

EXAMPLE 1 CONSERVATION MANAGEMENT SYSTEM GUIDANCE DOCUMENT

LOCATION (MLRA AND NRD): Lower Elkhorn, Papio Missouri and Lewis and Clark NRDs MLRA 102C and 107N

RESOURCE SETTING: Dryland Cropland, crops: corn & soybeans; Soils: Crofton-Nora D & E slopes (some flatter areas intermixed); Annual precip 23-28 inches, moisture is usually lacking in the summer during peak ET, and rainfall often comes in short intense spring and early summer storms; Wildlife: Potential for pheasant, quail, deer and other wildlife.

BENCHMARK RESOURCE PROBLEMS (EXISTING CONDITIONS)

Soil:	Sheet & rill erosion around four times tolerable level, ephemeral gullies in drainage courses, some off-site damage from sediment deposition, poor soil conditions (low organic matter),
Water:	Excess runoff, excessive soil moisture loss, surface water contamination from sediment, nutrients and pesticides
Air:	
Plants:	Below average crop yields, loss of crop stand
Animals:	Lack of food, cover, and shelter for upland wildlife.
Human:	Traditional operator that is resistant to no-till, contouring, and terraces. Is concerned about carry over from corn herbicides for soybeans. Wants to incorporate N before planting corn to prevent losses, properly place phosphorus, and control weeds without the use of atrazine or burn down herbicides that may help control weeds in no-till systems. Concerned that no-till system will cut yields and lead to nutrient and pest management problems. Wants to incorporate soybean herbicides to control water hemp on non-roundup soybeans.

CONSERVATION MANAGEMENT SYSTEM (list practices to be applied and maintained and where they are applicable)

Planned Practices	Practice Description
328 Crop Rotation	Crop Rotation: Corn soybean (other crops such as oats, alfalfa may be periodically substituted);
329A Residue Management No-Till	Complete no-till system, drill soybeans into corn on steeper slopes, plant soybeans on flat slopes.
386 Field Borders	Established where concentrated flow erosion is occurring on steep end rows.
393 Filter Strips	Filter strips are established next to seasonal and perennial streams
412 Grassed Waterways	Established where concentrated flow erosion is occurring
590 Nutrient Mgt	Nutrient Management program that follows UNL recommendations and includes banded P and sidedressed Nitrogen or injected N on flat areas or injected on the contour (prevent rilling in injection slot), additional N may be needed because of N immobilization due to additional residue from no-till. Apply dry P with Planter or drill.
595 Pest Mgt	Pesticide Mgt/Cultural Practices: all records will be kept and scouting for all post pesticide treatments and appropriate cultural practices will be used to limit pesticides use. Residual pre-plant herbicide along with a burndown herbicide (if necessary) will be used on non-roundup crops and burndown prior to or shortly after planting roundup crops and during the growing season. Spot spraying and cultivation will be used where appropriate. Corn is planted in 30" rows and soybeans are drilled on slopes and planted on flat areas.

RESULTS OF MANAGEMENT ACTIONS

MANAGEMENT ACTIONS	RESULTS OF MANAGEMENT ACTIONS
Complete No-Till System	Reduce erosion 8 tons or less per acre, reduce moisture loss and increase yields, improved permeability, and may increase herbicide costs. Increased yields due to improved soil quality, less soil moisture loss and less runoff.
Nutrient Mgt program that includes banded P and sidedressed Nitrogen or injected N on flat areas or injected on the contour	More efficient use of N, less P need to achieve yield goals, less loss of nutrient to the environment, adequate nutrients for crops, risk of not getting all N on because of wet weather (sidedress), more horsepower needed when injecting liquid N, more management required.
Use of combination of post, burndown, and ppi herbicides, including some Roundup Ready crops (no Roundup Ready crops will follow each other)	Less weed resistance, good weed control, improved yields during drought years, and more management time.
Corn-Soybean rotation	Minimal use of insecticides, large dependence on herbicides for weed control.
Buffer Practices (field borders, waterways and filter strips)	Provide Filtering of runoff water and convert crop to grass on areas flooded or where crops can be lost from water runoff

QUALITY CRITERIA DOCUMENTATION

RESOURCE CONCERN (refer to Section III quality Criteria and Exhibit 1 of NPPH for a list of concerns)	BEFORE CONDITIONS	AFTER CONDITIONS (refer to Section III quality criteria for more guidance)	QUALITY CRITERIA MET (Y or N)
Sheet and Rill Erosion	4T	8 tons or less	Y on 8% and less slope N on Steeper slopes
Concentrated Flow Erosion	Occurring	Treated with grass waterways	Y
Soil Tilth (condition)	Soil Conditioning Index is negative	Soil Conditioning Index is positive	Y
Plant Management (pest mgt)	595 practice standard not being followed	595 practice standard being followed	Y
Ground water contaminates (nitrogen)	Medium N leaching due to fall application	Low N leaching	Y
Ground water pesticide contaminates	Some medium and high pesticide leaching risk using WinPST	Low pesticide leaching risk using WinPST	Y
Wildlife Habitat	Index rating on cropland less than 0.5	Index rating on cropland 0.5 or greater	Y
Surface water contaminants Phosphorus	P-Index in Medium Category	P-index in Low category	Y