Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
537	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
65	---	---	500	250	2500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too stony	Low Too stony	High ---	Poor Too stony	Fair Too shallow

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate High erosion	Moderate Slope	Moderate Too steep	Moderate Too steep	Severe Too steep	Moderate Erodes easily

Hazard Ratings

Erosion Hazard
Moderate
Mass Wasting Hazard
Slight ---
Windthrow Hazard
Moderate Too shallow
Plant Competition Hazard
Moderate Fear2

Soil Properties

Soil Condition: Satisfactory

Factor	Soil Wetness		
K	Depth	Duration	Month
0.10	---	---	---

Unified Class	Liquid Limit
GM	25

Plastic Index	Shrink/ Swell
5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
18.5	0.4	0.8	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	80	75	25

% Current Surface Cover

RkFr	Veg.	Littr	Soil
50	5	70	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
546	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
80	---	---	500	250	2500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
High	High	High	Poor	Poor
---	---	---	Too clayey	Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	---	Severe	Severe	Slight	Severe
Low strength	---	Low strength	Low strength	---	Low strength

Hazard Ratings

Erosion Hazard
Slight
Mass Wasting Hazard

Windthrow Hazard
Slight

Plant Competition Hazard
Slight
Quga, Rone

Soil Properties

Soil Condition: Satisfactory

Factor	Soil Wetness		
K	Depth	Duration	Month
0.19	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
CH	40	20	High

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
3.1	0.	0.1	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	90	80	20

% Current Surface Cover

RkFr	Veg.	Littr	Soil
15	5	75	15

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
549	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
75	---	---	500	250	2500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Moderate Too steep	Moderate Too steep	High ---	Fair Too steep	Poor Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate Low strength	Moderate Low strength	Severe Low strength	Severe Low strength	Severe Too steep	Severe Low strength

Hazard Ratings / Soil Properties / Soil Loss Rates and Vegetative Ground Covers

Hazard Ratings	Soil Properties	Soil Loss Rates and Vegetative Ground Covers
Erosion Hazard	Soil Condition: Satisfactory	Soil Loss (Sheet/Rill Erosion)
Moderate		Pot. Nat. Cur. Tol.
	Factor K / Soil Wetness: Depth, Duration, Month	<----- tons/ha/yr ------>
Mass Wasting Hazard	0.12 --- --- ---	22.7 0.3 0.7 9.0
Moderate ---		
		% Veg. Ground Cover
Windthrow Hazard	Unified Class / Liquid Limit	Pot. Nat. Cur. Tol.
Moderate Low strength	CH 45	0 90 80 25
Plant Competition Hazard	Plastic Index / Shrink/Swell	% Current Surface Cover RkFr Veg. Littr Soil
Moderate Rone, Quga	25 High	35 5 75 5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
549	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
75	---	---	500	250	2500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Moderate Too steep	Moderate Too steep	High ---	Fair Too steep	Poor Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate High erosion	Moderate Low strength	Severe Low strength	Severe Low strength	Severe Too steep	Severe Low strength

Hazard Ratings

Erosion Hazard
Moderate

Mass Wasting Hazard
Moderate ---

Windthrow Hazard
Moderate Low strength

Plant Competition Hazard
Moderate Rone, Quga

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month	Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
0.11	---	---	---	CH	45	25	High

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
30.1	0.4	0.9	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	90	80	25

% Current Surface Cover

RkFr	Veg.	Littr	Soil
40	5	75	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
550	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
70	---	---	500	250	2500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Moderate Too steep	Moderate Too steep	High ---	Poor Too clayey	Fair Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate High erosion	Moderate Low strength	Moderate Low strength	Moderate Too steep	Severe Too steep	Moderate Erodes easily

Hazard Ratings

Erosion Hazard
Moderate
Mass Wasting Hazard
Slight ---
Windthrow Hazard
Slight ---
Plant Competition Hazard
Moderate Quga, Rone

Soil Properties

Soil Condition: Satisfactory

Factor	Soil Wetness		
K	Depth	Duration	Month
0.15	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
GC	45	25	Moderate

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
30.9	0.7	1.2	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	85	80	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
30	5	75	10

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
550	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
70	---	---	500	250	2500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Moderate Too steep	Moderate Too steep	High ---	Poor Too clayey	Poor Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe Low strength	Moderate Low strength	Severe Low strength	Severe Low strength	Severe Too steep	Severe Low strength

Hazard Ratings

Erosion Hazard
Moderate
Mass Wasting Hazard
Slight

Windthrow Hazard
Slight

Plant Competition Hazard
Moderate
Quga, Rone

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month	Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
0.15	---	---	---	CH	50	25	High

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
30.9	0.7	1.2	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	85	80	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
30	5	75	10

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
551	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
70	---	---	500	250	2500	---
---	---	---	---	---	---	---

Potential For

Re-Veg	Re-For	Nat Regen
Low	Low	High
Too stony	Too stony	---

Source Suitability

Top Soil	Roadfill
Poor	Fair
Too stony	Too stony

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate	---	Moderate	Slight	Moderate	Moderate
Too rocky	---	Too rocky	---	Too steep	Low strength

Hazard Ratings

Erosion Hazard
Slight

Mass Wasting Hazard

Windthrow Hazard
Slight

Plant Competition Hazard
Slight
Fear2

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.10	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
GM	35	15	Moderate

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion)

Pot.	Nat.	Cur.	Tol.
tons/ha/yr			
3.3	0.1	0.3	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	80	60	10

% Current Surface Cover

RkFr	Veg.	Littr	Soil
45	5	55	10

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
553	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
50	---	---	500	200	2400	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too bouldery	Low Too bouldery	Low Too bouldery	Poor Too bouldery	Poor Too bouldery

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate Too rocky	Moderate Slope	Moderate Too rocky	Moderate Too steep	Severe Too steep	Moderate Low strength

Hazard Ratings / Soil Properties / Soil Loss Rates and Vegetative Ground Covers

Erosion Hazard	Soil Condition: Satisfactory				Soil Loss (Sheet/Rill Erosion)			
					Pot.	Nat.	Cur.	Tol.
Slight					tons/ha/yr			
	Factor	Soil Wetness						
Mass Wasting Hazard	K	Depth	Duration	Month	2.9	0.2	0.6	6.7
Slight	0.02	---	---	---				

					% Veg. Ground Cover			
Windthrow Hazard		Unified Class	Liquid Limit		Pot.	Nat.	Cur.	Tol.
Moderate					0	70	40	10
Too shallow		GM	35					
Plant Competition Hazard		Plastic Index	Shrink/ Swell		% Current Surface Cover			
					RkFr	Veg.	Littr	Soil
Moderate					70	5	35	5
Pied, Fear2		15	Moderate					

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
555	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
55	55	---	250	50	2800	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too steep	Low Too steep	Low Plant competition	Poor Too steep	Poor Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe High erosion	Severe Slope	Severe Slope	Severe Too steep	Severe Too steep	Severe Erodes easily

Hazard Ratings

Erosion Hazard	Mass Wasting Hazard	Windthrow Hazard	Plant Competition Hazard
Severe	Severe ---	Moderate Too shallow	Severe Quga, Rone

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month	Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
0.10	---	---	---	GW	25	5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion)

Pot.	Nat.	Cur.	Tol.
tons/ha/yr			
59.6	1.3	1.8	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	85	80	55

% Current Surface Cover

RkFr	Veg.	Littr	Soil
50	5	75	0

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.	Production Potentials For						
		Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
		Site Index			lb/ac/yr			cd/ac
555	0.3	55	---	---	450	200	2300	---
		---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low	Low	Low	Poor	Low
Too steep	Too steep	Plant competition	Too steep	Too steep

Limitation Ratings					
Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	Severe	Severe	Severe	Severe	Severe
High erosion	Slope	Slope	Too steep	Too steep	Erodes easily

Hazard Ratings	Soil Properties					Soil Loss Rates and Vegetative Ground Covers			
Erosion Hazard	Soil Condition: Satisfactory					Soil Loss (Sheet/Rill Erosion)			
						Pot.	Nat.	Cur.	Tol.
Severe						tons/ha/yr			
	Factor	Soil Wetness							
Mass Wasting Hazard	K	Depth	Duration	Month		35.3	1.1	1.9	6.7
Moderate	0.10	---	---	---					

						% Veg. Ground Cover			
Windthrow Hazard		Unified Class	Liquid Limit			Pot.	Nat.	Cur.	Tol.
Moderate						0	80	70	40
Too shallow		GW	30						
Plant Competition Hazard		Plastic Index	Shrink/ Swell			% Current Surface Cover			
						RkFr	Veg.	Littr	Soil
Severe						55	5	65	0
Quga, Rone		10	Moderate						

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
557	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
70	---	---	525	275	2650	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
High	High	High	Poor	Poor
---	---	---	Too clayey	Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	---	Severe	Severe	Slight	Severe
Low strength	---	Low strength	Low strength	---	Low strength

Hazard Ratings

Erosion Hazard
Slight
Mass Wasting Hazard

Windthrow Hazard
Moderate
Low strength
Plant Competition Hazard
Slight
Fear2

Soil Properties

Soil Condition: Satisfactory

Factor	Soil Wetness		
K	Depth	Duration	Month
0.20	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
CH	45	20	High

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion)

Pot.	Nat.	Cur.	Tol.
tons/ha/yr			
4.6	0.1	0.2	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	85	70	20

% Current Surface Cover

RkFr	Veg.	Littr	Soil
30	5	65	10

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
558	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
50	---	---	500	50	50	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low	Low	Low	Poor	Good
Too sandy	Too sandy	Too sandy	Too sandy	---

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Slight	---	Slight	Slight	Severe	Severe
---	---	---	---	Too sandy	Soil blowing

Hazard Ratings

Erosion Hazard
Slight

Mass Wasting Hazard

Windthrow Hazard
Severe
Low strength

Plant Competition Hazard
Severe
Fapa

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.05	---	---	---

Unified Class	Liquid Limit
GP	15

Plastic Index	Shrink/ Swell
NP	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
1.9	0.2	0.4	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	60	40	20

% Current Surface Cover

RkFr	Veg.	Littr	Soil
55	5	35	15

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
559	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
50	---	---	450	25	25	---
---	---	---	---	---	---	---

Potential For Re-Veg	Potential For Re-For	Potential For Nat Regen	Source Suitability Top Soil	Source Suitability Roadfill
Low Too droughty	Low Too droughty	Low Too droughty	Poor Too sandy	Good ---

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Slight	---	Slight	Severe	Severe	Slight
---	---	---	Too sandy	Too sandy	---

Hazard Ratings

Erosion Hazard	Mass Wasting Hazard	Windthrow Hazard	Plant Competition Hazard
Slight	--- ---	Severe Low strength	Severe Fapa

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month	Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
0.02	---	---	---	GP	15	NP	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion)

Pot.	Nat.	Cur.	Tol.
tons/ha/yr			
0.8	0.1	0.1	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	60	45	20

% Current Surface Cover

RkFr	Veg.	Littr	Soil
75	5	40	10

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
560	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
50	---	---	450	150	2300	---
---	---	---	---	---	---	---

Potential For Re-Veg	Potential For Re-For	Potential For Nat Regen	Source Suitability Top Soil	Source Suitability Roadfill
Moderate Too droughty	Moderate Too droughty	Moderate Too droughty	Poor Too sandy	Good ---

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Slight	---	Slight	Slight	Slight	Moderate Soil blowing
---	---	---	---	---	

Hazard Ratings

Erosion Hazard: Slight

Mass Wasting Hazard: --- ---

Windthrow Hazard: Moderate Low strength

Plant Competition Hazard: Slight Fear2

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.10	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
GW	25	5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
2.8	0.1	0.4	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	70	50	20

% Current Surface Cover

RkFr	Veg.	Littr	Soil
45	5	45	15

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
561	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
50	---	---	450	25	25	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too droughty	Low Too droughty	Low Too droughty	Poor Too sandy	Fair Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate High erosion	Moderate Low strength	Moderate Slope	Severe Too sandy	Severe Too steep	Moderate Erodes easily

Hazard Ratings / Soil Properties / Soil Loss Rates and Vegetative Ground Covers

Hazard Ratings	Soil Properties	Soil Loss Rates and Vegetative Ground Covers
Erosion Hazard: Moderate	Soil Condition: Satisfactory	Soil Loss (Sheet/Rill Erosion) tons/ha/yr: Pot. 12.2, Nat. 1.3, Cur. 2., Tol. 9.0
Mass Wasting Hazard: Moderate ---	Factor K: 0.02; Soil Wetness Depth: ---, Duration: ---, Month: ---	
Windthrow Hazard: Severe Low strength	Unified Class: GP; Liquid Limit: 15	% Veg. Ground Cover: Pot. 0, Nat. 60, Cur. 45, Tol. 10
Plant Competition Hazard: Severe Fapa	Plastic Index: NP; Shrink/Swell: Low	% Current Surface Cover: RkFr 75, Veg. 5, Littr 40, Soil 10

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
562	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
50	55	---	250	45	2100	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too steep	Low Too steep	Low Too droughty	Poor Too steep	Poor Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe High erosion	Severe Low strength	Severe Too steep	Severe Too steep	Severe Too steep	Severe Erodes easily

Hazard Ratings

Erosion Hazard: Severe
Mass Wasting Hazard: Moderate ---
Windthrow Hazard: Moderate Low strength
Plant Competition Hazard: Slight Fear2, Potr5

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.10	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
GW	20	5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
62.5	1.9	5.8	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	80	60	45

% Current Surface Cover

RkFr	Veg.	Littr	Soil
55	5	55	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
562	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	PulWd
Site Index			lb/ac/yr			cd/ac
55	---	---	450	125	1600	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too steep	Low Too steep	Low Too droughty	Poor Too steep	Poor Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe High erosion	Severe Low strength	Severe Too steep	Severe Too steep	Severe Too steep	Severe Erodes easily

Hazard Ratings

Erosion Hazard
Severe
Mass Wasting Hazard
Moderate

Windthrow Hazard
Moderate Low strength
Plant Competition Hazard
Slight Pear2

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.10	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
GW	20	5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
49.9	2.1	4.3	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	70	65	45

% Current Surface Cover

RkFr	Veg.	Littr	Soil
55	5	60	15

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
565	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
70	---	---	450	200	2300	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low	Moderate	High	Poor	Fair
Too cobbly	Too steep	---	Too clayey	Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	Moderate	Moderate	Moderate	Severe	Severe
High erosion	Slope	Low strength	Too steep	Too steep	Erodes easily

Hazard Ratings

Erosion Hazard
Severe
Mass Wasting Hazard
Slight

Windthrow Hazard
Moderate
Low strength
Plant Competition Hazard
Moderate
Quga, Rone

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.15	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
GC	40	20	Moderate

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
39.1	1.6	3.4	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	85	60	40

% Current Surface Cover

RkFr	Veg.	Littr	Soil
40	5	55	25

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.	Production Potentials For: Pipos (Site Index)	Psmeg (Site Index)	Pien (Site Index)	Hb/Wd (lb/ac/yr)	Forg. (lb/ac/yr)	ForgM (lb/ac/yr)	FulWd cd/ac
566	0.1	---	---	---	1800	1700	1800	---
		---	---	---	---	---	---	---

Map No.	Unit Comp.	Potential For: Re-Veg	Re-For	Nat Regen	Source Suitability: Top Soil	Roadfill
566	0.1	High	---	---	Good	Fair
		---	---	---	---	Low strength

Map No.	Unit Comp.	Limitation Ratings: Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Campgrounds	Wheeled Off-Road Vehicles
566	0.1	---	---	Moderate	Slight	Slight	Moderate
		---	---	Low strength	---	---	Low strength

