

# CRP TAKE-OUT

## FOR EASTERN WASHINGTON:



### GENERAL GUIDELINES

- Taking out CRP stands is a **Process** and not a product.
- The first step of CRP Take-out begins with a visit to the FSA office. They will be instrumental in guiding you through completion of the required documents.
- Fields that have been in CRP for long periods of time will have improved soil organic matter levels and better tilth. Care should be taken to prevent loss of the organic matter.
- Cultivation is NOT an absolute prerequisite for returning CRP to annual cropland. CRP take-out is an excellent opportunity to begin no-till seeding.
- Draws and ravines can hide hazards like badger holes, abandoned equipment, and gullies. This terrain may need to be managed separately from the remainder of the field. It might be more practical to leave these areas in grass or reseed these areas back to perennial grass cover.
- Taking out CRP is an excellent opportunity to adopt practices such as divided slope farming or managing different soil types in a field.
- Leave marginal soils in grass. Inputs are expensive and yields may be minimal at best.

## **OVERVIEW OF CRP TAKE-OUT**

Converting CRP to annual cropland involves a series of evaluations and decisions. A little planning now will save you many headaches in the future.

Evaluate the condition of each CRP field before committing any resources. Some ground may have sparse stands, some ground might be very weedy, some ground might be in excellent condition, etc.

- Burning CRP must be done in accordance with FSA rules, county fire regulations, and safely. Burning reduces residue levels and water evaporation losses will be higher than a sprayed out cover.

Draws and fence lines may be full of weeds and weed carcasses that will impede cultivation and/or spraying operations. North facing slopes may have good stands of grass but is this ground profitable to farm? Are there highly erodible soils in the CRP? Will conversion of these soils jeopardize complying with USDA Farm Program requirements? Will keeping areas in grass as conservation buffers benefit your standing in future USDA Farm Programs? Does your landlord expect you to convert the entire field?

Roger Veseth, Baird Miller, and others conducted a number of CRP Take-out trials in the mid-1990s. Most of the information that they generated is still very relevant today. A copy of their report can be found in the STEEP III Conservation Tillage Systems and Equipment Report (<http://pnwsteep.wsu.edu/tillagehandbook/index.htm>).

A few key points in their report:

- Soil organic matter gains made during CRP can be rapidly lost with excessive tillage.
- Burning reduced soil cover and left the soil vulnerable to erosion.
- Fall flailing was not economical. However, they used a combine to “flail” the field.
- Fall harrowing improved emergence of downy brome which could be economically controlled in the spring.
- Fall disking and burning resulted in high evaporation rates and less stored soil moisture for future crops.
- Seeding a spring crop within a few weeks of taking out CRP resulted in poor yields and was not economical.
- Root diseases such as Take-All and rhizoctonia must be considered and managing your fields to break the “green bridge” is critical.

## **TAKE-OUT CONSIDERATIONS for 2012**

### **Scheduling and Logistics:**

Take-out could begin as early as May 2012. Most of the soil moisture in the upper 6" will be depleted by May and you should wait roughly 21 days before seeding a spring crop or risk "green bridge" disease problems. Diseases need a place to reside so if you utilize that opportunity of nothing growing for a period of time, the disease potential will much lower. The soonest a spring crop could be seeded would be in late May 2012. It is very likely that a late spring crop will not be economical in the drier areas.

### **Extended Weather Predictions:**

The Inland Pacific Northwest has experienced a drier-than-normal year so far. The weak La Nina conditions at present are expected to transition to ENSO-neutral conditions. Moisture conditions are expected to be about average March-May, 2012, and temperatures are expected to be slightly warmer. (Courtesy: [http://www.cpc.ncep.noaa.gov/products/analysis\\_monitoring/enso\\_advisory/](http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/)).

### **Existing CRP Cover:**



*Crested wheatgrass, Siberian wheatgrass, big bluegrass, and Snake River wheatgrass* are bunchgrasses that are sensitive to glyphosate applications made in the spring. They are also easily controlled by tillage. Crested wheatgrass produces large amounts of seed and volunteers after shallow tillage/harrow operations. Bunchgrass carcasses can pose a problem with seedbed preparation.

