

Rainwater Harvesting System

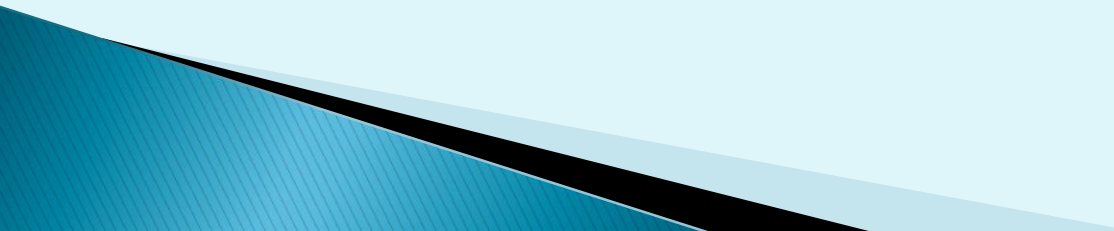
WWU

Andrew Donaldson

Britni Gilliland

Vince Mclaughlin

Presentation Outline

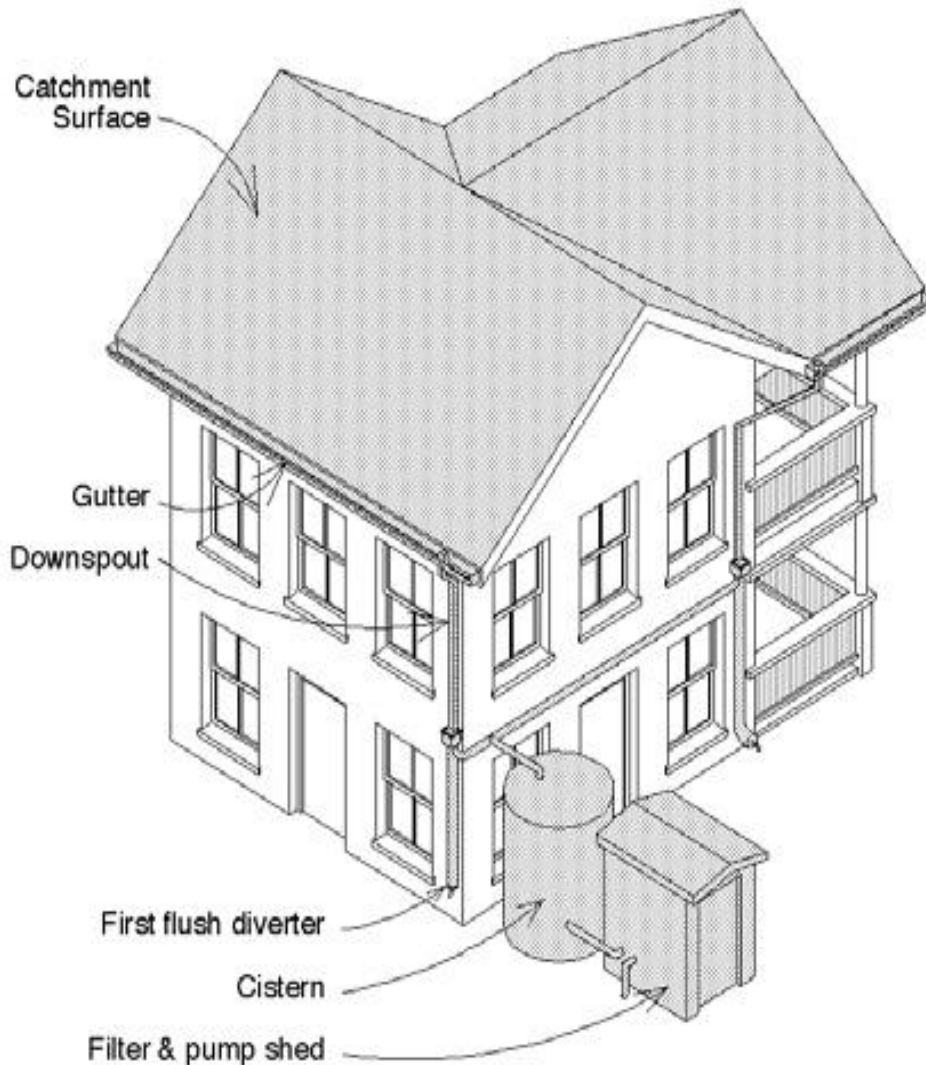
- ▶ Carver Gym Possible Renovation
 - ▶ Rainwater Harvesting System
 - ▶ Western's Rainy Climate
 - ▶ Lake Whatcom Conservation
 - ▶ Case Study
- 

Carver Gym Renovation

- ▶ \$13,000 for 2009 to 2010.
- ▶ 16,538,280 gallons of water
- ▶ Preliminary 2011–2013
- ▶ Construction 2013–2015



Rainwater Harvesting System



- ▶ Collect rainwater from roof
- ▶ Toilet use and irrigation
- ▶ Simple:
 - Collection
 - Treatment
 - Storage
 - Distribution

Western's Rainy Climate

- 30–60” per year
 - (Department of Ecology)
- Mission: Harvest rainwater for a useful, economical and sustainable purpose.



Lake Whatcom Conservation

- ▶ Drinking water for 95,000 people
- ▶ Nooksack Diversion Dam
- ▶ Quality Concerns
- ▶ Reservoir with motorized boats



Case Study

- ▶ **Portland State University**

- ▶ <http://www.water.siemens.com/en/videos/water-recycle-reuse/Pages/portland-state-going-green.aspx#content-zone>

- ▶ \$62,000 system cost

- ▶ Projected savings: 110,000 gallons of water

- ▶ \$1,000 in water/sewer savings

- ▶ 25% storm water reduction

- ▶ LEED

Support Rainwater Harvesting



- Move closer to independent resource management