Map No.	Unit Comp.	Hazard Ratings: Erosion Hazard	Mass Wasting Hazard	Windthrow Hazard	Plant Competition Hazard	Soil Properties: Soil Condition: Satisfactory — Factor K	Soil Wetness: Depth	Soil Wetness: Duration	Soil Wetness: Month	Unified Class	Liquid Limit	Plastic Index	Shrink/Swell
566	0.1	Slight	---	---	---	0.04	---	---	---	CL	30	10	Moderate
			---	---	---								

Map No.	Unit Comp.	Soil Loss Rates and Vegetative Ground Covers: Soil Loss (Sheet/Rill Erosion) Pot. (tons/ha/yr)	Nat.	Cur.	Tol.	% Veg. Ground Cover Pot.	Nat.	Cur.	Tol.	% Current Surface Cover RkFr	Veg.	Littr	Soil
566	0.1	0.3	0.1	0.2	9.0	0	40	10	10	70	5	5	20

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
567	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
65	---	---	500	250	2500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low	Moderate	High	Poor	Poor
Too stony	Too stony	---	Too clayey	Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	---	Severe	Severe	Moderate	Severe
Low strength	---	Low strength	Low strength	Too shallow	Low strength

Hazard Ratings / Soil Properties / Soil Loss Rates and Vegetative Ground Covers

Erosion Hazard	Soil Condition: Satisfactory				Soil Loss (Sheet/Rill Erosion)			
					Pot.	Nat.	Cur.	Tol.
Slight					tons/ha/yr			
	Factor	Soil Wetness						
Mass Wasting Hazard	K	Depth	Duration	Month	3.7	0.1	0.6	6.7
---	0.15	---	---	---				

					% Veg. Ground Cover			
Windthrow Hazard		Unified Class	Liquid Limit		Pot.	Nat.	Cur.	Tol.
Severe					0	80	50	30
Low strength		CH	50					
Plant Competition					% Current Surface Cover			
Hazard		Plastic Index	Shrink/ Swell		RkFr	Veg.	Littr	Soil
Moderate					20	5	45	30
Jude2		25	High					

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
567	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	PulWd
Site Index			lb/ac/yr			cd/ac
65	---	---	500	250	2500	---
---	---	---	---	---	---	---

Potential For

Re-Veg	Re-For	Nat Regen
High	High	High
---	---	---

Source Suitability

Top Soil	Roadfill
Poor	Poor
Too clayey	Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	---	Severe	Severe	Slight	Severe
Low strength	---	Low strength	Low strength	---	Low strength

Hazard Ratings

Erosion Hazard
Slight
Mass Wasting Hazard

Windthrow Hazard
Severe
Low strength
Plant Competition Hazard
Moderate
Jude2

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.28	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
CH	45	25	High

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
7.8	0.1	0.9	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	80	55	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
10	5	50	40

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.	Production Potentials For						
		Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
		Site Index			lb/ac/yr			cd/ac
570	0.1	70	---	---	450	200	2350	---
		---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low	Moderate	High	Poor	Poor
Too cobbly	Too cobbly	---	Too clayey	Low strength

Limitation Ratings					
Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	---	Severe	Severe	Moderate	Severe
Low strength	---	Low strength	Low strength	Too shallow	Low strength

Hazard Ratings	Soil Properties				Soil Loss Rates and Vegetative Ground Covers			
Erosion Hazard	Soil Condition: Satisfactory				Soil Loss (Sheet/Rill Erosion)			
					Pot.	Nat.	Cur.	Tol.
Slight					tons/ha/yr			
	Factor	Soil Wetness						
Mass Wasting Hazard	K	Depth	Duration	Month	2.2	0.1	0.2	6.7
---	0.15	---	---	---				

					% Veg. Ground Cover			
Windthrow Hazard		Unified Class	Liquid Limit		Pot.	Nat.	Cur.	Tol.
Severe					0	85	55	30
Low strength		CH	45					
Plant Competition					% Current Surface Cover			
Hazard		Plastic Index	Shrink/ Swell		RkFr	Veg.	Littr	Soil
Moderate		25	High		45	5	50	5
Rone								

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
570	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
70	---	---	450	200	2350	---
---	---	---	---	---	---	---

Potential For

Re-Veg	Re-For	Nat Regen
Low	Moderate	High
Too cobbly	Too cobbly	---

Source Suitability

Top Soil	Roadfill
Poor	Moderate
Too clayey	Shrink-swell

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate	---	Moderate	Slight	Moderate	Moderate
Low strength	---	Too shallow	---	Too shallow	Low strength

Hazard Ratings

Erosion Hazard
Slight

Mass Wasting Hazard

Windthrow Hazard
Severe
Low strength

Plant Competition Hazard
Moderate
Rone

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness: Depth	Duration	Month
0.15	---	---	---

Unified Class	Liquid Limit
GC	45

Plastic Index	Shrink/ Swell
25	Moderate

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
2.9	0.1	0.4	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	85	50	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
50	5	45	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
572	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
45	---	---	500	50	2500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too stony	Moderate Too stony	Low Plant competition	Poor Too clayey	Poor Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe Low strength	--- ---	Severe Low strength	Severe Low strength	Moderate Too shallow	Severe Low strength

Hazard Ratings

Erosion Hazard
Slight

Mass Wasting Hazard	Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
---	0.10	---	---	---

Windthrow Hazard	Unified Class	Liquid Limit
Severe Low strength	CH	45

Plant Competition Hazard	Plastic Index	Shrink/ Swell
Severe Arpu5, Jude2	20	High

Soil Properties

Soil Condition: Satisfactory

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion)

Pot.	Nat.	Cur.	Tol.
tons/ha/yr			
5.	0.3	0.3	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	80	65	10

% Current Surface Cover

RkFr	Veg.	Littr	Soil
40	5	60	10

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
575	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
55	---	---	450	200	2300	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too steep	Low Too steep	Moderate Plant competition	Poor Too steep	Poor Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe High erosion	Severe Slope	Severe Slope	Severe Too steep	Severe Too steep	Severe Erodes easily

Hazard Ratings

Erosion Hazard
Severe

Mass Wasting Hazard	Factor K	Soil Wetness: Depth	Soil Wetness: Duration	Soil Wetness: Month
Moderate ---	0.15	---	---	---

Windthrow Hazard	Unified Class	Liquid Limit
Moderate Too shallow	GC	40

Plant Competition Hazard	Plastic Index	Shrink/Swell
Moderate Quga, Rone	15	Moderate

Soil Condition: Satisfactory

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
73.1	3.	6.7	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	70	60	60

% Current Surface Cover

RkFr	Veg.	Littr	Soil
45	5	55	15

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.	Production Potentials For: Pipos (Site Index)	Psmeg (Site Index)	Pien (Site Index)	Hb/Wd (lb/ac/yr)	Forg. (lb/ac/yr)	ForgM (lb/ac/yr)	FulWd cd/ac
575	0.2	50	---	---	400	150	2200	---
		---	---	---	---	---	---	---

Map No.	Unit Comp.	Potential For: Re-Veg	Re-For	Nat Regen	Source Suitability: Top Soil	Roadfill
575	0.2	Low Too steep	Low Too steep	Low Too shallow	Poor Too steep	Poor Too shallow

Map No.	Unit Comp.	Limitation Ratings: Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Campgrounds	Wheeled Off-Road Vehicles
575	0.2	Severe High erosion	Severe Slope	Severe Too shallow	Severe Too steep	Severe Too steep	Severe Erodes easily

Map No.	Unit Comp.	Hazard Ratings: Erosion Hazard	Mass Wasting Hazard	Windthrow Hazard	Plant Competition Hazard	Soil Properties: Soil Condition: Satisfactory — Factor K	Soil Wetness: Depth	Soil Wetness: Duration	Soil Wetness: Month	Unified Class	Liquid Limit	Plastic Index	Shrink/Swell
575	0.2	Severe	Moderate- ---	Severe Too shallow	Severe Quga, Rone	0.05	---	---	---	GC	40	15	Moderate

Map No.	Unit Comp.	Soil Loss Rates and Vegetative Ground Covers: Soil Loss (Sheet/Rill Erosion) Pot. (tons/ha/yr)	Nat.	Cur.	Tol.	% Veg. Ground Cover Pot.	Nat.	Cur.	Tol.	% Current Surface Cover RkFr	Veg.	Littr	Soil
575	0.2	18.9	1.3	4.	4.5	0	55	40	40	75	5	35	15

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
578	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
65	---	---	500	250	2500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Moderate Too cobbly	High ---	Moderate Plant competition	Poor Too clayey	Poor Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe Low strength	--- ---	Severe Low strength	Severe Low strength	Slight ---	Severe Low strength

Hazard Ratings

Erosion Hazard
Slight
Mass Wasting Hazard

Windthrow Hazard
Severe
Low strength
Plant Competition Hazard
Moderate
Jude2, Quga

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.20	---	---	---

Unified Class	Liquid Limit
CH	50

Plastic Index	Shrink/ Swell
25	High

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion)

Pot.	Nat.	Cur.	Tol.
tons/ha/yr			
6.1	0.1	0.4	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	80	65	25

% Current Surface Cover

RkFr	Veg.	Littr	Soil
30	5	60	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
578	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
65	---	---	500	250	2500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Moderate Too cobbly	High ---	Moderate Plant competition	Poor Too clayey	Poor Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe Low strength	--- ---	Severe Low strength	Severe Low strength	Slight ---	Severe Low strength

Hazard Ratings

Erosion Hazard
Slight
Mass Wasting Hazard

Windthrow Hazard
Severe Low strength
Plant Competition Hazard
Moderate Jude2, Quga

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month	Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
0.20	---	---	---	CH	50	25	High

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
2.3	0.	0.2	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	80	65	25

% Current Surface Cover

RkFr	Veg.	Littr	Soil
30	5	60	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
579	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
55	---	---	450	225	2350	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low	Low	Low	Poor	Poor
Too stony	Too shallow	Too shallow	Too thin	Too shallow

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate	---	Severe	Severe	Severe	Moderate
Too rocky	---	Too shallow	Too shallow	Too shallow	Low strength

Hazard Ratings | **Soil Properties** | **Soil Loss Rates and Vegetative Ground Covers**

Erosion Hazard: Slight

Mass Wasting Hazard: ---

Windthrow Hazard: Severe
Too shallow

Plant Competition Hazard: Severe
Jude2, Quga

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Duration	Month
0.05	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
GC	45	25	Moderate

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
0.6	0.	0.2	4.5

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	75	30	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
65	5	25	15

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
579	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
60	---	---	500	250	2500	---
---	---	---	---	---	---	---

Potential For Re-Veg	Re-For	Nat Regen	Source Suitability Top Soil	Roadfill
Low	Moderate	Moderate	Poor	Poor
Too cobbly	Too cobbly	Plant competition	Too clayey	Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	---	Severe	Severe	Moderate	Severe
Low strength	---	Low strength	Low strength	Too steep	Low strength

Hazard Ratings / Soil Properties / Soil Loss Rates and Vegetative Ground Covers

Erosion Hazard	Soil Condition: Satisfactory				Soil Loss (Sheet/Rill Erosion)			
					Pot.	Nat.	Cur.	Tol.
Slight					tons/ha/yr			
	Factor	Soil Wetness						
Mass Wasting Hazard	K	Depth	Duration	Month	2.4	0.	0.3	6.7
---	0.10	---	---	---				

					% Veg. Ground Cover			
Windthrow Hazard		Unified Class	Liquid Limit		Pot.	Nat.	Cur.	Tol.
Severe					0	80	55	30
Too shallow		CH	45					
Plant Competition Hazard		Plastic Index	Shrink/ Swell		% Current Surface Cover			
					RkFr	Veg.	Littr	Soil
Moderate		25	High		50	5	50	15
Jude2, Quga								

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
582	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
75	---	---	525	275	2650	---
---	---	---	---	---	---	---

Potential For Re-Veg	Potential For Re-For	Potential For Nat Regen	Source Suitability Top Soil	Source Suitability Roadfill
High	High	High	Poor	Poor
---	---	---	Too clayey	Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	---	Severe	Severe	Slight	Severe
Low strength	---	Low strength	Low strength	---	Low strength

Hazard Ratings / Soil Properties / Soil Loss Rates and Vegetative Ground Covers

Erosion Hazard	Soil Condition: Satisfactory				Soil Loss (Sheet/Rill Erosion)			
					Pot.	Nat.	Cur.	Tol.
Slight					tons/ha/yr			
	Factor	Soil Wetness						
Mass Wasting Hazard	K	Depth	Duration	Month	3.3	0.1	0.3	9.0
---	0.20	---	---	---				

					% Veg. Ground Cover			
Windthrow Hazard		Unified Class	Liquid Limit		Pot.	Nat.	Cur.	Tol.
Severe					0	85	60	25
Low strength		CH	45					
Plant Competition Hazard		Plastic Index	Shrink/ Swell		% Current Surface Cover			
					RkFr	Veg.	Littr	Soil
Slight					25	5	55	15
Quga		25	High					

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
582	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
70	---	---	500	250	2500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Moderate Too cobbly	High ---	High ---	Poor Too clayey	Fair Too shallow

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate Low strength	--- ---	Moderate Low strength	Slight ---	Moderate Too shallow	Moderate Low strength

Hazard Ratings

Erosion Hazard
Slight
Mass Wasting Hazard

Windthrow Hazard
Moderate
Too shallow
Plant Competition Hazard
Slight
Quga

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.20	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
GC	45	25	Moderate

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
2.9	0.1	0.2	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	85	65	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
30	5	60	15

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
584	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
70	---	---	525	275	2650	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too stony	Low Too stony	High ---	Poor Too clayey	Poor Shrink-swell

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe High erosion	Moderate Low strength	Severe Shrink-swell	Moderate Too steep	Severe Too steep	Severe Erodes easily

Hazard Ratings

Erosion Hazard
Severe

Mass Wasting Hazard
Slight

Windthrow Hazard
Moderate
Low strength

Plant Competition Hazard
Moderate
Quga, Rone

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.15	---	---	---

Unified Class	Liquid Limit
GC	45

Plastic Index	Shrink/ Swell
25	High

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion)

Pot.	Nat.	Cur.	Tol.
tons/ha/yr			
30.3	0.4	1.7	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	85	70	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
45	5	65	10

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
584	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
75	---	---	525	275	2650	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too stony	Moderate Too steep	High ---	Poor Too clayey	Poor Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe Low strength	Moderate Low strength	Severe Low strength	Severe Low strength	Severe Too steep	Severe Low strength

Hazard Ratings

Erosion Hazard
Moderate
Mass Wasting Hazard
Slight

Windthrow Hazard
Severe
Low strength
Plant Competition Hazard
Moderate
Quga, Rone

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month	Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
0.15	---	---	---	CH	45	25	High

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
22.5	0.3	0.7	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	85	75	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
40	5	70	10

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
585	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
60	---	---	450	225	2350	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too stony	Low Too shallow	Low Too shallow	Poor Too thin	Poor Too shallow

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate Too rocky	--- ---	Severe Too shallow	Severe Too shallow	Severe Too shallow	Moderate Low strength

Hazard Ratings

Erosion Hazard	Mass Wasting Hazard	Windthrow Hazard	Plant Competition Hazard
Slight	---	Severe	Severe
	---	Too shallow	Quga

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.05	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/Swell
GC	45	25	Moderate

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
1.	0.	0.2	4.5

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	75	40	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
65	5	35	10

