

# Maintenance

## Quarterly Tasks

Task	Tools	Personnel
Visual Evaluation	Your inquisitive eyes	Co-directors, volunteers, staff
Clean Screen	Hands or pressurized water	Volunteers, staff
Clean Gutter	Hands, screwdriver to detach the screen	Volunteers, staff
Clean Solar Panel	Water and gentle soap (Dr. Brommer) and a soft cloth	Volunteers, staff

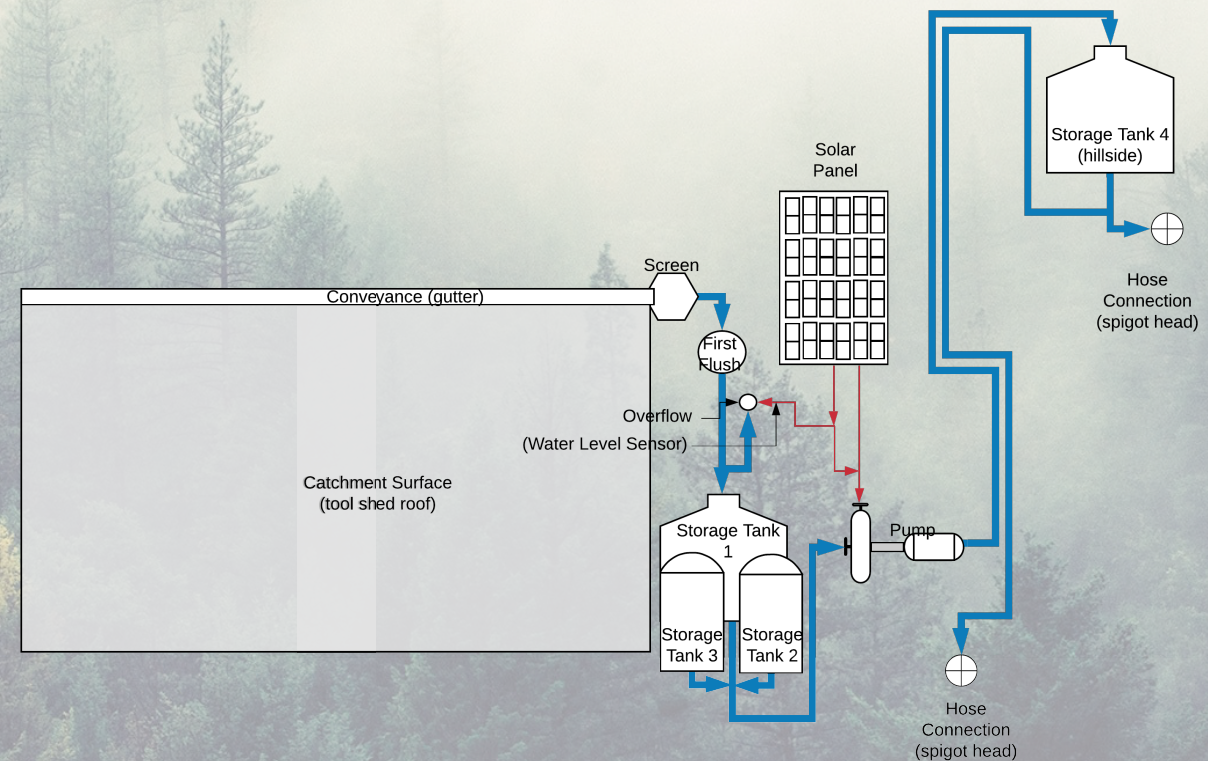
## Annual Tasks

Task	Tools	Personnel
Evacuate & Scrub the whole system	Bleach, scrub brush, full plan from Appropedia	Co-directors, volunteers, staff
Check water quality	Money, access to a water quality lab	Co-directors

CONTACT: [ccat@humboldt.edu](mailto:ccat@humboldt.edu)

APPROPEDIA: [https://www.appropedia.org/CCAT\\_small\\_rainwater\\_catchment](https://www.appropedia.org/CCAT_small_rainwater_catchment)

# Rainwater Catchment and Solar Pump System: Field O&M Manual



# Components



1. Roof

2. Gutter



3. Filter

4. First Flush



8. Storage Tank (#4)



9. Spigots



11. Water Level Sensor



10. Solar PV



7. Pump



5. Overflow



6. Storage Tanks (#1, 2, 3)



# Operation

This system catches, pumps, and stores rainwater to be used later. Rain is caught on the roof, falls into the gutter, flows through the filter and into (then over) the first flush, and into the bottom storage tank system (tanks 1, 2, 3). The solar panel provides power to the pump, which pumps water from the lower tanks (tanks 1, 2, 3) to the higher tank (tank 4) when it is sunny. Note that the pump can be turned off with the water sensor. Opening the spigot valve by the base of the solar panel, or at the hillside spigot, allows water to flow out from the upper storage tank (tank 4).

To use the water, attach a hose to the spigot (hose connection point) near the base of the solar panel, or at the base of the upper tank (tank 4). The lower spigot is used for almost all purposes – the upper spigot is used only for watering the upper garden bed. Water should flow. Once you open the valve at the spigot, water should flow. If water does not come out, check the amount of water in the upper tank. If there is water in the upper tank, but water is not coming out, check the troubleshooting manual.



1. Connect a hose
2. Open the valve
3. Enjoy!



## Contact:

All available system information is on the Appropedia page and the CCAT google drive. You can also contact one of the CCAT co-directors if you have questions.

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GOOGLE DRIVE: