East National Technology Support Center

Addressing Resource Concerns: Evaluating, Documenting, and Reporting Progress using NRCS' New Land Use Planning Criteria

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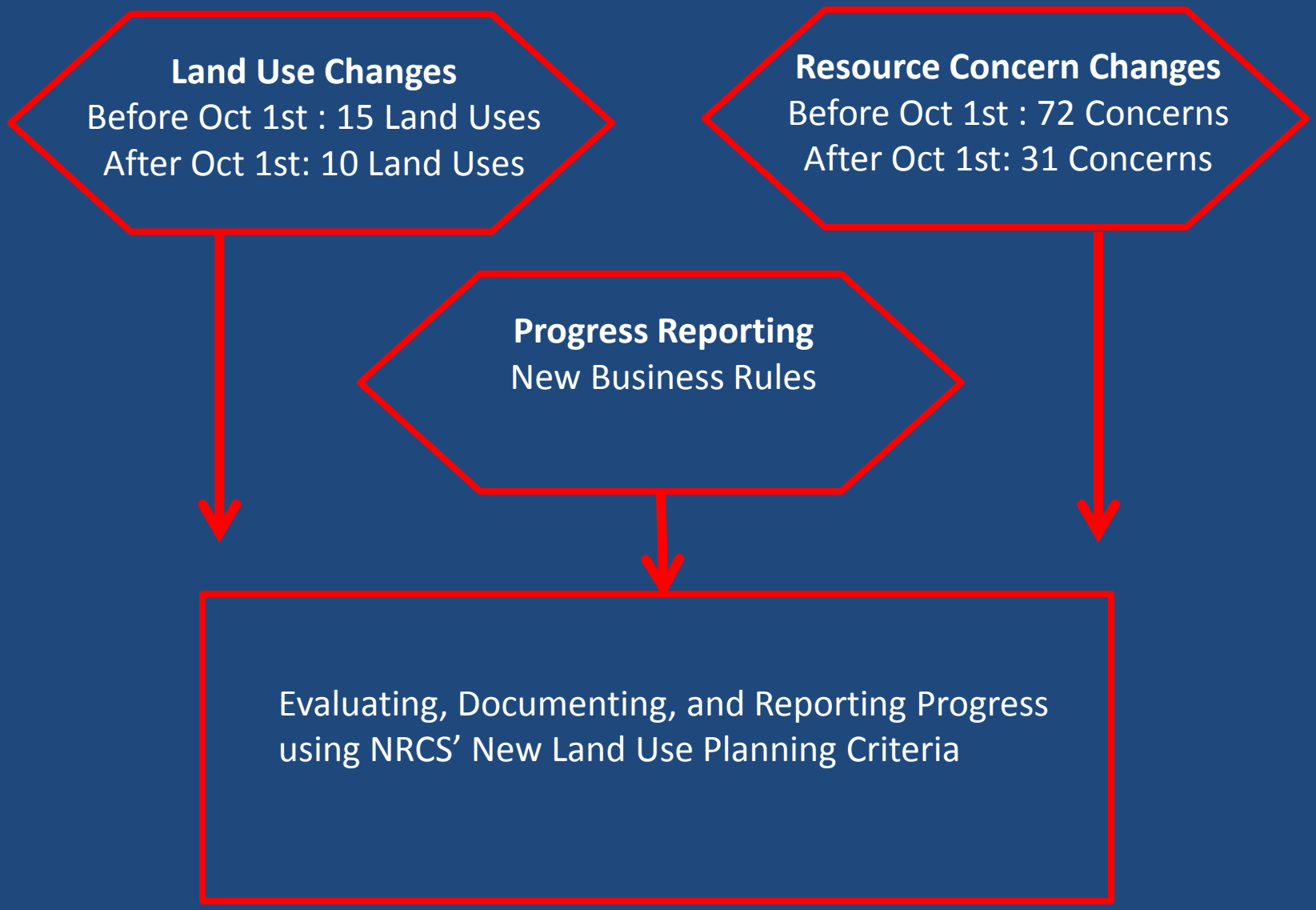

Land Use Changes
Before Oct 1st : 15 Land Uses
After Oct 1st: 10 Land Uses
Resource Concern Changes
Before Oct 1st : 72 Concerns
After Oct 1st: 31 Concerns
Progress Reporting
New Business Rules
Evaluating, Documenting, and Reporting Progress using NRCS' New Land Use Planning Criteria

Land Use Changes
Before Oct 1st : 15 Land Uses
After Oct 1st: 10 Land Uses

Why were Land Uses changed?

What are the changes?

What are modifiers?

How are modifiers used with the new Land Uses?

Land Use

- Definition of land use in the National Planning Procedures Handbook (NPPH):
  - "a term used by NRCS to identify the intent of the client with regard to the purpose to which a land unit is to be put".
  - In other words land use designations communicate the purpose of human activity on the land.

Land Use – Issues with Current

- 15 conservation land use designations are defined in the NPPH
- Several are:
  - Poorly defined
  - Unable to provide a clear purpose
  - Difficult to apply
  - Unable to represent the planning scenario accurately
  - Competing when the land use has multiple purposes
  - Rarely used