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
585	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	PulWd
Site Index			lb/ac/yr			cd/ac
65	---	---	500	250	2500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low	Moderate	High	Poor	Poor
Too cobbly	Too cobbly	---	Too clayey	Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	---	Severe	Severe	Moderate	Severe
Low strength	---	Low strength	Low strength	Too steep	Low strength

Hazard Ratings / Soil Properties / Soil Loss Rates and Vegetative Ground Covers

Erosion Hazard	Soil Condition: Satisfactory				Soil Loss (Sheet/Rill Erosion)			
					Pot.	Nat.	Cur.	Tol.
Slight					tons/ha/yr			
	Factor	Soil Wetness						
Mass Wasting Hazard	K	Depth	Duration	Month	2.3	0.1	0.4	6.7
---	0.15	---	---	---				

					% Veg. Ground Cover			
Windthrow Hazard		Unified Class	Liquid Limit		Pot.	Nat.	Cur.	Tol.
Severe		CH	45		0	85	45	30
Low strength								
Plant Competition					% Current Surface Cover			
Hazard		Plastic Index	Shrink/ Swell		RkFr	Veg.	Littr	Soil
Moderate		25	High		50	5	40	20
Quga								

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
586	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
65	---	---	500	250	2500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low	Low	High	Poor	Poor
Too stony	Too stony	---	Too clayey	Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	---	Severe	Severe	Moderate	Severe
Low strength	---	Low strength	Low strength	Too steep	Low strength

Hazard Ratings

Erosion Hazard
Slight

Mass Wasting Hazard

Windthrow Hazard
Severe
Low strength

Plant Competition Hazard
Slight
Quga

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month	Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
0.15	---	---	---	CH	55	30	High

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
2.3	0.1	0.3	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	85	55	10

% Current Surface Cover

RkFr	Veg.	Littr	Soil
50	5	50	15

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
586	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
65	---	---	500	250	2500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low	Low	High	Poor	Fair
Too stony	Too stony	---	Too clayey	Too shallow

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Campgrounds	Wheeled Off-Road Vehicles
Moderate	---	Moderate	Slight	Moderate	Moderate
Low strength	---	Low strength	---	Too steep	Low strength

Hazard Ratings

Erosion Hazard
Slight

Mass Wasting Hazard	Factor K
---	0.15

Windthrow Hazard
Severe
Low strength

Plant Competition Hazard
Slight
Quga, Rone

Soil Properties

Soil Condition: Satisfactory

Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month	Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
---	---	---	GC	45	25	Moderate

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
2.3	0.1	0.3	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	85	50	10

% Current Surface Cover

RkFr	Veg.	Littr	Soil
50	5	45	10

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
594	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
---	---	---	2600	2400	2600	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Moderate	---	---	Poor	Good
Too droughty	---	---	Too sandy	---

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
---	---	Slight	Slight	Slight	Moderate
---	---	---	---	---	Soil blowing

Hazard Ratings / Soil Properties / Soil Loss Rates and Vegetative Ground Covers

Erosion Hazard	Soil Condition: Satisfactory				Soil Loss (Sheet/Rill Erosion)			
					Pot.	Nat.	Cur.	Tol.
Slight					tons/ha/yr			
	Factor	Soil Wetness						
Mass Wasting Hazard	K	Depth	Duration	Month	1.7	0.1	0.2	9.0
---	0.15	---	---	---				

					% Veg. Ground Cover			
Windthrow Hazard		Unified Class	Liquid Limit		Pot.	Nat.	Cur.	Tol.
---					0	80	50	20
---		GW	20					
Plant Competition Hazard		Plastic Index	Shrink/ Swell		% Current Surface Cover			
					RkFr	Veg.	Littr	Soil
---					35	30	20	30
---		5	Low					

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.	Production Potentials For: Pipos (Site Index)	Psmeg (Site Index)	Pien (Site Index)	Hb/Wd (lb/ac/yr)	Forg. (lb/ac/yr)	ForgM (lb/ac/yr)	FulWd cd/ac	Potential For: Re-Veg	Re-For	Nat Regen	Source Suitability: Top Soil	Roadfill
595	0.1	---	---	---	2800	2600	2800	---	High	---	---	Poor	Poor
		---	---	---	---	---	---	---	---	---	---	Too clayey	Low strength

Map No.	Unit Comp.	Limitation Ratings: Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Campgrounds	Wheeled Off-Road Vehicles
595	0.1	---	---	Severe	Severe	Slight	Severe
		---	---	Low strength	Low strength	---	Low strength

Map No.	Unit Comp.	Hazard Ratings: Erosion Hazard	Mass Wasting Hazard	Windthrow Hazard	Plant Competition Hazard	Soil Properties: Soil Condition: Satisfactory — Factor K	Soil Wetness: Depth	Soil Wetness: Duration	Soil Wetness: Month	Unified Class	Liquid Limit	Plastic Index	Shrink/Swell
595	0.1	Slight	---	---	---	0.37	---	---	---	CH	45	25	High
			---	---	---								

Map No.	Unit Comp.	Soil Loss Rates and Vegetative Ground Covers: Soil Loss (Sheet/Rill Erosion) Pot.	Nat.	Cur.	Tol. (tons/ha/yr)	% Veg. Ground Cover Pot.	Nat.	Cur.	Tol.	% Current Surface Cover RkFr	Veg.	Littr	Soil
595	0.1	4.2	0.1	0.5	9.0	0	75	55	40	15	30	25	30

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
596	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
50	---	---	400	150	2200	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low	Low	Low	Poor	Poor
Too steep	Too steep	Too shallow	Too steep	Too shallow

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	Severe	Severe	Severe	Severe	Moderate
Too steep	Slope	Too shallow	Too steep	Too steep	Erodes easily

Hazard Ratings / Soil Properties / Soil Loss Rates and Vegetative Ground Covers

Erosion Hazard	Soil Condition: Satisfactory				Soil Loss (Sheet/Rill Erosion)			
					Pot.	Nat.	Cur.	Tol.
Moderate					tons/ha/yr			
	Factor	Soil Wetness						
Mass Wasting Hazard	K	Depth	Duration	Month	8.3	2.9	3.6	4.5
Moderate	0.02	---	---	---				

					% Veg. Ground Cover			
Windthrow Hazard		Unified Class	Liquid Limit		Pot.	Nat.	Cur.	Tol.
Severe		GW	25		0	20	20	15
Too shallow								
Plant Competition Hazard		Plastic Index	Shrink/ Swell		% Current Surface Cover			
					RkFr	Veg.	Littr	Soil
Slight		5	Low		80	5	15	5
Cemo2								

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No. 596 | Unit Comp. 0.3

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
60	65	---	300	50	3300	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too steep	Low Too steep	Low Too bouldery	Poor Too steep	Poor Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe Too steep	Severe Slope	Severe Slope	Severe Too steep	Severe Too steep	Moderate Erodes easily

Hazard Ratings

Erosion Hazard: Moderate

Mass Wasting Hazard: Moderate

Windthrow Hazard: Slight

Plant Competition Hazard: Moderate

Rone

Soil Properties

Soil Condition: Satisfactory

Factor	Soil Wetness		
K	Depth	Duration	Month
0.04	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
GW	25	5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
23.8	4.	6.6	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	45	35	15

% Current Surface Cover

RkFr	Veg.	Littr	Soil
75	5	30	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
610	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Porg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
70	70	---	1200	400	3300	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
High	High	High	Good	Good
---	---		---	---

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate	---	Slight	Slight	Moderate	Moderate
High erosion	---	---	---	Too steep	Erodes easily

Hazard Ratings

Erosion Hazard	Mass Wasting Hazard	Windthrow Hazard	Plant Competition Hazard
Moderate	---	Slight	Slight
	---	---	Potr5

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.37	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
GW	25	5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
33.	0.3	1.3	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	95	75	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
20	15	60	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
610	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
70	70	---	1200	400	3500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
High	High	High	Good	Good
---	---		---	---

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate	---	Slight	Slight	Slight	Moderate
High erosion	---	---	---	---	Erodes easily

Hazard Ratings | Soil Properties | Soil Loss Rates and Vegetative Ground Covers

Erosion Hazard	Soil Condition: Satisfactory				Soil Loss (Sheet/Rill Erosion)			
					Pot.	Nat.	Cur.	Tol.
Moderate					tons/ha/yr			
	Factor	Soil Wetness						
Mass Wasting Hazard	K	Depth	Duration	Month	9.5	0.1	0.2	9.0
---	0.25	---	---	---				

					% Veg. Ground Cover			
Windthrow Hazard		Unified Class	Liquid Limit		Pot.	Nat.	Cur.	Tol.
Slight					0	95	85	25
---		GW	25					
Plant Competition Hazard		Plastic Index	Shrink/ Swell		% Current Surface Cover			
					RkFr	Veg.	Littr	Soil
Slight					15	15	70	5
Potr5		5	Low					

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
611	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
70	70	---	1200	400	3300	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
High	High	High	Good	Good
---	---		---	---

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate	---	Moderate	Severe	Slight	Moderate
High erosion	---	Low strength	Erodible	---	Erodes easily

Hazard Ratings

Erosion Hazard
Moderate
Mass Wasting Hazard

Windthrow Hazard
Slight

Plant Competition Hazard
Slight
Potr5

Soil Properties

Soil Condition: Satisfactory

Factor	Soil Wetness		
K	Depth	Duration	Month
0.37	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
CL	35	15	Moderate

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion)

Pot.	Nat.	Cur.	Tol.
tons/ha/yr			
14.1	0.	0.2	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	100	85	10

% Current Surface Cover

RkFr	Veg.	Littr	Soil
10	10	75	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
611	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
70	70	---	1200	400	3500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
High	High	High	Poor	Fair
---	---		Too stony	Too stony

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate	---	Moderate	Slight	Moderate	Moderate
High erosion	---	Too shallow	---	Too steep	Erodes easily

Hazard Ratings | Soil Properties | Soil Loss Rates and Vegetative Ground Covers

Erosion Hazard	Soil Condition: Satisfactory				Soil Loss (Sheet/Rill Erosion)			
					Pot.	Nat.	Cur.	Tol.
Moderate					tons/ha/yr			
	Factor	Soil Wetness						
Mass Wasting Hazard	K	Depth	Duration	Month	11.8	0.	0.5	6.7
---	0.20	---	---	---				

					% Veg. Ground Cover			
Windthrow Hazard		Unified Class	Liquid Limit		Pot.	Nat.	Cur.	Tol.
Moderate					0	100	75	10
Too shallow		GM	35					
Plant Competition Hazard		Plastic Index	Shrink/ Swell		% Current Surface Cover			
					RkFr	Veg.	Littr	Soil
Slight					25	10	65	5
Potr5		15	Moderate					

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
612	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
45	50	---	375	125	3200	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too steep	Low Too steep	Moderate Plant competition	Poor Too steep	Poor Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe High erosion	Severe Slope	Severe Too steep	Severe Too steep	Severe Too steep	Severe Erodes easily

Hazard Ratings

Erosion Hazard
Severe

Mass Wasting Hazard	Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
Moderate ---	0.28	---	---	---

Windthrow Hazard	Unified Class	Liquid Limit
Moderate Too shallow	GW	30

Plant Competition Hazard	Plastic Index	Shrink/ Swell
Moderate Rone, Potr5	10	Moderate

Soil Properties

Soil Condition: Satisfactory

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
205.	5.8	6.7	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	80	75	75

% Current Surface Cover

RkFr	Veg.	Littr	Soil
30	5	70	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
613	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
65	65	---	300	50	3300	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too steep	Low Too steep	Low Too bouldery	Poor Too steep	Poor Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe High erosion	Severe Slope	Severe Too steep	Severe Too steep	Severe Too steep	Severe Erodes easily

Hazard Ratings

Erosion Hazard
Severe
Mass Wasting Hazard
Moderate ---
Windthrow Hazard
Moderate Too shallow
Plant Competition Hazard
Moderate Rone, Potr5

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.10	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/Swell
GM	30	10	Moderate

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion)

Pot.	Nat.	Cur.	Tol.
tons/ha/yr			
51.9	0.7	2.7	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	90	70	50

% Current Surface Cover

RkFr	Veg.	Littr	Soil
35	5	65	10

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
614	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
45	50	---	375	125	2800	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Moderate	Moderate	High	Fair	Fair
Too steep	Too steep	---	Too steep	Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	Moderate	Moderate	Moderate	Severe	Severe
High erosion	Slope	Slope	Too steep	Too steep	Erodes easily

Hazard Ratings

Erosion Hazard
Severe

Mass Wasting Hazard
Slight

Windthrow Hazard
Slight

Plant Competition Hazard
Moderate
Rone, Potr5

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.10	---	---	---

Unified Class	Liquid Limit
GW	25

Plastic Index	Shrink/ Swell
5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion)

Pot.	Nat.	Cur.	Tol.
tons/ha/yr			
29.7	0.8	1.6	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	80	70	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
35	5	65	15

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.	Production Potentials For: Pipos (Site Index)	Psmeg (Site Index)	Pien (Site Index)	Hb/Wd (lb/ac/yr)	Forg. (lb/ac/yr)	ForgM (lb/ac/yr)	FulWd (cd/ac)
620	0.1	45	55	---	300	50	1000	---
		---	---	---	---	---	---	---

Potential For: Re-Veg	Re-For	Nat Regen	Source Suitability: Top Soil	Roadfill
Low Too steep	Low Too steep	Low Plant competition	Poor Too steep	Poor Too steep

Limitation Ratings: Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe High erosion	Severe Slope	Severe Slope	Severe Too steep	Severe Too steep	Severe Erodes easily

Hazard Ratings: Erosion Hazard	Soil Properties: Soil Condition: Unsuited				Soil Loss Rates and Vegetative Ground Covers: Soil Loss (Sheet/Rill Erosion) Pot.	Nat.	Cur.	Tol.
Severe					<----- tons/ha/yr ------>			
	Factor	Soil Wetness: Depth	Duration	Month				
Mass Wasting Hazard	K				168.	11.5	11.5	6.7
Moderate ---	0.20	---	---	---				
					% Veg. Ground Cover			
		Unified Class	Liquid Limit		Pot.	Nat.	Cur.	Tol.
Windthrow Hazard Moderate Too shallow		GW	25		0	70	70	75
					% Current Surface Cover			
Plant Competition Hazard		Plastic Index	Shrink/ Swell		RkFr	Veg.	Littr	Soil
Severe Arpu5, Qutu2		5	Low		30	5	60	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
620	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
55	65	---	300	50	1000	---
---	---	---	---	---	---	---

Potential For Re-Veg	Re-For	Nat Regen	Source Suitability Top Soil	Roadfill
Low Too steep	Low Too steep	Low Plant competition	Poor Too steep	Poor Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe High erosion	Severe Slope	Severe Slope	Severe Too steep	Severe Too steep	Severe Erodes easily

Hazard Ratings

Erosion Hazard: Severe

Mass Wasting Hazard: Moderate

Windthrow Hazard: Moderate

Too shallow

Plant Competition Hazard: Severe

Arpu5, Qutu2

Soil Properties

Soil Condition: Unsuited

Factor K	Soil Wetness Depth	Duration	Month
0.15	---	---	---

Unified Class	Liquid Limit
GW	25

Plastic Index	Shrink/Swell
5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
89.	11.9	11.9	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	55	55	60

% Current Surface Cover

RkFr	Veg.	Littr	Soil
45	10	45	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.	Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	PulWd
		Site Index			lb/ac/yr			cd/ac
640	0.1	---	---	---	3800	3600	3800	---
		---	---	---	---	---	---	---

Production Potentials For

Potential For Re-Veg	Re-For	Nat Regen	Source Suitability Top Soil	Roadfill
High	---	---	Poor	Fair
---	---	---	Too cobbly	Too stony

