

### Hayden Residence

High desert residential system and landscape







#### Hayden Residence Project Overview

Underground active system, passive collection in landscape

• Industry/Sector: residential

• Client: private homeowners

• Location: Prescott, Arizona

• Completion: 2007, 2012

• **Description:** We ruled out above-ground tanks because of limited space and owner preference. Matching the existing grade, the new landscape and garden was constructed on top of the tank system. We selected the Eco-Rain system for its strength and flexibility. We capped the space with 2 ft. of topsoil for plantings and hardscape. Large trees were excluded from the tank footprint. Internal, 3-in. roof drains were intercepted just above grade with custom rainheads. Tank volume was dictated by landscape water budget.



#### Hayden Residence Design Data

- Water use: landscape irrigation
- Annual average rainfall: 14 in. (historically 18 in.)
- Available roof area: 1,500 sq. ft.
- Roof material: EPDM and pre-finished metal
- Hardscape material: pre-cast pavers

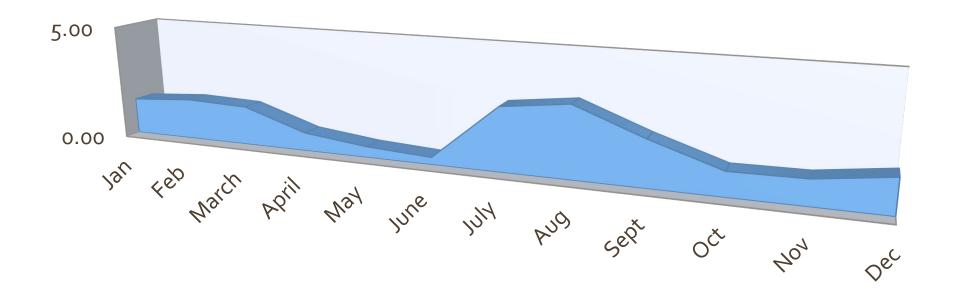


#### Hayden Residence Rainwater System

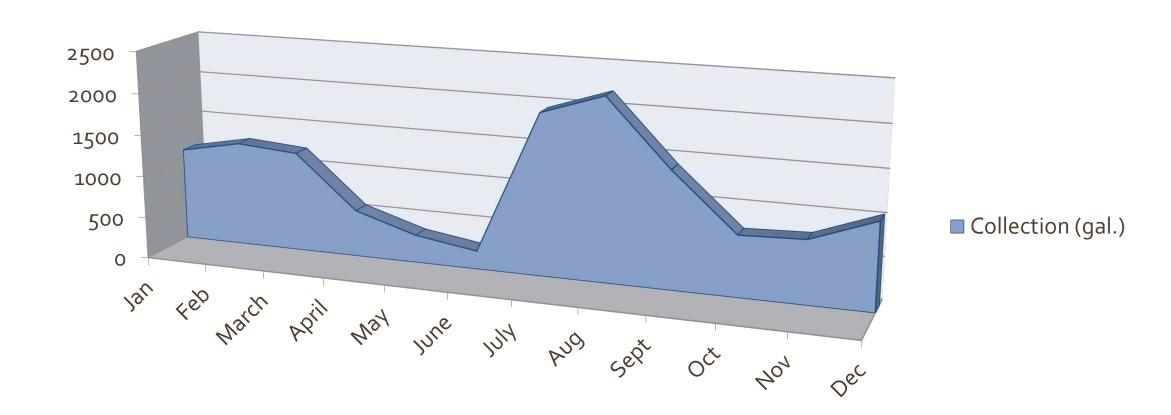
- Storage: 8,000 gal.
- **System**: underground EPDM-lined EcoRain system
- Pump: 1.0 hp Grundfos in mechanical box
- Roof and surface conveyance: wet
- Irrigation: gravity
- Overflow: landscape



# Hayden Residence Average Annual Precipitation (in.)



# Hayden Residence Collection Potential (gal.)

















### Hayden Residence *Team*

• **Designer**: TBK Environmental Design

• Installer: Skywater

• Other Consultants: High Desert Rain Catchment





### Skywater

P.O. Box 2100 Prescott, Arizona 86302 928-445-3515

skywaterarizona.com