Land Use – Issues with Current

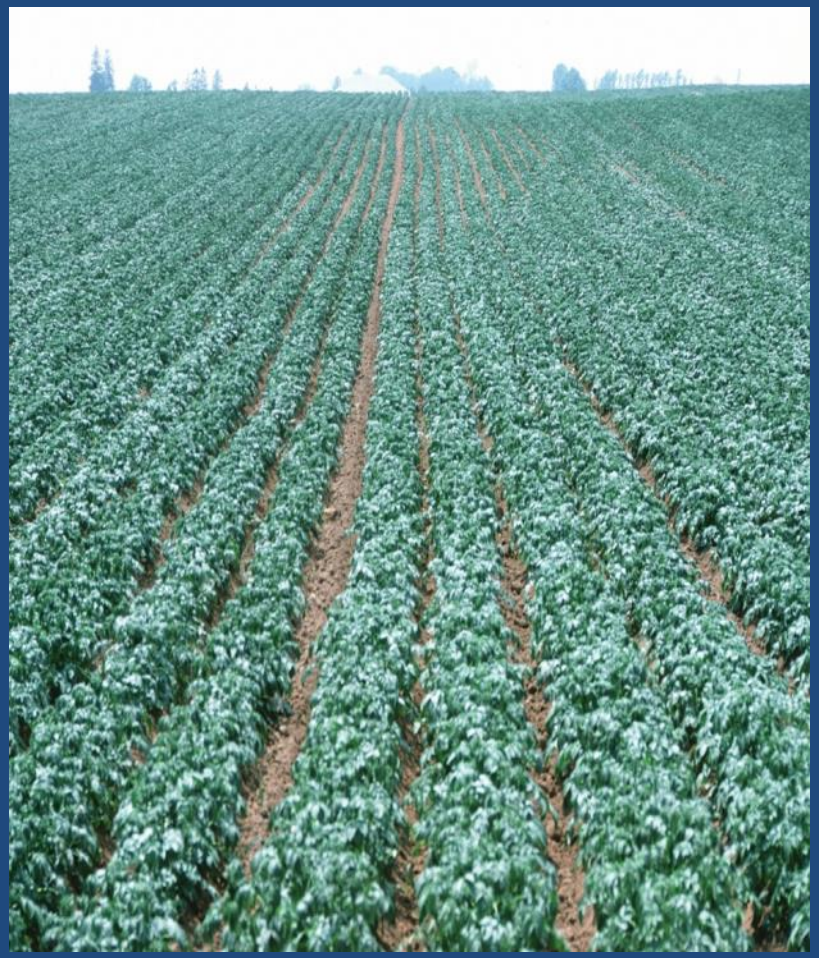
- Inconsistent application of land use complicates efforts to conduct:
  - Area-wide inventories and assessments
    - Conducting National Resource Inventory (NRI)
  - Program ranking & funding
    - Use in the Application Evaluation and Ranking Tool (AERT)
  - Modeling analysis
    - Conservation Effects Assessment Project (CEAP)

Conservation Delivery Streamlining Process

- Unclear or competing land use designations have been removed
- Changes are sensitive to legacy land use descriptions
- Introduces Land Use “modifiers” to more accurately define the land’s actual use and management.

Names Before October 1, 2013		Names After October 1, 2013
Crop	→	Crop
Forest	→	Forest
Grazed Forest	→	Forest
Grazed Range	→	Range
Hay	→	Crop
Headquarters	→	Farmstead
Mined	→	Other
Native or Naturalized Pasture	→	Pasture
Natural Area	→	Designated Protection Area
Pasture	→	Pasture
Recreation	→	Recreation
Urban	→	Developed Land
Water	→	Water
Watershed Protection	→	Watershed Protection
Wildlife	→	Wildlife
No Category Listed	→	Associated Agriculture Lands

Land Use Changes - Crop



- Prior to October 1, 2013
  - Crop: Land used primarily for the production of field crops or orchard crops alone or in association with sod crops.
  - Hay: Land on which perennial plants are managed and harvested for hay. (Annual plants planted for hay, and forage crops in short-term rotation are cropland)
- After October 1, 2013
  - Crop: Land used primarily for the production and harvest of annual or **perennial field, forage**, food, fiber, horticultural, orchard, vineyard, or **energy crops.**

Land Use Changes - Forest

- Prior to October 1, 2013
  - Forest: Land on which the primary vegetation is forest (climax, natural, or introduced plant community) and use is primarily for production of wood products.
  - Grazed Forest: Forest land that produces understory vegetation that is used for the production of livestock.
  - Native or Naturalized Pasture: Forest land that is used primarily for the production of forage for grazing by livestock rather than for the production of wood products. Overstory trees are removed or managed to promote the native or introduced understory vegetation occurring on the site. This vegetation is managed for its forage value through the use of grazing management principles.
- After October 1, 2013
  - Forest: Land on which the historic and/or introduced vegetation is predominantly tree cover managed for the production of wood products or non-timber forest products. Land on which the primary vegetation is tree cover (climax, natural, or introduced plant community) and use is primarily for production of wood products or non-timber forest products.

Land Use Changes - Range

- Prior to October 1, 2013
  - Grazed Range: Rangeland that is used primarily for the production of domestic livestock. Includes native plant communities and those seeded to native or introduced species, or naturalized by introduced species, that are ecologically managed using range management principles.
- After October 1, 2013
  - Range: **Land on which the historic and/or introduced vegetation is predominantly grasses, grass-like plants, forbs, or shrubs managed as a natural ecosystem. Rangeland may include natural grasslands, savannas, shrub lands, tundra, alpine communities, marshes, and meadows.** Land used primarily for the production of grazing animals. Includes native plant communities and those seeded to native or introduced species, or naturalized by introduced species that are ecologically managed using range management principles.

Land Use Changes - Pasture

- Prior to October 1, 2013
  - Pasture: Grazing lands composed of introduced or domesticated native forage species that are used primarily for the production of domestic livestock. They receive periodic renovation and/or cultural treatments, such as tillage, fertilization, mowing, weed control, and may be irrigated. They are not in rotation with crops.
- After October 1, 2013
  - Pasture: Land composed of introduced or domesticated native forage species that is used primarily for the production of livestock. Pastures receive periodic renovation and cultural treatments, such as tillage, fertilization, mowing, weed control, and may be irrigated. Pastures are not in rotation with crops.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Land Use Changes - Farmstead

- Prior to October 1, 2013
  - Headquarters: Land used for dwellings, barns, pens, corrals, or other facilities used in connection with farm and ranch operations.
- After October 1, 2013
  - Farmstead: Land used for facilities and supporting infrastructure where farming, forestry, animal husbandry, and ranching activities are often initiated. This may include dwellings, equipment storage, plus farm input and output storage and handling facilities. Also, includes land dedicated to the facilitation and production of high-intensity animal agriculture in a containment facility where daily nutritional requirements are obtained from other lands or feed sources.