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
---	---	Moderate	Slight	Moderate	Moderate
---	---	Too stony	---	Too steep	Erodes easily

Hazard Ratings / Soil Properties / Soil Loss Rates and Vegetative Ground Covers

Erosion Hazard	Soil Condition: Satisfactory				Soil Loss (Sheet/Rill Erosion)			
					Pot.	Nat.	Cur.	Tol.
Moderate					tons/ha/yr			
	Factor	Soil Wetness						
Mass Wasting Hazard	K	Depth	Duration	Month	23.5	0.2	1.	9.0
---	0.20	---	---	---				

					% Veg. Ground Cover			
Windthrow Hazard		Unified Class	Liquid Limit		Pot.	Nat.	Cur.	Tol.
---					0	95	75	25
---		GW	25					
Plant Competition Hazard		Plastic Index	Shrink/ Swell		% Current Surface Cover			
					RkFr	Veg.	Littr	Soil
Slight					25	35	40	10
Potr5		5	Low					

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
650	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
80	80	---	400	150	3500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Moderate Too cobbly	Moderate Too cobbly	High ---	Poor Too clayey	Poor Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate Low strength	---	Moderate Low strength	Slight ---	Slight ---	Moderate Low strength

Hazard Ratings | **Soil Properties** | **Soil Loss Rates and Vegetative Ground Covers**

Erosion Hazard: Slight

Mass Wasting Hazard: ---

Windthrow Hazard: Severe

Plant Competition Hazard: Moderate

Rone, Quga

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.10	---	---	---

Unified Class	Liquid Limit
CH	45

Plastic Index	Shrink/ Swell
25	High

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
3.5	0.	0.1	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	100	80	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
35	5	75	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
650	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
80	80	---	400	150	3500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Moderate Too cobbly	Moderate Too cobbly	High ---	Poor Too cobbly	Fair Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate Low strength	---	Moderate Low strength	Slight ---	Slight ---	Moderate Low strength

Hazard Ratings

Erosion Hazard
Slight
Mass Wasting Hazard

Windthrow Hazard
Moderate Low strength
Plant Competition Hazard
Moderate Rone, Quga

Soil Properties

Soil Condition: Satisfactory

Factor	Soil Wetness		
K	Depth	Duration	Month
0.10	---	---	---

Unified Class	Liquid Limit
GC	45

Plastic Index	Shrink/ Swell
25	Moderate

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
3.5	0.	0.1	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	100	80	20

% Current Surface Cover

RkFr	Veg.	Littr	Soil
35	5	75	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
651	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
75	80	---	400	150	3500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Moderate Too steep	Moderate Too steep	High ---	Poor Too acid	Fair Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe High erosion	Moderate Low strength	Moderate Low strength	Moderate Too steep	Severe Too steep	Severe Erodes easily

Hazard Ratings

Erosion Hazard
Severe
Mass Wasting Hazard
Slight ---
Windthrow Hazard
Slight ---
Plant Competition Hazard
Slight Rone

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month	Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
0.10	---	---	---	GM	35	10	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
59.5	0.1	0.9	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	100	90	45

% Current Surface Cover

RkFr	Veg.	Littr	Soil
40	5	85	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.	Production Potentials For						
		Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
		Site Index			lb/ac/yr			cd/ac
651	0.2	75	80	---	400	150	3500	---
		---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Moderate	Moderate	High	Poor	Poor
Too steep	Too steep	---	Too acid	Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	Severe	Severe	Moderate	Severe	Severe
High erosion	Low strength	Low strength	Too steep	Too steep	Erodes easily

Hazard Ratings | Soil Properties | Soil Loss Rates and Vegetative Ground Covers

Erosion Hazard	Soil Condition: Satisfactory				Soil Loss (Sheet/Rill Erosion)			
					Pot.	Nat.	Cur.	Tol.
Severe					tons/ha/yr			
	Factor	Soil Wetness						
Mass Wasting Hazard	K	Depth	Duration	Month	59.5	0.1	0.8	9.0
Slight	0.10	---	---	---				

					% Veg. Ground Cover			
Windthrow Hazard		Unified Class	Liquid Limit		Pot.	Nat.	Cur.	Tol.
Severe					0	100	90	45
Low strength		CH	40					
Plant Competition Hazard		Plastic Index	Shrink/ Swell		% Current Surface Cover			
					RkFr	Veg.	Littr	Soil
Slight					40	5	85	5
Rone		20	High					

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
652	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
55	60	---	400	150	3500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low	Moderate	High	Poor	Poor
Too stony	Too stony	---	Too stony	Too stony

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate	---	Moderate	Slight	Moderate	Moderate
Too stony	---	Too shallow	---	Too shallow	Soil blowing

Hazard Ratings

Erosion Hazard
Slight

Mass Wasting Hazard

Windthrow Hazard
Moderate
Too shallow

Plant Competition Hazard
Moderate
None

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.15	---	---	---

Unified Class	Liquid Limit
GM	30

Plastic Index	Shrink/ Swell
10	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
5.7	0.	0.4	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	100	65	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
25	5	60	15

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
652	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	PorgM	PulWd
Site Index			lb/ac/yr			cd/ac
50	60	---	375	125	3300	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too stony	Low Too shallow	Low Too shallow	Poor Too thin	Poor Too shallow

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate Too stony	--- ---	Severe Too shallow	Severe Too shallow	Severe Too shallow	Moderate Soil blowing

Hazard Ratings

Erosion Hazard
Slight
Mass Wasting Hazard

Windthrow Hazard
Severe Too shallow
Plant Competition Hazard
Moderate Rone

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month	Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
0.10	---	---	---	GW	25	5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
3.8	0.	0.2	4.5

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	95	70	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
40	5	65	10

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
653	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
70	75	---	400	150	3500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Moderate	High	High	Poor	Fair
Too cobbly	---	---	Too cobbly	Low strength

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate	---	Moderate	Slight	Moderate	Moderate
High erosion	---	Low strength	---	Too steep	Erodes easily

Hazard Ratings

Erosion Hazard
Moderate

Mass Wasting Hazard	Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
---	0.20	---	---	---

Windthrow Hazard	Unified Class	Liquid Limit
Moderate		
Low strength	GC	35

Plant Competition Hazard	Plastic Index	Shrink/ Swell
Slight		
Rone, Quga, Potr5	15	Moderate

Soil Properties

Soil Condition: Satisfactory

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
7.8	0.	0.4	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	100	70	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
20	5	65	15

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
654	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
70	75	---	400	150	3500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too stony	Low Too stony	High ---	Poor Too stony	Fair Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate High erosion	Moderate Slope	Moderate Low strength	Moderate Too steep	Severe Too steep	Moderate Erodes easily

Hazard Ratings

Erosion Hazard
Moderate
Mass Wasting Hazard
Slight ---
Windthrow Hazard
Slight ---
Plant Competition Hazard
Slight Rone, Quga, Potr5

Soil Properties

Soil Condition: Satisfactory

Factor	Soil Wetness		
K	Depth	Duration	Month
0.15	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
GM	35	10	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
38.	0.1	1.5	9.0

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	100	75	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
40	5	70	0

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.	Production Potentials For: Pipos (Site Index)	Psmeg (Site Index)	Pien (Site Index)	Hb/Wd (lb/ac/yr)	Forg. (lb/ac/yr)	ForgM (lb/ac/yr)	FulWd cd/ac
700	0.1	---	---	60	75	25	2400	---
		---	---	---	---	---	---	---

Potential For: Re-Veg	Re-For	Nat Regen	Source Suitability: Top Soil	Roadfill
Low Too steep	Low Too steep	Low Too bouldery	Poor Too steep	Poor Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Campgrounds	Wheeled Off-Road Vehicles
Severe High erosion	Severe Slope	Severe Slope	Severe Too steep	Severe Too steep	Severe Erodes easily

Hazard Ratings / Soil Properties / Soil Loss Rates and Vegetative Ground Covers

Erosion Hazard	Soil Condition: Satisfactory				Soil Loss (Sheet/Rill Erosion)			
					Pot.	Nat.	Cur.	Tol.
Severe					<----- tons/ha/yr ------>			
	Factor	Soil Wetness						
Mass Wasting Hazard	K	Depth	Duration	Month	38.5	0.8	3.9	6.7
Moderate	0.05	---	---	---				

					% Veg. Ground Cover			
Windthrow Hazard		Unified Class	Liquid Limit		Pot.	Nat.	Cur.	Tol.
Severe					0	85	55	40
Pien		GW	20					
Plant Competition Hazard		Plastic Index	Shrink/ Swell		% Current Surface Cover			
					RkFr	Veg.	Littr	Soil
Slight					55	5	50	10
Potr5		5	Low					

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
710	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
---	65	65	300	75	3800	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too bouldery	Low Too bouldery	Low Too bouldery	Poor Too bouldery	Poor Too bouldery

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe High erosion	Moderate Slope	Moderate Too rocky	Moderate Too steep	Severe Too steep	Severe Erodes easily

Hazard Ratings

Erosion Hazard	Mass Wasting Hazard	Windthrow Hazard	Plant Competition Hazard
Severe	Slight ---	Severe Pien	Slight Potr5

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month	Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
0.10	---	---	---	GW	25	5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
37.5	1.1	2.5	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	75	65	40

% Current Surface Cover

RkFr	Veg.	Littr	Soil
50	5	60	0

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.	Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
		Site Index			lb/ac/yr			cd/ac
715	0.1	---	70	75	300	75	4000	---
		---	---	---	---	---	---	---

Production Potentials For

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too bouldery	Moderate Too steep	High[2] ---	Poor Too stony	Fair Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe High erosion	Moderate Slope	Moderate Slope	Moderate Too steep	Severe Too steep	Severe Erodes easily

Hazard Ratings

Erosion Hazard	Mass Wasting Hazard	Windthrow Hazard	Plant Competition Hazard
Severe	Slight ---	Severe Pien	Slight Potr5

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month	Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
0.15	---	---	---	GW	25	5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
41.6	0.3	0.9	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	90	85	45

% Current Surface Cover

RkFr	Veg.	Littr	Soil
30	5	80	0

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
740	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
---	---	80	100	50	3175	---
---	---	---	---	---	---	---

Potential For Re-Veg	Re-For	Nat Regen	Source Suitability Top Soil	Roadfill
Moderate	Moderate	High	Poor	Moderate
Too steep	Too steep	---	Too stony	Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	Moderate	Moderate	Moderate	Severe	Severe
High erosion	Slope	Slope	Too steep	Too steep	Erodes easily

Hazard Ratings

Erosion Hazard	Mass Wasting Hazard	Windthrow Hazard	Plant Competition Hazard
Severe	Slight	Severe	Slight
	---	Pien	Potr5

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Duration	Month
0.17	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
GW	30	10	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
29.	0.1	0.1	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	100	100	30

% Current Surface Cover

RkFr	Veg.	Littr	Soil
20	5	95	0

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
740	0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
---	---	80	100	50	3175	---
---	---	---	---	---	---	---

Potential For

Re-Veg	Re-For	Nat Regen
Low Too bouldery	Moderate Too steep	High ---

Source Suitability

Top Soil	Roadfill
Poor Too bouldery	Poor Too bouldery

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe High erosion	Moderate Slope	Moderate Too rocky	Moderate Too steep	Severe Too steep	Severe Erodes easily

Hazard Ratings

Erosion Hazard
Severe
Mass Wasting Hazard
Slight

Windthrow Hazard
Severe
Pien
Plant Competition Hazard
Slight
Potr5

Soil Properties

Soil Condition: Satisfactory

Factor	Soil Wetness		
K	Depth	Duration	Month
0.15	---	---	---

Unified Class	Liquid Limit
GW	25

Plastic Index	Shrink/ Swell
5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
51.	0.4	0.4	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	95	95	45

% Current Surface Cover

RkFr	Veg.	Littr	Soil
25	5	90	0

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.	Production Potentials For						
		Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
		Site Index			lb/ac/yr			cd/ac
750	0.1	---	---	60	100	50	2800	---
		---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low	Low	High	Low	Low
Too stony	Too stony	---	Too stony	Too stony

Limitation Ratings					
Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate	Moderate	Severe	Moderate	Moderate	Slight
Too stony	Slope	Too stony	Too steep	Too steep	---

Hazard Ratings	Soil Properties				Soil Loss Rates and Vegetative Ground Covers			
Erosion Hazard	Soil Condition: Satisfactory				Soil Loss (Sheet/Rill Erosion)			
					Pot.	Nat.	Cur.	Tol.
Slight					tons/ha/yr			
	Factor	Soil Wetness						
Mass Wasting Hazard	K	Depth	Duration	Month	3.8	0.1	0.3	6.7
Slight	0.05	---	---	---				

					% Veg. Ground Cover			
Windthrow Hazard		Unified Class	Liquid Limit		Pot.	Nat.	Cur.	Tol.
Severe					0	90	65	20
Pien		GW	25					
Plant Competition					% Current Surface Cover			
Hazard		Plastic Index	Shrink/ Swell		RkFr	Veg.	Littr	Soil
Slight					50	5	60	5
Potr5		5	Low					

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No. 750 | Unit Comp. 0.2

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	PulWd
Site Index			lb/ac/yr			cd/ac
---	---	60	100	50	2600	---
---	---	---	---	---	---	---

Potential For

Re-Veg	Re-For	Nat Regen
Low Too stony	Low Too stony	Low Too sandy

Source Suitability

Top Soil	Roadfill
Low Too stony	Low Too stony

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Moderate High erosion	Moderate Slope	Severe Too stony	Moderate Too steep	Severe Too steep	Moderate Erodes easily

Hazard Ratings

Erosion Hazard	Moderate
Mass Wasting Hazard	Slight
Windthrow Hazard	Severe
Plant Competition Hazard	Slight

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.05	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
GW	20	5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
7.4	0.1	0.5	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	90	65	25

% Current Surface Cover

RkFr	Veg.	Littr	Soil
50	5	60	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
770	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
---	---	65	125	25	2500	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low Too steep	Low Too cold	Low Too cold	Poor Too steep	Poor Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe Too rocky	Severe Slope	Severe Slope	Severe Too steep	Severe Too steep	Moderate Erodes easily

Hazard Ratings

Erosion Hazard: Moderate

Mass Wasting Hazard: Moderate

Windthrow Hazard: Severe

Plant Competition Hazard: ---

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Soil Wetness Duration	Soil Wetness Month
0.03	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/Swell
GW	25	5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) <----- tons/ha/yr ------>

Pot.	Nat.	Cur.	Tol.
17.8	0.7	1.2	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	75	65	20

% Current Surface Cover

RkFr	Veg.	Littr	Soil
70	5	60	5

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No. 785 | Unit Comp. 0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
---	---	70	100	50	3000	---
---	---	---	---	---	---	---

Potential For Re-Veg	Re-For	Nat Regen	Source Suitability Top Soil	Roadfill
Low	Low	High	Poor	Poor
Too steep	Too steep	---	Too steep	Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	Severe	Severe	Severe	Severe	Severe
High erosion	Slope	Slope	Too steep	Too steep	Erodes easily

Hazard Ratings

Erosion Hazard: Severe

Mass Wasting Hazard: Moderate

Windthrow Hazard: Severe

Pien

Plant Competition Hazard: Slight

Fear2, Mumo

Soil Properties

Soil Condition: Satisfactory

Factor K	Soil Wetness Depth	Duration	Month
0.10	---	---	---

Unified Class	Liquid Limit
GW	20

Plastic Index	Shrink/ Swell
5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
68.2	1.5	6.1	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	85	65	60

% Current Surface Cover

RkFr	Veg.	Littr	Soil
45	10	55	10

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
790	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	FulWd
Site Index			lb/ac/yr			cd/ac
---	---	45	125	25	2500	---
---	---	---	---	---	---	---

Potential For Re-Veg	Re-For	Nat Regen	Source Suitability Top Soil	Roadfill
Low	Low	Low	Poor	Poor
Too steep	Too cold	Too cold	Too steep	Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
Severe	Severe	Severe	Severe	Severe	Severe
High erosion	Slope	Slope	Too steep	Too steep	Erodes easily

Hazard Ratings

Erosion Hazard
Severe
Mass Wasting Hazard
Severe

Windthrow Hazard
Severe
Pien
Plant Competition Hazard
Slight

Soil Properties

Soil Condition: Unsuited

Factor K	Soil Wetness Depth	Duration	Month
0.10	---	---	---

Unified Class	Liquid Limit
GW	20

Plastic Index	Shrink/ Swell
5	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion) tons/ha/yr

Pot.	Nat.	Cur.	Tol.
96.5	12.7	12.7	6.7

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	50	50	65

% Current Surface Cover

RkFr	Veg.	Littr	Soil
50	5	45	15

Table 3. Interpretations For Coconino Terrestrial Ecosystem Survey.

