2006 Conservation Security Program

Record Keeping

Self Assessment Workbook

Applicant Name: _____

Farm/Ranch Name: _____

Washington NRCS Natural Resources Conservation Service

Now that you have completed the documentation needed to determine your eligibility for participation in the Conservation Security Program in the Applicant Eligibility workbook, the next step in the self assessment process is to determine the eligibility of **EACH FIELD** that you identified in your agricultural operation (those fields you listed on pages 6-9 of your Applicant Eligibility workbook).

You are required to complete all of the appropriate sections in this Record Keeping Workbook that pertain to your agricultural operation.

Your Record Keeping Workbook will be used to document your fields "benchmark condition" for determining program placement and ultimately, your contract funding level. The Record Keeping Workbook is made up of two parts:

- **Cropland and Hayland Production Records (begins on page 4)**
- **Pasture and Rangeland Production Records (begins on page 31)**

After you have completed this final step in documenting your benchmark conditions in the Record Keeping Workbook, you will need to schedule an interview with the NRCS conservation planner in your CSP watershed. Contact information for scheduling you interview can be found on the bottom of page 4 of your Applicant Eligibility workbook.

During the interview process, NRCS will use the information in your workbooks, as well as your supporting documentation, to determine:

- The eligibility of each field in your agricultural operation
- What Tier level you will qualify for, and
- What Category level you will be placed in for funding selection

<u>You are asked to bring the following materials with you to the interview:</u>

- **Applicant Eligibility Self Assessment Workbook** including:
  - Agricultural Operation Property Location Map
  - Control of Land Certification or copy of lease

- **Record Keeping Workbook** including:
  - Soil tests taken during the last 5 years for each management unit where nutrients are being applied
  - Your conservation plan, if available.
  - Other documentation that may be helpful in verifying the information included in Applicant Eligibility Self Assessment Workbook and Record Keeping Workbook

2006 Conservation Security Program

Record Keeping Workbook

Cropland and Hayland

Production Records

The cropland / hayland production records portion of this workbook provides information needed to complete the CSP application process. The information you provide is used to establish benchmark resource analysis for your agricultural operation. The information you provide will document your nutrient and pest management activities, provide water quality risk assessments, measure predicted soil erosion, and document a soil conditioning index on a field specific basis.

- **The quality of your resource analysis and risk assessments is dependent on the quality and accuracy of the information you provide in these worksheets.**

- Your input for this benchmark inventory will include; field location, crop rotation, yield and residue amounts, list of tillage operations, nutrient and pest management inputs, and if irrigated, a description of your irrigation system and water management.

- **You must identify each field clearly and consistently.** Your field identifiers should match those which you designated on page 6-9 of the Applicant Eligibility Self Assessment Workbook.

- **Complete worksheets 1 through 6** (as appropriate) **in their entirety.** These worksheets will need to be completed for each field in your designated agricultural operation.

- Examples of each worksheet have been provided for reference. Use multiple copies of any of the worksheets if additional space is needed to record the required information for each field. An additional blank copy of each worksheet had been included starting on page 20.

- If you also have livestock (pastureland and/or rangeland) the second section of this workbook will need to be completed. The livestock production records begin on page 31.

Cropland and Hayland Production Records

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Cropland and Hayland Production Worksheets

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Pest Management Input	Worksheet 5	14
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If you have any grazing land fields:

Livestock Inventory	Worksheet 7	34
Feeding Inventory	Worksheet 8	38
Grazing System Documentation	Worksheet 9	43
Grazing Records for Rangeland	Worksheet 10	47

Reference Materials:

Typical Field Operations	Table 1	18
Additional blank worksheets		20

Worksheet 1 Crop Rotation

This worksheet will provide information about your crops and crop rotations for each individual field in your operation.

- Record the Tract and Field identification for **EACH field** identified in your operation as delineated on your map of farm operation and documented on page 8 of your Applicant Eligibility Self Assessment Workbook.
- Record whether each field is Non-irrigated (NI) or Irrigated (IR). Record the rotation of crops grown on each field. Year 1 is the most recent crop grown or growing and years 2-6 are the 5 previous crop years.
- Provide a crop rotation summary description for each field. For perennial crops in rotation, record the number of years the crop is grown. Record the most recent Soil / Tissue / Manure testing you have used to manage nutrients on each field. **Attach copies of these tests to your completed Worksheet 1.**

Refer to each worksheets examples. (Tract 310 field 1 example follows through the process)

EXAMPLE: Worksheet 1 **Crop Rotation Worksheet**

		Crop Rotation Sequence						
		Year 1 is most recent crop grown or growing						
Tract	**Field ID**	**NI / IRR**	**1**	**2**	**3**	**4**	**5**	**6**
486	1	IR	Apples	Apples	Apples	Apples	Apples	Apples
486	2	IR	Est. Alfalfa	Est. Alfalfa	Est. Alfalfa	Est. Alfalfa	New Alfalfa	Timothy
695	1	IR	W Wheat	Dry Beans	Corn	W Wheat	Dry Beans	Corn
695	2	NI	W Wheat	Fallow	W Wheat	Fallow	W Wheat	Fallow
301	1	NI	Sp Wheat	W Wheat	Fallow	Sp Wheat	W Wheat	Fallow

Tract	**Field ID**	**Summary Description of Crop Rotations**	**Soil/Tissue/Manure Most recent Sample ID (s) and Dates ***
486	1	Orchard - Apples	Soil - #1325 – September 2003 Tissue – #753 – June 2005
486	2	Grass (2 yr) and Alfalfa Hay (5 yr)	Soil - #7171 – October 2004
695	1	Wheat-Corn-Beans	Soil - #1544 – September 2004 Manure - #8383 – February 2003
695	2	Wheat-Fallow	Soil – #9932 - April
301	1	Wheat-Spring grain-Fallow	Soil - #43 - April 2003

Worksheet 1 Crop Rotation Worksheet

		Crop Rotation Sequence						
		Year 1 is most recent crop grown or growing						
Tract	**Field ID**	**NI / IR**	**1**	**2**	**3**	**4**	**5**	**6**

Tract	**Field ID**	**Summary Description of Crop Rotations**	**Soil/Tissue/Manure Most recent Sample ID (s) and Dates**

Attach copies of the most recent soil/tissue/manure testing you have used to manage nutrients on EACH field.

Worksheet 2 Crop Residue Management

This worksheet will provide information regarding crop yields, planting dates and harvest dates for **each field and crop** listed in Worksheet 1.

- Document each crop within the rotation for each field.
- Record the yield per acre per year and units, date of planting, date of harvest and whether residue is removed from field.
- If a perennial hay crop is grown, record the typical seeding date, number of cuttings and per acre yield.
- For tree crops, record the month and year of establishment

Refer to the example and then fill out your information on the worksheet.

