



- College of Agriculture, Food Safety, and Natural Resources
- ND Agricultural Experiment Station
- NDSU Extension Service

General Disaster Information

Drought

Flood

Winter Storm

Especially for Extension Educators

Tips for Handling Flooded Soils

Clean-up, Soil Testing and Cover Crops

If sediment came from fertile fields of your upstream neighbors, the fertility status of the field will probably be unchanged or higher than before the flood. If heavy sedimentation occurs, these soils should be tested to determine nutrient status. Take soil samples at a 6- to 8-inch depth in at least 15 locations per field. Each soil sample should represent 20 acres or less. Areas with significant differences in textures should be sampled separately.

Sand deposits may have to be removed or spread over other areas and mixed with the more productive soil beneath. Sand deposits on top of silty or clay-type soils deeper than 4 inches may decrease potential crop yields. Determine the location, depth and amount of coverage of sand. Call your county Extension agent for further guidelines.

General Guidelines

Open all drainage ditches.

Remove debris from fields and pastures. Look carefully for partially hidden objects that could injure livestock or damage machinery. Check hedge and fence rows carefully.

To prevent severe soil compacting, avoid running trucks and heavy farm equipment over wet soils. Most soils are not dry enough for traffic or cultivation until the top 5 or 6 inches crumble, rather than slick over or pack.

Encourage the growth of cover crops such as rye or wheat. Any type of plant growth is effective in drying waterlogged soils.

It is usually not necessary to remove silt deposits. After soils are dry

enough to work, level and mix silt deposits into original topsoil, if practical.

Apply animal manure and incorporate into soil. Check with your county Extension agent for recommended application rates.

The fertility level of flooded soils will probably change over a period of time. Do not guess at requirements. Take soil samples to determine new fertility levels. Follow recommendations. Allow for nutrients supplied by applied animal manures. When sampling silted fields, make sure the samples represent the soil mix that will exist after deposited silt is mixed with the original topsoil.

Avoid deep tillage or subsoiling unless advised by an agronomist. Deep tillage or subsoiling is rarely beneficial and could be harmful.

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