Map No.	Unit Comp.
850	0.1

Production Potentials For

Pipos	Psmeg	Pien	Hb/Wd	Forg.	ForgM	PulWd
Site Index			lb/ac/yr			cd/ac
---	---	---	100	100	100	---
---	---	---	---	---	---	---

Potential For			Source Suitability	
Re-Veg	Re-For	Nat Regen	Top Soil	Roadfill
Low	---	---	Poor	Poor
Too cold	---	---	Too steep	Too steep

Limitation Ratings

Timber Harvest	Cutbank Stability	Unsurfaced Roads	Trails	Camp-grounds	Wheeled Off-Road Vehicles
---	Severe	Severe	Severe	Severe	Severe
---	Slope	Slope	Too fragile	Too steep	Erodes easily

Hazard Ratings

Erosion Hazard	Mass Wasting Hazard	Windthrow Hazard	Plant Competition Hazard
Severe	Moderate	---	Slight
	---	---	---

Soil Properties

Soil Condition: Unsuited

Factor	Soil Wetness		
K	Depth	Duration	Month
0.02	---	---	---

Unified Class	Liquid Limit	Plastic Index	Shrink/ Swell
GW	20	NP	Low

Soil Loss Rates and Vegetative Ground Covers

Soil Loss (Sheet/Rill Erosion)

Pot.	Nat.	Cur.	Tol.
tons/ha/yr			
15.4	10.1	10.1	2.2

% Veg. Ground Cover

Pot.	Nat.	Cur.	Tol.
0	10	10	45

% Current Surface Cover

RkFr	Veg.	Littr	Soil
80	5	5	10

Classification

SOIL

The system of soil classification currently used was adopted by the National Cooperative Soil Survey in 1965. Terrestrial Ecosystem Survey utilizes five categories of this system: order, suborder, great group, subgroup and family. This classification is based on observed and/or inferred data from the field of soil science and other related disciplines. The properties selected for the higher categories are the result of soil genesis or of factors that affect soil genesis. The categories of this system are discussed in the following paragraphs.

ORDER. Eleven soil orders are recognized as categories in the system. The properties used to differentiate among orders are those that reflect the kind and degree of dominant soil forming processes that have taken place. Each order is identified by a word ending in "sol". An example is Alfisol.

SUBORDER. Each order is divided into suborders based primarily on properties that influence soil genesis and are important for growth or that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Boralf (Bor, meaning cool, plus alf, from Alfisol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of expression of pedogenic horizons, soil moisture and temperature regimes, and base status. Each great group is identified by the name of a suborder and a prefix that suggest something about the properties of the soil. An example is Cryoboralfs (Cry, indicating cool summers, plus boralf, the suborder of the Alfisols that have cryic or frigid temperature regimes).

SUBGROUP. Each great group may be divided into subgroups: The central (typic) concept of the great group, which is not necessarily the most extensive subgroup; The intergrades, (transitional forms to other orders, suborders, or great groups); or the extragrades, which have some properties that are representative of the great groups but do not indicate transitions to any other known kind of soil. Each subgroup is identified by one or more adjectives preceding the name of the great group. An example is Typic Cryoboralfs.

FAMILY. Families are established within a subgroup on the basis of similar physical and chemical properties that affect management. Mostly the properties are those of horizons below plow depth where there is much biological activity. Among the properties considered are particle-size class, mineral content, temperature regime, depth of the root zone, consistence, moisture equivalent, slope and permanent cracks. A family name consists of the name of a subgroup and a series of adjectives. The adjectives are the class name for the soil properties used as family differentia. An example is loamy-skeletal, mixed, Typic Cryoboralfs.

VEGETATION

The vegetation classification system is based upon the land's potential for vegetation development. The potential or climax vegetation is assumed to reflect climatic factors at the broadest classification level. Lower levels of the system are influenced by local factors of climate, soil, animals, fire and other environmental influences. This system is hierarchical, consisting of five levels or ranks of generalization. These ranks and their approximate scale are as follows:

RANK	SCALE
Class	Global (1:10,000,000)
Formation	Continental (1:3,000,000)
Series	Subcontinental (1:500,000)
Subseries	Regional (1:50,000)
Association	Local (1:5,000)

Vegetation within each rank is classified into mutually exclusive sets (or states) which are presumed to reflect the overriding influence of climate at the appropriate scale. This is referred to as the climatic climax vegetation. In addition, there are anomalies or departures from the expression of the climatic climax which are most evident at the Series, Subseries, and Association ranks. These departures are maintained in the potential expression of vegetation by sustained or episodic influences of fire, grazing animals, special soils and local relief anomalies. These are referred to as fire, zootic, edaphic, or topographic climaxes. Such names merely allude to generalized causes and not to the particular mechanisms of ecological or historical interaction that bring about the departure of vegetation from its climatic climax expression.

Each level of classification represents an opportunity for predicting successional trends, assessing biotic potentials (including productivity), assessing management opportunities and limitations, and cataloging information. The ranks are defined as follows:

CLASS. Classes of vegetation represent broad structural groupings based upon gross aspects of climate at the global scale. The states of this class occurring in Region 3 are Forest, Woodland, Scrub and Herbaceous vegetation (UNESCO 1973).

FORMATION. Vegetation with similar structural form (physiognomy) is controlled primarily by climates differentiated at a continental scale. The eight formation states in the Southwest are (from coldest to warmest climates, respectively) alpine tundra, coniferous forest, deciduous forest, coniferous woodland, evergreen oak woodland, chaparral, grassland and desert.

SERIES. Each state within this rank consists of vegetation having the same potential dominant species at climax. In the climatic series, there is a degree of climatic homogeneity that reflects the requirements and tolerances of the dominant indicator plants.

There are approximately 17 climatic series in Region 3 (Layser and Schubert 1979, Moir 1982).

SUBSERIES. Regionalized differences in macroclimates and floristics[1] result in different combinations of dominant plants occurring in different geographic areas of the Southwest. Each combination of dominant plants in the climatic climax constitutes a Subseries state (or vegetation Subseries). The vegetation Subseries ordered along a climatic gradient (generalized as a single, linear axis whose extremes represent hot-dry and cold-wet extremes) defines indirectly the primary climatic gradient of that region (Daubenmire, 1968, P 261-2).

ASSOCIATION. An association is the consistent combination of both overstory and understory climax dominants. Vegetation is relatively homogeneous as to the dominant plants of all structural layers (Daubenmire 1968).

[1] Floristics refers to the taxonomic assemblage of plants in any area, their geographic ranges, evolutionary and migratory history.

Integration of Terrestrial Ecosystem Components

The complex interaction of climate, soil and vegetation gives rise to several different terrestrial ecosystems. The interrelationship between soil, climate and vegetation may be depicted in the following diagram:

CLIMATE

Terrestrial
Ecosystem

SOIL VEGETATION

The diagram indicates that soil and vegetation are influenced by climate and by each other. The product of these interactions is a terrestrial ecosystem.

The three components of a terrestrial ecosystem can be arranged into an infinite number of combinations. Therefore, gradient analysis is used to integrate these components into a more manageable number. The basis for the initial segmentation of the gradient into uniform segments is by soil moisture and temperature regimes. This results in the preliminary continuum. The correlation of indicator plants with the soil moisture-temperature regimes results in a further refinement of the segments. The final phase consists of integrating soil categories, from Soil Taxonomy, to form individual terrestrial ecosystems. The resultant ordered alignment of terrestrial ecosystems is the continuum of climatic climaxes.

A departure from the climatic climax is attributed to a property resulting in edaphic, topographic, fire, or zootic climax classes. Occasionally it is a combination of properties and the resultant climax class is referred to as topo-edaphic, fire-zootic, etc.

Terrestrial ecosystems can be related to primary climaxes and associated disclimaxes. Examples of this relationship are depicted in the following diagram:

Primary climaxes			
Topographic	Edaphic	Fire	Zootic
Disclimaxes			
Topo-edaphic	Edaphic-fire	Fire-zootic	Zootic-fire

Successional pathways for terrestrial ecosystems are controlled by climatic parameters. Tables 4, 5 and 6 contain information by columns that reflect these climatic parameters. It is possible to move from primary climax to disclimax within the limits indicated in the columns, but not among columns.

In some instances a terrestrial ecosystem has moved from climatic climax to an edaphic climax through site degradation. This shift is mainly attributed to soil loss exceeding the tolerance over a significant period of time.

Table 4. Gradient Analysis for High Sun Cold Climate Continuum.

3	4	5	6	7	8	Descriptors		
						HSC		
						Climate		
Vaughn	Mtn.Air	Flagstaff	Cloudcrof			NOAA Wx. Sta:		
12	9	5	4	1	-3	MAAT	deg. C	0
---	10	6	5	2	-2			-1
11	8	5	3	0	---			+1
13	10[10]	6[6]	5[5]	2[2]	-2	MAST	deg. C	0
---	11	7	6	3[3]	-1[-1]			-1
12	9	6	4	1[2]	---			+1
---		12	9	6	4	MSST	deg. C	0
---		13	10	7	4			-1
		11	8	5	---			+1
---	5	2	1	-1	-6	MWST	deg. C	0
---	6	3	0	0	-5			-1
7	4	2	0	-2				+1
165	150(153)	120	90	60	30	FFP	no. days	0
---	160	130	100	70	40			-1
165	140	110	80	50	---			+1
30	40	56	68	76	88	MAP	cm	0
---	36	50	64	74	84			-1
31	46	60	72	80	---			+1
32	46	60	72	80				+1
---	80	110	140	170	210	MAS	cm	0
---	70	100	130	160	200			-1
60	90	120	150	180	---			+1
10P	10P	20P	50C	120C	15P	MASA	cm	0
---	---	15P	35P	90C	15P			-1
---	---	25P	70C	150C				+1
12/1	12/1	11/1	11/1	10/15	10/15	SP	mo.(s)	0
4/1	4/1	3/1	4/1	5/15	6/1			
---	---	12/1	11/1	10/15	10/15			-1
---	---	3/1	3/1	5/1	6/1			
---	---	11/1	10/15	10/15	---			+1
40	40	45	50	50	50	MLSP	% of ann.	
3.0	3.6	4.0	4.6	5.0	5.0	2yr 6hr	cm	
1820	2100	2400	2700	3200	3800	ME	m	0
1700	2000	2300	2600	3000	3600			-1
1900	2200	2500	2800	3400	---			+1
Ustic	Ustic	Ustic	Udic	Udic	Udic	SMR		
Mesic	Mesic	Frigid	Frigid	Cryic	Perg.	STR		

Table 5. Gradient Analysis for Low Sun Cold Climate Continuum.

2	3	4	5	6	7	8	Descriptors		
							LSC		
							Climate		
							NOAA Wx. Sta:		
---	---	8	5	4	1		MAAT	deg. C	0
---	---	9	6	5	2				-1
12	10	7	5	3	0				+1
---	---	9[9]	6[5]	5[5]	2		MAST	deg. C	0
---	---	10	7[7]	6	3[3]				-1
13	11[12]	8	6	4	1				+1
---			12	9	6		MSST	deg. C	0
---			13	10	7				-1
---			11	8	5				+1
---	---	5	2	1	-1		MWST	deg. C	0
---	---	6	3	2	0				-1
10	7	4	2	0	-2				+1
---		130(126)	100	90	60		FFP	no. days	0
---	---	140	110	100	70				-1
150	145	120	100	80	50				+1
---	---	40[35]	56	68	76		MAP	cm	0
---	---	36	50	64	74				-1
26	32	46	60	72	80				+1
---	---	90	120	150	180		MAS	cm	0
---	---	80	110	140	170				-1
40	70	100	130	160	190				+1
---	---	20P	35C	70C	120C		MASA	cm	0
---	---	15P	30C	60C	100C				-1
---	10P	25P	40C	90C	150C				+1
---	---	12/1	11/1	10/15	10/1		SP	mo.(s)	0
---		4/1	4/15	4/15	5/15				
---	---	12/1	11/1	11/1	10/1				-1
---		4/1	4/15	4/15	5/15				
---	12/1	11/15	11/1	10/1	10/1				+1
---	4/1	4/1	4/15	4/15	5/15				
60	60	60	55	50	50		MLSP	% of An.	
2.6	3.0	3.6	4.0	4.6	5.0		2 yr. 6hr.	st. cm	
1400	1800	2100	2400	2700	3000		ME	m	0
1200	1700	2000	2300	2600	2900				-1
1600	1900	2200	2500	2800	3100				+1
Aridic	Ustic	Ustic	Ustic	Udic	Udic		SMR		
Mesic	Mesic	Mesic	Frigid	Frigid	Cryic		STR		

Table 6. Gradient Analysis for Low Sun Mild Climate Continuum.

1	2	3	4	5	6	Descriptor		
						LSM		
						Climate		
	Apache J	Globe				NOAA Wx. Sta.:		
		18(18)			---	MAAT	deg. C	0
---	22(22)							-1
					---			+1
23	20(20)	17(17)	14[13]	10	---	MAST	deg. C	0
---	21	18	15	11	8			-1
22[22]	19	16	13	9	---			+1
				14	---	MSST	deg. C	0
				15	12			-1
				13	---			+1
	[10]	[7]	[5]		---	MWST	deg. C	0
								-1
					---			+1
310	260	230(228)	200	170	---	PFP	no. days	0
---	290(290)	240	210	180	150			-1
300	250	220	220	160	---			+1
16	28	40(40)	52	64	---	MAP	cm	0
---	24(22)	36	48	60	72			-1
20	32	44	56	68	---			+1
0	0	0	30	90	---	MAS	cm	0
---	0	0	20	50	170			-1
0	0	10	40	130	---			+1
0	0	0	0	10	---	MASA	cm	
0								
---	0	0	0	0	30			-1
0	0	0	0	20	---			+1
---	---	---	---	12/15		SP	mo.(s)	0
				3/1				
---	---	---	---	---	12/15			-1
					3/15			
---	---	---	---	12/15	---			+1
				3/1				
60						MLSP	% of ann.	
3.0	3.0	3.6	4.0	4.6	5.0	2yr6hr st.cm		
300(777)	600	1200(1082	1500(1500	1900	---	ME	m	0
---	500(506)	1000	1400	1700	2200			-1
400(502)	800	1300	1600	2100	---			+1
Aridic	Aridic	Ustic	Ustic	Ustic	Udic	SMR		
Hyperth.	Thermic	Thermic	Mesic	Mesic	---	STR		0
---	Thermic	Thermic	Thermic	Mesic	Mesic			-1
Hyperth.	Thermic	Thermic	Mesic	Mesic	---			+1

Abbreviations

NOAA -National Oceanic and Atmospheric Administration-climatological data.

