

2005 California Envirothon
Current Issue Station Test
Total points = 100
Time allotted = 35 minutes

Please write your team number on the top of each page. You may unstaple the test and work on the questions in any order; however, pages should be returned to the correct order when the test is turned in. You may chose to split your team and work on several questions at once or work on them together. For multiple-choice mark the letter that describes the best answer or completes the sentence most accurately. For True or False questions, circle the “True” only if the statement is completely true. Please show all work or thought process, as you may receive partial credit. There are no trick questions in this test.

1. The term rain shadow refers to **(2 points)**
 - a) periods of time during which there is a lack of rainfall
 - b) dry regions on the leeward side of mountain ranges
 - c) areas that are characteristic of the western slopes and margins of the Sierra Nevada Mountain and California’s Coast Ranges.
 - d) windward slopes of mountains.

2. Climate is **(2 points)**
 - a) the weather of a region
 - b) the short-term conditions of the atmosphere
 - c) the long-term conditions of the atmosphere
 - d) a reference to temperature patterns of a region

3. (True or False) An aquifer is a zone below the surface of the earth capable of producing water. **(2 points)**

4. Before Friant Dam, the floodplain of the Lower San Joaquin River was about _____ miles wide. **(2 points)**

a) 1	c) 3	e) 10
b) 2	d) 5	

5. (True or False) The riparian forest along the Lower San Joaquin River in the trough of the San Joaquin Valley lies in the Lower Sonoran life zone. **(2 points)**

6. (True or False) As agriculture increases, natural vegetation decreases. **(2 points)**

7. (True or False) The natural condition that makes an area a desert is its temperature. **(2 points)**

8. (True or False) The Central Valley Project is a federal project that was authorized by congress before World War II. **(2 Points)**

9. (True or False) Beaver, the largest rodent native to North America, is a common native inhabitant of the San Joaquin River. **(2 Points)**

10. (True or False) The Eastside Bypass is a flood control project built by the State of California. **(2 Points)**

11. From the list below, circle the 11 cultural features that are part of the Central Valley Project. (11 Points)

- Contra Costa Canal
- Lake McClure
- Shasta Dam and Reservoir
- Friant Dam
- Madera Canal
- Central California Irrigation District Main Canal
- San Luis National Wildlife Refuge
- Millerton Lake
- New Melones Dam and Reservoir
- Folsom Dam and Reservoir
- Corning Canal
- Pine Flat Dam and Reservoir
- Don Pedro Reservoir
- Trinity Dam and Reservoir
- Friant Kern Canal
- Tracy Pumping Plant
- Mendota Pool

12. From the list below, circle the nine natural features associated with San Joaquin Valley rivers. (9 points)

- Meanders
- Natural levees
- Yazoo streams
- Bottom lands
- Check dams
- Vernal pools
- Abandoned channels
- Deltas
- Floodplains
- Potholes
- Cross Channels
- Ditches

13. From the list below, circle the six **native** trees that inhabit the San Joaquin River riparian corridor. (6 points)

- Black walnut, *Juglans californica* var. *hindsii*
- Blue gum, *Eucalyptus globulus*
- Box elder, *Acer negundo*
- Cottonwood, *Populus fremontii*
- Coulter pine, *Pinus coulteri*
- Wild fig, *Ficus carica*
- Goodding's willow, *Salix gooddingii*
- Incense cedar, *Calocedrus decurrens*
- Lombardy poplar, *Populus nigra*
- Madrone, *Arbutus menziesii*
- Modesto ash, *Fraxinus velutina*
- Oregon ash, *Fraxinus latifolia*
- Pecan, *Carya illinoensis*
- Tree of heaven, *Ailanthus altissima*
- Valley oak, *Quercus lobata*
- Weeping willow, *Salix babylonica*

14. From the list below, circle the six **native** shrubs, vines, or small trees that inhabit the San Joaquin River riparian corridor (6 points)

- Blue elderberry, *Sambucus mexicana*
- Button willow, *Cephalanthus occidentalis*
- California blackberry, *Rubus vitifolius*
- California juniper, *Juniperus californica*
- Himalaya blackberry, *Rubus procerus*
- Mugwort, *Artemisia douglasiana*
- Osage orange, *Maclura pomifera*
- Sandbar willow, *Salix hindsiana*
- China berry, *Melia azedarach*
- Vine maple, *Acer circinatum*

15. Name the two canals that transport water north and south from Millerton Lake. **(6 points)**

1) _____

2) _____

16. Aggregate mining has occurred at various locations along the San Joaquin River. Explain the natural process that results in deposition of aggregates. **(10 points)**

