Flooded fields can lead to loss of top soil as well as damage to crops. While little can be done prior to flood situations, prompt action after the flood may help minimize the impact to your crops.

Before a Flood

- Open all drainage ditches.
- Remove any debris from fields and pastures that could injure plants or damage machinery.

After a Flood

- Assess your crops.
  - Determine how much of your crops are water logged (only roots flooded) and fully submerged (entire plants under water).
  - Corn can typically last 12 hours completely submerged if the temperature is above 70 degrees, but up to four days if the weather is cooler.
  - Soybeans can typically last 48 to 96 hours completely submerged. Cooler temperatures allow for a longer survival time.
- Factors affecting the extent of crop damage include:
  - Degree of submergence of plant
  - Weather conditions prior to the flood situation (e.g., temperature)
  - Plant growth stage and height – younger stages are more vulnerable
  - Mud disposition, which stresses plants and reduces photosynthesis
  - Some root death will occur – while new root growth will occur, it will be stunted and therefore subject to greater injury if a dry summer follows
- Be prepared with a rotary hoe to break up the dense surface crusts that may form as soil dries to aid emergence of plants.

- Flooding can cause significant losses of soil nitrogen.
  - If fertilizer had been recently applied to the soil surface, substantial nitrogen loss may occur in runoff.
  - If fertilizer was applied several months ago, loss can occur by denitrification or leaching.
  - Signs of nitrogen loss in plants include the lower leaves yellowing as well as inverted “V” yellowing pattern of leaf tips.
- Monitor for diseases.
  - Flood conditions can increase disease incident in surviving plants.
  - Scout the fields often to determine if and when problems occur.
- Do not use flood damaged or wet feeds until tested.
  - Flood damaged grain always need to be destroyed due to the contaminants that can enter through the water.
  - Good grain on top of the flooded grain MUST be removed from the top or side, not through the damaged grain.
  - Rain damaged grain is likely to contain toxins, as warm wet conditions are ideal for mold growth. Soaked grain will spoil within a day or two at high moisture and summer temperatures.
  - Rain damaged grain can be saved by drying and cleaning. It must be tested for mycotoxins before use.
  - Wet seed grain probably will not be suitable for seed, as wetness causes the seed to germinate.
- Do not feed heated, molded or sour feeds or moldy legume hays (alfalfa, clover) to any livestock.
- Replant considerations. Evaluating whether to replant will depend on:
  - The existing plant stand
  - Distribution of the plant stand
  - Calendar date
  - Weed situation
  - Seed availability of earlier maturing hybrids
  - Cost to replant
  - Yield potential of the existing crop

For more information and resources, see www.Prep4AgThreats.org