

### C-3-d. Leeward, Grazing, Range Options Worksheet

1	STATE	Hawaii
2	FIELD OFFICE	Lihue, Aiea, Hoolehua, Kealahou, Waimea, and Hilo
3	MLRA	164, 166, and 157
4	COMMON RESOURCE AREA (CRA)	<b>Leeward</b>
5	RESOURCE INTERPRETATIONS	<i>see Section II FOTG for interpretations</i>
5.1	SOIL	
5.2	WATER	
5.3	AIR	
5.4	PLANT	
5.5	ANIMAL	
5.6	HUMAN	
6	HYDROLOGIC UNIT	2001000 / 20040000 / 20050000 / 2006000 / 2007000
7	SYSTEM TEMPLATE LABEL	<b>LWA21</b>
8	SYSTEM NAME	<b>Leeward, Grazing, Range</b>
9	PLANNING PHASE	Non-Benchmark
10	PLANNING LEVEL	RMS
11	NRCS LANDUSE	RANG
12	PLANNED CONS. PRACTICES	<i>enter code / name of practice</i>
	1. 314	Brush Management
	2. 380	Windbreak/Shelterbelt Establishment
	3. 382	Fence
	4. 516	Pipeline
	5. 528 A	Prescribed Grazing
	6. 548	Grazing Land Mechanical Treatment
	7. 550	Range Planting
	8. 560	Access Road
	9. 575	Streambank and Shoreline Protection
	10. 580	Nutrient Management
	11. 595	Pest Management
	12. 614	Watering Facility
13	SYSTEM NARRATIVE	<i>describe how the practices work together as a system</i>
	Naturalized grazing lands with 25-40 inch annual rainfall. Elevation ranges from 500 to 1000 feet. Soils are gently sloping to very steep, that are underlain by soft weathered rock, volcanic ash or colluvium on narrow ridges and side slopes. The proposed grazing management system will enhance forage quality and quantity while addressing erosion and other natural resource concerns.	

### C-3-d. Leeward, Grazing, Range Options Worksheet

14	RESOURCE CONCERNS	MAGNITUDE/EFFECTS	IMPACTS
	1. Soil / Erosion / Sheet & Rill Erosion	1. Sheet & rill erosion will be reduced to an acceptable soil loss tolerance level of 5 tons/acre/year or less.	1. Productive topsoil will not erode at an accelerated rate. Soil loss is reduced by ___ tons/acre/year.
	2. Soil / Erosion / Wind Erosion	2. Amount and velocity of wind will be reduced in treated area.	2. Soil loss from wind is minimized. Also, a reduction in wind will conserve moisture.
	3. Soil / Erosion / Ephemeral Gully	3. Gullies and washouts will occur less frequently with installation of proposed treatment.	3. Forage production increases with reduction in gully erosion.
	4. Soil / Erosion / Classic Gully	4. Formation of new gullies will be minimized.	4. Runoff water will flow at a safe and non-erosive rate. Forage production increases with reduction in gully erosion.
	5. Soil / Erosion / Streambank Erosion	5. Streams will carry runoff water without eroding.	5. Grazing area is not reduced by sloughing of streambanks.
	6. Soil / Condition / Soil Compaction	6. Traffic areas will be avoided or rested.	6. Forage production will increase.
	7. Water / Quality / Suspended Sediment & Turbidity in Surface Water	7. Amount of sediment in runoff water is minimized.	7. Effects from suspended sediment and turbidity to aquatic habitat, recreation waters, and other downstream waterbodies are minimized.
	8. Plant / Condition / Plant Productivity	8. Implementation of a grazing management plan and installation of other appurtenant structures increase forage production.	8. Forage growth and production will increase. Animal weight gain and health will improve.
	9. Animal / Habitat / Domestic Animal Water Requirements	9. Installation of pipeline and troughs will improve supply and distribution of water to meet livestock needs.	9. Improved water system may increase animal distribution and carrying capacity of grazing lands.
	10. Animal / Habitat / Threatened & Endangered Species	10. Food, water, and shelter of threatened or endangered species will not be affected by agricultural activities.	10. Threatened or endangered animals will have a suitable habitat for growth and reproduction.

### C-3-d. Leeward, Grazing, Range Options Worksheet

CRA	SYSTEM TEMPLATE LABEL		
15	* QUALITY CRITERIA DOCUMENTATION <i>list resource concerns then indicate yes/no (X)</i>		
	1. Sheet & Rill Erosion	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	2. Wind Erosion	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	3. Ephemeral Gully	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	4. Classic Gully	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	5. Streambank Erosion	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	6. Soil Compaction	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	7. Suspended Sediment & Turbidity in Surface Water	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	8. Plant Productivity	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	9. Domestic Animal Water Requirements	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	10. Threatened & Endangered Species (Animal)	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO

\* Provides an indication that the resource quality criteria will be met.