

Forge Garden

Water Feature Research

- 1) Project Description
- 2) Interview Summary
- 3) Brainstorm
- 4) Research
- 5) Design



Project Description

- Collaboration with the Muwekma Ohlone Tribe and Forge Garden
 - For the Muwekma Ohlone Tribe and the general community
 - **Objective:** Create a water feature, where the sound of running water could be heard
- Preferred budget: \$100

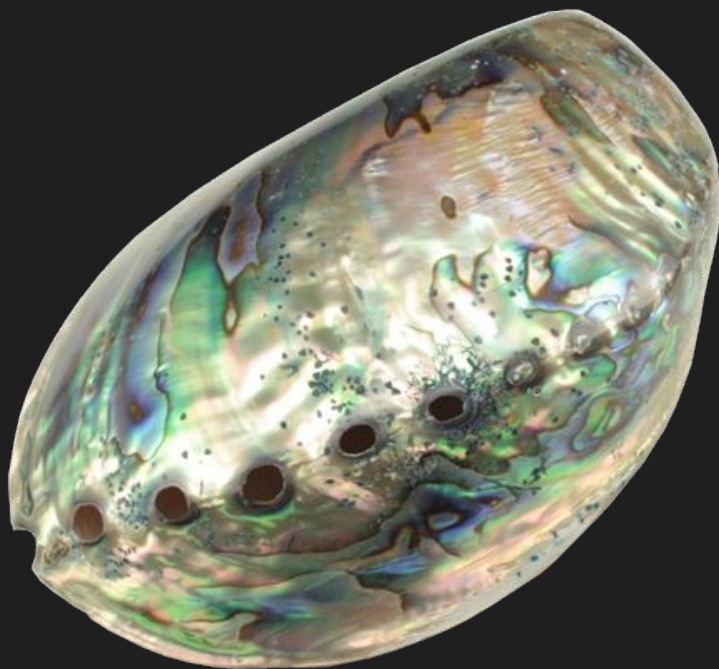
Interview Summary

- Abalone shells are an importance to the Muwekma Ohlone Tribe
- The water should fall vertically and the fountain itself should be relatively small
- The system should be on 24/7 using renewable energy
- Cares about longevity, but can have some maintenance necessities aspects
- Abalone shells are emphasized (we don't know if she wants it on the fountain or around)

Brainstorm

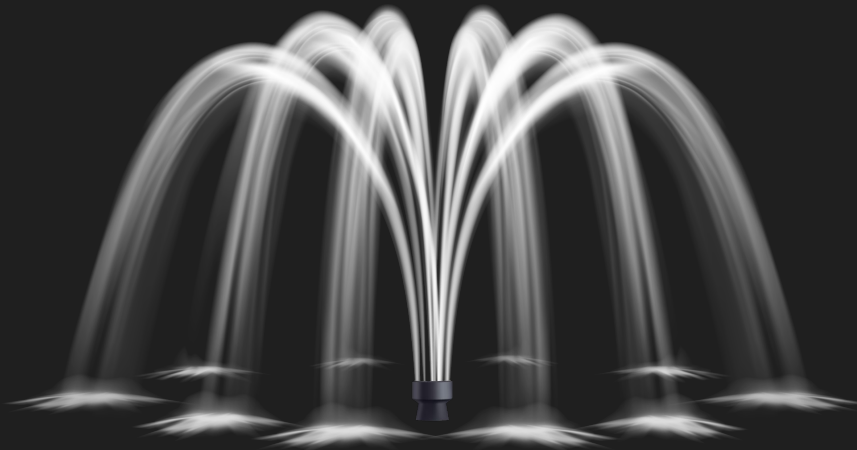
Elements that are needed

Forge Garden: Water Feature



Abalone Shells

Aesthetics



Water Feature

Core of Project



Uninterruptible Power Supply (UPS) with solar

Additional Benefit



Plant Bed (provided)

