The objective of this document is to provide you with current and helpful information regarding water protection, and the Michigan Agriculture Environmental Assurance Program (MAEAP).

Consider cover crops on summer wheat fields

Harvested wheat fields offer an excellent opportunity for mid-summer cover crop establishment. Cover crops can be put to work scavenging nutrients, building nitrogen for the next crop, improving soil tilth and breaking up deep compaction on these open fields. Boosting soil biology through the use of cover crops can help cut fertilizer and herbicide next spring and make fields more resilient to heavy rains and seasonal droughts. But while cover crops can provide many benefits, they aren’t a silver bullet and do require more management. Growers need to have a plan that includes prioritizing desired outcomes, along with termination steps in mind.

Specific site conditions and cropping needs will dictate the best cover crop species. Some cover crop species with strong taproots are particularly well-suited to breaking up compaction, while others with fibrous root systems improve soil structure and tilth. Some species winterkill, while others will keep adding biomass in the spring. Blending several cover crop species together not only broadens the range of benefits, but also helps ensure establishment success. If any one species doesn’t establish, others are there to grow.

Weed control and stemming the proliferation of herbicide resistant weeds should be top of growers’ minds as well. Fields should be scouted for the presence of weeds before seeding cover crops and a good burndown herbicide application used if necessary. Products with no residual properties can be used to ensure successful establishment of cover crop mixes. Good cover crop stands can be effective at controlling weeds later into the season, but getting ahead of difficult to control weeds early is important.

Termination plans are important to develop at the beginning. Uncontrolled spring growth can quickly lead to problems if growers are unprepared. Fall tillage of cover crops gives back many of the benefits accrued over the summer, but fits well into established management plans. Early spring herbicide termination followed by tillage or direct seeding can simplify management as well. Delaying termination until at planting has become more popular, but requires higher levels of management and some flexibility. Planters need to be equipped to plant into high residue, with thought given to row cleaners and closing wheels. Thick cereal rye can pose problems for any planter. The longer a cover crop grows, the more benefits it provides, but management needs increase as well.

Crop advisors, extension staff, and other farmers are all great resources for help in developing cover crop management. They are also knowledgeable about programs that help defray seed and planting costs. Flexible management and back-up contingency plans, particularly when it comes to termination, are a key to cover crop success. Cover crops increase the level of agronomy management required, but can provide numerous environmental benefits while boosting both short and long-term profitability.