*Sheep fescue* is relatively difficult to control with glyphosate. Proper timing of applications, proper rates, and good coverage must be practiced. It is easily controlled with tillage. However, the clumps are very persistent for months after tillage. The clumps can interfere with drill operations.

*Intermediate and pubescent wheatgrass* are weakly rhizomatous grasses that are fairly sensitive to glyphosate. Two applications are generally needed for good control. They produce large volumes of top growth that accumulates rapidly. It is not uncommon to have 3-6 inches of dense thatch built up. Tillage is effective for control if the rhizomes are allowed adequate time to fully desiccate.

*Tall wheatgrass* is fairly sensitive to glyphosate but it will require 2 applications for complete control. Timing of herbicide applications is critical for good control. It is a bunchgrass and tillage is effective for control. The clumps are very large and persistent. The clumps will interfere with seeding operations. The Pullman Plant Materials Center typically removes its tall wheatgrass fields in July. The fields are disked hard to expose the roots and then the fields are rolled in September to press the dead clumps back into the soil to improve decomposition. Direct seeding into tall wheatgrass should only be done after one year of chemical fallow because the tussocks need enough time to break down.

*Smooth brome* is a highly rhizomatous grass. It is sensitive to glyphosate but 2 applications are generally needed for full control. Tillage is effective if it exposes the roots and rhizomes for an adequate amount of time for complete desiccation. Direct seeding into smooth brome requires a very heavy drill because the dense root and rhizome mass will interfere with good penetration.



## Weeds:



*Downy brome* is very prevalent in many fields but it is easily controlled. Downy brome produces huge amounts of seed, and these seeds must be considered when selecting a crop. Planting a winter wheat crop without a fallow year is very risky.

*Jointed goatgrass* is becoming more apparent in many fields. It too is easily controlled but winter grains should not be seeded in fields with jointed goatgrass.

*Medusa-head and Ventenata* are problems in a few locations. They are winter annual grasses and easily controlled. Care must be taken to not spread the seed!

*Mustards and Russian thistle* are widespread in CRP. They are easily controlled but the carcasses are a major problem for many implements. Draws and fence lines choked with carcasses will most likely require special management.

*Rush skeletonweed* is a perennial, rhizomatous broadleaf weed. It can be difficult to control. Disking is not advised because this will chop up the rhizomes and stimulate their growth. Herbicide selection is paramount. Consult with knowledgeable representatives before applying any product and be sure to notify the representative which crop you plan to seed after treatment.

*Quackgrass* is a problem in a few locations such as the Palouse. It is easily controlled with glyphosate and/or tillage. It can be very competitive in the succeeding crop so full control is very important.

## Crop Selection:



*Winter wheat* requires adequate stored moisture for good emergence. Some producers might be tempted to seed winter wheat in 2012. This is risky if there is insufficient stored soil moisture to start a crop. Growers will need to probe their CRP fields and determine if growing winter wheat is practical. Given the cost of fertilizer, diesel, seed, pesticides, labor, and the likelihood of a low yield, planting a winter crop in 2012 probably will not be economical. Downy brome and goatgrass problems in CRP must be considered because control options in winter wheat are fairly limited and/or costly.

*Spring wheat* is a good option for CRP fields choked with downy brome and goatgrass because these weeds are more troublesome in winter crops. Veseth et al. showed that it was not economical to plant immediately after taking out CRP because the yields were low and the inputs were high. Root diseases that plague wheat also occur in CRP grasses. Green bridging must be prevented.

*Canola* is a risky crop to follow CRP. If the field has a history of rush skeletonweed, the control options are practically nil. Canola requires good seed placement so direct seeding is problematic given the rough, irregular surface conditions of a CRP field.

*Peas, Garbs, and Lentils* are risky crops to follow CRP. The value of these crops is tied to dockage, and CRP will probably result in high amounts of dockage.

*Alfalfa* requires good seed to soil contact for establishment. Consistent good seed placement probably will be difficult to attain following CRP.



*Grass Grown for Seed* is a very poor choice. A bare minimum of 2 years of annual crops should be grown before considering this crop.

*Cover crops* are a great alternative. They can provide an opportunity for pest control, stabilize the soil surface, provide residue, or provide nitrogen. A crop should be selected that will terminate on its own so no other fuel expense is needed.

