In many rural areas throughout Albany County, a lack of water mains and municipal fire hydrants impairs the ability of local fire departments to do their job quickly and efficiently. Every minute is crucial when lives and property are at stake, therefore, alternative water supplies for firefighting are a necessity. Dry hydrants fulfill this need.
Water in streams, ponds and cisterns helps a fire department only when it is readily accessible and within close proximity of the fire. Installation of dry hydrants into strategically located water-bodies eliminates the inefficiency and complexity of long-distance water shuttle operations and also allows access to water sources directly from a roadway rather than traversing over soft or saturated ground.

A dry hydrant consists of a hydrant head connected to an arrangement of buried pipes that extend into a water-body. The intake strainer is positioned below ice depth, so the system remains functional throughout the winter. Dry hydrants provide enhanced speed and safety over traditional methods of winter drafting because firefighters no longer need to cut holes through the ice to access available water.

Dry hydrants have the following features:
- Non-pressurized pipe system
- Use inexpensive piping materials
- Are permanently installed in open water bodies
- Provide a means of access whenever needed, regardless of weather
- Allow years of simple operation with a minimum of maintenance

Planning for dry hydrants involves several considerations:
- Current and future population and building trends
- Potential for loss of lives/property
- Fire history in the area
- Current water supply systems
- Other potential water sources

The siting of dry hydrants is influenced by several factors:
- Ownership of the land (requires landowner permission)
- Capacity of the water holding structure (available water volume)
- Accessibility (by backhoe and fire truck)
- Protection of the hydrant head (from traffic, snow plows, etc.)
- Road safety (good visibility, sufficient pull off)

The Albany County Soil and Water Conservation District, in conjunction with the Hudson Mohawk Resource Conservation & Development Council, has received funding from Senator Neil Breslin, Assemblyman John McEneny and the Albany County Legislature to improve rural fire protection throughout Albany County. The funding is intended to offset costs to local fire departments related to the purchase of dry hydrants. The SWCD provides dry hydrant materials and all necessary survey and design work free of charge, while local highway departments often donate heavy equipment and labor for installation. At such a low cost, dry hydrants are arguably one of the most cost-effective fire protection measures available.