

## The Planning Process

- ❖ Phase I – Collection & Analysis
  - Identify Problems and Opportunities
  - Determine Objectives
  - Inventory Resources
  - Analyze Resource Data
- ❖ Phase II – Decision Support
  - Formulate Alternatives
  - Evaluate Alternatives
  - Make Decisions
- ❖ Phase III – Application and Evaluation
  - Implement the Plan
  - Evaluate the Plan

## Conservation Planning Basic Field Information Collection Sheet Planning Aid *ver. 8/11*

On every site visit bring the following items at a minimum:

- Clipboard w/Aerial Photo
- Soils Map & Legend
- Inventory of Planning Area Form &

### Instructions

- Assistance Notes
- Extra Pen/Pencil, Calculator
- Clinometer, GPS Backpack, Camera
- Cell phone

*Note: Planner may need more than one site visit.*

### **THINGS TO NOTE, MARK WITH GPS, OR DRAW ON AERIAL PHOTO**

\* ACRES \* FARM/TRACT NUMBER \* LAND USE \* PROPERTY LINES \* UTILITIES \* EASEMENTS \* OUTLETS \* EXISTING CONSERVATION PRACTICES \* PADDOCK SIZES & LOCATIONS \* FEEDING, HANDLING, & WATERING AREAS \* DITCHES/DRAINS \* LOG LANDINGS \* ROADS \* CULVERTS \* WET SPOTS \* CULTURAL RESOURCES \* ETC.

### **GENERAL FIELD INFORMATION TO GATHER**

*(Apply the following as questions to yourself or landowner)*

#### **HEADQUARTERS**

- Renter
- Chemicals Stored
- Nozzle Tips, Hoses, Gauges Checked regularly
- Proper Disposal of Rinse Water after Cleanup
- Calibrate Equipment

#### **FOREST**

- Forest Management Plan (younger than 10 years)
- Forest Type (dominant species)
- Even Aged Stand (year planted stand)
- Last Harvest (pre-commercial/ selection/ clear-cut)
- Last Prescribed Burn
- Applied Chemicals or Organic
- More in depth info needed with forestry inventory tools

#### **IRRIGATION**

- Source for Irrigation
- Irrigation System Type

#### **CROP/ PASTURE/ HAY/ ORCHARDS/ VINEYARDS/ CHRISTMAS TREES**

- Conservation Plan
- Prescribed Grazing Plan
- Pest Management Plan
- CNMP or NMP

- Crop Rotation
- Tillage
- Time of Tillage
- Tillage Implements
- Yields & RYE
- Percent Residue
- Representative Slope
- Length of Slope
- Ridge Height (for each crop)
- Distance between. Rows
- Spacing within Rows
- Furrow/Row Grade
- Noxious Weeds
- Target Pests
- Pest Control Method
- Pesticides (specific brand/AI)
- Last Soil Test

#### **GENERAL LIVESTOCK**

- Livestock Type & Breed
- Number of Animals
- Average Weight
- Months on Farm
- Dates Confined
- Dates Grazed
- Mortality Handled
- Manure Type
- How Manure Spread
- Application Rate

#### **FEEDLOT/DAIRY**

- Type of Waste Storage
- Waste Storage Roofed
- Type of Bedding
- Type of Waste Separator

- Desired Waste Storage Time
- Existing Solid Storage Dimensions
- Bulk Tank/ Milk house/ Parlor/ Pipeline/ Holding Area/Lot Number of Washes & Gallons/Wash
- Lot Area/ Paved Area contribution to Storage
- Silage Leachate

#### **GRAZED LAND**

- Feed Supplemented
- Number of Paddocks
- Size of Paddocks
- Type & Quality of Vegetation
- Planned Weight of Livestock
- Current Stocking Rate
- Planned Stocking Rate
- How often Moved
- Dates Grazed

#### **NATURAL AREAS**

- Wildlife Management Plan
- Type(s) of Wild Game or Fish Managed
- Recent Habitat Mgt. Actions
- Area(s) Designated for Habitat Mgt.

*Use the CPA-52 to Document Client's Objectives  
and  
all the Resource Concerns you observe...  
not just the concerns the client calls attention to*

# GENERAL INFORMATION TO GATHER IN THE FIELD FOR SPECIFIC TOOLS

## USLE

### (HEL DETERMINATIONS ONLY)

- Crop Rotation
- Slope
- Length of Slope
- Ridge Height (for each crop)
- Tillage Practice
- Time of Tillage (Month & Date)
- Furrow/Row Grade

## RUSLE (VERSION 1.04)

### (PLAT CALCULATIONS ONLY)

- Crop Rotation
- Slope
- Length of Slope
- Tillage Practice
- Time of Tillage (Spring/Fall)
- Furrow/Row Grade

## RUSLE II

### SOIL LOSS CALCULATIONS, SCI, STIR

- Crop Rotation
- Average Yield
- Slope
- Length of Slope
- Tillage Practice (i.e. Chisel/ Disk? No. of times?)
- Time of Tillage (Spring/Fall)
- Tillage Equipment
- Rock Cover Percent
- Manure/Compost applied (tons/gallons/acre)
- Mulch/ Surface Residue Applied or Removed (tons/acre)
- Number of years in pasture
- Location, type, & height of existing vegetative or structural wind barrier (WEPS only)

## GULLY CALCULATION

- Length of Gully (ft.)
- Top Width (ft.)
- Bottom Width (ft.)
- Depth (ft.)

