Water Delivery Information

- Pump Discharge Pressure (PDP) = Nozzle Pressure (NP) + Friction Loss (FL) of Hoselay ± Head Pressure (HP)
- Gallons per Minute (GPM) and NP:

  Forester

  $^{3}/_{16}$ tip: 7 gpm (50 psi NP)

  $^{3}/_{8}$ tip: 30 gpm (50 psi NP)

  Variable Pattern (Adjustable Barrel)

  1": 20 gpm (100 psi NP)

  1½": 60 gpm (100 psi NP)
- FL for 1" hose:

  10 gpm = 5* psi per 100'

  20 gpm = 10 psi per 100'

  30 gpm = 20* psi per 100'
- FL for 1½" hose:

  20 gpm = 1 psi per 100'

  30 gpm = 5* psi per 100'

  60 gpm = 15* psi per 100'

  * Numbers rounded for easier math
- HP: Add or subtract 1 psi for every 2' elevation change.
- Gallons of water to fill 100' of hose:

  ¾" hose ≈ 2 gals.

  1" hose ≈ 4 gals.

  1½" hose ≈ 9 gals.
- Maximum effective lift for drafting = 22' at sea level, 14' at 8,000' elevation.
- Loss of 1' draft per 1,000' elevation.
- Use check and bleeder valve on pump discharge when pumping uphill to prevent back flow into the pump.
- A parallel hose lay will have ¼ the friction loss of a single hose lay.