Land Use Changes – Designated Protection Area

- Prior to October 1, 2013
  - Natural Area: Land or water used for the preservation, protection, and observation of the existing resources, archaeological or historical interpretation, resource interpretation, or for aesthetic value. Some of these may be officially designated by legislation or other authorities.
- After October 1, 2013
  - **Designated Protection Area** – Land or water used for the preservation, protection, and observation of the existing resources, archaeological or historical interpretation, resource interpretation, or for aesthetic value. These areas are officially designated by legislation or other authorities. **Examples: legislated natural or scenic areas and rural burial plots.**

Land Use Changes – Developed Land

- Prior to October 1, 2013
  - Urban: Land occupied by buildings and related facilities used for residences, industrial sites, institutional sites, public highways, airports, and similar uses associated with towns and cities.
- After October 1, 2013
  - Developed Land: Land occupied by buildings and related facilities used for residences, commercial sites, public highways, airports, and open space associated with towns and cities.

Land Use Changes - Water

- Prior to October 1, 2013
  - Water: A geographic area whose dominant characteristic is open water, but which may include a large proportion of intermingled land, including coastal marsh lands.
- After October 1, 2013
  - Water: Geographic area whose dominant characteristic is open water or **permanent ice or snow**. May include intermingled land, including **tidal-influenced coastal marsh lands.**

Land Use Changes – Associated Agriculture Lands

- Prior to October 1, 2013
  - No category was listed for this land use.

- After October 1, 2013
  - **Associated Agriculture Lands: Land associated with farms and ranches that are not purposefully managed for food, forage, or fiber and are typically associated with nearby production or conservation lands. This could include incidental areas, such as idle center pivot corners, odd areas, ditches and watercourses, riparian areas, field edges, seasonal and permanent wetlands, and other similar areas.**

Land Use Changes - Other

- Prior to October 1, 2013
  - Mined: Land on which the soil has been disturbed by the mining of minerals.
- After October 1, 2013
  - Other: Land that is barren, sandy, rocky, or that is impacted by the extraction of natural resources, such as minerals, gravel or sand, coal, shale, rock, oil, or natural gas.

Land Use Changes

- Eliminated the following:
  - Recreation: Land and water used and managed for recreational purposes.
  - Watershed Protection: Land managed and used specifically for water production into streams, rivers, lakes, and aquifers.
  - Wildlife: Land or water used, protected, and managed primarily as habitat for wildlife.

Land Use Changes

- Modifiers
  - Modifiers provided a level of specificity and help describe how the land is actually managed.
    - Irrigated: Applied when an operational system is present and managed to supply water.
    - Wildlife: Applied when the client is actively managing for wildlife, and management is reflected in the conservation plan through the application of practices that are beneficial to wildlife.
    - Grazed: Applied when grazing animals impact how land is managed and influence the conservation plan.

Using the Modifiers ~ Hypothetical Examples

Resource Concern Changes
Before Oct 1st : 72 Concerns
After Oct 1st: 31 Concerns

Why was the number of Resource Concerns reduced?

What is the general definition of a Resource Concern?

Example: Why is Soil Erosion a Resource Concern?

What are screening level criteria?

What is an “assessment level”?

How does it differ from screening level criteria?

Resource Concerns and Planning Criteria

- In FY 13 CDSI business teams gathered feedback and comments from NRCS employees on the following tasks:
    1. Identify changes needed to improve the understanding and use of the resource concerns.
    2. Simplify the planning criteria.

Resource Concerns and Planning Criteria

- The following actions occurred:
  - Planning criteria now allows States to use State-identified measurement and assessment tools.
  - List of resources concerns were reduced to 31
  - Clarification was provided on the relationship between the resource concerns and the resource concern components needed by planners to accurately plan and evaluate conservation systems that address resource issues.

Resource Concerns and Planning Criteria

- The following actions occurred:
  - Resource concerns and components will be integrated into Toolkit V7, Conservation Practice Physical Effects (CPPE), and the Program Contracts System (ProTracts) when new releases are deployed.

National and State Resource Concerns and Planning Criteria
10/1/2013

Resource Concern - Cause	**Description of Concern**	**Land Use**	**Resource Concern Component**	**Planning Criteria**		**Measurement & Assessment Tools**
A resource concern (RC) is an expected degradation of the soil, water, air, plant, or animal resource base to an extent that the sustainability or intended use of the resource is impaired. Because NRCS quantifies or describes resource concerns as part of a comprehensive conservation planning process that includes client objectives, human and energy resources are considered components of the resource base. The "Cause" is the specific reason or threat to the resource that results in the resource concern.		* Required Assessment	For planning purposes, Some resource concerns are divided into components where there is a clear distinction in the causal factors, the mitigating actions, and the anticipated environmental effect.	A planning criterion is a quantitative or qualitative method to assess the existing condition of the natural resources on a site to determine whether additional treatment is needed to address a specific potential resource concern. **Planning Consideration** - A planning consideration is a description of potential actions or activities that should be considered to help address an identified resource concern and/or to address unintended consequences of an action. Planning considerations are identified for resource concerns when it is not appropriate or technologically feasible to identify specific criteria or a threshold for treatment.		Description of the technology or process for determining if assessment criteria are met.
				Screening Level Screening level criteria are defined, when appropriate, to identify sites with conditions that have little or no probability of needing additional treatment to address the specific resource concern. If the site meets the screening level criteria, then no other assessment is needed to document that planning criteria are met on this site. States can delete or edit nationally identified screening criteria to address localized conditions.	***Basic Assessment Level*** Basic assessment level criteria are used when a site does not meet screening level criteria, or when no screening level criteria are defined. Assessment levels are also used when formulating and evaluating alternatives. National criteria establish the minimum for all sites. States may add state-specific criteria to address local conditions.	

