

# Quiz 9: Applied Spatial Analysis- Drought and Agriculture, Genetic Conservation

<b>Due</b> Nov 3 at 4:15pm	<b>Points</b> 15	<b>Questions</b> 6
<b>Available</b> Nov 2 at 4:15pm - Nov 3 at 4:15pm 24 hours		<b>Time Limit</b> 60 Minutes

This quiz was locked Nov 3 at 4:15pm.

## Attempt History

	Attempt	Time	Score
LATEST	<a href="#">Attempt 1</a>	53 minutes	15 out of 15

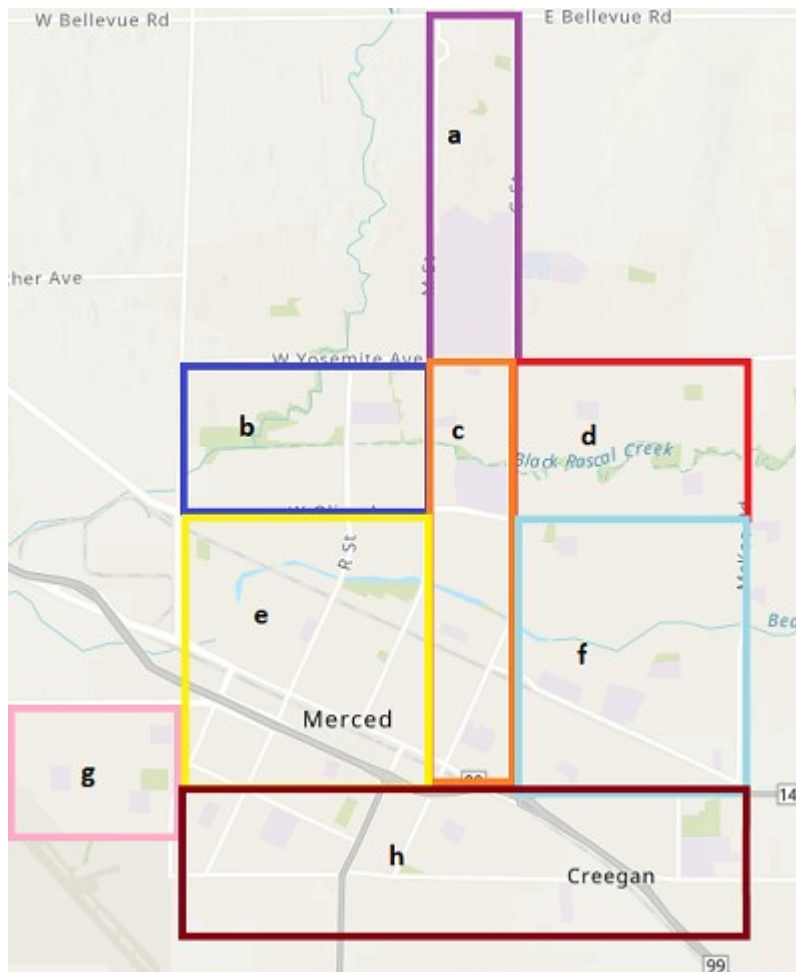
Score for this quiz: **15** out of 15  
Submitted Nov 2 at 10:35pm  
This attempt took 53 minutes.

Question 1

2 / 2 pts

Local scientists are exploring trends in public health concerns in the Merced area - particularly exposure to lead paint in older homes.

What is the spatial variability analysis approach if we compare area A to area B?



Correct!

- ☒ Across
- ☐ Within
- ☐ Nearest Neighbor
- ☐ Diagonal

## Question 2

2 / 2 pts

When Dr. Moyers and her team ran their analysis on spatial variation across an almond orchard, they used machine learning. They did not set

specific criteria for the analysis, and the software output two zones- Zone A and Zone B. This is an example of \_\_\_\_\_ classification.

**Correct!**

unsupervised

**Correct Answers**

unsupervised

Unsupervised

### Question 3

3 / 3 pts

Using complete sentences, describe one (1) contributing factor to California's unbalanced water budget.