EXAMPLE: Worksheet 2

Crop Residue Management Worksheet

Field ID	Crop	Planting Date	Harvest Date	Annual Yield / Acre	Residue Removed? Y / N	Residue Removal Method
301-1	W Wheat	15-Sep	15-Aug	50 Bu	N	
301-1	S Wheat	1-Apr	10-Sep	40 Bu	N	
695-2	W Wheat	10-Sep	5-Aug	48 Bu	N	
486-2	Timothy	15-Apr	2 cutting	5 Ton	Y	Baled
486-2	Est Alfalfa	5-Sep	4 cutting	6 Ton	Y	Baled
695-1	Dry Beans	15-May	1-Sep	25 cwt	N	
695-1	Wheat	20-Sep	19-Jul	85 Bu	Y	Baled
695-1	Corn	1-May	15-Oct	200 Bu	N	
486-1	Apples	Mar-99	August	700 boxes	N	

Worksheet 2 Crop Residue Management Worksheet

Field ID	Crop	Planting Date	Harvest Date	Annual Yield / Acre	Residue Removed? Y / N	Removal Method

Attached additional sheets as needed.

Worksheet 3 Field Operations

Record the field operations you use to produce crops in **EACH rotation** you listed on Worksheet 1. Record a summary description of the rotation and the fields where rotation is grown at the top of the worksheet.

- Information needed includes, date of operation, operation description and comments about the field operation.
- If a field is irrigated, use space provided to record the amount of water applied monthly during the rotation.
- **Start with the first tillage after a harvest and finish with a harvest operation**. **Table 1** (page 16 of this workbook) provides a list of typical field operations. Select the operation that best represents what you use.
- **Complete a separate worksheet for each rotation**.

Refer to the example and then fill out your information for each of your rotations.

EXAMPLE: Worksheet 3 **Field Operations Worksheet**

Fields for which rotation applies: 301-1			
Typical rotation: W Wheat - Spring Grain - Fallow			**Irrigation Summary**
Date	**Typical Operations**	**Comments**	**Month and Amount**
15-Oct	Herbicide application	Broadcast in stubble	
1-May	Sweep plow 20-40"		
1-Jun	Sweep plow 20-40"	Apply fertilizer with tillage	
1-Jun	Rodweed		
15-Jul	Rodweed		
20-Aug	Rodweed		
1-Sep	Deep furrow hoe drill 12"		
20-Jul	Harvest wheat	50 Bu	
20-Aug	Herbicide application	Broadcast in stubble	
20-Sep	Chisel 15 inch st. shank		
15-Oct	Chisel sweeps		
20-Mar	Cultivator, Field 6-12 in sweeps		
1-Apr	Deep furrow hoe drill 12"	Band starter fertilizer	
20-May	Herbicide / fertilizer application	Broadcast top dress	
10-Sep	Harvest wheat	40 Bu	

Worksheet 3 Field Operations Worksheet

Fields for which rotation applies:			
Typical rotation:			**Irrigation Summary**
Date	**Typical Operations**	**Comments**	**Month and Amount**
Complete a separate worksheet for EACH rotation in your agricultural operation.			

Worksheet 4 Crop Nutrient Input

Nutrient management records are required for CSP eligibility. This worksheet contains information on the nutrient applications you have made to **EACH field** in your operation.

- Record Field identification, crop and yield goal, date of application, formulation of material applied, application rate of material, method of application and the **actual lb/ac** of actual N, P and K that was applied. If manure is used, record this in the formulation column.

Refer to the example below and use the blank worksheet to input your specific information.

EXAMPLE: Worksheet 4

Crop Nutrient Input Worksheet

Field ID	Crop and Yield Goal	Date	Formulation	Application Rate	Method	N	P	K
301-1	Fallow	1-Jun	Anhydrous	74 lb/ac	Preplant w/ sweeps	61	0	0
301-1	Winter Wheat 50 Bu	1-Sep	10-34-0	10 gal/ac	Starter Band at planting	11	38	0
		15-Mar	32-0-0	6 gal/ac	Topdress	18	0	0
301-1	Spring Wheat 40 Bu	1-Apr	10-34-0	10 gal/ac	Starter Band at planting	11	38	0
		15-May	32-0-0	12 gal/ac	Topdress	41	0	0
486-1	Apples 700 box	15-Feb	20-20-20	200 lb/ac	Broadcast dry	40	40	40
695-1	Dry Beans 25 cwt	15-Apr	11-52-0	120 lb/ac	Preplant dry broadcast	13	62	0
695-1	Corn 185 Bu	1-Mar	Manure	15 ton dry	Pre plant broadcast	45	30	60
		June-July	32-0-0	10 gal/ac (3 times/yr)	In season pivot applications	103	0	0
695-1	Wheat 80 Bu	20-Sep	10-34-0	10 gal/ac	Band starter	11	38	0
		1-Mar	32-0-0	20 gal/ac	Top dress	67	0	0

Worksheet 4 Crop Nutrient Input Worksheet

Field ID	Crop and Yield Goal	Date	Formulation	Application Rate	Method	N	P	K

Worksheet 5 Pesticide Management Input

For **EACH field and crop** listed in your rotations, record information about your use of pesticides. Pest management records are required for CSP eligibility.

- Record field identification, crop, date of application, product used and rate.
- Record whether each application was surface applied, soil incorporated or foliar.
- Record whether application was broadcast or banded.
- Record the timing of application as pre-plant, pre-emerge, post emerge or on stubble. Formulation (lb active ingredient per gallon) is part of the trade name for most products. Include the formulation with the trade name when available.

EXAMPLE: Worksheet 5 **Pesticide Management Input Worksheet**

Field ID	Crop	Date applied	Product	Method		Timing	Rate units/acre
			Trade Name and Formulation	Broadcast or Banded	Surface applied, Soil incorporated or Foliar	When	How much
695-2	Fallow	15-Jun	Glyphosphate 4L	Broadcast	Foliar	Stubble	1 ½ pt
695-2	Wheat	10-Apr	AIM 2ec	Broadcast	Foliar	Post emerge	1 pt
695-2	Wheat	10-Jun	TILT 45W	Broadcast	Foliar	Post emerge	1 lb
695-1	Corn	15-May	Marksman	Band	Foliar	Pre emerge	1 pt
695-1	Corn	15-May	Lorsban 4L	Pivot broadcast	Surface applied	Post emerge	1 pt
486-1	Apples	May-Aug	Guthion 2L	Band	Foliar	Post emerge	2 qt (3 times/yr)

Worksheet 5 Pesticide Management Input Worksheet

Field ID	Crop	Date applied	Product	Method		Timing	Rate units/acre
			Trade Name and Formulation	Broadcast or Banded	Surface applied, Soil incorporated or Foliar	When	How much

Worksheet 6 Irrigation Water Management

This worksheet includes information on the method and management of irrigation water and description of your irrigation system.

- The following information provides examples of irrigation descriptions needed to complete the System Description column.
- Describe your irrigation systems as completely as possible

Sprinkler System Descriptions
Mainline size
Lateral spacing
Sprinkler head spacing
Nozzle size
Revolution/set time
Pressure regulator rating
GPM to system
Operating pressure of line

Surface System Descriptions
Length of fields
Furrow/Border Spacing
Grade at end of field: Flat / Steep / Moderate
Method: Siphon tube, gated pipe, concrete ditch

Refer to the example below for your reference and then fill out your field specific information.