## Implement Selection:



*Sprayers* are an excellent tool for taking out CRP, and it goes without saying that calibration is important. Areas with heavy cover will impede coverage so mowing and/or harrowing will be needed for these areas. Burning dense cover is effective but there are trade-offs. Burned CRP will be more susceptible to erosion and soil moisture will be less due to increased evaporation.

*Disks* are frequently the tool of choice for breaking sod. They are very effective but there are trade-offs. Disks are more destructive and organic matter gains made in CRP will be reduced.

*Cultivators* are more suitable for secondary tillage because operating them on CRP could be an exercise in weed carcass and thatch gathering. Cultivators are less destructive to the organic matter than disks.

*Harrows* can be a great tool to aid in for taking out CRP. Harrows can be operated fairly economically and rapidly. They help break down and spread thatch, improve flushes of annual weeds which can be controlled later, and knock down gopher mounds. Care must be taken to not be overly aggressive when harrowing or risk dislodging the grass tussocks.

*Mowers* are a great tool to aid in CRP take-out. Large rotary mowers can cover a lot of ground fairly rapidly. Mowing will improve herbicide applications.

*Conventional double-disk drills* are best suited for seeding tilled ground. Untilled CRP will impede seed placement.

*Conventional deep furrow drills* can be used to seed “untilled” CRP. Fertilizing will be problematic. Shanking in fertilizer prior to operating the drill seeding will cause more problems than do good.

*Direct seed drills* that are heavy enough to place the seed and fertilizer at the proper depth are most appropriate for seeding untilled CRP.

*Rollers and packers* can be useful following tillage. Rolling pushes the grass clumps into better contact with the soil and aids in decomposition. This is normally only applicable to tall wheatgrass fields.



## CONSERVATION RESERVE PROGRAM TAKE-OUT CONSIDERATIONS

### 1. CRP Take-out SPRING 2012 - Seed Crop FALL 2012:

This is a HIGH RISK option.

- Most CRP grasses must be sprayed earlier in the spring for good control.
- CRP grasses and winter weeds will have depleted most of the upper soil profile by May. This will impede establishment of a fall crop.
- Disking of CRP in May will control the vegetation but very large losses of organic matter will occur. Soil moisture losses will be considerable.
- Cultivating of CRP in May will control the vegetation but debris will interfere with seeding operations. Soil moisture losses will be considerable.
- Cheatgrass and/or jointed goatgrass competition will be very severe in the winter wheat crop.
- Direct and/or conventional seed drills will have problems placing seed and fertilizer at the proper depth in sprayed fields. Furthermore, the seed will not be placed in moisture soil.
- Mechanically tilled fields will be more suitable for conventional drills. Yields will be lower than a full fallow operation but the inputs will remain high.
- Economics are sketchy at best.

### 2. CRP Take-out FALL 2012 - Seed Crop FALL 2012:

This is a VERY HIGH RISK option.

- Most CRP grasses must be sprayed earlier in the spring for good control.
- CRP grasses and winter weeds will have depleted soil moisture throughout the profile. This will greatly impede establishment of a fall crop.
- Disking of CRP in September will control the vegetation but very large losses of organic matter will occur.
- Cultivating of CRP in September will control the vegetation but debris will interfere with seeding operations.
- Cheatgrass and/or jointed goatgrass competition will be very severe in the winter wheat crop.
- Direct and/or conventional seed drills will have problems placing seed and fertilizer at the proper depth in sprayed fields. Furthermore, the seed will not be placed in moist soil.
- Mechanically tilled fields will be more suitable for conventional drills. Yields will be much lower than a full fallow operation but the inputs will remain high.
- Economics are poor.

### **3. CRP Take-out FALL 2012 - Seed Crop SPRING 2013:**

This is a MODERATE RISK option.