Resource Concern Definition / Cause

- Expected degradation of the soil, water, plant, or animal resource base to an extent that the sustainability or intended use of the resource is impaired.

Resource Concern Description

- Detachment and transportation of soil particles caused by rainfall runoff/splash, irrigation runoff or wind that degrades soil quality.

SOIL	Description
SOIL EROSION - Sheet, rill, & wind erosion	Detachment and transportation of soil particles caused by rainfall runoff/splash, irrigation runoff or wind that degrades soil quality.
SOIL EROSION – Concentrated flow erosion	Untreated classic gullies may enlarge progressively by head cutting and/or lateral widening. Ephemeral gullies occur in the same flow area and are obscured by tillage. This includes concentrated flow erosion caused by runoff from rainfall, snowmelt or irrigation water.
SOIL EROSION– Excessive bank erosion from streams shorelines or water conveyance channels	Sediment from banks or shorelines threatens to degrade water quality and limit use for intended purposes.

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Land Use	Component	S
• Crop*	Excess nutrients in surface water	
	Excess nutrients in groundwater	
• Pasture*	Excess nutrients in surface water	
	Excess nutrients in groundwater	
• Developed Land	Excess nutrients in surface water	
	Excess nutrients in groundwater	
• Other Rural Land • Associated Ag Land • Designated Protected Area • Water • Forest • Range	Excess nutrients in surface water	
	Excess nutrients in groundwater	

Screening Level

- Screening level criteria are defined to identify sites with conditions that have little or no probability of needing additional treatment to address the specific resource concern
- Example with water quality is the screening level for cropland is organic or inorganic nutrients are not applied AND PLU is not grazed.

Screening Level

- If the site meets the screening level criteria, then no other assessment is needed to document that planning criteria are met on this site
- Example with water quality the screening level for cropland is organic or inorganic nutrients are not applied AND PLU is not grazed. So, if the above conditions are present then no assessment is needed. If nutrients are applied and the PLU is grazed then an assessment is required.

Assessment

- Act of assessing the physical condition or extent of management applied
- Assessment level – A statement describing the physical condition or extent of management applied that is used by planners to determine if the resource concern planning criteria have been met.

Assessment

- Two levels:
  - Screening level – Simple true-false statements of easily observable conditions planners can use to identify sites that have little or no probability of needing additional treatment to address the specific resource concern.
  - Basic level – Criteria used when a site does not pass the screening level or when no screening level criteria are defined.

Assessment

- Methods:
  - Procedural – For some resources, planners use well-defined procedures to acquire data used to determine the resource condition. An example is determining the ecological health of rangeland using the Interpreting Indicators of Rangeland Health protocol. The appropriate discipline handbook or manual may be consulted for more information.

Interpreting Indicators of Rangeland Health

Technical Reference 1734-6

Version 4 — 2005

USGS science for a changing world

USDA NRCS Natural Resources Conservation Service

USDA ARS

Assessment

- Predictive – The condition of some resources is best assessed using models created to predict the probability of an outcome. An example is using RUSLE2 to estimate sheet and rill erosion rates.
- Observation – Where standard procedures to measure or model the condition of resources do not exist, planners often rely on direct observation or information provided by the client through an interview. Observation always implies onsite investigation.

Assessment

- Deduction – When it is impractical to measure, model, or observe resource conditions, planners may rely on reason to deduce the status of a resource. Often, the deductive approach is related to treatment standards. In this case, the planner must assume that a certain condition is met if specific treatment is applied, and conversely, if the specific treatment is not applied, a less desirable condition will result. Planners must frequently rely on deductive methods to address offsite effects.


CAUTION
AMMONIA
CAUTION
AMMONIA

oncerns and Planning Criteria
2013

	Screening	Assessment Level	Assessment Tools
	Organic or inorganic nutrients are not applied **AND** PLU is not grazed	Nutrient and amendment applications are based on soil or tissue tests and nutrient budgets for realistic yields **AND** Conservation practices and managements are in place to minimize surface water impacts	Client input / planner observation Nutrient budget
		Nutrient and amendment applications are based on soil or tissue tests and nutrient budgets for realistic yields **AND** Conservation practices and managements are in place to minimize groundwater impacts	
		PCS - streambank / shoreline erosion element score ≥ 4 **AND** PCS - livestock concentration areas element score	PCS – Pasture Condition Score Nutrient budget
	Organic or inorganic nutrients are not applied	Nutrients if applied, are based on a soil test, tissue tests or nutrient budget **AND** Conservation practices and managements are in place to minimize surface water impacts	Nutrient Budget Client input / planner observation
		Nutrients if applied, are based on a soil test, tissue tests or nutrient budget **AND** Conservation practices and managements are in place to minimize groundwater impacts	
	Organic or inorganic nutrients are not applied **AND** PLU is not grazed **AND** There are no confined livestock areas	Nutrients if applied, are based on a soil test, tissue tests or nutrient budget **AND** Conservation practices and managements are in place to minimize surface water impacts	Nutrient Budget Client input / planner observation
		Nutrients if applied, are based on a soil test, tissue tests or nutrient budget **AND** Conservation practices and managements are in place to minimize groundwater impacts	

National and State Resource Concerns and Planning Criteria
10/1/2013

Land Use	Component	Screening	Assessment Level	Assessment Tools
All with "wildlife" modifier - (Required when Land Use has a wildlife modifier)	Quantity, quality of food is inadequate to meet requirements of identified fish, wildlife or invertebrate species		WHSI rating ≥ 0.5 **AND** (when surface stream present) [SVAP2 – fish habitat complexity element score ≥ 7 **AND** SVAP2 – aquatic invertebrate habitat element score ≥ 7] **OR** Conservation practices and management are in place that meet or exceed species or guild-specific habitat model thresholds **OR** Food is available in quality and extent to support habitat requirements for the species of interest	Species-specific wildlife habitat assessment tools SVAP2 Generalized WHS Index finalized by States, and detailed models by selected species and habitat type
	Quantity, quality of water is inadequate to meet requirements of identified fish, wildlife or invertebrate species		WHSI rating ≥ 0.5 **AND** (when surface stream present) SVAP2 – aquatic invertebrate habitat element score ≥ 7 **OR** Conservation practices and management are in place that meet or exceed species or guild-specific habitat model thresholds **OR** Water is available in quality and extent to support habitat requirements for the species of interest	
			WHSI rating ≥ 0.5	

