Herbaceous Wind Barriers (603)

Herbaceous wind barriers are rows or narrow strips of herbaceous vegetation established in a field perpendicular to the prevailing wind direction.

Practice Information

Installation of the practice requires that the vegetation in the wind barriers be stiff and be resistant to lodging during inclement weather/seasons. The plant material must also have good leaf retention and not pose a competitive threat to adjacent crops.

Conservation benefits include but are not limited to:

- reduce soil erosion (wind erosion: saltation, creep, and suspension)
- reduce soil particulate emissions to improve air quality
- improve plant health by reducing crop damage by wind or wind-borne soil particles

Installation requires analysis of the wind direction, field size, crop types, and machinery types and size. These factors will determine the alignment, height and width, and distance between the strips. After establishment, wind barriers may need to be fertilized to maintain plant vigor. Noxious weeds must be controlled. Gaps in the barriers must be replanted as soon as practical to maintain effectiveness.

Over time, wind-borne sediment accumulated by the barriers may need to be redistributed over the surface of the field. To maintain effectiveness wind barriers need to be reestablished or relocated periodically depending on the vegetation used to create the barriers, soil, crops grown, and frequency of high-wind events.

Common Associated Practices

Herbaceous Wind Barriers (603) is commonly applied with conservation practices such as Conservation Cropping Rotation (328), Cover Crop (340), and Residue Management type of practices.

For further information, contact your local NRCS field office.