EXAMPLE: Worksheet 6 **Irrigation Water Management Worksheet**

Field ID	Irrigation system description	Moisture monitoring Techniques used
486-1	Solid set sprinklers, 600 GPM, 15 degree impact nozzles	Tensiometer
486-2	130 acre center pivot, 6 ft drop nozzles. 800 GPM	Capacitance sensors
695-1	130 acre center pivot, 6 ft drop nozzles. 900 GPM	Hand feel method

Worksheet 6: Irrigation Water Management Worksheet

Field ID	Irrigation system description	Moisture monitoring Techniques

Typical Field Operations

Table 1

Operation	Depth
TILLAGE	
Chisel, straight points	7.0
Chisel, straight points 5 in deep	5.0
Chisel, straight points 12 in deep	12.0
Chisel, straight points 15 in deep	15.0
Chisel, sweep shovel	7.0
Chisel, sweep shovel 5 in depth	5.0
Chisel, twisted shovel	7.0
Cultivator, field 6-12 in shovels	4.0
Cultivator, field 6-12 in sweeps	3.0
Cultivator, field w/ spike points	4.0
Cultipacker, roller	2.0
Cultivator, hipper, disc hiller on beds	
Cultivator, rotary	
Disk, offset, heavy	6.0
Disk, offset, heavy 12 in depth	12.0
Disk, offset, heavy 15 in depth	15.0
Disk, tandem heavy primary operation	6.0
Disk, tandem light finishing	3.0
Disk, tandem secondary operation	5.0

Harrow, coiled tine	2.0
Harrow, heavy	3.0
Harrow, heavy on heavy residue	1.0
Rotary harrow	1.5
Harrow, rotary, light, fluff fragile residue	1.0
Harrow, rotary, light, fluff residue	1.0
Harrow, spike tooth	2.0
Harrow, tine, on beds	2.0
Mulch treader	2.0
Mulch crimper	2.0
Power mulcher, bed conditioner	3.0
Furrow diker	4.0
Do All	4.0
Subsoiler	15.0
Subsoiler bedder (ripper/hipper)	7.0
Subsoiler ripper, 24 to 40 in deep	24.0
Subsoiler, in row	15.0
Subsoiler, wide spacing	12.0
Sweep plow 20-40 in wide	3.0
Sweep plow wider than 40 in w/ mulch treader	3.0
Sweep plow, wider than 40 in	3.0
Sweep, single under row	4.0

Operation	Depth
Plow, disk	6.0
Plow, moldboard	8.0
Plow, moldboard 10 inch depth	10.0
Plow, moldboard 6-7 inch depth	6.0
Plow, moldboard, conservation	8.0
Plow, moldboard, up hill	8.0
Plow, reversible	8.0
Slip plow 48 to 60 in. deep	24.0
Para plow or till	12.0
Rod weeder	3.0
Roller, corrugated packer	1.5
Roller, corrugated packer 6 by 16	3.0
Roller, on beds	1.0
Roller, residue	1.0
Roller, residue incorporator	2.0
Roller, row shaper	1.0
Roller, smooth	1.0
Rolling basket incorporator	1.5
Rotary hoe	1.5
Rotary hoe, residue	1.0
Rototiller, field	4.0
Rototiller, field, add residue	4.0
Rototiller, row cultivator add residue	3.0
Rototiller, row cultivator	3.0
Seedbed finisher	2.0
Residue Managers	
Mower, swather on stubble	NA
Mower, swather on stubble 4”	NA
Mower, swather, windrower	NA
Shredder, flail or rotary - no soil disturbance	NA
Shredder, flail or rotary, add other cover	NA
Shredder, flail or rotary, filberts and pecans	NA
Shredder, rotary mower	NA
Shredder, rotary, regrow veg	NA
Shredder, rotary, remove residue	NA
Stalk chopper, rotary	5.0
Stalk chopper, strip rotary	5.0
Stalk puller	4.0
Stalk puller high disturbance	4.0
APPLICATIONS	
Coulter caddy, w/ fluted coulters	2.0
Fert applic. Coulter, high pressure inject 12 in	6.0
Fert applic. Anhyd knife 12 in	4.0
Fert applic. Deep placement heavy shank	8.0
Fert applic. Shank low disturbance, 12 in	4.0

Table 1

Typical Field Operations

Operation		Depth
Fert application	Surface broadcast	1.0
Fert application	Anhyd knife 30 in	4.0
Fert application	Strip-till 30 in	5.0
Manure spreader, solid and semi-solid		NA
Manure injector		6.0
Manure, spreader		NA
Sprayer, post emerge		NA
Sprayer, pre-emerge		NA
Sprayer, kill crop		NA
Sprayer, insecticide, post emerge		NA
PLANTERS		
Planter, double disk opener on 12 inch high beds		2.5
Planter, double disk opener on 15 inch high beds		2.5
Planter, double disk opener on 18 inch high beds		2.5
Planter, double disk opener on 8 inch high beds		2.5
Planter, double disk opener		2.5
Planter, double disk opener w/fluted coulter		2.5
Planter, double disk opener, 18 in rows		2.5
Planter, furrow opener in 4 inch deep furrows		4.0
Planter, furrow opener in 6 inch deep furrows		6.0
Planter, furrow opener in 8 inch deep furrows		8.0
Planter, in row subsoiler		15.0
Planter, in row subsoiler low disturbance		12.0
Planter, in row subsoiler w/ residue manager		12.0
Planter, narrow slot w/ smooth or rippled coulter		2.5
Planter, ridge till		2.5
Planter, runner opener		2.5
Planter, small veg seed		1.5
Planter, small veg seed on 8 inch high beds		1.5
Planter, sprig conventional		2.0
Planter, sprig, no-till		2.0
Planter, transplanter, vegetable		6.0
Planter, transplanter, vegetable on 8 inch high beds		6.0
Planter, transplanter, vegetable, no-till		6.0
Planter, tree, mechanical transplanter		10.0
Residue, row cleaner		1.0
Planter, strip till		2.5
Strip till bed conditioner		2.5
Striptiller w/ middlebuster on beds		6.0
Harvest		NA
Harvest, silage		NA
Harvest, grain		NA
Harvest, hay, legume		NA
Harvest, hay, grass		NA
Harvest, hand pick		NA
Operation		**Depth**
Harvest, vine crops		NA
Harvest, vine crops mechanical		NA
Knife, windrow dry beans		4.0
Graze, continuous		NA
Graze, rotational		NA
Graze, stubble or residue		NA
Bale straw or residue		NA
Burn residue		NA
Burn residue,	high intensity	NA
Burn residue,	moderate intensity	NA
Burn residue,	low intensity	NA
Harvest, killing crop	20 percent standing stubble	
Harvest, killing crop	30 percent standing stubble	
Harvest, killing crop	50 percent standing stubble	
Harvest, killing crop	60 percent standing stubble	
Harvest, killing crop	70 percent standing stubble	
Harvest, legume seed, remove forage		
Harvest, orchard and nut crops		
Drills and seeding		
Drill or air seeder tee slot openers 7-10 in spacing.		2.0
Drill or air seeder, sweep or band opener		2.5
Drill, deep furrow 7-10 in spacing		4.0
Drill, deep furrow 12-18 in spacing		4.0
Drill or air seeder, hoe opener in heavy residue		4.0
Drill or air seeder, hoe/chisel openers 6-12 in spacing		4.0
Drill or air seeder, hoe/chisel openers 12-15 in spacing		4.0
Drill, semi-deep furrow 12 to 18 in spacing		4.0
Drill or air seeder single disk openers 7-10 in spacing.		2.0
Drill or air seeder single disk openers, + fert openers 7-10 in spacing.		2.5
Drill or air seeder, dble disk opener w/ fluted coult 5X10 paired row		2.5
Drill or air seeder, double disk		1.5
Drill or air seeder, double disk w/ fluted coulters		2.0
Drill or air seeder, double disk opener, w/ fert openers		2.5
Drill, double disk, 7-8 in packer C		2.0
Drill, double disk, 7-8" packer C		1.5
Drill, heavy, direct seed, dbl disk opener		3.0
Drill, heavy, direct seed, dbl disk opener w/ row cleaners		3.0
Drill or air seeder, offset double disk openers		2.5
Drill, range		2.0
Seeder corrugated packer		1.0
Aerial seeding		NA
Planting, broadcast seeder		NA