Brainstorm

Forge Garden: Water Feature



Brainstorm

Forge Garden: Water Feature



Brainstorm

Forge Garden: Water Feature



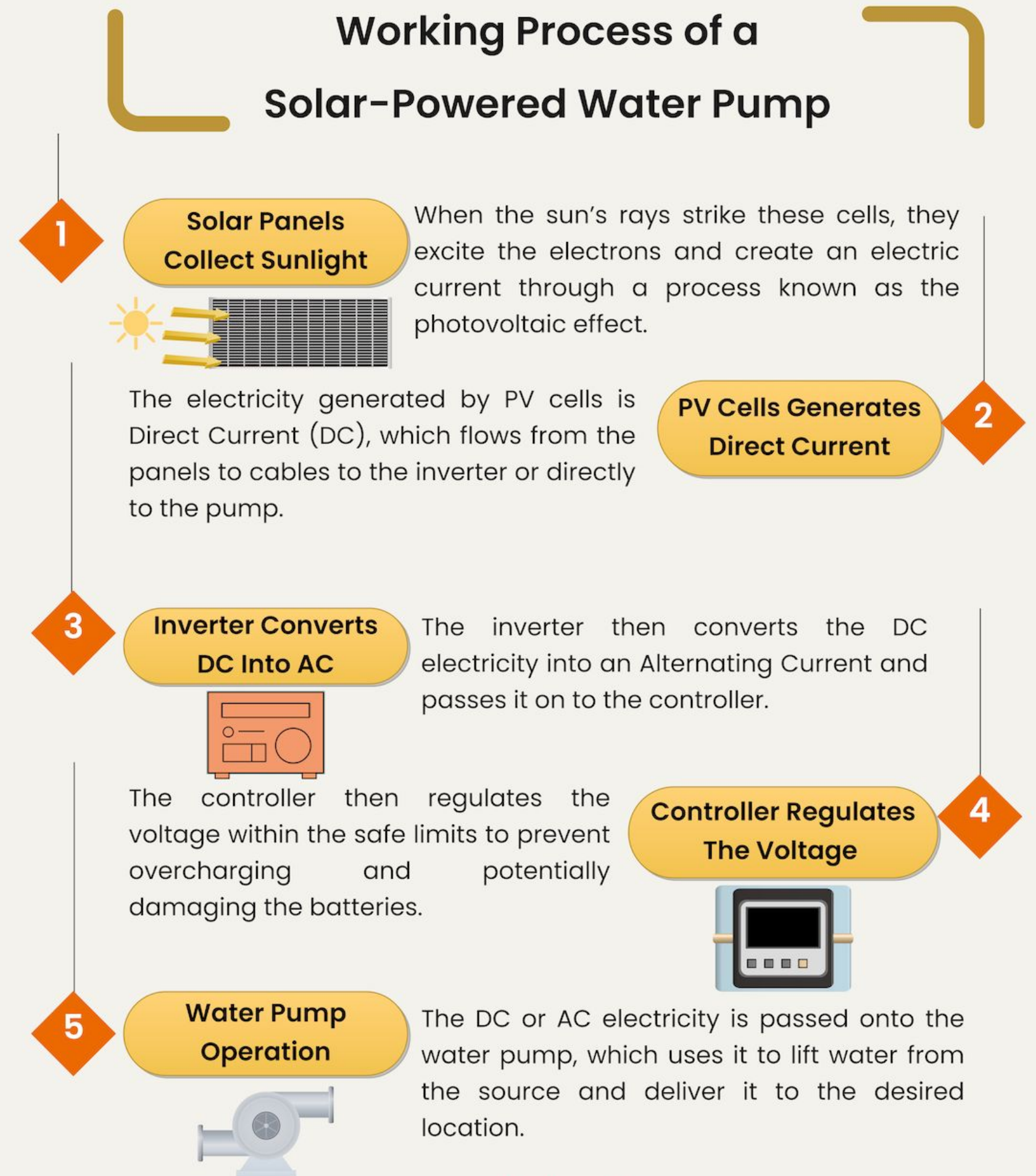
Proposed Plan

Battery Cap in Wh x Battery Efficiency / Wattage = Total Time

Runtime Calculation will differ for each pump
Consider the efficiency, and power factor of
the battery.

Consider the solar panel conversion factor.

Source



Cost Analysis: Battery w/ Panels



\$109.99

- + Affordable
- + 22,500 mah



\$319.98

- + Longevity
- + 90,000 mah

Cost Analysis: Water Features



\$43.39

- + 16" x 27"
- + Rustic Barrel
- Might not be what they're looking for



\$62.57

- + More sound
- Needs water underneath



\$99.35

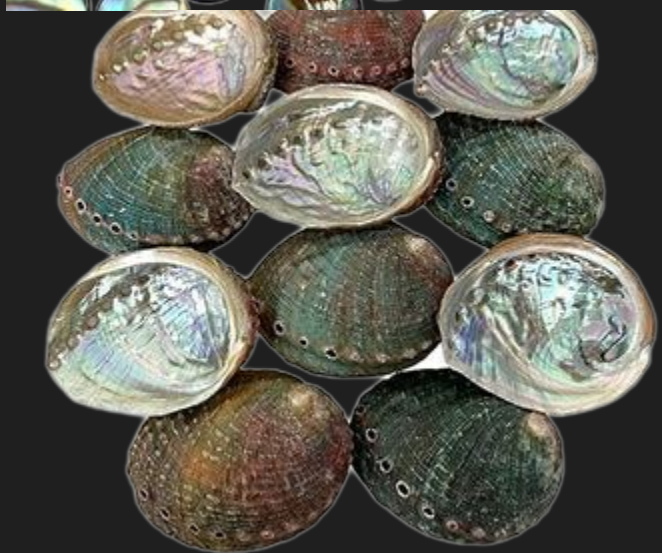
- + Wood
- Pricy

Cost Analysis: Abalone Shell



\$15.99

- + Cheap
- + More reflections and coverage



\$28.99

- + Full shells
- Pricy



\$17.97

- + Many Shells
- Looks less like abalone
- Less shiny

Alternate: DIY Build a Water Feature



Material Estimated Costs (from video):

Pump: \$34.28

¼ Tube: \$11.99

Water Holding: \$71.95

Screws: \$9.32

Total cost: ~\$127.54

Note: This price does not include the renewable energy