

FSPR Volunteer Service/Activity Description

Wells and hydrological monitoring:

Description: Locate and visit BLM wells to record depth to water. Also visit sites along the San Pedro River to test water quality, retrieve samples and record data on survey forms. Using scientific instruments they measure water temperature, acidity level, electrical conductivity, dissolved solids, and collect water samples that are kept on ice for later testing. The water samples are returned to a central point where they are tested for turbidity, coliform bacteria and specifically E-coli contamination. Limit impacts to wildlife and landscape as much as possible.

1. *Location:* BLM wells in the San Pedro Riparian National Conservation Area, specific locations along the San Pedro River determined in project planning
2. *Time/schedule commitments:* Special projects planned and announced in advance, 3 to 4 hour workday or longer depending on project.
3. *Use of government vehicle:* Will be operated by government employee as needed to reach work site. Will ride as passenger in government vehicle to survey location.
4. *Use of personal vehicle:* For volunteer's personal transportation to meeting point.
5. *Tools and equipment:* Well monitoring device, water quality sampling/testing kit, GPS, clipboard and survey forms.
6. *Personal tools and equipment:* Gloves and personal protective clothes and footwear. Drinking water and food/snacks, hat, sunblock.
7. *Skills and abilities needed:* Volunteers record field measurements on pre-printed field forms. Record the name of the sampling site, the time of sample collection, water temperature, electrical conductivity, total dissolved solids, dissolved oxygen and pH readings on the field data form. In addition, record observations of field conditions at the time of the sampling event, including information on evidence of recent flooding, current weather conditions, recent precipitation events, site condition observations, and any field notes or comments. Pictures of each site are taken along with the observations. Walking in riverbeds, wading in deep water, and hiking on rugged, natural terrain.
8. *Training and certifications:* Knowledge of well monitoring techniques and equipment, water quality sampling and testing procedures and equipment. Recognizing potential hazards encountered along trails and throughout landscape.
9. *Level of physical activity:* Moderately strenuous due to walking, hiking through brush.
10. *Hazards or risks:* Walking outdoors on natural terrain, uneven and rough ground, sometimes in remote locations. Potential cuts and punctures, potential pathogens, hazardous materials. Hazardous materials will be reported to BLM representative on site and will not be handled or removed by volunteers. Encounters with stinging and biting insects, wildlife, allergens (dust, pollen). Encounters with undocumented immigrants, drug smugglers, hunters.
11. *COVID-19 preventative measures:* Volunteers are recommended to check on the latest CDC guidance at the following website: <https://www.cdc.gov/coronavirus/2019-ncov/index.html>