National and State Resource Concerns and Planning Criteria
10/1/2013

	Land Use	Component	Screening	Assessment Level	Assessment Tools
y	All with "wildlife" modifier - (Required when Land Use has a wildlife modifier)	Habitat continuity and/or space is inadequate to meet requirements of identified fish, wildlife or invertebrate species		WHSI rating ≥ 0.5 **AND** (when surface stream present) [SVAP2 – barriers to movement element score ≥ 7 **AND** SVAP2 – aquatic invertebrate habitat element score ≥ 7] **OR** Conservation practices and management are in place that meet or exceed species or guild-specific habitat model thresholds **OR** The connectivity of habitat components are adequate to support stable populations of targeted species	Species-specific wildlife habitat assessment tools SVAP2 Generalized WHS Index finalized by States, and detailed models by selected species and habitat type
n f	• All with "grazed" modifier (Applicable when Land Use is grazed)			Livestock forage, roughage and supplemental nutritional requirements addressed.	Client input / planner observation GRAS - Grassland Resource Analysis System
	• All with "grazed" modifier (Applicable when Land Use is grazed)			Artificial or natural shelters meet animal health needs and client objectives.	Client input / planner observation

Other Planning Documents

- Exhibits in the National Planning Procedures Handbook (NPPH)
  - Sample Resource Concern Checklist
  - Resource Concern Factsheets

Part 600 – National Planning Procedures Handbook

Subpart H – Exhibits

600.70 Exhibit 1 – Sample Resource Concern Checklist

Tailor to Meet State, Tribal, Territorial or Local Needs

Note: Items protected by Federal Law, Executive Order, etc., such as threatened and endangered species, cultural resources/historical properties, and other items of like nature must remain on the checklist.

Checklist of Resource Concerns – *Examples in Italics*

Soil Erosion – Sheet and Rill, Wind, Concentrated Flow, Shoreline, Bank, and Channel

Concern	Extent
Sheet and Rill	*Visible rills in 50 percent of the crop fields*
Streambank	*Tillage operations within 5 feet of Streambank, few random trees*

Soil Quality/Health – Subsidence, Compaction, Organic Matter Depletion, Salts and Chemicals

Concern	Extent
Organic Matter Depletion	*Residue regularly harvested from corn fields for livestock bedding*

Water Quality – Excess Nutrients, Pesticides, Pathogens, Excess Salt, Petroleum, Heavy Metals, Excess Sediment, Elevated Temperature

Concern	Extent
Elevated Temperature	*Trout steam void of shade trees*

United States Department of Agriculture
Natural Resources Conservation Service

Resource Concerns

Sheet, Rill and Wind Erosion

SOIL

Soil

Soil Erosion

Sheet, Rill and Wind Erosion

Concentrated Flow Erosion

Shoreline, Bank and Channel Erosion

Soil Quality Degradation

Water

Air

Plants

Animals

Energy

SOIL EROSION - Sheet, Rill and Wind Erosion

Detachment and transportation of soil particles caused by rainfall runoff/splash, irrigation runoff, or wind that degrades soil quality.

What is it?

Wind or water erosion is the physical wearing of the earth's surface. Erosion is not always readily visible, even when soil loss exceeds unsustainable levels. Symptoms of soil erosion by water may be identified by small rills and channels on the soil surface, soil deposited at the base of slopes, sediment in streams, lakes, and reservoirs, and pedestals of soil supporting pebbles and plant material. Water erosion is most obvious on steep, convex landscape positions. Symptoms of wind erosion may be identified by dust clouds, soil accumulation along fence lines or snowbanks, and a drifted appearance of the soil surface.

Why is it important?

Erosion removes surface soil material (topsoil), reduces levels of soil organic matter, and contributes to the breakdown of soil structure. This creates a less favorable environment for plant growth. Loss of only 1/32 of an inch can represent a 5 ton/acre soil loss. In soils that have restrictions to root growth, erosion decreases rooting depth, which decreases the amount of water, air, and nutrients available to plants. Erosion removes surface soil, which often has the highest biological activity and greatest amount of soil organic matter. Nutrients removed by erosion are no longer available to support plant growth on-site, and when they accumulate in water, algal blooms, lake eutrophication, and high dissolved oxygen levels can occur. Deposition of eroded materials can obstruct roadways and fill drainage channels. Blowing dust can affect human health and create public safety hazards.

What can be done about it?

Soil erosion can be avoided by maintaining a protective cover on the soil and modifying the landscape to control runoff amounts and rates. To avoid water erosion, include high residue, perennial, and sod crops in the cropping system, grow cover crops, manage crop residues, and shorten the length and steepness of slopes. To avoid wind erosion, keep soil covered with plants or residue, plant windbreaks, use stripcropping, increase surface roughness, cultivate on the contour, and maintain soil aggregates at a size less likely to be carried by wind.

Sheet, Rill and Wind Erosion at a Glance

Problems / Indicators - Changes in soil horizon thickness, soil deposition in fields and water, and decreased organic matter	
Causes	**Solutions**
• Bare or unprotected soil • Long and steep slopes • Intense rainfall or irrigation events when residue cover is at a minimum • Decreased infiltration by compaction	• Residue Management • Crop Rotation • Cover Crops • Terraces • Contour Farming • Stripcropping • Windbreaks

Checklist of Resource Concerns

CROPLAND

CLIENT		LOCATION	
PLANNER		DATE	
LAND UNITS		TOOLS	

This check sheet is designed to assist planners and clients in identifying resource concerns during the planning process. The planning criteria outlined in Section III of the FOTG sets the minimum level of treatment. If a screening question is NO, this indicates no resource concern exists and no assessment is required. If a screening question is YES, the assessment must be completed to evaluate if there is a resource concern. For questions with no listed screening questions, move directly to the assessment. If the Assessment is YES, Planning Criteria is met. If the Assessment is NO, the Planning Criteria is not met and a Resource Concern exists.

