

# Terminology Handout

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**Atmospheric Pressure** - pressure exerted by the atmosphere at the surface of the earth due to the weight of air. Atmospheric pressure at sea level is about 14.7 psi. Atmospheric pressure increases as elevation is decreased below sea level and decreases as elevation increases above sea level.

**BTU**- the amount of heat required to raise the temperature of 1 pound of water 1°F

**Elevation pressure** - gain or loss of pressure in a hoseline due to a change in elevation. AKA Head pressure.

**External water supply** - Any water supply to a fire pump from a source other than the vehicle's own water tank.

**Fire Hydraulics** - Science that deals with water in motion as it applies to fire fighting operations.

**Friction loss** - Loss of pressure created by the turbulence of water moving against the interior walls of the hose or pipe.

**Hydrant pressure** - Amount of pressure being supplied by a hydrant without assistance

**Intake Pressure** - Pressure coming into the fire pump.

**Net Pump Discharge Pressure (NPDP)** - Actual amount of pressure being produced by the pump. When taking water from a hydrant, it is the difference between the intake pressure and the discharge pressure. When drafting, it is the sum of the intake pressure and the discharge pressure.

**Nozzle Pressure** - Velocity pressure at which water is discharged from the nozzle.

**Nozzle Reaction** - Counterforce directed against a person holding a nozzle or a device holding a nozzle by the velocity of water being discharged.

**Pressure** - Force per unit area measured in pounds per square inch

**Pump Discharge Pressure** - Actual velocity pressure of the water as it leaves the pump and enters the hoseline.

**Residual Pressure** - the part of the total available pressure not used to overcome friction loss or gravity while forcing water through pipe, fittings, fire hose and adapters.

**Static Pressure** - Stored potential energy available to force water through pipe, fittings, fire hose, and adapters.