Worksheet 1

Crop Rotation Worksheet

		Crop Rotation Sequence						
		Year 1 is most recent crop grown or growing						
Tract	**Field ID**	**NI / IR**	**1**	**2**	**3**	**4**	**5**	**6**

Tract	**Field ID**	**Summary Description of Crop Rotations**	**Soil/Tissue/Manure Most recent Sample ID (s) and Dates**

Attach copies of the most recent soil/tissue/manure testing you have used to manage nutrients on EACH field.

Worksheet 1

Crop Rotation Worksheet

		Crop Rotation Sequence						
		Year 1 is most recent crop grown or growing						
Tract	**Field ID**	**NI / IR**	**1**	**2**	**3**	**4**	**5**	**6**

Tract	**Field ID**	**Summary Description of Crop Rotations**	**Soil/Tissue/Manure Most recent Sample ID (s) and Dates**

Attach copies of the most recent soil/tissue/manure testing you have used to manage nutrients on EACH field.

Worksheet 2 Crop Residue Management Worksheet

Field ID	Crop	Planting Date	Harvest Date	Annual Yield / Acre	Residue Removed? Y / N	Removal Method

Worksheet 2 Crop Residue Management Worksheet

Field ID	Crop	Planting Date	Harvest Date	Annual Yield / Acre	Residue Removed? Y / N	Removal Method

Worksheet 3 Field Operations Worksheet

Fields for which rotation applies:			
Typical rotation:			**Irrigation Summary**
Date	**Typical Operations**	**Comments**	**Month and Amount**
Complete a separate worksheet for EACH rotation in your agricultural operation.			

Worksheet 3 Field Operations Worksheet

Fields for which rotation applies:			
Typical rotation:			**Irrigation Summary**
Date	**Typical Operations**	**Comments**	**Month and Amount**

Worksheet 4 Crop Nutrient Input Worksheet

Field ID	Crop and Yield Goal	Date	Formulation	Application Rate	Method	N	P	K

Worksheet 4 Crop Nutrient Input Worksheet

Field ID	Crop and Yield Goal	Date	Formulation	Application Rate	Method	N	P	K

Worksheet 5 Pesticide Management Input Worksheet

Field ID	Crop	Date applied	Product	Method		Timing	Rate units/acre
			Trade Name and Formulation	Broadcast or Banded	Surface applied, Soil incorporated or Foliar	When	How much

Worksheet 6: Irrigation Water Management Worksheet

Field ID	Irrigation system description	Moisture monitoring Techniques

2006 Conservation Security Program

Record Keeping Workbook

Pastureland and Rangeland

Production Records

The pasture and rangeland production records portion of this workbook provides information needed to complete the CSP application process if you have either pastureland or rangeland identified on page 8 of your Applicant Eligibility Self Assessment Workbook.

The information you provide on the following pages will be used to establish a benchmark resource analysis for the livestock portion of your agricultural operation.

- **The quality of your resource analysis and risk assessments is dependent on the quality and accuracy of the information you provide on these worksheets.**

- **If this documentation already exists in your current conservation plan there is no need to reproduce it using these specific forms**. If you do not have a current conservation plan:

- **You must identify each field clearly and consistently.** Your field identifiers should match those which you designated on page 8 of the Applicant Eligibility Self Assessment Workbook

- **Complete worksheets 7 through 10 in their entirety.** Examples of each worksheet have been provided for reference. Note: Some worksheets have multiple pages.

- Use additional copies of any of the worksheets if additional space is needed to record the required information for each field.

Pastureland and Rangeland Inventory Records

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Feeding Inventory	Worksheet 8	38
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Grazing Records for Rangeland	Worksheet 10	47

If any of your grazing land fields were:

Irrigated	Complete Worksheet 6	16
Had Herbicide applied	Complete Worksheet 5	14
Had Nutrients applied	Complete Worksheet 4	12

Reference Materials:

Determining Animal Unit Equivalent	Table 2	34
Degree of Use Class	Table 3	47
Lower Snake Tucannon - Range Suggested AUM's /Ac	Appendix A	59
Lower Snake Tucannon - Pasture Suggested AUM's /Ac	Appendix B	64
Naches - Range Suggested AUM's /Ac	Appendix C	69
Naches - Pasture Suggested AUM's /Ac	Appendix D	71

Worksheet 7 Livestock Inventory

The livestock inventory and the feed inventory will be used to help you and the conservation planner determine that your grazing system is balanced for the sustainable use of your grazing land.

The animal unit month (AUM) is the best measure for comparing the yearlong and seasonal carrying capacity that the operation can provide to the needs of the livestock on the operation.

- Describe your herd inventory on the **Livestock Inventory** worksheet.
- Calculate feed needs (demands) in total animal unit months (AUMs).

One animal unit (AU) is equivalent to the intake required for one 1,000 pound mature cow and her calf.

See Table 1: Determining Animal Unit Equivalent – (AEU).

An AUM is the amount of forage needed to sustain one animal unit for one month-30 pounds of air-dry feed for one day or 900 pounds of air-dry feed for one month.

Table 2 Determining Animal Unit Equivalent

Animal Weight - lb	AUE
100	0.18
200	0.30
300	0.41
400	0.50
500	0.59
600	0.68
700	0.77
800	0.85
900	0.92
1000	**1.00**
1100	1.07
1200	1.15
1300	1.22
1400	1.29
1500	1.36
1600	1.42
1700	1.49
1800	1.55

Determine the weight of your kind and class of livestock and enter the number from AUE

Example 1 Determining Animal Unit Equivalent (AUE)

Kind, class and weight of animals	**(AUE)**
1,200 lb Cow w/calf (a calf is < 5 months and/or 450 pounds)	1.15
1400 lb Cow w/ calf (a calf is < 5 months and/or 450 pounds)	1.29
500 lb steer	.59
850 lb Replacement Heifer	.89
1,500 lb bull	1.36
1,500 lb horse	1.36
150 lb Ewe	.24

Example: Worksheet 7 - **Livestock Inventory Worksheet**

Column 1	***Column 2***	***Column 3***	***Column 4***	***Column 5***	***Column 6***	***Column 7***
Livestock Kind &/or Class	Weight *(pounds)*	Number of Animals	Animal Unit Equivalent (AUE)	Total AUs *(Multiply Columns 3 and 4)*	Months on Unit	Total AUMs Needed per year *(Multiply Columns 5 and 6)*
Cow/Calf pair	1200	350	1.15	402.5	12	4830
Bulls	1500	20	1.36	27.2	12	326.4
Replacement Heifer	850	60	0.89	53.4	12	640.8
Horse	1200	5	1.15	5.8	12	69
Steers	1000	100	1	100.0	3	300
					Total AUMs:	6166

Livestock Inventory worksheet describes your livestock operation by number of animals, animal unit equivalent (AUE), and the number of Animal Units Months (AUMs) needed to meet your livestock forage needs.

