

# Dust Storms & Erosion

Dust storms arise when strong winds lift and disperse tiny sand and soil particles from dry surfaces and suspend them in the air.

Farming operations that utilize intensive tillage, not using cover crops and other best management practices can contribute to the formation of dust storms.

Erosion from dust storms depletes the land of essential nutrients, harms young crops by abrasion, causes economic loss, and can harm the environment, public health, and even livestock.



## Health Effects

These small particles, called particulate matter, or PM<sub>10</sub>, are inhaled deep into your lungs where they can cause, or increase problems, for those with:

- Emphysema
- Asthma
- Bronchitis
- Heart disease
- Allergic reactions
- Respiratory irritation

The particles are especially harmful to:

- Infants, children, and teens
- The elderly
- Pregnant women
- Healthy adults working or exercising outdoors

# Protect Yourself

The best thing to do when a dust storm is coming is to be prepared.

- Spend as little time outside as possible
- Avoid hard exercise
- Be alert for sudden changes in visibility
- Pull over if you have trouble seeing
- Close your windows, vents, and doors
- Wear an N95, or greater, mask outdoors
- Ask your doctor for advice

**Sign up for dust storm alerts:**

[www.weather.gov/enterprise/](http://www.weather.gov/enterprise/)

**For more information contact:**



[www.ecology.wa.gov/dust](http://www.ecology.wa.gov/dust)



[www.nrcs.usda.gov](http://www.nrcs.usda.gov)



[www.fsa.usda.gov](http://www.fsa.usda.gov)



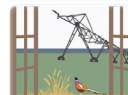
[www.bentoncleanair.org](http://www.bentoncleanair.org)



[www.bentoncd.org](http://www.bentoncd.org)



[www.doh.wa.gov](http://www.doh.wa.gov)



[www.franklincd.org](http://www.franklincd.org)

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**A Guide To:**

## Control Erosion Reduce Dust Protect Health



## Best Management Practices





## No-till Farming



No-till farming is a method of growing crops from year to year without disturbing the soil through tillage. Spreading crop residue in the fall can provide a valuable base of cover for your ground over winter.

### Benefits:

- Reduces soil erosion caused by plowing and tilling
- Increases organic matter
- Reduces soil compaction
- Improves soil structure and aeration
- Increases beneficial microbes
- Retains soil moisture
- Conserves water
- Reduces fuel use from not plowing
- Saves time
- Less herbicide runoff
- Higher crop yield



## Using Cover Crops

Cover crops can boost your profits the first year after you plant them. Every year, their soil-improving effects accumulate.

### Benefits:

- Provides erosion control
- Boosts crop yield
- Improves soil structure
- Increases organic matter
- Suppresses weeds and pests
- Reduces pollution
- Reduces fertilizer, herbicide, and pesticide use
- Conserves soil moisture
- Protects water quality
- Can be used as forage for livestock

## Creating Windbreaks



Windbreaks are created by planting trees, shrubs, and wildflowers designed to enhance crop production. Using conservation cover establishes and maintains permanent vegetative cover and is especially beneficial for center-pivot irrigation corners where 15-20% of land remains unused. Managing these corners is time consuming and unproductive and can easily become a source of weeds and contaminants.

### Benefits:

- Protects wind-sensitive crops
- Controls wind erosion
- Aids in soil and water conservation
- Provides habitat for pollinators
- Protects livestock and property
- Improves aesthetics
- Reduces odors