



Projects and Activities Thu Oct 19 21:15:36 HST 2017

|                                      |  |
|--------------------------------------|--|
| <b>Name</b>                          | Effect of Groundwater Pumping and Climate Change on Anchialine Ponds in West Hawaii  |
| Capability Area: Variability/Changes | <ul style="list-style-type: none"> <li>- Understanding Climate Variability and Change</li> <li>- Research/Development</li> </ul>   |
| ECV                                  | <ul style="list-style-type: none"> <li>- Surface (e.g., temp, precip, wind)</li> <li>- (e.g., surface water, glaciers and ice caps, land cover, biomass)</li> </ul>  |
| Timeframe                            | - Multi-decadal (scenarios)  |
| Status                               | - Ongoing  |
| Focus Area                           | <ul style="list-style-type: none"> <li>- Fresh Water Resources and Drought</li> <li>- Coastal Inundation/Sea Level Rise, Extreme Weather, and Community Resilience</li> <li>- Marine and Terrestrial Ecosystems</li> </ul>   |
| Regions                              | <ul style="list-style-type: none"> <li>- Central North Pacific</li> <li>- State Of Hawaii</li> </ul>   |
| Description                          | Experimental tests of tolerances native Hawaiian damselflies and shrimp to a range of salinity. As sea level rises and/or precipitation and groundwater flows decrease in West Hawaii, the ability of native pool fauna to survive in anchialine pools will depend partly on salinity tolerance. Use experimental data on the sensitivity of aquatic invertebrates in anchialine ponds to assess how climate change will affect their habitat. |
| Lead Agencies                        | USGS/PIERC, NPS, UC Berkeley   |
| Contacts                             | David Foote, DFoote@usgs.gov   |
| Partnering Agencies                  | PICCC  |
| Projected Timelines                  | 1994-2014  |