Use **Example 1 Determining Animal Unit Equivalent (AUE)** to help you determine the appropriate number for column 4 - Animal Unit Equivalent (AUE) of the worksheet.

Please refer to the example above and then fill out your information on the worksheet.

Worksheet 7

Livestock Inventory Worksheet

Column 1	***Column 2***	***Column 3***	***Column 4***	***Column 5***	***Column 6***	***Column 7***
Livestock Kind & / or Class	Weight *(pounds)*	Number of Animals	Animal Unit Equivalent (AUE)	Total AUs *(Multiply Columns 3 and 4)*	Months on Unit	Total AUMs Needed per year *(Multiply Columns 5 and 6)*
		Total AUMs:				

Worksheet 8a (a-c) Feed Inventory

The livestock inventory and the forage inventory will be used to help you and the conservation planner determine that your grazing system is balanced for the sustainable use of your grazing land.

- **FEED** is defined here as the hay, other roughages and grains you provide for your animals, either through growing it yourself or purchasing it. This is the feed you provide during the winter, between pasture regrowth periods, etc. Crop and hay aftermath is treated as a type of feed.
- **FORAGE** is defined as the plant material an animal grazes on pastures and range land.
- The animal unit month (AUM) is the best measure for comparing the yearlong and seasonal forage needs on your operation with the carrying capacity that the operation can provide. The **Livestock Inventory** worksheet converted animals to AUMs. On the following worksheets, feed will be converted to AUMs for easy comparison with animal demand.
- Document the total amount of feed inventory on your operation on the following worksheets.
- There are 3 individual worksheets to be completed for forage inventory (a, b, and c)

Example 1: Worksheet 8a **Feeding Inventory** **Other Feeds Provided Worksheet**

Type of Feed	Field(s)	Units	Total Units	Average AUMs/Unit	AUMs
Grain Grazed Aftermath	All small grain fields	Acres	1000	.25	250
Hay Grazed Aftermath – End of Season	Field 11, 15, & 16	Acres	110	.5	55
Hay		Tons	1500	2.5	3750
Silage		Tons	0	1.2	0
Energy Feeds: Grains		Tons	30	5	150
				TOTAL AUMs:	4205

Worksheet 8a **Feeding Inventory**

Other Feeds Provided Worksheet

Type of Feed	Field(s)	Units	Total Units	Average AUMs/Unit	AUMs
Grain Grazed Aftermath		Acres		.25	
Hay Grazed Aftermath – End of Season		Acres		.5	
Hay		Tons		2.5	
Silage		Tons		1.2	
Energy Feeds: Grains		Tons		5	
Other:					
TOTAL AUMs:					

Worksheet 8b **Feed Inventory - Forage Production**

Please contact your local NRCS conservation planner if you need assistance to determine the average AUMs per acre that your pasture or range produces in a year.

- For each watershed, soil mapping units from the soil survey manuscript have suggested AUMs/acre as a guideline for your use.
- The Suggested AUMs/acre are appendices in this document.

Example 2 Worksheet 8b Feed Inventory **Forage Production Worksheet**

Field or Pasture – Type of Forage	Dominant Soil Map Unit	Grazable Acres	AUMs/Acre	AUMs
Tract 523 - range	37	5000	0.27	1350
Tract 2395 - pasture	9	103	4.5	464
Miller Place - range	56	2000	0.11	220
Home Place – range	PkA	54	1.39	75
TOTAL AUMs:				2109

Worksheet 8b **Feed Inventory**

Forage Production Worksheet

Field or Pasture – Type of Forage	Dominant Soil Map Unit	Grazable Acres	AUMs/Acre	AUMs
			TOTAL AUMs:	

EXAMPLE 3 Worksheet 8c Feed Inventory **Feed AUM Summary**

Insert TOTAL from:	**AUMs**
Other Feed Provided	4205
Forage Production	2109
TOTAL AUMs AVAILABLE:	6314
AUMs Needed from Livestock Inventory:	6166
Forage Balance = TOTAL AUMs AVAILABLE minus Total AUMs from Livestock Inventory Worksheet (Worksheet 7)	+148

Worksheet 8c Feed Inventory **Feed AUM Summary**

Insert TOTAL from:	**AUMs**
Other Feed Provided	
Forage Production	
TOTAL AUMs AVAILABLE:	
AUMs Needed from Livestock Inventory:	
Forage Balance = TOTAL AUMs AVAILABLE minus Total AUMs from Livestock Inventory Worksheet (Worksheet 7)	

Worksheet 9 **Grazing System Documentation**

Use the following worksheet to describe your grazing management.

- Step 1: Use the field information identified in Worksheet 2 Forage Inventory,
- Step 2: Identify the herd or movement components from Worksheet 1 Livestock Inventory and the number of animals
- Step 3: Mark the corresponding time grazed in each field or pasture (insert in & out dates &/or number of days)

This worksheet needs to show the grazing system for each of herd or movement group for your operation for the past 3 years.

Use additional sheets to document each year.

Example: Worksheet 9 **Grazing System Worksheet**

Field	Livestock	Number	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Tract 2395	Cow/Calf pair	350	Fed Hay			X						X	Fed Hay	
Tract 523	Cow/Calf pair	350					X	X			X			
Miller Place	Cow/Calf pair + bulls	370						X	X	X				
Home Place	Heifers	60	Fed Hay			X	X	X					Fed Hay	
Fields 11, 15, & 16	Heifers	60							X	X	X			

Worksheet 9

Grazing System Worksheet

YEAR: 2002														
Field	**Livestock**	**Number**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**

Worksheet 9

Grazing System Worksheet

YEAR: 2003														
Field	**Livestock**	**Number**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**

Worksheet 9

Grazing System Worksheet

YEAR: 2004														
Field	**Livestock**	**Number**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**

Worksheet 10 Grazing Records for Range

This worksheet will combine the information you developed in the previous worksheets to demonstrate balance of forage and animals on each field.

Use **Table 3 Degree of Use Class** to evaluate your level of use for the season in the last column of the worksheet.

- At or near the end of the grazing period determine the degree of use from the chart below.
- When properly grazed, the vegetation left will supply adequate cover for soil protection and will maintain or improve the quantity and quality of desirable vegetation (identified as "Moderate" use below).