- Consider either harrowing or mowing in the fall. This will reduce litter and weed carcasses, and will improve herbicide coverage in the spring. Harrowing will stimulate emergence of cheatgrass and jointed goatgrass which can be controlled in the spring.
- Burning reduces trash and improves drill operation but it severely depletes residue levels and increases erosion hazard. Also, Veseth et al. reported that burned fields lost considerable soil moisture due to increased evaporation.
- Fall spraying is not effective. The CRP grasses will be dormant. Spraying early in the spring is needed to control the grasses.
- Spring spray operations will need to be applied with adequate time to break the “green bridge” before seeding.
- Fall disking should be discouraged. Disked fields lose more moisture to evaporation than fields that were sprayed out. The dislodged grass clumps will interfere with drill operations. The wind erosion potential will be high. Organic matter gains made while the field was in grass cover will be dramatically reduced.
- Fall cultivating/undercutting is not as destructive as disking but might not be practical. Weed carcasses, especially Russian thistle, will rake-up in the cultivator. Depth control of the cultivator will be difficult.
- Direct and/or conventional seed drills should have few problems placing seed and fertilizer at the proper depth in sprayed fields.
- Mechanically tilled fields will be more suitable for conventional drills. Yields will be much lower than a full fallow operation but the inputs will remain high.
- Economics are sketchy.

### **4. CRP Take-out SPRING 2012 - Seed Crop SPRING 2013:**

This is a LOW RISK option.

- Most producers will need to spray 2 applications in 2012: one in the spring and another in early summer.
- A spray application will be needed in spring 2013 prior to seeding.
- Burning reduces trash and improves drill operation but it severely depletes residue levels and increases erosion hazard. Also, Veseth et al. reported that burned fields lost considerable soil moisture due to increased evaporation.
- Disking should be discouraged. Disked fields lose more moisture to evaporation than fields that were sprayed out. The dislodged grass clumps will interfere with drill operations. The wind erosion potential will be high. Organic matter gains made while the field was in grass cover will be dramatically reduced.
- Cultivating/undercutting is not as destructive as disking but might not be practical.
- Direct and/or conventional seed drills should have few problems placing seed and fertilizer at the proper depth in sprayed fields.
- Mechanically tilled fields will be more suitable for conventional drills. Yields will be on par with a conventional wheat-fallow operation.
- Veseth’s data shows that this option is economical.

## **5. CRP Take-out SPRING 2012 - Seed Crop FALL 2013:**

This is a LOW RISK option.

- This option leaves the ground in fallow for a long period. It would be appropriate for fields heavily infested with difficult to control perennial weeds such as rush skeletonweed.
- Most producers will need to spray 2-3 applications in 2012: one in the spring, one in early summer, one in early fall.
- A spray application will generally be needed in spring 2013.
- Burning reduces trash and improves drill operation but it severely depletes residue levels and increases erosion hazard. Also, Veseth et al. reported that burned fields lost considerable soil moisture due to increased evaporation.
- Disking should be discouraged. Disked fields lose more moisture to evaporation than fields that were sprayed out. Disking will spread perennial weeds such as rush skeletonweed.
- Cultivating/undercutting is not as destructive as disking and will aid in setting the moisture line.
- Direct and/or conventional seed drills should have few problems placing seed and fertilizer at the proper depth in sprayed fields.
- Mechanically tilled fields will be more suitable for conventional drills. Yields will be on par with a conventional wheat-fallow operation.

## **6. CRP Take-out FALL 2012 - Seed Crop FALL 2013:**

This is a LOW RISK option.

- Consider either harrowing or mowing in the fall. This will reduce litter and weed carcasses, and will improve herbicide coverage in the spring. Harrowing will stimulate emergence of cheatgrass and jointed goatgrass which can be controlled in the spring.
- Burning reduces trash and improves drill operation but it severely depletes residue levels and increases erosion hazard. Also, Veseth et al. reported that burned fields lost considerable soil moisture due to increased evaporation.
- Fall disking should be discouraged. Disked fields lose more moisture to evaporation than fields that were sprayed out. The dislodged grass clumps will interfere with drill operations. The wind erosion potential will be high. Organic matter gains made while the field was in grass cover will be dramatically reduced.
- Cultivating/undercutting is not as destructive as disking and will aid in setting the moisture line.
- Direct and/or conventional seed drills should have few problems placing seed and fertilizer at the proper depth in sprayed fields.
- Mechanically tilled fields will be more suitable for conventional drills. Yields will be on par with a conventional wheat-fallow operation.