

Fire hydrants on rural water districts: risky venture or benefit?

One of the more contentious issues confronting rural water districts is the seemingly stream of constant requests by customers and others that the district install fire hydrants. After all, who can be against fire hydrants and saving property? Customers believe that if they have a fire hydrant on their property or close by, then they will benefit from reduced property insurance costs. Well, that's not necessarily the case. Having a fire hydrant close to your property does not necessarily reduce the cost of fire insurance. More factors than a location of a hydrant need to be taken into account when the fire rating is set.

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Who sets the ratings?

Insurance Service Offices (ISO) is the principal provider of rating and statistical information by the insurance industry in the United States. ISO evaluates many different aspects of insurance underwriting, including public fire protection, flood risk and the adoption and enforcement of building codes.

The ISO Public Protection Classification (PPC) is utilized by most U.S. insurers of homes and business property in calculating premiums. Typically the price of insurance in a



That garden hose flow isn't going to slow this fire. This is a real situation in which 12 restored Harley-Davidson cycles were destroyed.

community with a good classification rating is substantially less than a community with a poor rating.

Before a classification is set the rating is based upon three aspects. These are:

- 1) fire alarm and communication systems, including telephone systems, telephone lines, staffing and dispatching systems
- 2) the fire department, including equipment, staffing, training and geographic distribution of fire companies
- 3) the water supply system, including the condition and maintenance of hydrants, and a careful evaluation of the amount of available water compared with the amount needed to suppress fires.

As you can see, the process of evaluating a water system to

assign a classification level is complex. It goes further. The above-mentioned items total 100% of the classification of a survey but these are separated as follows.

Ten percent (10%) of the classification is based on receiving and handling of fire alarms. The fire department accounts for 50% of the rating. This includes pumper trucks, pump capacity, ladder/service, reserve ladder service, distribution of trucks, company personnel and training. The final 40% of the classification is based on the community water supply.

Let's discuss the community water supply. Unless you are building a new system or have improvements scheduled, there may not be much that you are going to be able to do to

improve flows from an existing fire hydrant. Installing additional fire hydrants in strategic locations may help for needed fire flows to some commercial buildings. But that's not the case with rural water districts.

Yes, having fire hydrants in the country may help supply water for fires. However, it is not financially feasible for a RWD to install a fire hydrant within 1000 feet of every structure. Fire departments may tell you that ISO will lower the fire rating for the area if the water system will allow the installation of additional fire hydrants. That is not necessarily correct. Typically ISO assigns the fire rating for a fire department based on the previously mentioned criteria. If a fire department has a coverage area within five road miles and has 85% fire hydrant coverage, then a single rating is assigned. However, if the department exceeds the five miles, then a split rate is assigned. For example a split rating of 7/9 means that the first class (Class 7 in the example rating of 7/9) applies to property within five road miles of a fire station and within 1000 feet of a fire hydrant. The second class (Class 9 in the 7/9 rating) applies to property within five road miles of a fire station but beyond 1000 feet of a fire hydrant. ISO will generally assign a Class 10 rating to all property beyond five road miles of a fire station.

Some fire departments have taken the approach of branching out. In other words if they have several fire trucks located in a central location they will house a fire truck in another building a few miles away from the main fire station. This in effect creates another fire station under the original one and therefore helps reduce the fire ratings further than five miles from the original station. As long as there is an

Evaluating a community for a fire insurance rating

When a community wishes to be evaluated or re-evaluated for a fire protection classification, the community must have the following minimum facilities and practices:

A. Organization

The community must have a fire department, organized permanently under applicable state or local laws. The organization must include one person responsible for the operation of the department, usually with the title of chief.

B. Membership

The department must have sufficient membership to assure the response of at least 4 members to fires in structures.

C. Training

The fire department must conduct training for active members, at least 2 hours every 2 months.

D. Alarm Notification

Alarm facilities and arrangements must be such that there is no delay in the receipt of alarms and the dispatch of firefighters and apparatus.

E. Apparatus

The department must have at least one piece of apparatus meeting the general criteria of National Fire Protection Association (NFPA) Standard 1901, Automotive Fire Apparatus.

F. Housing

The department must house apparatus to provide protection from the weather.

If a community does not meet these minimum criteria, ISO will assign the community a Class 10 rating. For further information on obtaining lower classifications for a community visit the ISO website at <http://www.isomitigation.com>.

adequate work force, there is nothing wrong with this approach.

Here a hydrant, there a hydrant

Adding fire hydrants will not necessarily reduce insurance premiums. A fire hydrant installed in a rural area must be useable and accessible year round. The hydrant must also be capable of delivering 50 gallons per minutes at 20 p.s.i.

The best use of a fire hydrant (or flush hydrant) in rural areas is to fill supply trucks. This saves the fire department from returning to the city or station to refill. It is also beneficial for the fire department

to install dry hydrants at locations that are acceptable for use. These are at lakes, reservoirs, rivers and streams of sufficient depth.

It's beneficial to have a pumper truck and portable tank available when using one of these rural fill taps. A soft hose is used to fill the portable tank and the pumper truck siphons water from the tank and fills trucks as needed. When there are no trucks being filled the tank is allowed to refill and be ready for the next truck.

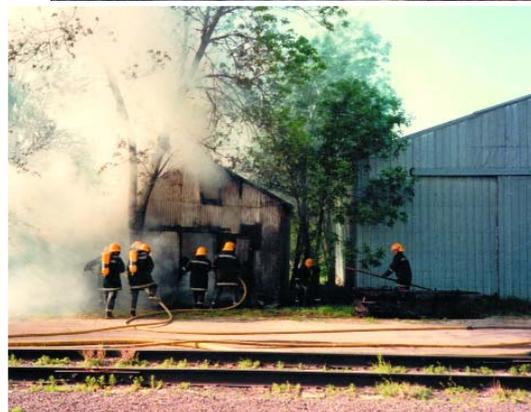
Reduced classifications: who benefits?

When applied to insurance rates the following may surprise

you. Most insurance companies will have the same rates for residential property for Class 3 through Class 8 fire ratings. Those who benefit most from lower classifications are the commercial buildings. The costs for insurance can drop substantially with each reduction in classification.

One small town in northeast Kansas had a new business located on the outside edge of the city. The business did not want to be annexed into the city limits due to various factors and in no uncertain terms told the city council that he did not want annexed. His insurance company notified him that his rates for fire insurance could be reduced by several hundred dollars a year if the city would annex his business into the city limits. This person then had to approach the city council requesting annexation.

To learn more about fire protection, insurance ratings and evaluations, I encourage you to attend the KRWA conference



Establishing a fire insurance rating considers more than just the water supply. The photo above is of a rural home in Nemaha County that burned. The photo at left shows firemen

dousing a blaze in the town of Seneca. Both photos are courtesy of the Seneca Fire Department.

and specifically the session: "Improving Your Fire Protection and Fire Insurance Rating" in Room 210A on Wednesday, March 24 at 1:30 p.m.

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