Over the past two quarters, Wild Roots has worked with a team of students from Engineers for a Sustainable World (ESW) to research and design a modular drip irrigation system.

The team of ESW students has thoroughly researched various systems of water delivery and timing to design the most sustainable. Their research identified the following as essential components of the proposed system:

1. **Connection system to water source.** Includes piping, valves, or a multi-outlet drip manifold.
2. **Controller/timer.** Either battery powered or AC powered if we can plug it into a power source. Must be able to have multiple ‘stations’ if different parts of the garden have different watering needs.
3. **Water delivery system.** hoses, tubing, etc.
4. **Pressure regulator** if the water pressure from our water source is too much: Minimum working pressure (PSI) for a drip or micro sprinkler system is 15 PSI, maximum working pressure is 25 PSI.
5. **Filter** to make sure the system doesn’t clog.

The materials, available with the help of the ISEN grant awarded to us and support from Facilities Management, have been purchased and are ready for installation. They include:

- **Main components:**
  - Hose & Tubing
  - Back flow preventer
  - Filters
  - Adapter
  - Regulator
  - End timer

- **Additional items:**
  - End caps
  - Elbow fittings
  - T fittings
  - Stakes
  - 9 volt batteries
  - Hose cutter

Installation and testing are scheduled to be completed by June 3rd.