Questions & Answers: Seasonal High Tunnels

Objective: The primary objective of the pilot, from USDA's perspective, is to enhance the production of local food in the face of climate change and reduce the energy footprint of our food system. Applicants should be informed that if funded by NRCS conservation programs, these structures can include any electrical or mechanical energy inputs but at the participant's expense and they will be required to help collect some data and keep records.

1. Can I attach it to my heated greenhouse? Yes.
2. To add heat to the crop during the day, can I fence off a small area within the hoop house and allow my chickens to graze? Chickens would return to chicken coop at night. No.
3. Can I move the high tunnel from one tract to another tract? The assumption is that these can be portable in certain circumstances, as needed. The program contract requirement is that the multiple tracts be included in the contract.
4. Can I put it on runners/rollers and move it? Yes, if it is part of the manufacturer's specifications. Would there be concerns with the wind? Following manufacturer's requirements for installation is the key.
5. Am I required to move it annually? No.
6. Can I put small animals inside in the off season for nutrient & pest management? No.
7. Can I use it year round if it can withstand the snow load? Yes, if it is included in the manufacturer's specifications. In Vermont we only allow the Gothic style high tunnels, which include additional bracing and support to better withstand snow loads and wind.
8. Are there limitations as to where this practice would apply? Yes, in Vermont the farm must previously been growing specialty crops like vegetables or small fruits for local markets. Crops under a high tunnel must be grown in the natural soil profile or in raised beds. Crops grown on benches or pots will NOT be allowed.

   Because the intent of this practice is to support local food systems the applicant needs to be actively involved in growing veggies or small fruits for local markets. This practice is not intended for the backyard gardener. Applicants for this practice must already be actively growing veggies and/or small fruits for local markets. Eligible applications are only for agricultural enterprises actively engaged in agricultural production for more than home consumption of produce.

9. Do I have to remove the plastic? Not necessarily - emphasis is on maintenance for the life of the structure (standard requires 4 years). Gothic style high tunnels are better able to withstand snow loads and will be the only type of high tunnel funded in Vermont. Some folks use 2x4s under the hoops in extreme situations to address that issue and avoid

the problem of damage to the plastic and potential cost of premature replacement. Removing the plastic limits its life and leads to leaching of nutrients that would otherwise not have to be replaced the next year. If there is snow in late spring that can delay putting the plastic back on slowing warming of the tunnel and reducing the season extension. The owner will be responsible for maintaining the structure to avoid snow related problems. This includes removing the snow on and around the structure as necessary. If a problem does occur they will be responsible for fixing it.

10. Instead of having to design a bunch of associated practices with high tunnels, shouldn't we do the up front investigations to identify areas on the farm where they should construct them to avoid these potential issues? Yes, site conditions are critical in planning this practice. The handbook will identify the site criteria necessary for locating these structures. The criteria include locating the structures on well drained soils on flat slopes, as possible, to avoid grading and drainage costs.

11. Is everyone going to get irrigation to go along with this practice? No, most will not need permanent systems. An available source of water should exist for temporary watering methods (drip tape, hoses, etc.). Depending on the intended use, there may be a few that need irrigation systems. Direct these cases toward AMA for new irrigation; EQIP for improving an existing system.

12. An infiltration trench would only work if there was a lower horizon w/ better permeability. Any sites with restrictive layers below the topsoil would need subsurface drainage and a place to outlet. Do we really want to trench up productive soil and backfill with coarse granular earthfill when the live span of the practice is 4 years? No. That is why we want to locate these structures on relatively flat well drained soils. Follow Manufacturer's recommendations for installation, stone placed on the outside of the poly may be justified in some instances, but an engineered infiltration trench is over-kill if they are on permeable soil, not to mention that the trench would become useless if the high tunnel is moved periodically.

13. Stone along perimeter - if part of Manufacturer's installation requirements, but if it is to be moved, who is going to pick up the stone? Owner may want to consider a different manufacturer.

14. Is the idea for these things to be portable? Yes to some degree, but not required. As stated previously, best results have been found when these structures are left in place for a period of time so that the nutrients are protected from leaching, and there is much less soil compaction created by traffic associated with installation. Growing a cover crop inside a tunnel is a nice idea but a key to pest management in these structures is bare fallowing - lack of any plant tissue for insects to feed on - for an extended period of time.

15. Does this have to be one structure or can it be several smaller structures? It can be one or more structures.

16. Can the structure be bigger than 2178 sq. ft.? Yes, but our maximum financial assistance is for 2178 sq. ft. The rest of the cost would fall on the participant.

17. Can the participant build their own high tunnel using their own materials? No, a manufactured kit must be purchased and the manufacturer's recommendations must be followed.

18. Can electricity be used to run an inflation fan to inflate the 2 layers of plastic to increase heat retention and extend the growing period? Yes, the additional cost will be at the participant's expense.

19. What is the definition of a manufacturer? We want these to be kits that come with warranties for wind and snow damage, and plans/designs and installation instructions from the company.

20. Am I allowed to grow 12 months out of the year or is there a required down time? Yes these can be used 12 months of the year with no required down time depending upon how the seasonal high tunnels is managed.

21. When do you anticipate that the money will be available? This depends on the eligible applications that are received before the cutoff dates. Although we accept applications continuously there are cutoff dates so that applications can be evaluated, ranked and prioritized for funding based on funding availability. Those that fall below the ranking cutoff will not be funded that go around.

    If an eligible applicant is ranked high enough to be funded they will enter into a contract with NRCS. They then can proceed to select and build the appropriate system from a manufacturer that warranties their product. Once it has been fully constructed and in place they can request payment under their contract. All of this should be coordinated with the local NRCS representative to avoid any unintentional surprises. If the participant is "historically underserved" (new and beginning farmer, limited resource farmer, etc.) they will get $3.40 per square foot and all others will get $2.90 per square foot up to the 2,178 square foot limit.

22. If a participant already has high tunnels, will they be eligible for this practice? Yes, it does not matter if they already have high tunnels.

23. Are end walls required? Yes, end walls are required to add to the stability of the structure. There can be many designs for the end walls. Follow manufacturer's recommendations.