Solar-Powered Drip Irrigation System for the Proctor School Garden Project

Sponsored by the **TOPSFIELD RENEWABLE ENERGY COMMITTEE** www.topsfield-ma.gov/energy

Conserving water and electricity! Solar Panel **Battery Battery Charger** Rain Barrel Controller

Pump

* Energy from the sun is converted to electricity in the *solar panel*.

★ The current (DC) is fed via a *battery charger* into the *battery* where it can be stored for use in running the pump.

* Rain water runs off the roof of the school, through a downspout and is stored in the *rain barrel*.

* The *controller* uses a sensor to monitor soil conditions and turns on the *pump* when water is needed. Lights will indicate low water or low battery power.

* The *pump* sends water from the rain barrel to the irrigation tubing.

* The *drip tubing* runs under the soil taking the water directly to the roots of the plants.

Drip Tubing

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