

Swanton Village Water & Sewer Department





Water Loss

Below are some things that occur daily either intentionally or unintentionally that result in a loss of water.

| Use | Gallons Per Minute | Gallons per month |
|---|--------------------|-------------------|
| Dripping Faucet | 1/4 GPM | 10,800 |
| Leaking Toilet | 1/2 GPM | 21,600 |
| Drip Irrigation | 1 GPM | 43,200 |
| Watering Garden for 2 hrs | 5 GPM | 18,000 |
| | 10 GPM | 36,000 |
| Unattended Water Hose 1 night | 10 GPM | 5,400 |
| Broken Service Line | | |
| 1 Night | 15 GPM | 8,100 |
| 1 Day | 15 GPM | 21,600 |
| 1 Week | 15 GPM | 151,200 |
| 1 Month | 15 GPM | 648,000 |
| Stuck Ice Maker | 2 GPM | 86,400 |
| Stuck Check Valve in Washing Machine 30 Minutes | 8 GPM | 240 |
| Stuck Float in Watering Trough | 5 GPM | 216,000 |
| Typical Usages | | |
| 1 Bath | 42 Gallons | |
| 30 Baths | 1,260 Gallons | |
| 1 Shower | 17 Gallons | |
| 30 Showers | 510 Gallons | |
| Running tap while brushing teeth | 1.3 Gallons | |
| Shaving | 2 Gallons | |
| Wash 1 load of clothes | 45 Gallons | |
| Wash 20 Loads | 900 Gallons | |
| Dishwasher | 5 -13 Gallons | |
| Flush Toilet | 3 Gallons | |
| 15 flushes per day | 900 Gallons/Month | |
| Hosing driveway | 13 – 26.5 Gallons | |
| Washing car with running hose | 26.5 – 80 Gallons | |

Consider how much water can be lost through a pinhole leak over a period of a month. "Unaccounted for" water is a major source of lost revenue for most utilities.

Water loss as a result of a leak .63 cm diameter (1/4") can mean a loss of 14,952 gallons per day. If undetected for a period of 34 days, over ½ million gallons are lost, plus resultant water damage or underground water undercutting. The following table shows leak sizes and their approximate loss in the gallons from a pressurized 60 psi pipeline. A pinhole leak can mean an average loss of 18,000 gallons of water per quarter, equaling normal demand from the average family home.

| GALLONS LOST | | |
|---|---------|-----------|
| PIPE LEAK SIZE | PER DAY | PER MONTH |
|  | 360 | 11,160 |
|  | 3,096 | 95,976 |
|  | 8,424 | 261,144 |
|  | 14,952 | 463,512 |