

## Micro-hydro Capabilities

*Gardner Energy has been designing and installing micro-hydro systems for the past 18 years and has installed 20 micro hydro systems in the intermountain west. Micro hydro power, just like solar power, can be designed for grid-tie with net metering, off-grid and grid-tie with battery backup. Micro hydro systems are typically designed to meet the customer's needs even though at times the potential exists to generate far more power than is needed. Because hydropower operates 24 hours a day a small system can provide enough energy for residential or small commercial customers.*

### Case Study:

Bohman Hydro plant, Peterson, Utah

- 200 watt off-grid hydroelectric system
- 45 feet of net head
- 45 gpm

The system was installed to supplement power from a small solar electric system. The turbine was connected to an existing 2" spring feed waterline serving the customer's off-grid cabin. Water moving through the spring line during winter months ensures that the line doesn't freeze. The system only produces approximately 4.8 kWh a day, but it is sufficient to recharge a large battery bank after weekend use by the owners.

