

# ON-SITE STORAGE REQUIREMENTS

Any new member, as of November 28, 2016, connecting to Lincoln-Pipestone RWS that purchases more than one capacity unit (50,000 gallons per month), and/or utilizes over 50,000 gallons in any month is required to have on-site storage equivalent to 24-hour peak usage.

Any existing member with peak capacity usage higher than 50,000 gallons per month is highly encouraged to incorporate on-site storage consisting of an equivalent to 24-hour peak usage.

## Piping & Plumbing Criteria:

- Air Gap – Positive separation shall be provided through use of air gap separation. Supply tank needs an overflow pipe that is positioned lower than the bottom of the fill pipe. Air gap is determined by twice the diameter of the fill pipe (i.e. 2" fill pipe = 4" air gap). LPRW recommends a 6" air gap.
- Backflow Prevention – If no air gap is achieved, then a backflow preventer is to be installed and maintained in operable condition by the member.

## Storage Specifications:

- Reservoirs serving as on-site storage cannot share a common wall with a confinement pit.
- Please refer to LPRW's *Livestock Water Use Estimator* Worksheet to assist in calculating daily consumption per animal unit.
- Formula for volume of on-site storage:
  - Volume of a Cube: Length x Width x Height x 7.48 gals/cubic foot
    - i.e. 12 x 12 x 8 x 7.48 = 8617 gallons
  - Volume of a Cylinder:  $\pi \times \text{radius}^2 \times \text{Height} \times 7.48$ 
    - i.e.  $3.14 \times 6^2 \times 10 \times 7.48 = 8455$  gallons

## Verification:

LPRW staff member will verify if all above requirements have been met; at which time water service can be initiated/resumed.