Resource Concern * required response	Screening Questions NO = Met Screening (Not a RC) YES = Go to Assessment	YES	NO	Assessment Tools	Assessment Level Required to Meet Planning Criteria YES = Meets Planning Criteria NO = Identified Resource Concern	YES	NO
SOILS RESOURCES							
1a.SOIL EROSION: ***Sheet and Rill erosion****	Are permanent ground cover < 90% and slope > 10%?	☐	☐	➢ RUSLE2	Water erosion rate <=T	☐	☐
1b. SOIL EROSION: ***Wind erosion****				➢ WEPS	Wind erosion rate <=T	☐	☐
2a.SOIL EROSION: ***Ephemeral gully erosion****	Do ephemeral gullies occur?	☐	☐	➢ Field measurements ➢ Observations	Are conservation practices and managements in place to prevent or control ephemeral gullies?	☐	☐
2b.SOIL EROSION: ***Classic gully erosion****	Are classic gullies present?	☐	☐	➢ Field measurements ➢ Observations	Is classic gully management adequate to stop the progression of head cutting and widening **and** are offsite impacts minimized by vegetation and/or structures?	☐	☐
3.SOIL EROSION: ***Excessive bank erosion from streams, shorelines or water conveyance channels****	Are streams or shoreline on or adjacent to site?	☐	☐	➢ SVAP2	For shorelines and water conveyance channels; are banks stable or commensurate with normal geomorphological processes? **AND** For stream banks:- SVAP2 bank condition ≥5	☐	☐
					OR Bank erosion caused solely by upstream/upland landuse(s) and management decisions that are beyond the client's control?	☐	☐
4. SOIL QUALITY DEGRADATION: ***Subsidence***	Are Histosol soils present?	☐	☐	➢ Client input ➢ Planner observations	Is subsidence adequately managed to meet client's objectives?	☐	☐
	OR Arethere Histosols present exhibiting subsidence?	☐	☐				
5. SOIL QUALITY DEGRADATION: ***Compaction***	Is soil compaction a problem? **AND** Do activities cause soil compaction problems?	☐	☐	➢ Soil Quality Test Kit ➢ Observation of soil and plant condition ➢ Client input/planner observation	Is compaction managed to meet Client's production and management objectives?	☐	☐

