**Flooding**

Multiple Choice

1. Clarify what happens in a flood.
2. Water in rivers overflows into the surrounding land.
3. Water in lakes evaporates, leaving an arid salt pan.
4. High temperatures cause rivers and lakes to dry out.
5. Water in rivers freezes, creating a glacier.
6. Identify the name given to water that flows across land as a result of flooding.
7. Run-off
8. “Oops”
9. Sleet
10. Tears
11. Identify what dangerous things floods can bring into a populated area, like the city of Brisbane. Select all that apply.

Select ALL correct options

1. Sediments
2. Nutrients
3. River predators
4. Coral Reefs
5. Flooding can bring large volumes of water into populated areas. Even after the water has stopped flowing, it can still pose many hazards to people and other organisms.

Identify which of these options are examples of such hazards. Select all that apply.

Select ALL correct options

1. Plankton
2. Radiation
3. Diseases
4. Drowning
5. Identify how floods can be beneficial for some ecosystems.

Select all that apply.

Select ALL correct options

1. Drought-resistant plants are able to germinate.
2. More animals are likely to populate a usually dry area.
3. Animals have to migrate away from the ecosystem.
4. Animals cannot easily live in areas which are saturated.
5. State whether the sentence below is true or false.

"Floods have only negative effects on ecosystems."

1. True
2. False
3. State whether the sentence below is true or false.

"Lake Eyre is the largest lake in Australia when it's filled by a flooding event."

1. True
2. False
3. State whether the sentence below is true or false.

"Run-off from floods carries large amounts of sediment, which can cover plants and stop them from producing food."

1. True
2. False
3. State whether the sentence below is true or false.

"Excess nutrients in waterways can lead to the death of many organisms."

1. True
2. False

Fill in the Blanks

1. Use the words below to fill in the blanks.

**producers, consumers, removal, algal blooms, biomes**

Sediments bury and choke \_\_\_\_\_\_\_\_\_\_\_\_\_ , limiting their ability to gain energy from photosynthesis and fuel the food web. Pesticides are poisonous to many organisms and can accumulate in the bodies of \_\_\_\_\_\_\_\_\_\_\_\_\_\_, eventually killing them.

Excess nutrients can cause algae to grow uncontrollably into \_\_\_\_\_\_\_\_\_\_\_\_\_\_ , limiting the light and oxygen available to organisms in the water below them. All these factors lead to the death and \_\_\_\_\_\_\_\_\_\_\_\_ of organisms from the food web.

1. Use the words below to fill in the blanks.

**And, salt pan, ephemeral, biodiversity, water**

Occasional flooding can be useful in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ environments. It provides the \_\_\_\_\_\_\_\_\_\_\_\_\_ needed for plants in drought-prone areas to germinate and grow. Some plants only germinate during times of flooding - they are described as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. New plant growth attracts consumers, increasing the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ present in the environment. An example of this is the flooding of Lake Eyre, a normally dry \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, after the Queensland Floods in 2010 and 2011.

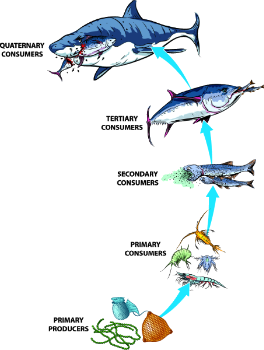
Short Answer

1. **Flooding is a major event that can have major effects on the environment around it, and to the life in that area.**

**Identify the effects flooding may have on ecosystems.**

**Compare these effects in a desert and a river system.**

1. **Flooding can have major effects on the surrounding ecosystem, that extend beyond just the movement of nutrients and water.**



**This diagram shows a food chain that goes from phytoplankton (primary producers) all the way up to great white sharks (quaternary consumers). The phytoplankton use photosynthesis to produce energy, just like plants on land. However, the water above them is occupied by algae, which benefit from nutrients delivered by the run-off from a recent flood.**

**If the algae develop into a large algal bloom, consider what will happen to the food chain shown above. Deduce the likely effects.**