MAAT -mean annual air temperature in degrees Celsius.

MAST -mean annual soil temperature @ 50 cm in degrees Celsius.

MSST -mean summer soil temperature @ 50 cm in degrees Celsius (June, July, August).

MWST -mean winter soil temperature @ 50 cm in degrees Celsius (December, January, February).

FFP -freeze free period in days.

MAP -mean annual precipitations in centimeters.

MAS -mean annual snow in centimeters.

MASA -mean annual snow accumulation (P-patchy, C-continuous) in centimeters.

SP -snow period, continuous over two weeks or more, first accumulation to snow melt by month.

MLSP -mean low sun precipitation in percent of annual precipitation.

ME -mean elevation in meters.

SMR -soil moisture regime.

STR -soil temperature regime.

0
+1
-1 -Terrestrial Ecosystem Survey uses a classification and integration system with columns of information. These columns are referred to as typical, coded "0", climatic segments of a continuum. Variations from typical are due to slight shifts in moisture and temperature. A shift to the dryer/warmer side is coded "-1" while a shift to the cooler/wetter side is coded "+1".

Glossary

Alluvium: Material such as rock fragments, sand, silt or clay that is deposited on land by water action.

Aquic: A reducing soil moisture regime nearly free of dissolved oxygen due to saturation by ground water or its capillary fringe and occurring at periods when the soil temperature is above 5 degrees Celsius.

Aridic: A soil moisture regime that in 6, or more, out of 10 years, is dry in all parts for more than half the cumulative days per year when soil temperature, at a depth of 50 centimeters from the soil surface, is above 5 degrees Celsius and is moist in some or all parts for less than 90 consecutive days when soil temperature, at a depth of 50 centimeters, is above 8 degrees Celsius.

Basin: A closed depression with no surface outlet bounded by slopes of low inclination.

Base Saturation Percentage: The extent to which the absorption complex of a soil is saturated with exchangeable cations other than hydrogen; expressed as a percentage of the total cation-exchange capacity.

Bearing Strength: The maximum load a soil material can support before failing.

Boulder: Rock fragment greater than 60 centimeters (24 inches) in diameter.

Calcareous Soil: Soil containing sufficient free calcium carbonate or magnesium carbonate to effervesce carbon dioxide visibly when treated with cold 0.1 Normal hydrochloric acid.

Cation-Exchange Capacity (CEC): The sum total of exchangeable cations that a soil can absorb; expressed in milliequivalents per 100 grams of oven dry soil.

Cinder Land: Areas composed of loose cinders and other scoriaceous magmatic ejecta. The water holding capacity of these areas is very low and trafficability is generally poor.

Clay: A soil separate with diameter of less than .002 millimeters.

Climate: The sum total of all atmospheric or meteorological influences (principally temperature, moisture, wind, barometric pressure and evaporation) which combine to characterize a region and give it individuality by influencing the nature of its landforms, soils, vegetation and land use.

Climax: A plant community of the most advanced type capable of development under and in dynamic equilibrium with the prevailing environment.

Cobble: Rock fragments ranging in size from 7.6 to 25 centimeters (3 to 10 inches) in diameter.

Colluvium: Material such as rock fragments, sand, silt or clay that has been moved downhill, and accumulates on lower slopes by the force of gravity.

Color, Soil: A color designation system that specifies the relative degrees of three simple variables of color: hue, value, and chroma.

Chroma, (Color): The relative purity, strength, or saturation of a color; directly related to the dominance of the determining wavelength of the light and inversely related to grayness; one of the three variables of color (hue, value, and chroma).

Control Section: Depth of soil material within which certain diagnostic horizons, features, and other characteristics are used as differentia in the classification of soils.

Cord: A unit of measurement of stacked wood containing 128 cubic feet within its outside surfaces. The standard cord is a pile of wood 4 feet by 8 feet, made up of sticks 4 feet long, containing about 80 solid cubic feet of wood.

Cryic: A soil temperature regime that has mean annual soil temperature higher than 0 degrees Celsius but lower than 8 degrees Celsius at either a depth of 50 centimeters from the soil surface, or at a lithic or paralithic contact, whichever is shallower.

Current Soil Loss: The rate of soil erosion occurring under existing conditions of effective ground cover.

Depth, Soil: The depth of soil material that plant roots can penetrate readily to obtain water and nutrients; the depth to a layer that differs sufficiently from the overlying material in physical or chemical properties to prevent or seriously retard the growth of roots.

Diagnostic Horizons: Combinations of specific soil characteristics that are indicative of certain classes of soils. Those which occur at the soil surface are called epipedons, those below the surface are diagnostic subsurface horizons.

Albic Horizon: A mineral soil horizon from which clay and free iron oxides have been removed or in which the oxides have been segregated to the extent that the color of the horizon is determined primarily by the color of the primary sand and silt particles rather than by coatings on these particles.

Argillic Horizon: A mineral soil horizon that is characterized by the illuvial accumulation of layer-lattice silicate clays. The argillic horizon has a certain minimum thickness depending on the thickness of the solum, a minimum quantity of clay in comparison with an overlying eluvial horizon (depending on the clay content of the eluvial horizon), and usually has coatings of oriented clay on the surface of pores or peds or bridging sand grains.

Calcic Horizon: A mineral soil horizon of secondary carbonate enrichment that is 15 cm or more (6 inches) thick, has a calcium carbonate equivalent of more than 15 percent, and has at least 5 percent more calcium carbonate equivalent than an underlying horizon.

Cambic Horizon: A mineral soil horizon that has a texture of loamy very fine sand or finer, has soil structure rather than rock structure and is characterized by the alteration or removal of mineral material as indicated by mottling or gray colors, stronger chromas, redder hues or higher clay contact than in underlying horizons or the removal of carbonates. The cambic horizon lacks cementation or induration and has too few evidences of illuviation to meet the requirements of the argillic or spodic horizon.

Duripan: A subsurface horizon that is cemented by silica.

Mollic Epipedon: A surface horizon of mineral soil that is dark colored and relatively thick, contains at least 1.0 percent organic matter, is not massive and hard or very hard when dry, and has a base saturation of more than 50 percent when measured at pH 7.0.

Ochric Epipedon: A surface horizon of mineral soil that is too high in chroma, too low in organic carbon, too thin or too dry to be a plaggen, mollic, umbric, melanic, anthropic or histic epipedon, or that is both hard and massive when dry.

Petrocalcic Horizon: A calcic horizon that is indurated or cemented throughout by calcium carbonate and, in some places, with magnesium carbonate. It cannot be penetrated with a spade or auger when dry, the dry fragments do not slake in water, and it is impenetrable by roots.

Ecosystem: A community, including all the component organisms, together with the environment, forming an interacting system.

Edaphic Climax: The ultimate vegetation where substratal peculiarities are sufficiently pronounced to produce a self-perpetuating vegetation that differs from the climatic climax of the area.

Elevated Plain: A plain bounded on one or more sides by a descending, steeply sloping (greater than 15 percent) scarp slope.

Erosion: (1) The wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep; (2) Detachment and movement of soil or rock fragments by water, wind, ice or gravity.

Accelerated Erosion: Erosion which exceeds tolerable soil loss, primarily as a result of the influence of the activities of man or, in some cases, of other animals, or natural catastrophes that expose bare surfaces, for example, fires.

Gully Erosion: The erosion process whereby water accumulates in narrow channels over short periods of time, and removes the soil from this narrow area to considerable depths, ranging from 1 to 2 feet to as much as 75 to 100 feet.

Natural Erosion: Wearing away of the earth's surface by water, ice, or other natural agents under natural environmental conditions of climate, vegetation, etc., undisturbed by man. Also called geological erosion.

Rill Erosion: The removal of soil through the cutting of many small but conspicuous channels where runoff concentrates. Rill erosion is intermediate between sheet and gully erosion. The channels are shallow enough that they are easily obliterated by tillage.

Sheet Erosion: The more or less uniform removal of soil from an area without the development of conspicuous water channels. The channels are tiny or tortuous, exceedingly numerous, and unstable; they enlarge and straighten as the volume of runoff increases. Sheet erosion is less apparent, particularly in its early stages, than other types of erosion. It is generally more serious as slope gradient increases.

Wind Erosion: Wind is not generally an important cause of erosion in humid areas, except on unprotected sandy soils and on tracts of drained and cultivated organic soils. In regions of low rainfall, wind erosion can be widespread, especially during periods of drought. Unlike water erosion, wind erosion is generally not related to slope gradient. The hazard of wind erosion is increased by removing or reducing the vegetation.

Escarpment: A steeply sloping precipitous slope linking a lowland area to an upland area. Typically, an escarpment is a relatively continuous precipitous slope terminating an extended elevated plain.

Excessively Drained: As used as a phase, these are soils that have very high rates of hydraulic conductivity and low water holding capacity to an extent that it effects the type of vegetation that grows on the soil.

Fire (pyro) Climax: A plant community which maintains its composition and structure only as a consequence of periodic burning.

Flooding: Temporary covering of the soil surface by flowing water from any source, such as streams overflowing their banks or runoff from adjacent or surrounding slopes.

Frequent: Flooding is likely to occur often under usual weather conditions (more than a 50 percent chance of flooding in any year, or more than 50 times in 100 years).

Occasional: Flooding is expected infrequently under usual weather conditions (5 to 50 percent chance of flooding in any year, or 5 to 50 times in 100 years).

Forage Production (Climax): The amount of vegetation that is produced annually under the climax vegetation community, and that is available and palatable to livestock or wildlife (air dry - measured to a height of 4.5 feet).

Forage Production (Maximum): The amount of vegetation that is produced upon total elimination of non-forage species (air dry - measured to a height of 4.5 feet).

Frigid: A soil temperature regime that has warm summer temperatures with mean annual temperatures of more than 0 degrees Celsius, but less than 8 degrees Celsius, and a difference of more than 5 degrees Celsius between mean summer and winter soil temperatures at 50 centimeters depth from the soil surface or at a lithic or paralithic contact, whichever is shallower.

Gravel: Rock fragments ranging in size from 0.2 to 7.6 centimeters in diameter.

Ground Cover: The sum of surface rock fragments, litter (2.54 cm and greater) and vegetation (basal area). This is expressed as a percent.

Herbaceous Vegetation: As used in the UNESCO Vegetation Classification System, "Mainly composed of grasses, grasslike plants, and forbs."

Herbage Production (Climax): The total amount of herbaceous vegetation that is produced annually under the climax vegetative community (air-dry measured to a height of 4.5 feet). This includes grasses, forbs, shrubs, and trees.

Hill: A positive relief feature that has a moderate order of vertical relief (30 to 300 meters). It is bounded on all sides by steeply sloping (greater than 15 percent) outfacing side slopes ascending to a summit area. Summit area slopes may be either gently or steeply sloping and may be restricted or extended in areal extent.

Hue, (Color): One of the three variables of color (hue, value and chroma). Hue represents the dominant spectral (rainbow) color related to the dominant wavelength of the light.

Igneous Rock: Rock formed from the cooling and solidification of magma and that has not been changed appreciably since its formation.

Included Soils: Soils that are not present in every delineation of the subject mapping unit. Generally 15 percent or less of the total composition.

Infiltration Rate: A soil characteristic determining or describing the maximum rate at which water can enter the soil under specified conditions, including the presence of an excess of water. It has the dimensions of velocity.

K-factor: The Soil Erodibility Factor used in the Universal Soil Loss Equation which represents the capability of a soil surface to resist sheet erosion. It is a function of the physical and chemical properties of the soil.

Lava Flows: Areas covered with lava. Most flows have sharp, jagged surfaces, crevices and angular blocks characteristic of lava. Some soil material may be present in cracks and sheltered pockets, but the flows are virtually devoid of plants other than lichens.

Liquid Limit: The water content (in percent) at which a soil changes from a plastic condition to a liquid state.

Lithic Contact: A boundary between soil and continuous, coherent underlying rock that has a hardness of three or more (Mohs scale).

Major Soils: Soils that are present in significant extent in every delineation of the subject mapping unit.

Map Unit: An area defined and named the same in terms of its soil/vegetation/climate components or miscellaneous areas.

Mesic: A soil temperature regime that has mean annual soil temperatures of 8 degrees Celsius or more, but less than 15 degrees Celsius and more than 5 degrees Celsius difference between mean summer and mean winter soil temperatures at 50 centimeters depth from the soil surface or at a lithic or paralithic contact, whichever is shallower.

Mineral Soil: A soil consisting predominantly of, and having its properties determined predominantly by, mineral matter usually containing less than 20 percent organic matter.

Miscellaneous Area: Areas with little or no identifiable soil, although some delineated areas may have soil as inclusions; such areas support little or no vegetation; formerly called miscellaneous land type. Examples include: Cinder Land, Lava Flows, Riverwash, Rock Outcrop, Rubble Land and Talus.

Mixed Mineralogy: A mineralogy class that has less than 40 percent of any one mineral besides feldspars or quartz.

Montmorillonite: An aluminum silicate clay mineral with 2:1 expanding crystal structure, that is, with two silicon tetrahedral layers enclosing an aluminum octahedral layer. Considerable expansion may be caused along the C axis by water moving between silica layers of contiguous units.

Mottled Soil: Soil horizons irregularly marked with spots of color. A common cause of mottling is impeded drainage, although there are other causes, such as soil development from an unevenly weathered rock. The weathering of different kinds of minerals may cause mottling.

Mountain: A landform feature of positive relief having a high order of vertical relief (greater than 300 meters). It is bounded on all sides by steeply sloping (greater than 15 percent) outfacing side slopes ascending to a summit area. Summit areas may be either gently or steeply sloping and may be restricted or extended in areal extent.

Natural Soil Loss (NSL): The rate of soil loss under conditions associated with a climax category (minimum rate). The boundary between potential capability and no capability is the line of constant slope as determined at the point where "TSL" is equivalent to "NSL".

Order: An indication of the intensity of soil mapping. Order one is very intense and order five is very general. Orders two, three, and four are of intermediate intensity.

Organic Matter: The organic fraction of the soil that includes plant and animal residues at various stages of decomposition.

Paralithic Contact: A boundary between soil and continuous coherent underlying material that has a hardness of less than 3 (Mohs scale). When moist, the underlying material can be dug with a spade and chunks will disperse in water with 15 hours shaking. Example, shale.

Parent Material (soil): The unconsolidated, more or less chemically weathered, mineral or organic matter from which the solum of soils has developed by pedogenic processes. The "C" horizon may or may not consist of materials similar to those from which the "A" and "B" horizons developed.

Ped: A unit of soil structure, such as an aggregate, crumb, prism, block or granule, formed by natural processes.

Pedon: A soil column extending down from the surface to reach a lower limit in some form of regolith or bedrock, and the smallest volume that can be called a "soil".

Pergelic: A soil temperature regime that has a mean annual temperature less than 0 degrees Celsius.

Permeability, Soil: (i) The ease with which gases, liquids, or plant roots penetrate or pass through a bulk mass of soil or a layer of soil. Since different soil horizons vary in permeability, the particular horizon under question should be designated. (ii) The property

of a porous medium itself that relates to the ease with which gases, liquids, or other substances can pass through it.

pH, Soil: The negative logarithm of the hydrogen activity of a soil. The degree of acidity (or alkalinity) of a soil as determined by means of a glass, quinhydrone, or other suitable electrode or indicator at a specified moisture content of soil-water ratio and expressed in terms of the pH scale of 0 to 14.