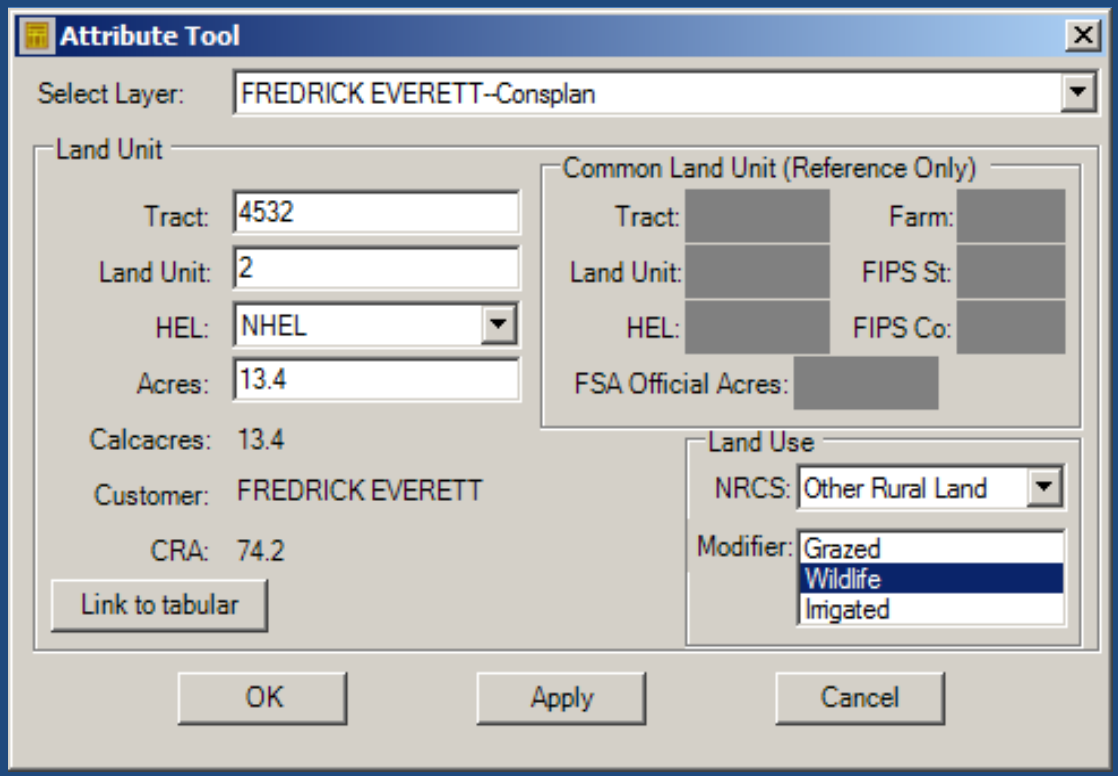
Checklist of Resource Concerns

CROPLAND

6. SOIL QUALITY DEGRADATION: ***Organic matter depletion****	Is permanent ground cover < 80%?	☐	☐	➢ RUSLE2 ➢ WEPS	SCI>0	☐	☐
7. SOIL QUALITY DEGRADATION: ***Concentration of Salts or other chemicals***	Do activities cause salinity/sodicity problems?	☐	☐	➢ Soil diagnostic evaluations	Are conservation practices and managements in place to mitigate on-site effects?	☐	☐
WATER RESOURCES							
8a. EXCESS WATER: ***Ponding and Flooding***	Is ponding or flooding a problem? **AND** Do activities cause ponding/flooding problems?	☐	☐	➢ Client Input ➢ Planner Observations	Is excess water managed to meet Client's objectives?	☐	☐
8b. EXCESS WATER: ***Seasonal high water table***	Does a seasonal high water table cause a problem?	☐	☐	➢ Client Input ➢ Planner Observations	Is excess water managed to meet Client's objectives?	☐	☐
8c. EXCESS WATER: ***Seeps***	Does excess water from seeps cause a problem?	☐	☐	➢ Client Input ➢ Planner Observations	Is excess water managed to meet Client's objectives?	☐	☐
8d. EXCESS WATER: ***Drifted snow***	Does drifted snow cause a problem?	☐	☐	➢ Client Input ➢ Planner Observations	Is excess water managed to meet Client's objectives?	☐	☐
9. INSUFFICIENT WATER: ***Inefficient moisture management***	Is Moisture Management a problem? **AND** Do activities cause inefficient moisture management?	☐	☐	➢ Client Input ➢ Planner observation	Are runoff and evapotranspiration levels minimized to meet Client's management objectives?	☐	☐
10. INSUFFICIENT WATER: ***Inefficient use of irrigation water****	Is the PLU irrigated?	☐	☐	➢ FIRI worksheet	State established system type criteria	☐	☐
11a. WATER QUALITY: ***Excess nutrients in <u>surface</u> water****	Are organic or inorganic nutrients applied? **AND** Is PLU grazed?	☐	☐	➢ Client input ➢ Planner observation ➢ Nutrient budget	Are nutrient and amendment applications based on soil or tissue tests and nutrient budgets for realistic yields? **OR** Are conservation practices and managements in place to minimize offsite impacts?	☐	☐
11b. WATER QUALITY: ***Excess nutrients in <u>ground</u>water****				➢ Client input ➢ Planner observation ➢ Nutrient budget	Are nutrient and amendment applications based on soil or tissue tests and nutrient budgets for realistic yields? **OR** Are conservation practices and managements in place to minimize offsite impacts?	☐	☐

26c. **INADEQUATE HABITAT FOR FISH AND WILDLIFE –** ***Quantity, quality or cover/shelter is inadequate to meet requirements of identified fish, wildlife or invertebrate species***	Is PLU managed for wildlife?	☐	☐	➢ Species-specific wildlife habitat assessment tools ➢ SVAP2 ➢ Generalized WHS Index finalized by States, and detailed models by selected species and habitat type	WHSI rating ≥ 0.5 **AND** (when surface stream present) SVAP2 – fish habitat complexity element score ≥ 7 **AND** SVAP2 – aquatic invertebrate habitat element score ≥ 7 **OR** Are conservation practices and management are in place that meet or exceed species or guild-specific habitat model thresholds? **OR** Are Space and cover available in quality and extent to support habitat requirements for the species of interest?	☐ ☐ ☐ ☐ ☐ ☐
26d. **INADEQUATE HABITAT FOR FISH AND WILDLIFE –** ***Habitat continuity is inadequate to meet requirements of identified fish, wildlife or invertebrate species***	Is PLU managed for wildlife? (Wildlife Modifier)	☐	☐	➢ Species-specific wildlife habitat assessment tools ➢ SVAP2 ➢ Generalized WHS Index finalized by States, and detailed models by selected species and habitat type	WHSI rating ≥ 0.5 **AND** (when surface stream present) SVAP2 – fish habitat complexity element score ≥ 7 **AND** SVAP2 – aquatic invertebrate habitat element score ≥ 7 **OR** Are conservation practices and management are in place that meet or exceed species or guild-specific habitat model thresholds? **OR** Is connectivity of habitat components are adequate to support stable populations of targeted species?	☐ ☐ ☐ ☐ ☐ ☐
27. **LIVESTOCK PRODUCTION LIMITATION:** ***Inadequate feed and forage***	Is Client actively grazing animals. (Grazing Modifier)	☐	☐	➢ Client input ➢ Planner observation	Are livestock forage, roughage and supplemental nutritional requirements addressed?	☐ ☐
28. **LIVESTOCK PRODUCTION LIMITATION:** ***Inadequate livestock shelter***		☐	☐	➢ Client input ➢ Planner observation	Do artificial or natural shelters meet animal health needs and client objectives?	☐ ☐
29. **LIVESTOCK PRODUCTION LIMITATION:** ***Inadequate livestock water***		☐	☐	➢ Client input ➢ Planner observation	Is water of acceptable quality and quantity adequately distributed to meet animal needs?	☐ ☐

New Land Uses and Land Use Modifiers



Progress Reporting
New Business Rules

- **What the new rules as they pertain to modifiers?**
- **What is the new reporting system?**

Reporting Progress – Land Uses & Modifiers

- “When the business rules for land uses changes, the following table reflects the migration of land uses and modifiers. When this migration occurs, the business rules in the performance measures will be updated accordingly.” (PRS Business definitions document)
- Priority = maintain consistency in existing reporting
- New performance measures may be restricted to land uses with required modifiers
- Specifics on use of land use modifiers for new performance measures are not yet developed
- Use of modifiers for performance measures will be approved by the National Technical Data Stewards

Current Measure	Land uses permitted	Post-migration – Reporting Changes
1.10 – Soil Quality	Crop and hay	Hay land use will be eliminated, hay will become a cover type. No acreage changes as hay will be migrated to crop
1.11 – Soil health	Crop	None
1.13 – SHMS	Crop	None
2.10 – Water Quality	All land uses	None
2.20 – Water Quantity	All land uses except CPC 533, which must be on crop or hay	None as hay will be migrated to crop
2.26 – IWM/Water mgt	All land uses	None
3.11 – Grazing land conservation	Grazed range, grazed forest, native/naturalized pasture, and pasture. Former cropland being converted to pasture is also eligible.	The grazed modifier is set when migrating the NCP land uses of 'grazed forest' , 'grazed range', 'pasture', and 'Native/Naturalized Pasture'. Data will be monitored to make sure modifiers are reflected.
3.30 – Wetlands	All land uses	No changes

