

# Converting CRP to Cropland: Management Considerations

## Management Considerations

Converting Conservation Reserve Program (CRP) acres back to cropland requires proper planning. Several things need to be considered in the planning process to ensure a successful transition. These include:

- **Maintain concentrated flow areas or other critical eroding areas in grass cover**
- **Consider continuous CRP practices such as grassed waterways, field borders, cross wind trap strips, filter strips, or other appropriate buffer practices**
- **How to effectively kill existing cover including the amount of residue and cover type (cool-season grass, warm-season grass, grass/legume mix) to plant and establish initial crop**
- **Soil moisture and other soil limitations such as available water capacity that will limit crop growth**
- **Planned crop rotation**
- **Tillage and planting system**
- **Soil fertility (nutrient management planning)**
- **Pest management**
- **Impacts on environmental quality**
- **Conservation Compliance requirements on Highly Erodible Land (HEL)**

## Cropping Considerations

Primary considerations for converting CRP to cropland are how to effectively kill existing cover, conserve soil moisture, and maintain soil quality. The recommended method for killing existing cover is to use a systemic herbicide, such as glyphosate along with other appropriate herbicides such as Dicamba or 2-4-D. It is important to manage the CRP stand to maximize herbicide uptake, and to time application to coincide with carbohydrate transfer to the root system to get a good kill. Managing CRP using measures such as haying, grazing, or shredding to stimulate new shoot growth and to minimize dormant root buds prior to applying the herbicide will improve the effectiveness of the herbicide application. Selecting herbicide resistant crops will allow for subsequent herbicide treatments to control escapes. Soil moisture conditions impact the effectiveness of the herbicide application because drought stressed plants will not absorb or translocate the herbicide. Soil moisture conditions also need to be considered in choosing whether to plant a fall or spring crop. Several factors need to be considered to decide what crop to plant on converted CRP. These include profitability, protecting or enhancing soil quality, controlling soil erosion, managing pests, and effectively using available soil water. Diverse cropping systems including small grains, warm-season row crops, broadleaf crops such as sunflowers or legumes, and maximizing high residue crops used in rotation are most effective. Consult with local Natural Resources Conservation Service staff to select a crop rotation that controls soil erosion, maintains soil quality, and works best with the tillage system utilized.



## Tillage System Selection

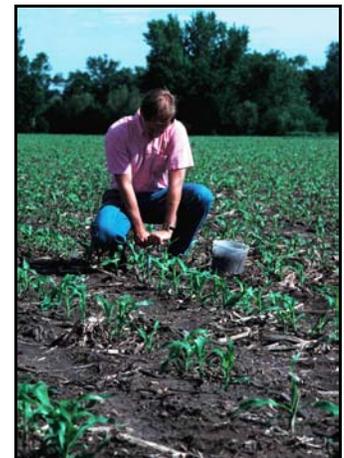


No-till is the preferred method when converting grassland to cropland to maintain benefits accrued over the last 10-to-15 years in CRP. Research has shown that there have been significant soil quality improvements in soils that have been in CRP for an extended period. No-till systems in conjunction with a diverse crop rotation, and minimal fallow periods are most effective to improve or maintain soil organic matter, aggregate stability, soil infiltration, and available water-holding capacity. These improvements result in soil that is in better condition to grow plants over the long-term. If tillage is necessary to level the field, limit it to the first year and only involve implements (harrows,

blade/roller, aerator, etc.) that lightly disturb the soil surface, or sweeps that undercut vegetation leaving protective residue cover on the surface. Conventional tillage systems can destroy most of the soil quality improvements gained under CRP over the last 10-to-15 years in just the first year.

## Fertility

Soils that have been in long-term CRP cover can be different than soils that have been cropped regularly over the last decade. Soil tests to determine fertility should be completed before fields are returned to production allowing ample time to schedule and apply fertilizer required for planned crops. In areas where soil test phosphorus levels are low, consider applying starter fertilizer at planting. If residue levels are heavy, nitrogen may be temporarily tied up by soil micro-organisms and nitrogen rates may need to be increased by 10 percent over recommended rates to compensate. Consider use of a legume cover crop or forage crops to improve the transition to the first cash crop. Legumes fix atmospheric nitrogen and have a low C:N ratio which allows them to readily decompose remaining sod residue, provide nitrogen, and allow for an easier transition to the following crop.



## Soil Erosion and Highly Erodible Land

Depending on the cropping system, soil erosion rates can increase significantly when HEL is cropped compared to land maintained in sod. The Conservation Compliance provisions of the Food Security Act require U.S. Department of Agriculture program participants who produce annual agricultural commodities on HEL fields to apply an approved conservation system on those fields. In addition to controlling erosion by wind and water, the conservation system applied must also control gully erosion and prevent off-site damages to be considered acceptable. Check with your local NRCS office for specific erosion estimates, and alternatives for different cropping/tillage systems.

## Impacts on Environmental Quality



Land enrolled in the CRP has provided many natural resource benefits. Soil erosion, soil quality, water quality, air quality, and wildlife have all been positively impacted by the establishment of grasses, legumes, trees, and shrubs. It is important to consider impacts to these resources as you decide whether and how to transition CRP acres back to crop production. Potential effects of converting CRP acres back into cropland include excessive soil erosion, reduced soil quality, loss of wildlife habitat, and degradation of water quality.

Contact your local NRCS office for assistance with planning the transition from CRP back into cropland.