

## Precision Land Forming and Smoothing

### Definition/Purpose

Reshaping the surface of agricultural land to planned grades for the purpose of improving water quality. Precision land forming is reshaping crop fields to planned grades to improve surface drainage and control erosion. Land smoothing is used for removing irregularities within a field, including depressions, mounds, old terraces or diversions, turn-rows, or other surface irregularities.

Improve Water Quality by:

1. Reducing nutrient loss
2. Reducing concentrated flow of water from an agriculture field
3. Improving infiltration

### Policies

1. Land must be agricultural land that is being used for crop production. Land must be suitable for practice intentions.
2. Land must be graded to the extent needed to eliminate concentrated flow and achieve sheet flow for non-bedded crops.
3. Precision Land Forming and Smoothing must be accompanied by one or more of the following best management practices that must meet NRCS standards (the contract must specify which accompanying practice(s) apply):
  - a. Residue and Tillage Management on all fields where Precision Land Forming and Smoothing is applied. Burning of crop residue is not permitted, unless NC Cooperative Extension or NCDA&CS Regional Agronomist certifies that burning is recommended to control a pest infestation.
  - b. Water Control Structures that intercept all drainage acres from fields where Precision Land Forming and Smoothing is applied.
  - c. Riparian Forest Buffer or Filter Strip that intercepts all drainage acres from fields where Precision Land Forming and Smoothing is applied.
4. The accompanying BMP must be maintained for the five-year lifespan of this practice. NOTE – If accompanying BMP is Residue and Tillage Management the practice must be maintained for five years.
5. When contracting this practice for Precision Land Forming use the PRECISION LAND FORMING average cost list component.
6. When contracting this practice for Land Smoothing use the appropriate GRADING average cost list component for removal of gullies, terraces, diversions, or other structures.

Agriculture Cost Share Program

7. If the practice is completed outside the recommended planting season of a field crop, or if a field crop is not to be planted, a seasonal cover crop must be planted to prevent erosion.
8. A stable outlet is required for all hoe-drains for the life of the practice.
9. Existing condition and as-built surveys are required for practice design and check-out.

<b>LAND SMOOTHING</b>	
<b>Maintenance Period</b>	5 years
<b>BMP Units</b>	ACRES
<b>Required Effects</b>	ACRES_AFFECTED (planted acres and drainage area)
<b>JAA</b>	SWCC - 466 Precision Land Forming and Smoothing  OR  NRCS - ENG - 462 - Precision Land Forming and Smoothing
<b>NRCS Standard</b>	NRCS - ENG - 462 - Precision Land Forming and Smoothing
<b>CS2 Reference Materials</b>	NC-ACSP-11 Signature Page Map with BMP location, fields, and roads