising on a regular basis. Potential water quality and isolation concerns shall be recognized. The program shall track the annual results and set goals to reduce the percent of inoperable valves.
- 6) The valve-exercising program may be implemented in conjunction with the systematic flushing program.
- 7) A goal of replacing the inoperable valves identified during the operation and maintenance process shall be established as part of the exercising program.

### **Determining which valves are critical**

- Transmission mains affecting service to large groups of customers
- Distribution valves necessary to maintain service to critical customers such as: hospitals, dialysis centers, nursing homes, medical facilities, manufacturing facilities, downtown/high density areas, and service connections where loss of flow could impact human health due to catastrophic events (wastewater treatment plant critical processes or loss of cooling water to processes where it is critical)
- Areas prone to main breaks
- Areas of infrastructure approaching the end of its useful life
- Areas around road or other utility re-construction areas

### **Frequency of exercising**

- Critical valves - annually
- Non-critical valves:
  - Rate of deterioration known to occur in the distribution system. Systems should operate a representative sample annually to determine rate of deterioration
  - Consequence of failure or delays in being able to close the valve.