

General	Spring Name _____ Springs Online ID# _____ ¹ Spring Type Primary _____ Secondary _____		Survey	Date _____ Begin Time _____ End Time _____
	Country _____ State _____ County _____ ² Sensitivity _____			Project _____ Protocol: <i>Lev. 1 / Other</i> _____
Land Unit _____ Land Unit Detail _____		Surveyors _____		
Georef Source: <i>GPS / Map</i> Device _____ Datum _____		Weather _____ Recent rain _____		
UTM Zone _____ Easting _____ Northing _____		____ No current/ recent precip. _____ Snow on ground _____		
Georef	Latitude _____ Longitude _____ Elev _____ <i>ft / m</i>			____ Rain during survey _____ Snow/ hail/ sleet during survey
	EPE _____ <i>ft or m</i> Comment _____			Survey Notes
Description	Site Description <i>Seepage/ flow emerges from...</i>			
	Access Directions			
Flow				
			<i>Volumetric / Weir / Flume / Other</i>	
Images	Whose Camera Used _____		Photo#	Photo Caption
	Photo#	Photo Caption		

1 Spring Type

Anthropogenic
Cave
Exposure
Fountain
Geyser
Gushet
Hanging Garden
Helocrene
Hillslope
Hypocrene
Limnocrene
Mound-form
Rheocrene

2 Sensitivity

None - Spring Online users with Land Unit and Project permissions can see all data
Location - Users need extra permissions to see spring location
Survey - Users need extra permissions to see survey data
Both - Users need extra permissions to see spring location and survey data

3 Land Unit

BLM
DOE
NPS
Private
State
Tribal
USFS
Other

4 Georeference Source

GPS
Map
Other

5 Surface Type

BW- Backwall
C- Cave/Tunnel
CH- Channel
CS- Colluvial slope
HGC- High Grad. Cienega (>16°)
LGC- Low Grad. Cienega(<16°)
Mad- Madiculous Flow
P- Pool
PM- Pool Margin
SB- Sloping Bedrock
SZ- Spray Zone
SM- Spring Mound
TE- Terrace
Oth- Other/anthropogenic

6 Surface Subtype (optional)

BW: Wet, Dry
CH: Riffle, Run, Margin, Eph
CS: Wet, Dry
PO: Wet, Dry
SB: Wet, Dry
TE: LRZ, MRZ, URZ, HRZ
UPL,LRZMRZ,LRZURZ,
MRZURZ, HRZMRZ
All: Anthro (human influence)

7 Slope Variability

Low, Medium, High

8 Soil Moisture

0 - Dry, no soil moisture

1 - Soil mostly dry, few slightly moist patches
2 - Soil mostly slightly moist. few dry patches

3 - Soil moist, with little moisture

4 - Soil mostly moist, with few wetter patches where soil easily sticks together
5 - Soil mostly wet with soil easily sticking together, few drier patches

6 - Soil wet, soil easily sticks together

7 - Some wet patches of soil (easily sticking together) and some saturated soil patches

8 - Soil saturated, added water does not soak up, but there is little to no standing or flowing water

9 - Substantial standing or flowing water, but less than 100% of microhabitat is inundated

10 - Inundated, 100% standing or flowing water, with no emergent vegetation or rocks

9 Substrate

1- clay
2- silt
3- sand (0.1-1mm)
4- fine gravel (1-10 mm)
5- coarse gravel (1-10 cm)
6- cobble/ small boulders (10-100 cm)
7- large boulders (>1 m)
8- bedrock
Organic Soil, including peat. Not including litter.
Other/anthropogenic

10 Lifestage

Adult
Egg
Exuvia
Immature
Larvae
Mixed
Other
Pupae
Shell

11 Habitat

AQ - Aquatic
T - Terrestrial

12 Method (Invertebrates)

Spot
Benthic

13 Detection Type (Vertebrates)

Call
Observed
Sign
Reported (by others)
Other

14 Str (Vegetation Cover Codes)

NV- Nonvascular (moss, liverworts, lichen)
GC- Ground Cover (all non-aquatic herbaceous veg, including grasses and forbs)

For woody shrubs and trees:

SC- Shrub Cover (all cover in 0-4 m strata)
MC- Midcanopy (all cover in 4-10 m strata)
TC- Tall Canopy Cover (>10 m)
BC- Basal Cover (record if >1% of cover)

15 Emergence Environ/Detail

Cave (Subterranean)
Subaerial
Subglacial
Subaqueous-lentic freshwater
Subaqueous-lotic freshwater
Subaqueous-estuarine
Subaqueous-marine

16 Source Geomorphology

Contact Spring
Fracture Spring
Seepage or filtration
Tubular Spring

17 Flow Force Mechanism

Anthropogenic
Artesian
Geothermal
Gravity
Other

18/19 Parent Rock Type/Subtype

*only a selection of subtypes is listed

Igneous

andesite
basalt
dacite
gabbro
granite
peridotite
rhyolite

Metamorphic

gneiss
marble
quartzite
slate
schist

Sedimentary

conglomerate
dolomite
evaporates
limestone
mudstone
sandstone
shale
siltstone

Unconsolidated

alluvium
ash/ loess mixture
talus deposit

Combination

20 Channel Dynamics

Mixed runoff/spring dominated
Runoff dominated
Spring dominated
N/A

21 Flow Consistency

Perennial
Ephemeral (GDE Intermittent)
Unknown

22 Flow Measurement Technique

Volumetric (timed volume capture)
Current meter
Weir
Flume
Other