

## **CONSERVATION ENHANCEMENT ACTIVITY**

### E340F



# Cover crop to minimize soil compaction

**Conservation Practice 340: Cover Crop** 

**APPLICABLE LAND USE: Crop (Annual & Mixed); Crop (Perennial)** 

**RESOURCE CONCERN: Soil** 

**ENHANCEMENT LIFE SPAN: 1 Year** 

### **Enhancement Description**

Establish a cover crop mix that includes plants with both fibrous root and deep rooted systems. Fibrous to treat and prevent both near surface (0-4") and deep (>4") soil compaction and deep rooted to break up deep compacted soils. Cover crop shall not be harvested, grazed, or burned.

### Criteria

- Plant species, seedbed preparation, seeding rates, seeding dates, seeding depths, fertility requirements, and planting methods will be consistent with applicable local criteria and soil/site conditions (REFER TO STATE SPECIFIC LISTS).
- Determine method and timing of cover crop termination to meet grower's objective and current NRCS Cover Crop Termination Guidelines.
- Select species that are compatible with other components of the cropping system.
- Ensure herbicides used with crops are compatible with cover crop selections.
- Cover crops may be established between successive production crops, companionplanted or relay-planted into production crops. Select species and planting dates that will not compete with production crop yield or harvest.

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- Do not burn cover crop residue.
- Do not harvest or graze cover crop.



- If specific rhizobium bacteria for selected legumes are not present in the soil, treat seed with appropriate inoculum at time of planting.
- Select a mix of cover crop species that includes plants with both fibrous root and deep rooted systems. Fibrous rooted cover crop species are essential to treat and prevent both near surface (0-4") and deep (>4") soil compaction and deep rooted species to break up deep compacted soils.





### **Documentation and Implementation Requirements**

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### Participant will:

☐ Prior to implementation, provide NRCS with the planned crop rotation and field operation(s) used for each crop.

### **Planned Management Rotation Including Cover Crop**

Field	Planned Crops/Cover Crop (in sequence)	Planting Date	Harvest/Termination Date

**Planned Field Operations for each crop** 

Training Train operations for each crop					
Field	Crop	Field Operation		Timing of Field Operation (month/year)	

## Cover Crop Mix (minimum of 2 species, one each fibrous and deep rooted) and Seeding Rate

☐ Deep rooted crop types must have documented ability to alleviate compaction.

Species	Variaty	Seed Size	Typical Seeding Depth	Seeding Rate (PLS lbs/acre)	Percent of Mix	Root Type (fibrous or deep)
Species	Variety	Seed Size	Бериі	(PLS IDS/acre)	(%)	ueep)

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# **Establishment and Management Considerations:**

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	Task	Provide information and details	
	Seedbed Preparation		
	Seeding Date		
	Seeding Depth		
	Seeding Method		
	Fertilizer, as needed		
	Weed Management, as needed		
	Termination Date (window)		
	Termination Method		
	•	d and follow current <u>NRCS Cover Crop Termination Guidelines</u> .	
	During implementation, cover crops must not be burned, grazed, or harves <mark>ted.</mark>		
	During implementation, notify NRCS of any planned changes in crops, crop rotation, or unharvested areas to verify the planned system meets the enhancement criteria.		
	After implementation, if changes to the cover crop and crop rotation were made, complete the tables above to document the applied Cover Crop for the contract period and provide to NRCS.		
NR	CS will:		
	As needed, provide technical assistance in selecting cover crop mixes for the crop rotations or substitute species that would meet the criteria of the enhancement.		
	As needed, provide additional assistance to the participant as requested.		
	Prior to implementation, provide and explain the current NRCS Cover Crop Termination Guidelines.		
	Prior to implementation, verify the cover crop mix includes both fibrous root and deep rooted systems.		
	During implementation, evaluate planned adjustments in cover crop selected, timing in crop rotation, management, or field operations to verify the new system meets the enhancement criteria.		

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☐ After implementation, evaluate the applied crop rotation or management using information provided from the participant, if any variation to planned evaluation, document that the applied rotation met the enhancement criteria.



### **NRCS Documentation Review:**

I have reviewed all required participant documentation and have determined the participant has implemented the enhancement and met all criteria and requirements.

Participant Name:	Contract Number:
Total Acres Applied:	Fiscal Year Completed:
NRCS Technical Adequacy Signature	Date

### **IDAHO SUPPLEMENT TO**

### **CONSERVATION ENHANCEMENT**

# CONSERVATION STEWARDSHIP PROGRAM

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#### **Additional Criteria for Idaho**

- Plant species, seedbed preparation, seeding rates, seeding dates, seeding depths, fertility requirements, and planting methods will be consistent with applicable local criteria and soil/site conditions. For an Idaho state specific cover crop list and local establishment/management details <See Idaho Plant Materials Technical Notes #67 and #24>. TN #67 and #24 can be found in section 1 of the the Idaho Field Office Technical Guide (eFOTG).
- A cover crop selection tool was developed by the NRCS (West National Technology and Support Center) WNTSC. The cover crop selection tool was developed to assist conservation planners in determining what cover crops will meet the client's resource management objectives, and are adapted and suited to the site. This cover crop selection tool may be used to assist you in choosing appropriate cover crops that will meet the intended use and practice purpose. The cover crop selection tool can be found in NRCS WNTSC Technical Note #2 and can be found at: https://www.nrcs.usda.gov/plant-materials/pacific-northwest-cover-crop-selection-tool
- Implementation of this enhancement must meet all "general criteria" and "additional criteria related to the applicable practice purpose" listed in the NRCS conservation practice standard for the cover crop (340) practice.

#### Additional Documentation Requirements for Idaho

Planning and Certification of this enhancement will be documented using the Idaho
Cover Crop Design Worksheet. This worksheet can be found in section IV of the Field
Office Technical Guide along with the conservation practice standard for Cover Crop
(340).