KAUFFMAN
The Foundation of Entrepreneurship

This facility is powered exclusively by **micro hydroelectricity**

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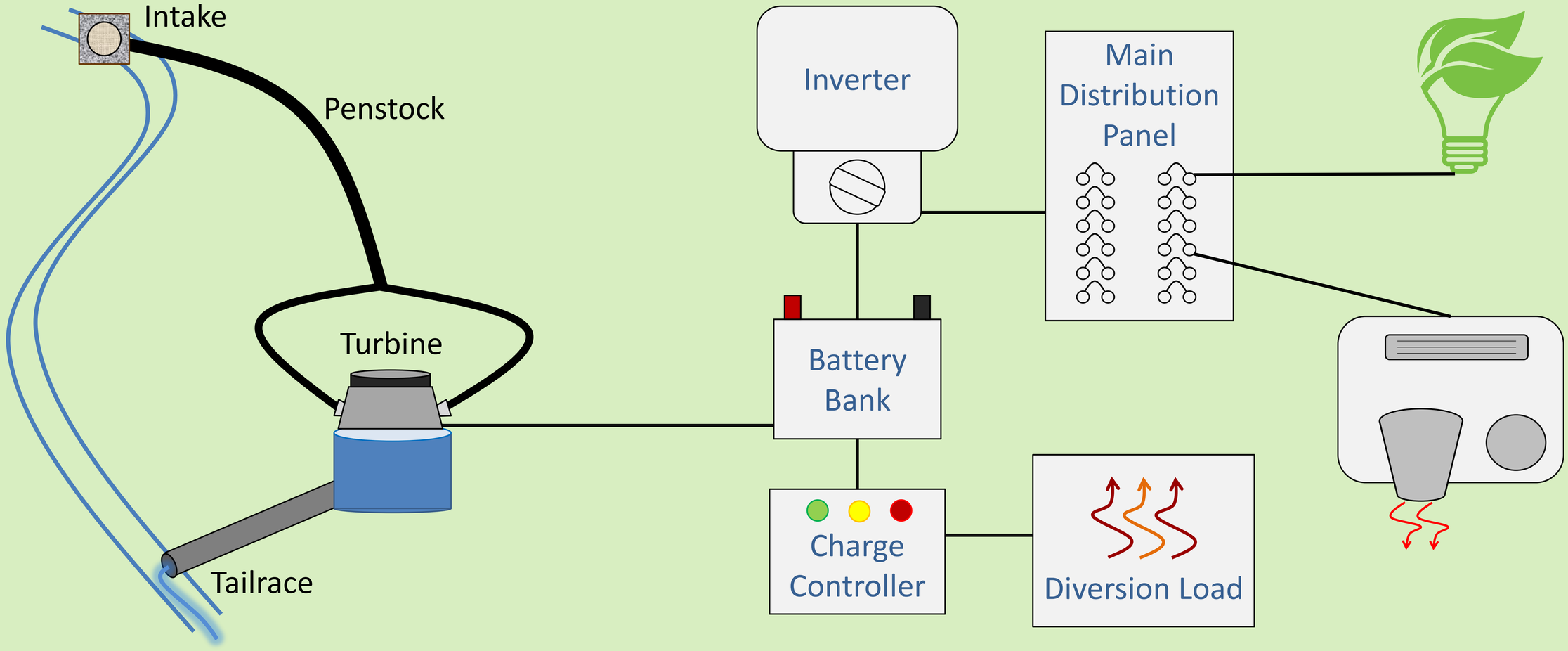
The intake for our system allows only 40 gallons per minute into the penstock pipe

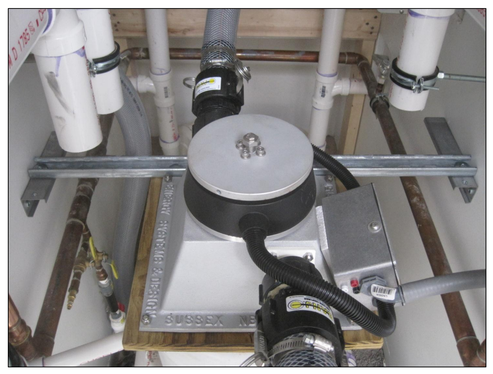
System Details:

- ✓ 40 Gallons per minute, 150 feet of drop
- ✓ No impoundments, weirs, or dams
- ✓ Safe for aquatic animals
- ✓ Water clarity and temperature unaffected
- ✓ Less expensive than running utility lines
- ✓ No monthly bill
- ✓ All energy needs of the facility are met

Sustainable Energy at its best!

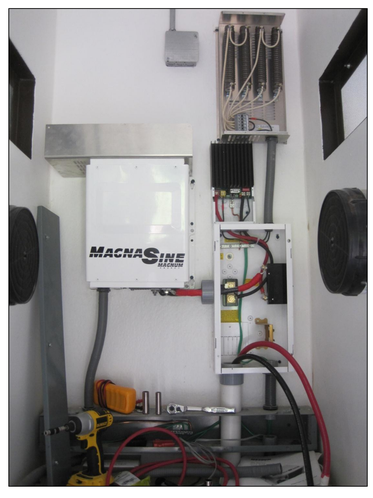
Our penstock pipe is 2” high-density polyethylene (HDPE), which is flexible, durable, and nontoxic for the water returning to the stream.





The turbine is operating at 325 Watts (3,100 kWh/year) and supplies 48 VDC.

Our system is entirely off-grid (no power lines). It consists of a battery bank (for energy storage), a charge controller and diversion load (for battery bank regulation), an inverter (to convert direct current to alternating current), and a main distribution panel (to feed branch circuits like lights and hand dryers).



View of the electrical system wiring during installation. Visible is the inverter, charge controller, DC disconnect box, and diversion load.

This project was funded in-part through a grant from the Kaufmann Foundation Enitiative series. It is a collaborative demonstration effort between Madison County Planning Department, Morrisville State College’s Renewable Energy Training Center, and renewable energy component manufacturers. For more information on micro hydroelectricity or questions about this system, please contact:
Phil Hofmeyer, Ph.D., Morrisville State College, Assistant Professor of Renewable Energy, hofmeypv@morrisville.edu, 315-684-6515

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