Table 3 Degree of Use Class

Degree of Use	Description
None : 0-15 percent	Little or no use of key forage plants. Only choice areas and choice forage grazed.
Very Light: 16-35 percent	Key forage plants lightly to moderately used. Practically no use of low-value forage plants. Most of accessible range shows grazing. Very little trailing to grazing.
Moderate: 36-65 percent	Key forage plants used correctly for the season of grazing. Some use of low-value forage plants. All fully accessible areas are grazed; some trampling damage may be evident.
Heavy: 66-80 percent	Key forage plants closely cropped. Low value forage plants generally being grazed. Trampling damage is widespread in accessible areas.
Severe: 81-100 percent	Key forage plants are weakened from continual grazing of regrowth and mechanical damage. Low-value forage plants carrying the grazing load and are closely cropped.

Worksheet 10 **Grazing Records for Range**

Directions:

- Complete one of these for **EACH** pasture/field Identified in the Pasture Inventory (Worksheet 8b **Feed Inventory Forage Production**).
- Evaluate for the past 3 years. Additional worksheet have been provided.

Example 2 Grazing Record Worksheet

Pasture/Field: Use the same Names/Numbers used in **Forage Production** Worksheet				Tract 523				
Use the information supplied in **Forage Production** Worksheet for Adjacent Cell				**AUMs Available: _____1350_____**				
Use the information supplied in **Livestock Inventory** worksheet for these columns				AUMs Grazed =(Days Grazed x Livestock Number x AUE) / 30				
Year	**Livestock Type**	**Livestock Number**	**AUE**	**Date In**	**Date Out**	**Days Grazed**	**AUMs Grazed**	**Use Class - Percent**
2004	Cow/Calf pair	350	1.15	5/1	6/15	46	617	Moderate
2004	Cow/Calf pair	350	1.15	10/1	10/30	30	403	Moderate
2003	Cow/Calf pair	350	1.15	6/15	8/31	77	1033	Moderate
2003	+ Bulls	20	1.36	6/15	8/31	77	70	Moderate
Forage Balance = AUMs Available minus AUMs Grazed **YEAR 1**							(1350-1020) = **330**	
Forage Balance = AUMs Available minus AUMs Grazed **YEAR 2**							(1350-1103) = 2**47**	

Worksheet 10

Grazing Record Worksheet

Pasture/Field: Use the same Names/Numbers used in **Forage Production** Worksheet	
Use the information supplied in **Forage Production** Worksheet for Adjacent Cell	**AUMs Available: _____**
Use the information supplied in **Livestock Inventory** worksheet for these columns	AUMs Grazed =(Days Grazed x Livestock Number x AUE) / 30

Year	**Livestock Type**	**Livestock Number**	**AUE**	**Date In**	**Date Out**	**Days Grazed**	**AUMs Grazed**	**Use Class - Percent**

Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 1**		
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 2**		
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 3**		

Worksheet 10

Grazing Record Worksheet

Use the information supplied in **Forage Production** Worksheet for Adjacent Cell							**AUMs Available: _____**	
Use the information supplied in **Livestock Inventory** worksheet for these columns			AUMs Grazed =(Days Grazed x Livestock Number x AUE) / 30					
Year	**Livestock Type**	**Livestock Number**	**AUE**	**Date In**	**Date Out**	**Days Grazed**	**AUMs Grazed**	**Use Class - Percent**
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 1**								
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 2**								
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 3**								

Worksheet 10

Grazing Record Worksheet

Pasture/Field: Use the same Names/Numbers used in **Forage Production** Worksheet								
Use the information supplied in **Forage Production** Worksheet for Adjacent Cell				**AUMs Available: _____**				
Use the information supplied in **Livestock Inventory** worksheet for these columns				AUMs Grazed =(Days Grazed x Livestock Number x AUE) / 30				
Year	**Livestock Type**	**Livestock Number**	**AUE**	**Date In**	**Date Out**	**Days Grazed**	**AUMs Grazed**	**Use Class - Percent**
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 1**								
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 2**								
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 3**								

Worksheet 10

Grazing Record Worksheet

Pasture/Field: Use the same Names/Numbers used in **Forage Production** Worksheet								
Use the information supplied in **Forage Production** Worksheet for Adjacent Cell				**AUMs Available: _____**				
Use the information supplied in **Livestock Inventory** worksheet for these columns				AUMs Grazed =(Days Grazed x Livestock Number x AUE) / 30				
Year	**Livestock Type**	**Livestock Number**	**AUE**	**Date In**	**Date Out**	**Days Grazed**	**AUMs Grazed**	**Use Class - Percent**
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 1**								
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 2**								
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 3**								

Worksheet 10

Grazing Record Worksheet

Pasture/Field: Use the same Names/Numbers used in **Forage Production** Worksheet								
Use the information supplied in **Forage Production** Worksheet for Adjacent Cell				**AUMs Available: _____**				
Use the information supplied in **Livestock Inventory** worksheet for these columns				AUMs Grazed =(Days Grazed x Livestock Number x AUE) / 30				
Year	**Livestock Type**	**Livestock Number**	**AUE**	**Date In**	**Date Out**	**Days Grazed**	**AUMs Grazed**	**Use Class - Percent**
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 1**								
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 2**								
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 3**								

Worksheet 10

Grazing Record Worksheet

Pasture/Field: Use the same Names/Numbers used in **Forage Production** Worksheet								
Use the information supplied in **Forage Production** Worksheet for Adjacent Cell				**AUMs Available: _____**				
Use the information supplied in **Livestock Inventory** worksheet for these columns				AUMs Grazed =(Days Grazed x Livestock Number x AUE) / 30				
Year	**Livestock Type**	**Livestock Number**	**AUE**	**Date In**	**Date Out**	**Days Grazed**	**AUMs Grazed**	**Use Class - Percent**
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 1**								
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 2**								
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 3**								

Worksheet 10

Grazing Record Worksheet

Pasture/Field: Use the same Names/Numbers used in **Forage Production** Worksheet								
Use the information supplied in **Forage Production** Worksheet for Adjacent Cell				**AUMs Available: _____**				
Use the information supplied in **Livestock Inventory** worksheet for these columns				AUMs Grazed =(Days Grazed x Livestock Number x AUE) / 30				
Year	**Livestock Type**	**Livestock Number**	**AUE**	**Date In**	**Date Out**	**Days Grazed**	**AUMs Grazed**	**Use Class - Percent**
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 1**								
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 2**								
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 3**								

Worksheet 10

Grazing Record Worksheet

Pasture/Field: Use the same Names/Numbers used in **Forage Production** Worksheet								
Use the information supplied in **Forage Production** Worksheet for Adjacent Cell				**AUMs Available: _____**				
Use the information supplied in **Livestock Inventory** worksheet for these columns				AUMs Grazed =(Days Grazed x Livestock Number x AUE) / 30				
Year	**Livestock Type**	**Livestock Number**	**AUE**	**Date In**	**Date Out**	**Days Grazed**	**AUMs Grazed**	**Use Class - Percent**
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 1**								
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 2**								
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 3**								

Worksheet 10

Grazing Record Worksheet

Pasture/Field: Use the same Names/Numbers used in **Forage Production** Worksheet								
Use the information supplied in **Forage Production** Worksheet for Adjacent Cell				**AUMs Available: _____**				
Use the information supplied in **Livestock Inventory** worksheet for these columns				AUMs Grazed =(Days Grazed x Livestock Number x AUE) / 30				
Year	**Livestock Type**	**Livestock Number**	**AUE**	**Date In**	**Date Out**	**Days Grazed**	**AUMs Grazed**	**Use Class - Percent**
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 1**								
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 2**								
Forage Balance = AUMs Available minus AUMs Grazed - **YEAR 3**								

APPENDIX A

LOWER SNAKE - TUCANNON WATERSHED
2006 CSP
SUGGESTED AUMs/ACRE

Please contact your local NRCS conservation planner if you need assistance to determine the average AUMs per acre that your pasture or range produces in a year. For each watershed, soil mapping units from the soil survey manuscript have suggested AUMs/acre as a guideline for your use.

