RESIDENTIAL FIRE SPRINKLERS

Carl Lunak





NORTHSHORE UTILITY DISTRICT

- Service area includes 5 cities
 - ► All of Kenmore
 - About 1/3 of Kirkland
 - ► Bothell
 - ► Lake Forest Park
 - ► Woodinville

- ► 22,000 Water Connections
 - Primarily single family residential
 - Growing multifamily
 - Small Commercial
 - Bastyr University
 - Evergreen Hospital

THE ORDINANCE

City of Kenmore

"An approved fire sprinkler system shall be installed in new one-family and two-family dwellings and townhouses"...



THE DISTRICTS CONCERNS

- Impact to water system
 - Long term forecasting
 - Engineering design specifications
- Increase in required backflow assemblies
 - Increased workload
 - Cross connection staffing
- Liability issues delinquent accounts
- Coordination with Kenmore & Northshore Fire

- My concerns
 - ► MORE WORK!

THE PROCESS

- ► Kenmore & Northshore Fire
- ► 2 stakeholders meeting
 - ► City
 - ► Fire District
 - Master Builders Association
 - Plumbers
 - ► Fire Sprinkler Contractors
 - Northshore Utility District
- Everyone had concerns



Jeff LaFlam – Fire Marshal /

Growth Opportunities (aka obstacles)

- 1. Impact to water system
- 2. Liability
- 3. Meter size and cost issues

How it was addressed

- 1. Education
 - 98% of residential fires put out by 1 or 2 heads – 13 g.p.m. per head
- 2. The District already had legal opinion on liability of shut off accounts
- 3. N.U.D. connection charges are based on use so no change to connection fees.
 - 1. Meter upgrade cost \$55.00
 - 2. Already using 1" setter and service line

COLLECTIVE PROBLEM SOLVING

Growth Opportunities (aka obstacles)

- 1. Coordination with "the Authority having jurisdiction"
- 2. Multi-purpose, flow through, passive purge, traditional 13D

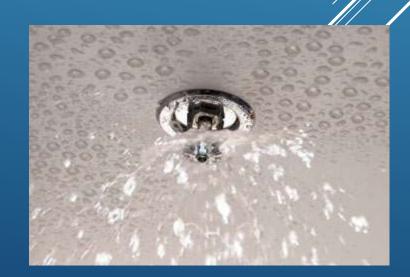
How they were addressed

- 1. Jointly produced form
- 2. Education & shared definitions
 - 1. "Flow-through fire protection system" means a fire sprinkler system that:
 - Is supplied only by the purveyor's water;
 - Does not have a fire department pumper connection;
 - Is constructed of approved potable water piping and materials to which sprinkler heads are attached and
 - Terminates at a connection to a tellet or other plumbing fixture to prevent stagnant water.

COLLECTIVE PROBLEM SOLVING

MOST IMPORTANT – MY WORK LOAD

- ► Jointly develop a form with Northshore Fire District
 - Verify type of system
 - Confirm built as designed
 - ► No required inspection for NUD!
- Majority of large builders installed flow-through systems
 - ▶ 2012 80%
 - ▶ 2013 75%
 - ► Last estimate averaging 60%

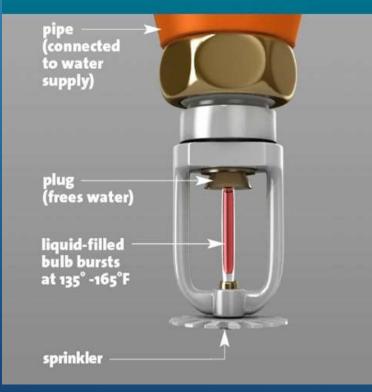


BY THE NUMBERS

- From 2012 2018 single family fire sprinkler systems
 - ► Started with 120 +/-
 - ► Added 425 +/- **
- ► There are 8 "locally" already in place
 - 1. Bonney Lake
 - 2. Camas
 - 3. Dupont
 - 4. Kenmore
 - 5. Mercer Island
 - 6. Olympia
 - 7. Redmond
 - 8. Tukwila

HOW HOME FIRE SPRINKLERS WORK

A typical home fire sprinkler covers a minimum 12 X 12 foot area.



PREPARING FOR AN ORDINANCE

- Review your connection fees, rates, facilities charges etc.
- Evaluate service line specifications and meter size
- Continue to build relationships with jurisdictions you serve
- Promote your utility keep your rate payers on your side!

Carl Lunak clunak@northshorefire.com 425-354-1744

QUESTIONS?

