Unit 6 Assignment:

Water Availability and Pollution

Unit outcome addressed in this Assignment:

- Explain the importance of the availability of clean water for agriculture and food production.

Course outcomes assessed with this Assignment:

- **NS435-4**: Describe the significance of water availability and pollution management on food production.
- **GEL 2.3**: Solve real-world problems using mathematical skills.

Instructions

For this Assignment you will assess drought conditions and their effects on agriculture.

To do so, you will utilize data and resources available from the U.S. Drought Portal (http://www.drought.gov/drought/). This organization monitors climate conditions, allowing users to predict potential impacts of drought and plan accordingly.

To access local precipitation information from your area, you will utilize the U.S. Drought Portal here: http://drought.rcc-acis.org/

- Click on the dropdown box beside Multi-Station and select Monthly Data
- Under date, select the current date
- Under variable, select precipitation
- Under summary, select sum
- Under station selection, select county, then your state and county
- Select Go

This will give you the total precipitation for the county and month you selected

- Repeat this process, and select the same month but *10 years earlier*

- Discuss how precipitation amounts have changed in the area where you live over the last 10 years. By what percentage has rainfall changed?
o What additional data would you need to collect to determine if this change in precipitation was significant?
o What types of positive and negative effects could this precipitation change have on agricultural crops?
o Explain the importance of the availability of clean water for agriculture and food production.
o Discuss various water pollution management techniques that can be used to increase food production.
o Discuss at least one agency in your State which provides assistance to those experiencing drought conditions.

Requirements
- This Assignment needs to be 1–2 pages in length, written in APA format, and include at least two references.
- Utilize the Kaplan Writing Center and the Writing Center Resources found in Doc Sharing.

Submitting Your Work

Put your responses in a Word document. Save it in a location and with the proper naming convention: username-CourseName-section-Unit 6_Assignment.doc (username is your Kaplan username, section is your course section, 6 is your Unit number). When you are ready to submit it, go to the Dropbox and complete the steps below:

1. Click the link that says “Submit an Assignment.”
2. In the “Submit to Basket” menu, select Unit 6: Assignment.
3. In the “Comments” field, make sure to add at least the title of your paper.
4. Click the “Add Attachments” button.
5. Follow the steps listed to attach your Word document.

To view your graded work, come back to the Dropbox or go to the Gradebook after your instructor has evaluated it. Make sure that you save a copy of your submitted project.

Unit 6 Assignment Grading Rubric = 90 points

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<thead>
<tr>
<th>Assignment Requirements</th>
<th>Points possible</th>
<th>Points earned by student</th>
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<tr>
<td>Discussion Prompt</td>
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<tr>
<td>Discuss how precipitation amounts have changed in the area where you live over the last 10 years and the percentage rainfall has changed</td>
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<td>Discuss the additional data you need to collect to determine if this change in precipitation was significant</td>
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<td>Discuss the types of positive and negative effects this precipitation change could have on agricultural crops</td>
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<td>Explain the importance of the availability of clean water for agriculture and food production</td>
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<td>Discuss various water pollution management techniques that can be used to increase food production</td>
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<td>Discuss at least one agency in your State which provides assistance to those experiencing drought conditions</td>
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<td>Ideas supported with research</td>
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<td><strong>Total (Sum of all points)</strong></td>
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**Points deducted for spelling, grammar, and/or APA errors.**

**Adjusted total points**

**Instructor Feedback:**