



**CONSERVATION ENHANCEMENT ACTIVITY**

**E334A**

**CONSERVATION STEWARDSHIP PROGRAM**

**Controlled traffic farming to reduce compaction**

**Conservation Practice 334: Controlled Traffic Farming**

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

**RESOURCE CONCERN: Soil**

**ENHANCEMENT LIFE SPAN: 5 Year**

**Enhancement Description**

Establish a controlled traffic system where no more than 25% of the surface is tracked with heavy axel loads to minimize soil compaction. For row crops (e.g. corn in 30-inch rows) no tire should run on a row except for flotation tires on combines and/or fertilizer and lime spreading trucks. If wide flotation tires are used, they must be big enough that the inflation pressure will be below 18 psi to minimize compaction on trafficked rows.

**Criteria**

- Ensure that controlled traffic lanes are designed and used in a manner that avoids concentrated flow that may result in gully erosion.
- Limit wheel/track traffic to no more than 25 percent of the soil surface. The same tracks must be used for all high load traffic continually. High wheel load traffic is defined here as any tire or track that bears a load higher than 6,000 pounds at 30 psi or 6 tons per axle.
- For row crops (e.g. corn in 30-inch rows) no tire should run on a row except for flotation tires on combines and/or fertilizer and lime spreading trucks.
- If wide flotation tires are used, they must be big enough that the inflation pressure will be below 18 psi to minimize compaction on trafficked rows.

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- Use a Geographic Positioning System (GPS) to guide field operations and wheeled/track traffic when the designated traffic lanes are obscured.
- Once the tram lines or traffic pattern is established, do not till deeper than 4 inches.

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## Documentation and Implementation Requirements

Participant will:

- Prior to implementation, develop a plan to limit wheel/track traffic to no more than 25 percent of the soil surface.
- Prior to implementation, complete the following table to provide the current and any planned changes to crop row width.

| Crops in Rotation<br>(shown in sequence) | Current Crop Row Width | Planned Crop Row Width |
|--|------------------------|------------------------|
|  |                        |                        |
|  |                        |                        |
|  |                        |                        |
|  |                        |                        |
|  |                        |                        |

- Prior to implementation, complete the following table to provide the current equipment width and spacing used for the above crop rotation.

| Equipment Used in Crop Rotation | Width of Equipment (feet) | Tire/Track Spacing (on-center Inches) |
|---------------------------------|---------------------------|---------------------------------------|
|                                 |                           |                                       |
|                                 |                           |                                       |
|                                 |                           |                                       |
|                                 |                           |                                       |
|                                 |                           |                                       |

- Prior to implementation, complete the following table to provide any planned changes to equipment width and spacing used for the above crop rotation.

| Equipment used in Crop Rotation | Width of equipment (feet) | Tire/Track spacing (on-center Inches) |
|---------------------------------|---------------------------|---------------------------------------|
|                                 |                           |                                       |
|                                 |                           |                                       |
|                                 |                           |                                       |
|                                 |                           |                                       |



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| Equipment used in Crop Rotation | Width of equipment (feet) | Tire/Track spacing (on-center Inches) |
|---------------------------------|---------------------------|---------------------------------------|
|                                 |                           |                                       |

- During implementation, the same tracks must be used for all high load traffic continually. High wheel load traffic is any tire or track that bears a load higher than 6,000 pounds at 30 psi or 6 tons per axle.
- During implementation, use a Geographic Positioning System (GPS) to guide field operations and wheeled/track traffic when the designated traffic lanes are obscured.
- During implementation, once the tram lines or traffic pattern is established, do not till deeper than 4 inches.
- During implementation, if ruts develop, use tillage or other specialized equipment to remove ruts and reestablish controlled traffic lanes.

NRCS will:

- As needed, provide technical assistance to meet the criteria of the enhancement.
- Prior to implementation, verify the developed plan will limit wheel/track traffic to no more than 25 percent of the soil surface. **Percent wheel/track traffic = \_\_\_\_\_**
- Prior to implementation, ensure that controlled traffic lanes are planned and implemented in a manner that avoids concentrated flow that may result in gully erosion.
- After implementation, verify the plan was implemented to limit wheel/track traffic to no more than 25 percent of the soil surface. **Percent wheel/track traffic = \_\_\_\_\_**



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### NRCS Documentation Review:

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

Participant Name \_\_\_\_\_ Contract Number \_\_\_\_\_

Total Amount Applied \_\_\_\_\_

Fiscal Year Completed \_\_\_\_\_

\_\_\_\_\_  
NRCS Technical Adequacy Signature                      Date

\*Sign and certify in the Oregon-Acknowledgment & Certification supplement below.

**Design Approvals & Acknowledgements:**

| Design Approval | Date | Job Approval Authority |
|-----------------|------|------------------------|
| Designed by:    |      |                        |
| Approved by:    |      |                        |

**Client's Acknowledgement Statement:**

The client acknowledges:

- I have received a copy of the specification and understand the contents and requirements.
- It is my responsibility to obtain all necessary permits and/or rights and to comply with all ordinances and laws pertaining to the application of this practice.
- I will not begin installation of this practice until I have received appropriate approval to do so. I understand NRCS also has Federal and state laws to comply with that may take some time to address (e.g. cultural resources).

| Client's Signature | Date |
|--------------------|------|
|                    |      |

**Certification Documentation:**

|   |  |
|---|--|
|   | Field Evaluation: Post-treatment inventory, measurements, notes, as-built, and supporting documentation (document completion in conservation plan), as required. |
|   | Map(s): Including field numbers, fields treated, and units treated (may document on conservation plan map), as required.   |
|   | Photos or other supporting documentation (e.g., seed tags, soil tests, receipts, invoices, spray records, fertilizer records, etc.)                              |
| Brief Description of Work Accomplished (types of equipment used, date of application, extents and quantities installed, etc.) |  |
|   |  |

**Certification Statement:**

The employee certifies the implementation of this conservation practice:

- Meets the purpose, general criteria, and any required additional criteria as documented in the conservation practice standard and/or enhancement sheet.
- Meets the specifications contained herein and is complete.
- Conforms to my existing Job Approval Authority controlling factors and levels.

| Name | Date | Job Approval Authority |
|------|------|------------------------|
|      |      |                        |

| <b>Field Level Certification</b> – For multiple applications of this design. |      |         |                  |           |
|--|------|---------|------------------|-----------|
| Land Unit/ Contract Item Number  | Date | Unit(s) | Amount Installed | Certifier |
|  |      |         |                  |           |
|  |      |         |                  |           |
|  |      |         |                  |           |
|  |      |         |                  |           |
|  |      |         |                  |           |