

Resource Concerns

Ponding, Flooding, Other Excess

Soil

Water

Excess Water

Ponding, Flooding,
Other Excess

Insufficient Water

Water Quality
Degradation

Air

Plants

Animals

Energy

Excess Water - Ponding, Flooding, Other Excess

Surface water or poor subsurface drainage restricts land use and management goals. Wind-blown snow accumulates around and over surface structures, restricting access to humans and animals.

What is it?

Water can flood or pond and restrict plant growth and land use. Water may flow into or around buildings if they are constructed over or near a spring or seep. If the soil has a dense layer, especially a layer of clay, flow of water through the soil may be restricted and water may pond.

Why is it important?

Flooding and ponding impacts plant growth and land use. Plant growth is essential for improving soil quality and increasing soil organic matter. Saturated soils increase the likelihood of diseases, significant losses of soil nitrogen due to denitrification and leaching of nitrate N, and soil damage due to heavy equipment. Seeps and high water tables must be taken into account for conservation plantings and when evaluating sites for construction. Excess water can affect structures and slope stability while drifting snow may prevent access to livestock or farmsteads. Drifting snow can block access.

What can be done about it?

Using a systems approach can help address excess water. Strategies include managing for drainage, conveyance, and multiple uses for crops and wildlife. Drainage systems must be compatible with crops grown, field layouts, and cultural practices such as crop rotation and cultivation. System choices include open ditches, tile drains, mole drains, and land forming for increased surface runoff. Planned systems can include diverting excess water and infiltration basins combined with roof runoff management systems. Restored and enhanced wetlands can also be key components in water management.

Ponding, Flooding, Other Excess at a Glance

Problems / Indicators - Little to no established vegetation due to excess water, wet areas due to restrictive soil layers, flood prone buildings and structures	
Causes	Solutions
<ul style="list-style-type: none"> • Ponding and seeps • Stormwater runoff • Flood prone areas 	<ul style="list-style-type: none"> • Drainage management and structures for water control • Roof runoff structures and capture for reuse methods • Floodplain management • Wetland restoration or enhancement • Windbreak placement for protection and to provide access