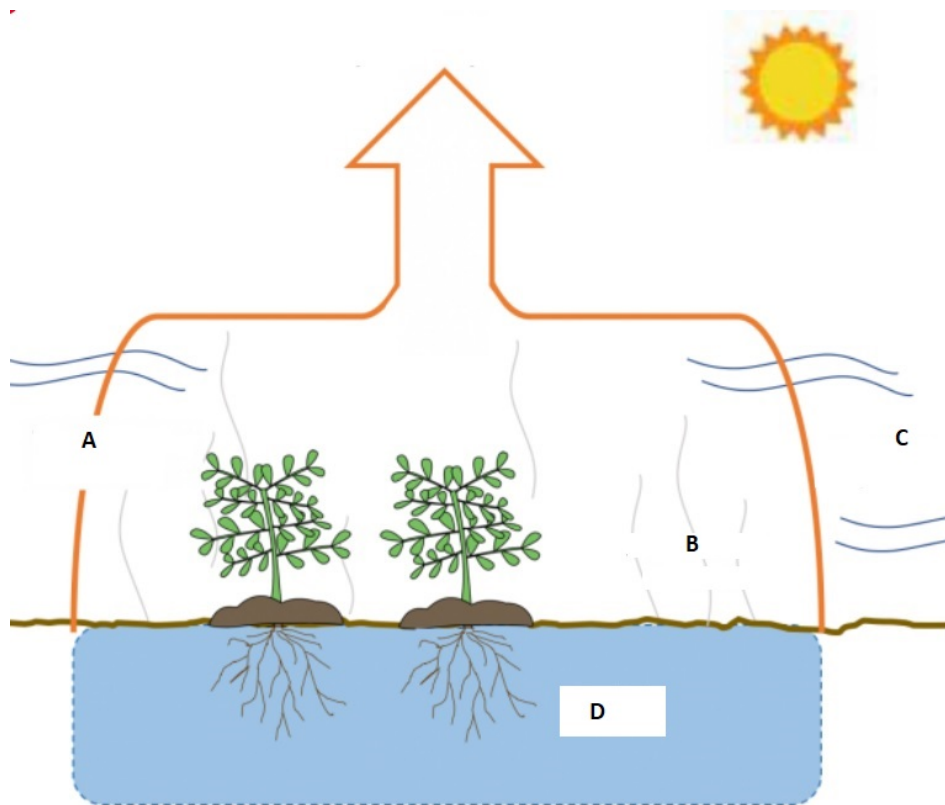
Your Answer:

Immediate drought response, water quality and ecosystem restoration are factors contributing to California's unbalanced water budget.

### Question 4

2 / 2 pts

Match the labelled letter in the evapotranspiration diagram below with its corresponding cycle component



Correct!

A

Transpiration



Correct!

B

Evaporation



Correct!

C

Humidity and Temperature



Correct!

D

Available soil water



Other Incorrect Match Options:

- Transposition
- Transylvania
- Evaluation

Question 5

2 / 2 pts

Midterm #2 is this coming Wednesday, 11/9.

List two ways you plan to study for the midterm. Describe how these approaches will reinforce knowledge from lecture and reading content.

Your Answer:

I will review the lecture slides, past quizzes and the assigned textbook. These will reinforce my learning, because I can cross reference information between the three sources and gain a better understanding of reviewed concepts.

### Question 6

4 / 4 pts

Dr. Peek's work featured drought analysis at county and HUC (watershed) scales. Explain why a scientist would need to analyze data at a county ("socio-political") scale and a watershed scale?

Your Answer:

It's important for scientists to analyze data at a county scale and a watershed scale so as to better simulate the natural processes, unaffected by man. Analyzing data using the watershed scale allows scientists to better classify hydrologic units and what subdivision they belong to, which is usually a region or zone devoid of a river system. Analyzing data at a county ("socio-political") is analyzing how the data could affect the local politics, in the case for water, politics is usually affected by water's availability, as it is an important human need, so analyzing the drought at a county, measures the human interference with water.

Quiz Score: **15** out of 15