Cover Crop Planning Support

The following questions are intended to guide a discussion with the producer to help select a cover crop species or mix of species that best fits their needs. When requesting assistance from a specialist, this information along with site specific climate and soils data, will ensure best outcomes for your customer. Please provide as much detail as possible.

1. For what identified resource concern(s) is a cover crop being planned to address (from NRCS list of currently approved RC's):

2. What is the primary purpose (from standard) of cover crop (check all that apply):
   - ☐ Erosion protection
   - ☐ Increase SOM
   - ☐ Nutrient capture/recycle/distribution
   - ☐ Nitrogen fixation
   - ☐ Increase biodiversity
   - ☐ Suppress weeds
   - ☐ Manage soil moisture
   - ☐ Minimize/reduce soil compaction

   In the PRODUCER'S words, what is the purpose of the cover crop planting, and how do they imagine it (e.g. how tall, upright/more creeping growth pattern, with/without flowers, diverse mix or one or two species, lots of biomass, just enough to cover ground, biomass that is readily decomposed or likely to persist, etc.)?

3. In what months does the producer want living cover?

4. In what kind of cropping system will cover crops be planted?
   - ☐ Annual crops (e.g. vegetables, cotton, tomatoes, strawberries)
   - ☐ Perennial crops (e.g. vineyard, orchard)?

   Please describe the operation (e.g. crop, current rotation, planting/harvest dates, on raised beds, direct seeded/transplanted, major disease/pest issues, etc.). Also explain what will happen when the cover crop is growing (e.g. harvest, spray, prune, etc.) and how critical a particular planting date for following cash crop is after cover crop termination (in annual systems). For perennial systems include how many years the crop has been established.

5. Where will cover crop be planted?
   - ☐ Whole field (common in annual crops)
   - ☐ In row middles (common in perennial/vineyard crops)
   - ☐ On semi-permanent raised beds

6. Do any of the following apply to the planned site:
   - ☐ Salt affected soils (e.g. sodic, saline)
   - ☐ Evidence of soil crusting
   - ☐ High nitrogen soil
   - ☐ Low fertility
   - ☐ Low/high pH
   - ☐ Poor drainage
   - ☐ Droughty soil
   - ☐ Possible residual herbicide

   Any other factors noted or mentioned by the producer? Please describe.

7. What production factors (e.g. disease carry over, host of cash crop pest, residue at planting/harvest, impact on pollinators for cash crop, frost risk) must be considered for the cover crop to be successful?

8. What equipment/infrastructure is available to support the cover crop for the following:
   - Planting:
   - Termination:
   - Irrigation (during establishment and/or growth):

9. Where will a producer get cover crop seed?

10. Has the producer planted cover crops in the past? What was their experience? Do they have any specific concerns arising from that experience or other observations of cover crops?

THINGS TO CONSIDER…

In many perennial systems, it is important for growers to have access to the crop nearly year round, for example in citrus, harvest may occur periodically throughout the year. Other activities such as spraying and pruning crops may also require activity in a production block. It is critical to understand how vegetative cover may impact the ability to complete essential activities, considering things such as:

- ☐ How tall does a cover crop get? When is it at maximum height?
- ☐ How does it grow (upright, creeping)?
- ☐ How quickly will residue break down? Will it delay planting of following crop?
- ☐ Is there risk of it becoming a weed issue if termination is not fully successful?

Cover Crops (340) and Conservation Cover (328) may serve similar purposes. In general, Conservation Cover includes perennial species as they are intended to persist for the lifespan of the practice (10 years), and may be more appropriate than cover crop in perennial system middles (e.g. between rows of trees and vines).