Phase, Soil: A subdivision of a soil taxon, usually a soil series or other unit of classification, based on characteristics that affect the use and management of the soil but which do not vary sufficiently to differentiate it as a separate soil series. A variation in a property or characteristic, such as degree of slope, degree of erosion, content of stone, texture of the surface, etc. Phases of soil series are the major components of the soil mapping units shown on detailed soil maps in the United States.

Plant Available Water: The amount of water that a soil can hold that is available for plant use (generally between 1/3 bar and 15 bars of tension).

Plastic Index: The numerical difference between the liquid and the plastic limit.

Plastic Limit: The water content (in percent) at which a soil changes from a nonplastic to a plastic condition.

Ponded: Standing water in a closed depression. The water is removed only by percolation, transpiration or evaporation.

Productivity, Soil: The inherent capacity of a soil to support the growth of specified plants or plant communities. Soil productivity may be expressed in terms of volume or weight/unit area/year, percent plant cover, or other measures of biomass accumulation.

Reaction, Soil: The degree of acidity or alkalinity of a soil, usually expressed as a pH value. Descriptive terms commonly associated with certain ranges in pH are extremely acid, less than 6.0; slightly acid, 6.1-6.5; neutral, 6.6-7.3; mildly alkaline, 7.4-7.8; moderately alkaline, 7.9-8.4; strongly alkaline, 8.5-9.0; and very strongly alkaline, more than 9.0.

Residuum: Unconsolidated and partly weathered mineral materials accumulated by disintegration of consolidated rock in place.

Riverwash: Barren alluvial areas, usually coarse-textured, exposed along streams at low water and subject to shifting during normal high water.

Rock Fragments: All fragments greater than 2 millimeters. Includes gravel, cobble, stone, and boulder.

Rock Outcrop: Exposures of bare bedrock other than lava flows.

Runoff: That portion of the precipitation on an area which is discharged from the area through stream channels. That which is lost without entering the soil is called surface runoff and that which enters the soil before reaching the stream is called groundwater runoff or seepage flow from groundwater.

Sand: A soil separate or mineral fragment ranging from 0.05 to 2.0 millimeters in diameter.

Scarp Slope: Any steeply sloping surface. It is a single disassociated slope element and thus not a discrete landform but rather a landform component. A scarp slope has only one essential characteristic: A steep (greater than 15 percent) slope.

Sedimentary Rock: A rock formed by the accumulation and cementation of mineral grains transported by wind, water, or ice to the site of deposition or by chemical precipitation at the depositional site. The principle sedimentary rocks are sandstones, shales, limestones and conglomerates.

Seral: A plant community that does not represent the potential natural vegetation, but that is intermediate in the sequence of plant community successional stages.

Shrink-Swell Potential: Susceptibility of the soil to volume change due to loss or gain in moisture content.

Silt: A soil separate or mineral fragment ranging in size from 0.002 to 0.05 millimeters in diameter.

Skeletal: Rock fragments make up more than 35 percent by volume of the soil in the control section.

Slope Length (SL): The distance from the point of origin of overland flow to the point where either the slope gradient decreases enough that deposition begins, or the runoff becomes concentrated. A well defined stream channel or ditch need not be present.

Soil: The natural three dimensional medium for the growth of land plants; the collection of natural bodies on the earth's surface capable of supporting plants.

Soil Loss: The predicted net average annual soil loss from a site due to erosion.

Soil Structure: The combination or arrangement of primary soil particles into secondary particles, units, or peds. The secondary units are characterized and classified on the basis of size, shape, and degree of distinctness into classes, types, and grades, respectively.

Soil Texture: The relative proportions of sand, silt and clay as described by classes established by the USDA.

Solum (plural: sola): The upper and most weathered part of the soil profile; the "A" and "B" horizons.

Somewhat Excessively Drained: As used as a phase, soils that have high rates of hydraulic conductivity, and low water holding capacity, to an extent that it affects the type of vegetation that grows on the soil.

Somewhat Poorly Drained: As used as a phase, soils that have seasonal water tables, addition of water through seepage, or a layer with low hydraulic conductivity, to the extent that the vegetation that will grow on the soil is noticeably affected.

Stone: Rock fragment 25 to 60 centimeters (10 to 24 inches) in diameter.

Subsoil: Generally the portion of the soil below the surface or "A" horizon.

Talus: Fragments of rock and other soil material accumulated by gravity at the foot of cliffs or steep slopes.

Terrestrial Ecosystem: A conceptual unit of interacting soil and climax vegetation

controlled primarily by a specific climate. Phases of terrestrial ecosystems are the functional land units for which interpretations are made.

Terrestrial Ecosystem Survey (TES): The systematic analysis, mapping, classification and interpretation of terrestrial ecosystems.

Texture, USDA: The relative proportions of sand, silt and clay as described by classes established by the USDA.

Thermic: A soil temperature regime that has mean annual soil temperatures of 15 degrees Celsius or higher but lower than 22 degrees Celsius, and more than 5 degrees Celsius difference between mean summer and mean winter soil temperatures at a depth of 50 centimeters from the soil surface or a lithic or paralithic contact, whichever is shallower.

Tolerance Soil Loss (TSL): The maximum rate of soil loss that can occur while sustaining inherent site productivity.

Topo-edaphic Climax: Areas associated with special microclimates which also relate to generally restricted edaphic conditions. Vegetation structure typically departs strongly from that which would otherwise be present. An example would be an herbaceous wet meadow associated with soils having aquic moisture regimes surrounded by forest.

Topographic Climax: Wherever local topography, usually operating through microclimate produces a distinctive vegetative climax (Daubenmire).

Udic: A soil moisture regime that in 6 or more out of 10 years, is neither dry for as long as 90 cumulative days, nor for as long as 60 consecutive days in the 90 days following summer solstice, at periods when the soil temperature at 50 centimeters below the soil surface is above 5 degrees Celsius.

Unified Soil Classification System: A classification system based on the identification of soils according to their particle size, gradation, plasticity index, and liquid limit.

Ustic: A soil moisture regime that is intermediate between the aridic and udic regimes and common in temperate sub-humid or semiarid regions, or in tropical and subtropical regions with a monsoon climate. A limited amount of moisture is available for plants but occurs at times when the soil temperature is optimum for plant growth.

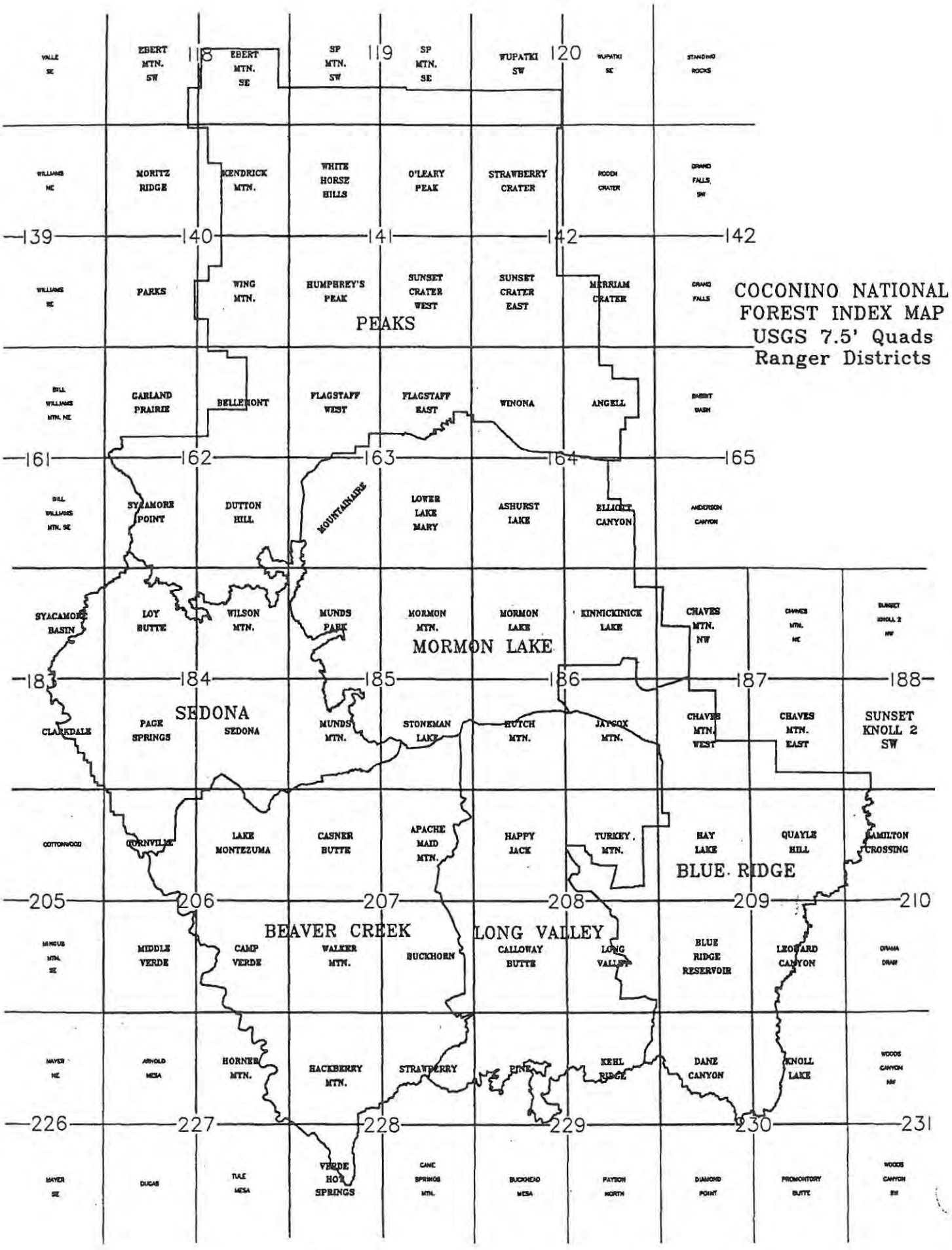
Valley Plain: A negative relief landform feature having a low to high order of vertical relief (1 to 300 or more meters). It is bounded on two or more sides by steeply sloping (greater than 15 percent) infacing side slopes descending from an elevated area to the valley floor. It is an open depression thus permitting the outflow of water.

Value, (Color): The relative lightness or intensity of color and approximately a function of the square root of the total amount of light. One of the three variables of color (hue, value and chroma).

Vegetative Ground Cover: The sum of perennial vegetation (basal area) and litter (dead and down plant material greater than 2.5 cm depth on the soil surface). This is expressed as a percent.

Well Drained: As used as a phase, soils which have intermediate water holding capacity. They retain optimum amounts of soil moisture, but are not wet close enough to the surface, or long enough during the growing season to affect the type of vegetation growing on them.

Zootic Climax: The climax produced by the affects of man or his activities, where the soil and modified vegetation form a dynamic and interlocking system. This includes fire-zootic climaxes in which repeated burning that is required to produce fire climaxes is always a consequence of man's activity. This definition does not include natural fire climaxes where man is not involved.


COCONINO NATIONAL
FOREST INDEX MAP
USGS 7.5' Quads
Ranger Districts
PEAKS
MORMON LAKE
SEDONA
BLUE RIDGE
BEAVER CREEK
LONG VALLEY
EBERT MTN. SW
EBERT MTN. SE
SP MTN. SW
SP MTN. SE
WUPATKI SW
MORITZ RIDGE
KENDRICK MTN.
WHITE HORSE HILLS
O'LEARY PEAK
STRAWBERRY CRATER
PARKS
WING MTN.
HUMPHREY'S PEAK
SUNSET CRATER WEST
SUNSET CRATER EAST
MERRIAM CRATER
GARLAND PRAIRIE
BELLEMONT
FLAGSTAFF WEST
FLAGSTAFF EAST
WINONA
ANGELL
SYCAMORE POINT
DUTTON HILL
MOUNTAINAIRE
LOWER LAKE MARY
ASHURST LAKE
ELLIOTT CANYON
SYCAMORE BASIN
LOY BUTTE
WILSON MTN.
MUNDS PARK
MORMON MTN.
MORMON LAKE
KINNICKINICK LAKE
CHAVES MTN. NW
CLARKDALE
PAGE SPRINGS
SEDONA
MUNDS MTN.
STONEMAN LAKE
HUTCH MTN.
JAYSOX MTN.
CHAVES MTN. WEST
CHAVES MTN. EAST
SUNSET KNOLL 2 SW
COTTONWOOD
CORNVILLE
LAKE MONTEZUMA
CASNER BUTTE
APACHE MAID MTN.
HAPPY JACK
TURKEY MTN.
HAY LAKE
QUAYLE HILL
HAMILTON CROSSING
MIDDLE VERDE
CAMP VERDE
WALKER MTN.
BUCKHORN
CALLOWAY BUTTE
LONG VALLEY
BLUE RIDGE RESERVOIR
LEONARD CANYON
HORNER MTN.
HACKBERRY MTN.
STRAWBERRY
PINE
KEHL RIDGE
DANE CANYON
KNOLL LAKE
VERDE HOT SPRINGS
CANE SPRINGS MTN.
BUCKHEAD MESA
PAYSON NORTH
DIAMOND POINT
PROMONTORY BUTTE
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APPENDIX A

USDA Forest Service, R3, WSA, Arizona TES -- Forbs List: Coconino NF

Scientific Name	Symbol	Common Name	Synonym
Achillea millefolium lanulosa	Acmil	Western yarrow	---
Allionia spp.	ALLIO	Umbrellawort	---
Allium cernuum	Alce2	Nodding onion	---
Allium geyeri	Alge	Geyer onion	---
Androsace septentrionalis	Anse4	Rock-jasmine	---
Androsace septentrionalis glandulosa	Anseg	---	---
Antennaria marginata	Anma5	Pussytoes	---
Antennaria parvifolia	Anpa4	Rocky Mountain pussytoes	---
Antennaria rosea	Anro2	Pussytoes	---
Antennaria rosulata	Anro3	Pussytoes	---
Anthericum torreyi	Anto2	Craglily	---
Aquilegia canadensis	Aqca	Columbine	---
Aquilegia chrysantha	Aqch	Golden columbine	---
Aquilegia coerulea	Aqco	Rocky Mountain/Blue columbine	---
Aquilegia spp.	AQUIL	Columbine	---
Arabis fendleri	Arfe	Fendler rockcress	---
Arabis spp.	ARABI	---	---
Arctomecon californica	Arca4	Yellow desert poppy	---
Arenaria fendleri	Arfe3	Fendler Sandwort	---
Arenaria obtusiloba	Arob3	Sandwort	---
Artemisia campestris	Arca12	---	---
Artemisia carruthii	Arca14	Flat Sagebrush	---
Artemisia dracunculis	Ardr4	Wormwood, False tarragon	---
Artemisia franserioides	Arfr3	Ragweed Sagebrush	---
Artemisia frigida	Arfr4	Fringed sagebrush	---
Artemisia frigida	Arfr4	Fringed Sage	---
Artemisia ludoviciana	Arlu	Cudweed sagewort	---
Artemisia spp.	ARTEM	Sagebrush	---
Aster commutatus	Asco22	Aster	---
Aster spp.	ASTER	Aster	---
Astragalus humistratus	Ashu2	Milkvetch	---
Astragalus puniceus	Aspu8	Trinidad Milkvetch	---
Astragalus spp.	ASTRA	Locoweed	---
Bahia dissecta	Badi	Ragleaf Bahia	---
Bahia spp.	BAHIA	---	---
Baileya multiradiata	Bamu	Desert marigold	---
Besseya arizonica	Bear	Besseya, Syntheris	---
Besseya plantaginea	Bepl	Kittentail	---
Brassica spp.	BRASS	Mustard	---
Brickellia brachypylla	Brbr2	---	---
Brickellia fendleri	Brfe2	---	---
Brickellia grandiflora	Brgr	Tassel Brickelbush	---
Brickellia scabra	Brsc5	---	---
Brickellia spp.	BRICK	Brickellbush	---
Campanula parryi	Capa10	Parry's Bellflower	---
Campanula rotundifolia	Caro2	Bluebell	---
Campanula spp.	CAMPA	---	---
Castilleja integra	Cain14	Whole-leaf indian paintbrush	---

