



Seasonal High Tunnels for Food and Other Specialty Crop Production

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What are Seasonal High Tunnels

A seasonal high tunnel is a polyethylene (PE) covered structure applied to cropland which modifies the climate to create more favorable growing conditions for vegetables and other specialty crops. Crops are grown in the soil or on permanently raised beds. Tables/benches or portable pots where crops are not grown in the natural soil profile are not permitted. Electrical or mechanical equipment may be added to the structure but will be at the producer's expense.



Why Seasonal High Tunnels

High tunnels will help extend the growing season and increase the availability of locally grown produce. Evidence suggests that there are conservation benefits associated with these structures, though scientific research is scarce. The USDA initiated a three-year pilot, beginning in 2010, to test the validity of potential conservation benefits.

Potential Resource Benefits of High Tunnels

Potential natural resource benefits from using tunnel structures include: (1) improved plant quality, (2) improved soil quality, and (3) improved water quality through methods such as reduced nutrient and pesticide transport.

Features of High Tunnels

Commercially available high tunnel structures are made in numerous widths and lengths. These structures are constructed of metal, wood, or plastic frames that are covered with a single layer of 6-mil PE. Ventilation is achieved by means of a combination of roll-up side vents, end vents, or roof vents. Generally, the end walls are framed-in to create door and ventilation areas. As these structures are not generally designed to withstand the weight of

snow, the high tunnel cover must be removed at the end of the growing season unless the structure is designed to withstand expected snow loads.



Interim Conservation Practice Standard (CPS)

The NRCS will use an interim CPS to field test this new technology. Participants will provide feedback to evaluate strengths and weaknesses which will be used to provide recommendations about whether to develop a national CPS or to discontinue the use of the interim CPS.

Systems Approach

Water runoff from the high tunnels can cause issues that will require the application of several other practices such as roof runoff structures and critical area plantings. These additional practices must be planned and installed as a condition for the installation of a high tunnel. Additional practices should be considered as a part of a conservation plan, such as nutrient and pest management and crop rotation.

Financial Assistance for High Tunnels

During the pilot period, high tunnel systems may be eligible for financial assistance through the Environmental Quality Incentives Program. Financial assistance will be limited to a maximum of 5 percent of one acre (2,178 square feet) per farming operation – equivalent to a structure size of approximately 22 feet x 96 feet. The seasonal high tunnel has an expected practice life of four years.

For More Information

Please contact your local NRCS Service Center.
<https://offices.sc.egov.usda.gov/locator/app>.