## WIN-PST

- Crop Rotation and Pesticides used (pesticide information from landowner or crop-specific from NC Ag Chemicals manual)
- Pesticides (Specific brand names or Active Ingredients needed)

## PLAT/NLEW

- All RUSLE (Version 1.04) Information
- Realistic Yield Expectation
- Unfertilized Crops
- Soil Test
- Existing/Planned Buffers (ft), Ponds, Water Control Structures, and other runoff trapping devices & Acres served by those Practices
- Method of application & Rates of inorganic fertilizers
- Manure Type, Method of Application & Rates Applied
- Waste Analysis Report (optional)
- Drainage Spacing (ft) & Depth (in)

## WILDLIFE HABITAT EVALUATION PROCEDURE

- Pine Forest: Grazed/Raked; Basal Area & Stocking Rate; % of Forest in permanent wildlife openings (Approx. 0.5-2ac.); Burning Frequency (every ? yrs); % Hardwoods ≥ 10"DBH; Presence of invasive species restricting regeneration or causing damage
- Hardwood Forest: Grazed; Size Class(es) (mixed/homogenous) & Canopy Coverage; Types of tree species; Number of snags or cavity trees >10"DBH; % ≤ 3ft tall native under story cover; Presence of invasive species restricting regeneration or causing damage
- Cropland: % residue in fall; Crop Rotation; Avg. field size (ac); % of unharvested crops; % of field perimeter in permanent wildlife Field Borders (20' min. width) with native veg.
- Old Fields: Avg. field size(ac.); No. times area burned, disked, chopped, or mowed/5 years; Species types of canopy of grass and forbs at mature height; % of area dominated by woody vegetation
- Pasture & Hayland: Species composition (0.5 ac. min.); Avg. field size (ac.); No. hay harvests/year or length of grazing system; % of field perimeter ungrazed/hayed in permanent wildlife Field Borders (20ft min. width) with native vegetation
- Orchards, Christmas Trees & Nurseries: Avg. field size(ac.); % of field perimeter in permanent wildlife Field Borders (20' min. width) with native veg.; Mgmt between rows; Plant composition between rows

## PASTURE CONDITION EVALUATION

North Carolina Score Card for Pasture Condition		Evaluation				
Farm Name: _____		Date: _____				
Indicators (with relative weight for determining score)	Weight factor	Pasture Number				
		1	2	3	4	5
Multiply wt. factor by score to get weighted score						
<b>PERCENT DESIRABLE PLANTS (10%)</b> % of plant cover by weight that is desirable for animals using the forage:	1.0					
1 <20 2 20-40 3 40-60 4 60-80 5 >80						
<b>LIVE PLANT COVER (15%)</b> Live stems and green leaf cover by all species assuming 3" stubble hts:	1.5					
1 <40 2 40-60 3 60-75 4 75-90 5 90-100						
<b>PLANT DIVERSITY (10%)</b> diversity may be determined for each pasture or for the farm as a whole	1.0					
1 1-species & for 1 seasonal growth grp. 2 2-species all palatable cool or warm 3 3-species all palatable cool or warm 4 4-species all palatable cool or warm 5 4-5 species warm & cool & legume						
<b>PLANT RESIDUE (3%)</b> organic residue on ground between plants:	0.3					
1 0% 2 1-10% 3 10-20% 4 20-30% 5 30-70%						
<b>PLANT VIGOR (level of potential recovery post graze) (20%)</b> Degree of plant stress which affects recovery: If <4, score the factors causing poor vigor (see next page for reference OWL)	2.0					
1 none 2 slow 3 med. 4 rapid 5 very rapid						
<b>LEGUME Content (5%)</b> Percentage of legume present as total air dry weight:	0.5					
1 <10, or >60 2 10-19 3 20-29 4 30-39 5 40-60						
<b>UNIFORMITY OF GRAZING (2%)</b> Degree of Spot grazing is:	0.7					
1 >50% 2 25-50% 3 10-25% 4 minor 5 none						
<b>LIVESTOCK LOUING AREAS (10%)</b> Presence of livestock concentration area covering 7% of pasture and proximity to surface water:	1.0					
1 >10 2 5-10 3 <5 4 some 5 none						
<b>SOIL COMPACTION (5%)</b> Probe moist soil comparing to an ungrazed area (i.e. beneath fence)	0.5					
1 very severe 2 severe 3 moderate 4 slight 5 not visible						
<b>EROSION (15%)</b> Consider all the following: Sheet, rill, gully, streambank, shoreline, or wind	1.5					
1 very severe 2 severe 3 moderate 4 slight 5 not visible						
<b>PASTURE CONDITION SCORE, total for each field based on weighted values</b>						
<b>Acres in each field</b>						
<b>Weighted score by acreage</b>						

- Need Soil Test to identify causes of poor plant vigor or factors affecting plant vigor

## CGRAZE

- Animal Type
- Number of Head
- Average Body Condition Score for herd/flock
- Weight of adult animals
- Percent of females birthing in 1st month
- Birthing Efficiency (percent of herd that will give birth)
- Month birthing begins (calving season)
- Birth weight of baby
- Weaning age (months) and weight
- When animals are moved off farm post weaning (months)
- If animals are not moved off farm at weaning, what is the weight when moved off farm?
- Number of animals culled each year
- When animals are culled
- Number of females kept as replacements, weight of replacements, when are the extras sold or are replacements purchased
- Average grazing efficiency (length of grazing period)
- Target grazing height post grazing or heights when animals move off pasture
- Supplemental hay/forage brought onto the farm (tons of dry matter)
- Feed used that is not accounted for in the pasture
- Is owner interested in changing herd size, farm layout, fence locations, watering facilities, lanes, etc?