Ralph et al. (2025). Water quality fact sheets for production nurseries. https://doi.org/10.25949/JH43-4N56

Storms and Floods

OVERVIEW

- Storms and floods may cause damage to agricultural landscapes, including production nurseries.
- Excess water in the landscape can cause soil erosion, disrupt sediment in water bodies (e.g., earth dams), and damage infrastructure.
- Floodwaters move sediment, nutrients, heavy metals, weeds, and pathogens in catchments (**Figure 1**).

KEY FACTORS

- Storm and flood hazards are complex, with several conditions that can increase the risk of severe impacts, including:
  - Size and severity of storm cells.
  - Presence or absence of hard surfaces to influence runoff in catchments.
  - Storm tracking from the top of a catchment to the bottom (i.e., higher risk in lower catchment), or travelling across the headwaters (i.e., higher risk in upper catchment).
  - Successive storms over several days or weeks.
  - Heavy rainfall after drought.
  - Heavy rainfall after a bushfire.
  - Long periods of heavy rainfall.
  - Intensive land use change or bare soil in a catchment.
  - Coincidence with king tides or storm surges in lower parts of coastal catchments.
  - Proximity to waterways and floodplains.

HIGHLIGHTS

- Storms and floods can threaten the safety and productivity of nurseries.
- Floodwaters move contaminants and pathogens through the landscape.
- Awareness of local risk factors is important, including weather and catchment conditions.
- The NSW State Emergency Service, Bureau of Meteorology, and NSW Government have resources available.

MANAGEMENT

- Resources and current flood warnings are available at the NSW SES website.
- The Bureau of Meteorology has resources available at the Flood Knowledge Centre website.
- The NSW Government's Hazards Near Me app can notify you of local emergencies.
- Flood risk maps and flood management plans are available through local councils.
- Being prepared and having a storm and flood plan in place will promote efficient and appropriate actions during severe weather situations.
- It is very important to consider and understand the location within a catchment (headwaters, middle, or low) when evaluating flood risk.

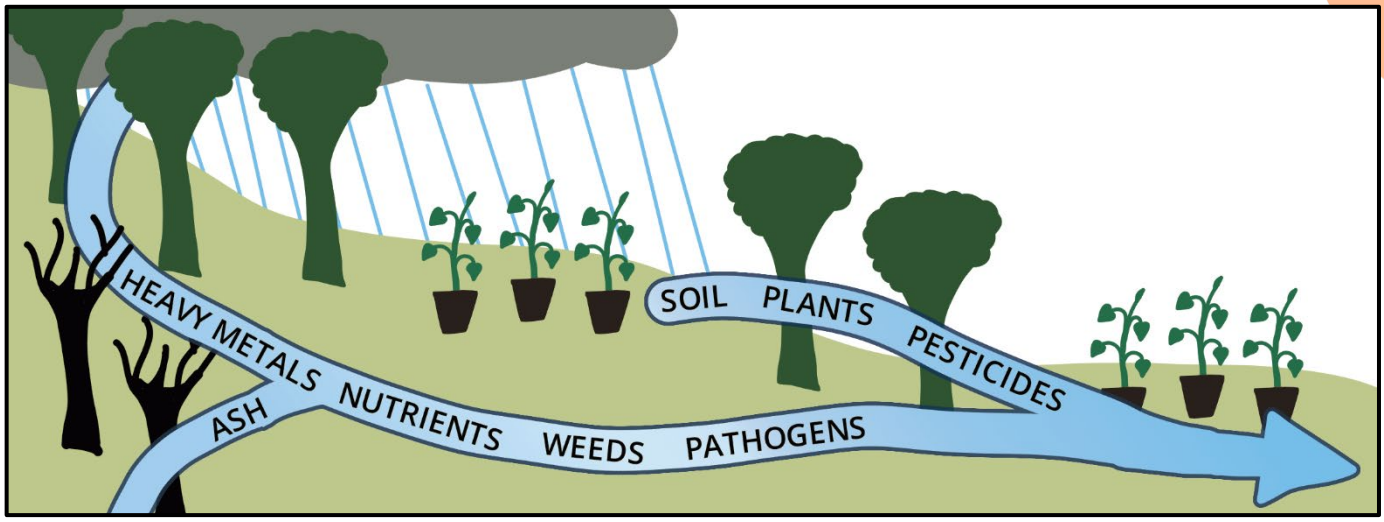

Figure 1. An example of how storms and floods can move overland transporting soil and sediment particles, and contaminants.

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