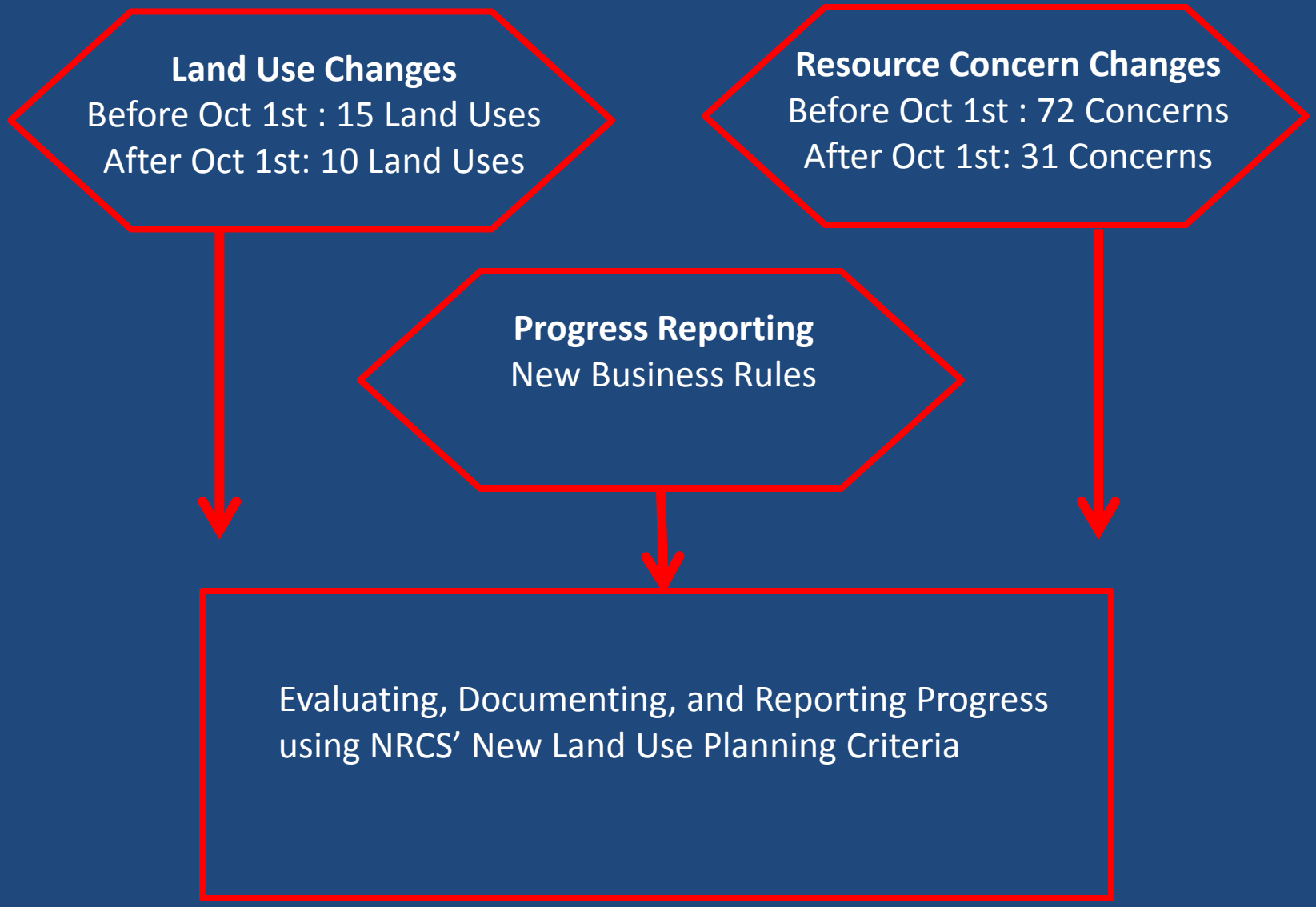
Current Measure	Land uses permitted	Post-migration – Reporting Changes
3.12 – Acres of prescribed grazing	Grazed range, grazed forest, native and naturalized pasture, pasture	The grazed modifier is set when migrating the NCP land uses of 'grazed forest' , 'grazed range', 'pasture', and 'Native/Naturalized Pasture'. Data will be monitored to make sure modifiers are reflected.
3.21 – Wildlife conservation	All land uses	For consistency, no changes to require a wildlife modifier are planned for this measure at this time. New performance measures could be developed using wildlife modifier to capture landowner wildlife conservation objectives.
3.30 – Wetlands	All land uses	No changes
3.40 – Forest land conservation	Forest and grazed forest	No changes. No modifiers required or prohibited.
6.15 – Stewardship activities (CSP)	Crop, pasture, range, forest	No changes

References

- Circular #180 – 14 – 1
- National Planning Procedures Handbook
- National and State Resource Concerns and Planning Criteria – FOTG Section III
- CDSI Sharepoint: https://nrcs.sc.egov.usda.gov/cdsi/display/Resource%20Concerns.aspx
- Toolkit – Contact Kristie Mckinley - NRCS, Fort Worth, TX
- PRS – Contact Laura Morton - NRCS, Scarborough, ME

References

- East Region CDSI/FMI Point of Contact:
  - Steve Boetger – NRCS
  - 336-370-3362
  - Steve.boetger@gnb.usda.gov


Land Use Changes
Before Oct 1st : 15 Land Uses
After Oct 1st: 10 Land Uses
Resource Concern Changes
Before Oct 1st : 72 Concerns
After Oct 1st: 31 Concerns
Progress Reporting
New Business Rules
Evaluating, Documenting, and Reporting Progress using NRCS' New Land Use Planning Criteria