

Name _____

Using the reading, abstract and poster materials available on the class poster project web page, answer the following review questions regarding Water Resources Issues in the Willamette Valley.

http://www.wou.edu/las/physci/taylor/es476_hydro/poster_2018.htm

1. List and discuss the general climate models that have been developed for the Pacific Northwest, and Willamette Valley region through the years 2000-2100. In your answer, include the current model predictions for: (A) Air Temperature, (B) Overall precipitation, (C) snow vs. rain inputs vs. elevation trends, (D) surface runoff during the wet and dry seasons. ANSWER WILL BE IN THE 300-500 WORD RANGE, USE CUT-AND-PASTE FIGURES FROM THE POSTER PROJECT TO SUPPORT YOUR ANSWER.
2. Given the predicted climate changes in the coming decades and expected population growth, discuss the risk potential for summer drought, wild fires and changes in forest composition in the Willamette Valley region. In your answer, include a discussion of agricultural economics in relation to drought cycles and seasonal irrigation patterns. . ANSWER WILL BE IN THE 300-500 WORD RANGE, USE CUT-AND-PASTE FIGURES FROM THE POSTER PROJECT TO SUPPORT YOUR ANSWER.
3. Discuss the variables associated with the linkage between forest fires, solar radiation flux, and snow pack trends in the Pacific Northwest. In your answer include a discussion linking concepts of albedo / ground absorption, seasonal land temperatures, predicted seasonal changes in snowpack ablation, and predicted seasonal changes in surface runoff hydrography in the Western Cascades. . ANSWER WILL BE IN THE 300-500 WORD RANGE, USE CUT-AND-PASTE FIGURES FROM THE POSTER PROJECT TO SUPPORT YOUR ANSWER.