NATURAL RESOURCES CONSERVATION SERVICE
MONTANA CONSERVATION PRACTICE JOB SHEET

CONSERVATION CROP ROTATION (ACRE)

CODE 328(C)

FLEXIBLE LEGUME−CEREAL CROPPING

Landowner	Field/Management Unit		Date
Legal Description	Contract Item Number	Acres	Job Class

Purpose (check all that apply):

- ☐ REDUCE SHEET/RILL/WIND EROSION
- ☐ MANAGE THE BALANCE OF PLANT NUTRIENTS
- ☐ CONSERVE WATER
- ☐ MANAGE PLANT PESTS
- ☐ SUPPLY NITROGEN THROUGH BIOLOGICAL FIXATION TO REDUCE ENERGY USE
- ☐ IMPROVE SOIL QUALITY
- ☐ PROVIDE CROPS FOR BIOENERGY FEEDSTOCKS
- ☐ MANAGE SALINE SEEPS
- ☐ PROVIDE FEED FOR DOMESTIC LIVESTOCK
- ☐ PROVIDE FOOD AND COVER FOR WILDLIFE AND POLLINATORS

PLANNED ROTATION:

YEAR	CROP	ESTIMATED YIELD	HARVEST METHOD

CROP DIVERSITY INDEX:

Benchmark Index: _____ Planned Index: _____

CROP ROTATION INTENSITY RATING:

Benchmark Index: _____ Planned Index: _____

FERTILIZER PLAN: See FOTG, Section IV, Practice Specification, Nutrient Management (Code 590)

CROP	PROJECTED YIELD	N	P	K	OTHER	APPLICATION DATE	APPLICATION METHOD

Additional fertilizer information:

_____

_____

_____

WEED CONTROL PLAN: See FOTG, Section IV, Practice Specification, Integrated Pest Management (Code 595)

Chemical or mechanical. Producer's plan for use of herbicides, rates, and application:

_____

_____

_____

DISEASES AND INSECT CONTROL: See FOTG, Section IV, Practice Specification. Integrated Pest Management (Code 595)

Producers plans for disease or insect control if problems should occur:

_____

_____

_____

Chemicals used in performing this practice must be federally, state and locally registered. They will be applied strictly in accordance with authorized registered uses, directions on the label, and other federal, state, and local regulations.

SCI, STIR and Wind or Water Soil Erosion Loss Output (specify wind or water erosion)

Soil conditioning index (SCI)	*Average annual slope STIR*	*Wind or water soil erosion Loss (tons/ac)*

The **SCI** is the **Soil Conditioning Index** rating. If the calculated index is a negative value, soil organic matter levels are predicted to decline under that production system. If the index is a positive value, soil organic matter levels are predicted to increase under that system.

The **STIR** value is the **Soil Tillage Intensity Rating**. It utilizes the speed, depth, surface disturbance percent and tillage type parameters to calculate a tillage intensity rating for the system used in growing a crop or a rotation. STIR ratings tend to show the differences in the degree of soil disturbance between systems. The kind, severity and number of ground disturbing passes are evaluated for the entire cropping rotation as shown in the management description.

DECISION TO RE-CROP: The two major factors in deciding to re-crop in a flexible crop rotation are the annual available water and the stored subsoil moisture available determined just prior to planting. Approximately 9 inches of plant available water, at a minimum, is needed to produce a small grain crop. For every additional inch of plant available water 4-5 bushels per acre yield may be expected. Available water is stored soil moisture plus the potential growing season precipitation expected at the 70 percent probability level. The upper 4 feet of soil is used to calculate the stored soil moisture. It should be noted that this method assumes adequate weed control and adequate fertility levels to meet production goals.

In a dry year the legume is terminated as green manure. If good moisture prevails the crop can be maintained for forage or seed production. Subsoil moisture must be monitored regularly and the crop terminated before excess subsoil moisture is extracted.

Use the following calculations to determine when to **re-crop:**

Planting Spring Crops:

_____ **inches stored soil plant-available water (measured in spring)**

+ _____ **inches growing season precipitation – 70% probability**

_____ **TOTAL inches plant-available water for growing season**

Planting Winter Crops:

_____ **inches stored soil plant-available water (measured in fall)**

+ _____ **inches average winter precipitation X adjustment factor**

+ _____ **inches growing season precipitation – 70% probability**

_____ **TOTAL inches plant-available water for growing season**

APPROVALS:

Reset Job Sheet **Print Job Sheet**

NRCS Conservationist	JOB APPROVAL AUTHORITY	Date
Producer		Date

CERTIFICATION STATEMENT:

I hereby certify that this practice has been installed in accordance with NRCS standards and specifications.

NRCS Conservationist	JOB APPROVAL AUTHORITY	Date
		Date