17. Write the number from Test Map # 1 next to the natural landscape feature listed below. **(8 points)**

_____ Upper San Joaquin River

_____ Kern River

_____ Merced River

_____ Panoche Creek

_____ Kern Lake Basin

_____ Fresno River

_____ Tuolumne River

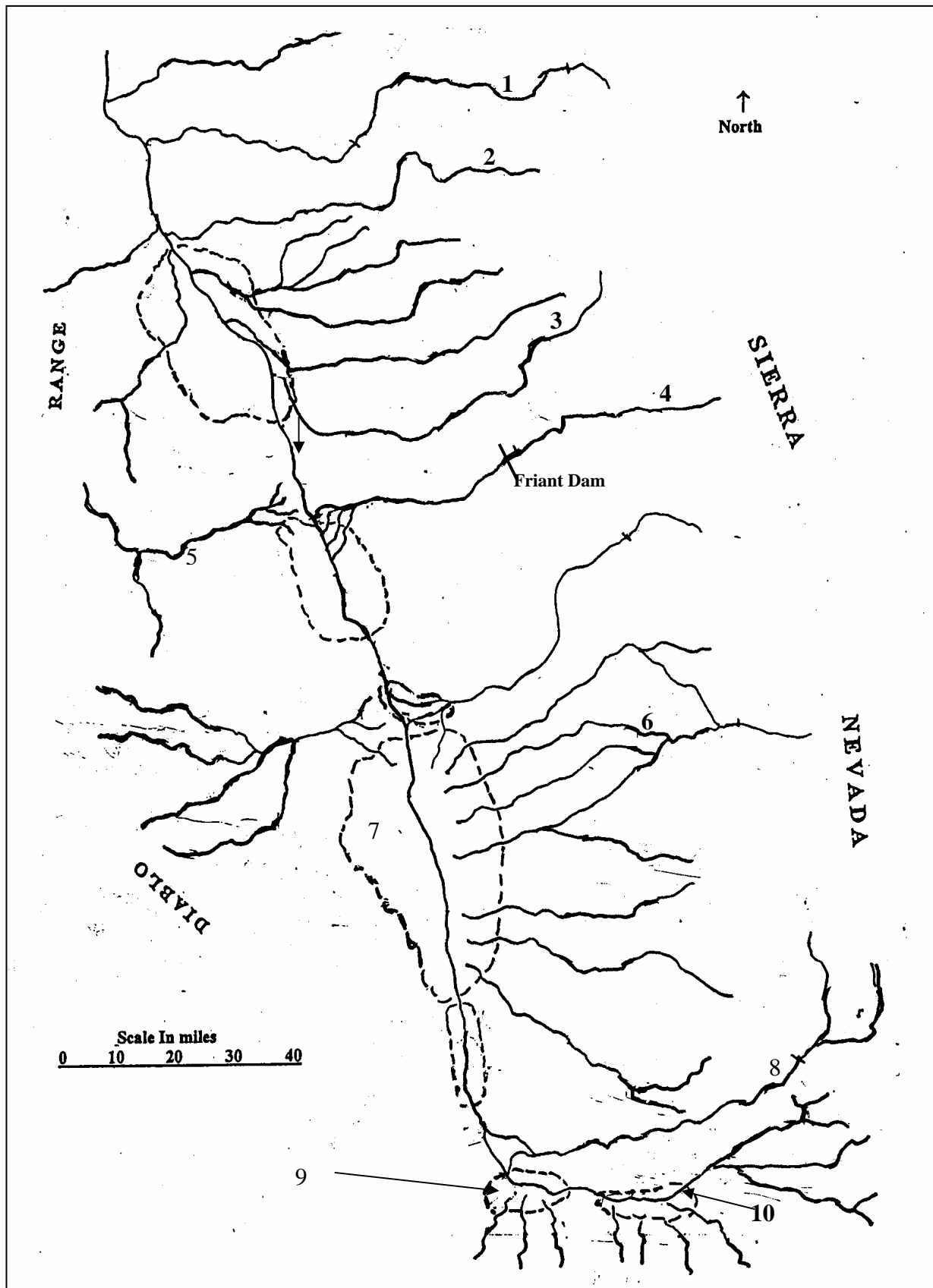
_____ Kaweah River

18. Briefly describe the two natural landscape features listed. **(8 Points)**

1) Upper San Joaquin River: _____

2) Kaweah River: _____

Test Map # 1



Team # _____

19. Write the number from Test Map #2 next to the cultural landscape feature listed below. **(8 Points)**

_____ Lake McClure

_____ Don Pedro Reservoir

_____ New Melones Reservoir

_____ Pine Flat Dam

_____ Delta Mendota Canal

_____ Millerton Lake

_____ Friant Dam

_____ Mendota Pool

20. Briefly describe how the two cultural landscape features listed below have influenced human settlement in the San Joaquin Valley. **(8 Points)**

1) Friant Dam: _____

2) Eastside Bypass: _____

Test Map #2