RANGE

RANGE - Lower Snake Watershed Suggested AUMs per Acre based on the **WHITMAN COUNTY** AREA SOIL SURVEY DOCUMENT – AVAILABLE ON-LINE AND AT THE LOCAL FIELD OFFICE

Map Unit Symbol: musym	RANGE AUMs/Acre
4	0.31
5	0.17
6	0.26
13	0.33
15	0.16
16	0.15
18	0.11
19	1.39
26	0.31
27	0.31
28	0.25
31	1.39
35	0.31
36	0.31
37	0.26
39	0.08
40	0.06

Map Unit Symbol: musym	RANGE AUMs/Acre
41	1.04
45	0.09
47	0.14
49	0.26
54	1.39
55	0.33
56	0.31
57	0.15
58	1.74
63	1.04
69	0.38
73	0.36
74	1.04
75	1.04
77	0.15
78	0.26
79	0.20

Map Unit Symbol: musym	RANGE AUMs/Acre
80	0.16
83	0.03
84	0.31
85	0.21
86	0.17
93	0.31
95	0.07
96	0.31
97	0.21
113	0.32
116	0.35
117	0.35
118	0.27
119	0.23
121	0.18
122	0.29
123	0.16

RANGE - Lower Snake Watershed Suggested AUMs per Acre based on the **ASOTIN AND PARTS OF GARFIELD COUNTY** AREA SOIL SURVEY DOCUMENT – AVAILABLE ON-LINE AND AT THE LOCAL FIELD OFFICE

Map Unit Symbol: musym	RANGE AUMs/Acre
1	0.24
3	0.07
4	0.24
5	0.09
6	0.31
16	0.17
23	0.24
24	0.13

Map Unit Symbol: musym	RANGE AUMs/Acre
26	0.22
47	0.26
50	0.13
51	0.06
55	0.02
56	0.11
57	0.06
58	0.05

Map Unit Symbol: musym	RANGE AUMs/Acre
60	0.18
68	0.13
69	0.08
70	0.23
71	0.17
91	0.23

RANGE - Lower Snake Watershed Suggested AUMs per Acre based on the **COLUMBIA COUNTY** AREA SOIL SURVEY DOCUMENT – AVAILABLE ON-LINE AND AT THE LOCAL FIELD OFFICE

Map Unit Symbol: musym	RANGE AUMs/Acre
AnF	0.09
AsC	0.31
AsD	0.24
AsE	0.20
AsE3	0.11
AsF	0.16
AtF	0.29
AtF3	0.29
ChB	0.31
ChC	0.31
ChD	0.24
ChE	0.20
CvA	1.56
Du	0.19
EvB2	0.31
EwB	0.31
EyA2	1.04
EzA	1.04
FaA	0.21
FaC2	0.21
FaD2	0.16
FaE	0.13
FeB	0.31
FeC	0.31
FeD	0.24
FeE	0.19
HmA	1.04

Map Unit Symbol: musym	RANGE AUMs/Acre
KlF	0.07
KrG	0.02
KuD	0.12
KvF	0.04
LaF	0.18
LkE	0.12
LvF	0.26
MoA	0.63
OlC	0.42
OlD	0.32
OlE	0.27
OnA	1.04
PaD3	0.22
PaE3	0.35
PaF	0.38
PeC	0.56
PeD2	0.44
PeE2	0.37
PkA	1.39
PlA	1.39
PoA	1.39
RcE	0.19
ReB	0.31
ReD	0.13
ReE	0.20
ReF	0.16
RrE	0.11

Map Unit Symbol: musym	RANGE AUMs/Acre
RsD	0.13
RsE	0.16
RsF	0.12
RuD	0.16
RuF	0.10
SpC	0.26
SrD	0.21
TuC	0.63
TuD	0.50
TuE	0.42
TuE3	0.23
TuF	0.29
WhC	0.59
WhD	0.47
WhE	0.40
WhE3	0.22
WhF	0.28
WwB	0.31
WwD	0.13
WwD3	0.13
WwE	0.20
WwE3	0.20
WwF	0.16
WyE	0.19
YmA	0.69
YvA	0.69
YvB	0.69

RANGE - Lower Snake Watershed Suggested AUMs per Acre based on the **GARFIELD COUNTY** AREA SOIL SURVEY DOCUMENT – AVAILABLE ON-LINE AND AT THE LOCAL FIELD OFFICE

Map Unit Symbol: musym	**RANGE AUMs/Acre**
3	0.07
5	0.09
50	0.13
51	0.06
56	0.11
57	0.06
58	0.05
60	0.18
71	0.17
AaD	0.28
AaF	0.22
AcE	0.22
AeD	0.31
AlE	0.21

Map Unit Symbol: musym	**RANGE AUMs/Acre**
AmE	0.40
AoE	0.36
AoF	0.29
ApE	0.36
ApF	0.26
AtC	0.42
AtD	0.32
BeF	0.20
CdE	0.21
ChD2	0.22
ChE2	0.21
Du	0.19
GnF	0.27
GrF	0.16

Map Unit Symbol: musym	**RANGE AUMs/Acre**
LcF	0.17
LkF	0.11
LlF	0.11
LnF	0.28
OlE	0.27
OlF	0.22
OnE	0.27
OsD	0.25
Ox	0.56
PlE	0.36
Qu	0.21
WaE	0.30
WwE	0.23
WwF	0.25

APPENDIX B

LOWER SNAKE - TUCANNON WATERSHED
2006 CSP
SUGGESTED AUMs/ACRE

Please contact your local NRCS conservation planner if you need assistance to determine the average AUMs per acre that your pasture or range produces in a year. For each watershed, soil mapping units from the soil survey manuscript have suggested AUMs/acre as a guideline for your use.

PASTURE

PASTURE - Lower Snake Watershed Suggested AUMs per Acre based on the **WHITMAN COUNTY** AREA SOIL SURVEY DOCUMENT – AVAILABLE ON-LINE AND AT THE LOCAL FIELD OFFICE

Map Unit Symbol: musym	PASTURE AUMs/Acre NonIrrigated	PASTURE AUMs/Acre Irrigated
1	7.5	
4	2.25	15
5	2.25	15
8	7.5	
9	7.5	
10	7.5	
19	15	
20	15	
21	7.5	
22	7.5	
23	7.5	
24	7.5	
25	7.5	
26	3	18
27	3	18
28	3	18
31	15	
35	2.25	15
38	4.5	
40	6	
41	4.5	19.5
52	5.25	
58	11.25	

Map Unit Symbol: musym	PASTURE AUMs/Acre NonIrrigated	PASTURE AUMs/Acre Irrigated
59	9	
60	7.5	
61	6.75	
64	7.5	
65	7.5	
66	4.5	
67	6	
68	4.5	
70	8.25	
71	8.25	
72	7.5	
75	9	
90	9	18
93	3	
96		22.5
103	9	
104	9	
105	9	
107	9	
108	6.75	
112	4.5	
113	6	

PASTURE - Lower Snake Watershed Suggested AUMs per Acre based on the **ASOTIN AND PARTS OF GARFIELD COUNTY** AREA SOIL SURVEY DOCUMENT – AVAILABLE ON-LINE AND AT THE LOCAL FIELD OFFICE

Map Unit Symbol: musym	PASTURE AUMs/Acre NonIrrigated	PASTURE AUMs/Acre Irrigated
2	3	
9	4.5	
10	3.75	
11	3	18
12	3	18
13	3	18
14	3	18
15	3	
16	3	
27		18
60	3	
70	3	
76	3	
77	3	
78	3	

Map Unit Symbol: musym	PASTURE AUMs/Acre NonIrrigated	PASTURE AUMs/Acre Irrigated
80	3	
81	2.625	
82	3.75	
83	3.75	
84	3	
87	3.75	
88	3.75	
89	3.75	
90	3	
91	2.625	
98	5.25	
113	9	18
114	9	16.5
115	3	

PASTURE - Lower Snake Watershed Suggested AUMs per Acre based on the **COLUMBIA COUNTY** AREA SOIL SURVEY DOCUMENT – AVAILABLE ON-LINE AND AT THE LOCAL FIELD OFFICE

Map Unit Symbol: musym	PASTURE AUMs/Acre NonIrrigated	PASTURE AUMs/Acre Irrigated
AtB	7.5	
AtD	7.5	
AuC	6	
AuD2	4.5	
ChB	3	18
ChC	3	18
ChD	3	18
ChE	3	
CvA	15	
CwA	15	
EvB2		19.5
EwB		19.5
HmA	7.5	22.5
LkE	5.25	
MoA	11.25	
PaB	7.5	
PaD	7.5	
PaD3	4.5	

Map Unit Symbol: musym	PASTURE AUMs/Acre NonIrrigated	PASTURE AUMs/Acre Irrigated
PaE	6	
PaE3	4.5	
PeC	12	
PeD2	12	
PeE2	10.5	
PkA	6.75	18
PlA	6	18
PoA	4.5	
TuC	6	
TuD	6	
WhC	10.5	
WhD	10.5	
YmA	3	24
YvA	3	24
YvB	3	24

PASTURE -Lower Snake Watershed Suggested AUMs per Acre based on the **GARFIELD COUNTY** AREA SOIL SURVEY DOCUMENT – AVAILABLE ON-LINE AND AT THE LOCAL FIELD OFFICE

Map Unit Symbol: musym	**PASTURE AUMs/Acre NonIrrigated**	**PASTURE AUMs/Acre Irrigated**
AdB	2.25	15
AeD	2.25	15
AmC	4.5	
AmD	3	
AmE	3	
AnC	3.75	
AoB	7.5	
AoD	7.5	
ApB	7.5	
ApD	7.5	
ArB	6	
ArD	4.5	
AtC	5.25	
AtD	3	
CdB	3	18
CdD	3	18
CdE	3	
ChD2	3	18
ChE2	3	
Hr	7.5	22.5
LaC	6	
LaD	5.5	
LaE	5.25	
LaF	5.25	
Mo	11.25	
OlB	4.5	
OlD	3	

Map Unit Symbol: musym	**PASTURE AUMs/Acre NonIrrigated**	**PASTURE AUMs/Acre Irrigated**
OlE	3	
OlF	3	
OpE2	3	
OsC	3.75	
OsD	3	
PaB	7.5	
PaD	7.5	
PlB	12	
PlD	12	
PlE	10.5	
WaC	6	
WaD	6	
WwF	3	
9	4.5	
10	3.75	
60	3	
76	3	
77	3	
80	3	
81	2.625	
83	3.75	
84	3	
88	3.75	
89	3.75	
90	3	
115	3	

APPENDIX C

NACHES WATERSHED
2006 CSP
SUGGESTED AUMs/ACRE

Please contact your local NRCS conservation planner if you need assistance to determine the average AUMs per acre that your pasture or range produces in a year. For each watershed, soil mapping units from the soil survey manuscript have suggested AUMs/acre as a guideline for your use.

RANGE

Table 4 RANGE - Naches Watershed Suggested AUMs per Acre based on the **YAKIMA COUNTY** AREA SOIL SURVEY DOCUMENT – AVAILABLE ON-LINE AND AT THE LOCAL FIELD OFFICE

musym	RANGE AUMs/ Acre	musym	RANGE AUMs/ Acre	musym	RANGE AUMs/ Acre
3	0.07	48	0.31	113	0.10
6	0.10	49	0.24	114	0.07
7	0.06	53	0.15	116	0.20
8	0.14	54	0.12	117	0.11
9	0.07	56	0.23	118	0.08
19	0.69	65	0.15	130	0.31
20	0.69	67	0.13	131	0.25
21	0.69	68	0.12	133	0.21
22	0.13	70	1.04	136	0.31
23	0.06	74	0.31	137	0.24
26	0.35	75	0.20	142	0.16
27	0.27	76	0.20	143	0.06
30	0.14	83	0.16	144	0.03
31	0.08	98	0.31	151	0.24
33	1.04	99	0.31	152	0.19
41	0.07	100	0.31	153	0.15
42	0.16	101	0.31	154	0.14
43	0.16	102	0.24	160	0.35
44	0.12	103	0.17	161	0.27
45	0.16	109	0.07	162	0.21
46	0.31	110	0.10	181	0.69
47	0.31	112	0.12	189	0.31

APPENDIX D

NACHES WATERSHED
2006 CSP
SUGGESTED AUMs/ACRE

Please contact your local NRCS conservation planner if you need assistance to determine the average AUMs per acre that your pasture or range produces in a year. For each watershed, soil mapping units from the soil survey manuscript have suggested AUMs/acre as a guideline for your use.

PASTURE

Table 5 PASTURE - Naches Watershed Suggested AUMs per Acre based on the **YAKIMA COUNTY** AREA SOIL SURVEY DOCUMENT – AVAILABLE ON-LINE AND AT THE LOCAL FIELD OFFICE

musym	**PASTURE AUMs/Acre NonIrrigated**	**PASTURE AUMs/Acre Irrigated**
100		25.5
101		22.5
102		22.5
110		15
111		15
128		21
129		21
130		21
131		21
133		18
136		18
137		15
142		13.5
163	6	25.5
165		22.5
169		27
18		22.5
182		22.5
183		18
184		15
185		25.5
189		21
19		22.5
190	3	24
192		30

musym	**PASTURE AUMs/Acre NonIrrigated**	**PASTURE AUMs/Acre Irrigated**
20		21
21		21
24	3	19.5
25	3	19.5
26	3	19.5
27	3	15
40		21
41		9
42		12
43		9
44		4.5
45		4.5
46		18
47		18
48		15
49		12
53		15
56		9.75
66		15
69	3	22.5
70	3	22.5
83		22.5
84		18
92		18
99		25.5