APPENDIX A

USDA Forest Service, R3, WSA, Arizona TES -- Forbs List: Coconino NF

Scientific Name	Symbol	Common Name	Synonym
Castilleja linearis	Cali4	Paintbrush	---
Castilleja occidentalis	Caoc4	Paintbrush	---
Castilleja spp.	CASTI	Paintbrush	---
Ceanothus fendleri	Cefe	Buckbrush	---
Chenopodium album	Cha17	Common lambsquarters	---
Chenopodium spp.	CHENO	---	---
Chrysopsis villosa	Chvi	Golden aster	---
Cicuta douglasii	Cido	Western water-hemlock	---
Cirsium spp.	CIRSI	Thistle	---
Cirsium ochracentrum	Cioc2	---	---
Cirsium wheeleri	Ciwh	Thistle	---
Clematis columbiana	Clco2	Rocky Mountain clematis	(Clematix pseudoalpina)
Cleome serrulata	Clse	---	---
Commelina dianthifolia	Codi4	Birdbill day flower	---
Commelina erecta	Coer	Dayflower	---
Commelina spp.	COMME	---	---
Cordylanthus wrightii	Cowr2	Wright clubflower/birdbeak	---
Coreopsis spp.	COREO2	---	---
Crepis occidentalis	Croc	Western hawksbeard	---
Cryptantha flavoculata	Crfl6	Hidden flower	---
Cymopterus fendleri	Cyfe	Chimaya waterparsnip	---
Dalea candida	Daca7	White Prairie Clover	(Petalostemum candidum)
Dalea spp.	DALEA	Indigo bush	---
Delphinia spp.	DELPH	---	---
Delphinium scaposum	Desc	Tall mountain larkspur	---
Descurainia obtusa	Deob	Tansy mustard	---
Descurainia richardsonii	Deri2	Sticky tansymustard	---
Descurainia richardsonii viscosa	Deriv	Tansy mustard	---
Descurainia spp.	DESCU	Tansy Mustard	---
Draba aurea	Drau	Whitlow grass	---
Draba hellerana	Drhe	Heller whitlow grass	---
Dracocephalum moldavica	Drmo	Dragon head	---
Dyssodia acerosa	Dyac	Dogweed	---
Echinocereus spp.	ECHIN	Hedgehog cactus	---
Epilobium angustifolium	Epan2	Fireweed	---
Erigeron bellidiastrum	Erbe2	---	---
Erigeron divergens	Erdi4	Spreading fleabane	---
Erigeron flagellaris	Erfl	Trailing fleabane	---
Erigeron formosissimus	Erfo3	Beautiful fleabane	---
Erigeron melanocephalus	Erme2	Alpine fleabane	---
Erigeron speciosus	Ersp4	Little Nell Fleabane	---
Erigeron speciosus	Ersp4	Oregon fleabane/Showy daisy	---
Erigeron speciosus macranthus	Erspm	---	---
Erigeron spp.	ERIGE	Fleabane	---
Erigeron superbus	Ersu3	Fleabane	---
Eriogonum alatum	Era14	Wing Eriogonum-Wild Buckwheat	---
Eriogonum jamesii	Erja	WeeMary Buckwheat	---
Eriogonum jamesii	Erja	Antelope-sage	---

APPENDIX A

USDA Forest Service, R3, WSA, Arizona TES -- Forbs List: Coconino NF

Scientific Name	Symbol	Common Name	Synonym
Eriogonum racemosum	Erra3	Redroot wild buckwheat	---
Eriogonum spp.	ERIOG	Wild buckwheat	---
Eriogonum wrightii	Erwr	Shrubby buckwheat	---
Erodium cicutarium	Erci6	Red-stemmed filaree	---
Erysimum capitatum	Erca14	Western Wallflower	---
Euphorbia albomarginata	Eual4	Spurge, rattlesnake weed	---
Euphorbia fendleri	Eufe2	Fendler Spurge	---
Euphorbia spp.	EUPHO	Spurge	---
Fragaria americana	Fram4	Strawberry	---
Fragaria ovalis	Frov	Strawberry	---
Fragaria spp.	FRAGA	---	---
Galium spp.	GALIU	Bedstraw	---
Gaura coccinea	Gaco5	Scarlet Gaura	---
Gentiana affinis	Geaf	Pleated gentian	---
Gentiana spp.	GENTI	---	---
Geranium caespitosum	Geca3	Purple/Pineywoods geranium	---
Geranium richardsonii	Geri	Richardson's geranium	---
Geranium spp.	GERAN	---	---
Geum rossii	Gero2	Mountain avens	---
Geum triflorum	Getr	Old-man's whiskers	---
Geum turbinatum	Getu	Avens	---
Goodyera oblongifolia	Goob2	Giant rattlesnake plantain	---
Grindelia aphanactis	Grap	Gumweed	---
Grindelia spp.	GRIND	---	---
Gutierrezia sarothrae	Gusa2	Broom snakeweed	---
Haplopappus parryi	Hapa9	Parry goldenweed	---
Haplopapus gracilis	Hagr5	Goldenbush	---
Helenium hoopesii	Heho5	Orange sneezeweed	---
Helianthella parryi	Hepa	Dwarf Helianthella	---
Helianthus annuus	Hean3	Annual sunflower	---
Helianthus spp.	HELIA3	---	---
Heliomeris ciliata	Heci4	Goldeneye	(Viguiera ciliata)
Heliomeris multiflora	Hemu3	Showy goldeneye	(Viguiera mutiflora)
Heterotheca canescens	Heca8	Gold Aster	(Chrysopsis canescens)
Heterotheca villosa	Hevi4	Hairy Gold Aster	(Chrysopsis villosa)
Heuchera spp.	HEUCH	Alumroot	---
Heuchera versicolor	Heve2	Alumroot	---
Hoffmannseggia spp.	HOFFM	Rushpea	---
Hymenopappus filifolius	Hyfi	Fineleaf Hymenopapus	---
Hymenoxys argentea	Hyar4	---	---
Hymenoxys richardsonii	Hyri	Bitterweed	---
Ipomopsis aggregata	Ipag	Skyrocket	---
Ipomopsis longiflora	Iplo2	Throated trumpet	---
Ipomopsis multiflora	Ipmu3	---	---
Ipomopsis spp.	IPOMO	Skyrocket	---
Iris missouriensis	Irmi	Rocky Mountain iris	---
Iris spp.	IRIS	Iris	---
Lactuca spp.	LACTU	Lettuce	---

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Scientific Name	Symbol	Common Name	Synonym
Lappula redowski	Lare	Bluebur Stickseed	---
Lathyrus arizonicus	Laar6	Arizona peavine	---
Lathyrus lanszwertii arizonicus	Lalaa3	Arizona peavine	---
Lepidium spp.	LEPID	Pepperweed	---
Lesquerella intermedii	Lein3	Bladderpod	---
Lesquerella spp.	LESQU	---	---
Leucelene ericoides	Leer	White Aster	---
Ligusticum porteri	Lipo	Osha	---
Linum lewisii	Lile3	Flax	---
Linum neomexicanum	Line	New Mexico Flax	---
Linum puberulum	Lipu4	Flax	---
Lithospermum multiflorum	Limu3	Stone Seed	---
Lithospermum spp.	LITHO	Gromwell/Puccoon	---
Lithospermun incisum	Liin2	---	---
Lotus wrightii	Lowr	Wright's deervetch	---
Lupinus argenteus	Luar3	Silvery lupine	---
Lupinus caudatus	Luca	Tailcup Lupine	---
Lupinus caudatus argrophyllus	Lucaa	---	---
Lupinus kingii	Luki	Kingston Lupine	---
Lupinus palmeri	Lupa3	Palmer lupine	---
Lupinus sparsiflorus	Lusp2	Redeye lupine	---
Lupinus spp.	LUPIN	Lupine	---
Machaeranthera gracilis	Magr10	Golden bush	(Haplopappus gracilis)
Machaeranthera spinulosa	Masp4	Golden bush	(Haplopappus spinulosa)
Melilotus albus	Meal2	White sweet clover	---
Melilotus officinalis	Meof	Yellow sweet clover	---
Mertensia ciliata	Meci3	Mountain bluebells	---
Mimulus spp.	MIMUL	Monkeyflower	---
Mirabilis multiflora	Mimu	Desert four o'clock	---
Mirabilis pumila	Mipu6	Four o'clock	---
Mirabilis spp.	MIRAB	Four-o'clock	---
Monarda spp.	MONAR	Horse-mint/Bee-balm	---
Oenothera albicaulis	Oeal	Halfshrub Sundrop	---
Oenothera cespitosa	Oece2	Tuffed evening primrose	---
Oenothera coronopfolia	Oeco2	Evening Primrose	---
Oenothera pubescens	Oepu	---	---
Oenothera spp.	OENOT	Evening-primrose	---
Orthocarpus purpureoalbus	Orpu2	Purplewhite Owlclover	---
Osmorhiza claytonii	Oscl	---	---
Osmorhiza depauperata	Osde	Sweet cicely	---
Osmorhiza spp.	OSMOR	Sweet cicely	---
Oxyria digyna	Oxdi3	Mountain sorrel	---
Oxytropis lambertii	Oxla3	Lambert locoweed	---
Paxistima myrsinites	Pamy	Mountain Lover	---
Pectis papposa	Pepa2	Chinchweed	---
Penstemon barbatus	Peba2	Beardlip Penstamen	---
Penstemon linarioides	Peli2	Toadflax beardtongue	---
Penstemon oliganthus	Peol	Wooten Beardtongue	---

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Scientific Name	Symbol	Common Name	Synonym
Penstemon spp.	PENST	Beardtongue	---
Penstemon whippleanus	Pewh	Dusky/Whipple's penstemon	---
Phacelia corrugata	Phco21	Caterpillar weed	---
Phlox spp.	PHLOX	---	---
Plantago argyraea	Plar2	Plantain, Indian wheat	---
Plantago pusilla	Plpu	-O-	---
Plantago spp.	PLANT	Plantain	---
Polemonium viscosum	Povi	Sticky Jacob's-Ladder/Sky pilot	---
Polygala alba	Poal4	White Milkwart	---
Polygonum spp.	POLYG4	---	---
Potentilla anserina	Poan5	Common silverweed	---
Potentilla hippiana	Pohi6	Horse cinquefoil	---
Potentilla pensylvanica	Pope8	Pennsylvania cinquefoil	---
Potentilla spp.	POTEN	Cinquefoil	---
Pretradoria pumila	Pepu7	---	---
Primula parryi	Prpa	Bog primrose	---
Pseudocymopterus montanus	Psmo	False springparsley	---
Psilostrophe spp.	PSILO3	Paper Flower	---
Psilostrophe tagetina	Psta	Wooly paperflower	---
Pteridium aquilinum	Ptaq	Western brackenfern	---
Pterospora andromedea	Ptan2	Woodland pinedrops	---
Pyrola minor	Pymi	---	---
Rumex spp.	RUMEX	Dock	---
Sedum rhodanthum	Serh	Stonecrop/Rose crown	---
Selaginella mutica	Semu	Spikemoss	---
Senecio douglasii longilobus	Sedol	Threadleaf butterweed	---
Senecio eremophilus	Seer2	Cutleaf Groundsel	---
Senecio fendleri	Sefe	Notchedleaf Groundsel	---
Senecio franciscanus	Sefr2	Alpine groundsel	---
Senecio neomexicanus	Sene4	Butterweed	---
Senecio sanguisorboides	Sesa6	Groundsel	---
Senecio spp.	SENEC	Groundsel/Butterweed	---
Senecio wootonii	Sewo	Wooton's butterweed	---
Sidalcea neomexicana	Sine3	Checkermallow	---
Silene acaulis	Siac	Moss campion	---
Silene laciniata	Sila2	Mexican Silene	---
Smilacina racemosa	Smra	False Solomon's seal	---
Smilacina spp.	SMILA	---	---
Smilacina stellata	Smst	Star flower	---
Solanum spp.	SOLAN	Nightshade	---
Solidago missouriensis	Somi2	Missouri goldenrod	---
Solidago multiradiata	Somu	Alpine goldenrod	---
Solidago parryi	Sopa4	Golden Rod	---
Solidago spp.	SOLID	Goldenrod	---
Solidago wrightii	Sowr	Golden Rod	---
Sphaeralcea ambigua	Spam2	Globemallow	---
Sphaeralcea coccinea	Spco	Red Globe Mallow	---
Sphaeralcea digitata	Spdi3	Slippery Globemallow	---

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Scientific Name	Symbol	Common Name	Synonym
Sphaeralcea grossulariaefolia pedata	Spgrp2	---	---
Sphaeralcea grossulariifolia	Spgr2	Footed Globemallow	---
Sphaeralcea spp.	SPHAE	Globe-mallow	---
Stachys spp.	STACH	---	---
Stellaria jamesiana	Stja2	Tubar Starwart	---
Swertia radiata	Swra	Elkweed/Deer's ears	---
Taraxacum officinale	Taof	Common dandelion	---
Taraxacum spp.	TARAX	---	---
Tetraneursis acaulis	Teac	---	---
Tetraneursis argentia	Tear4	---	---
Thalictrum fendleri	Thfe	Fendler meadow rue	---
Thalictrum spp.	THALI2	---	---
Thelesperma spp.	THELE	Greenthread	---
Thelypodiopsis linearifolia	Thli4	Tumble mustard, London rocket	(Sisymbrium linearifolium)
Thermopsis pinetorum	Thpi	Piney Goldenpea	(T. montana, T. divaricarpa)
Thlaspi montanum fendlerii	Thmof	Penny cress	---
Townsendia formosa	Tofo	Bee Nuts	---
Tradescantia pinetorum	Trpi	Spiderwort	---
Tragopogon dubius	Trdu	Yellow Salsify	---
Trifolium gymnocarpon	Trgy	Clover	---
Trifolium repens	Trre	---	---
Trifolium spp.	TRIFO	---	---
Typha latifolia	Tyla	Common/Broad-leaved cattail	---
Vaccinium spp.	VACCI	---	---
Verbascum thapsus	Veth	Miner's Candle/Mullein	---
Verbena bipinnetifida	Vebi	Dakota Vervain	---
Vicia americana	Viam	American vetch	---
Vicia spp.	VICIA	---	---
Viguiera multiflora	Vimu	Goldeneye	---
Viguiera spp.	VIGUI	---	---
Viola canadensis	Vica4	Canada violet	---
Viola spp.	VIOLA	---	---
Woodsia oregana	Woor	Oregon Woodsia	---
Wyethia scabra	Wysc	---	---
Wyethia spp.	WYETH	---	---
Zigadenus spp.	ZIGAD	Death Camas	---
Zinnia grandiflora	Zigr	Rocky Mountain zinnia	---
Zinnia pumila	Zipu	Desert Zinnia	---
Zinnia spp.	ZINNI	---	---

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USDA Forest Service, R3, WSA, Arizona TES -- Grasses List: Coconino NF

Scientific Name	Symbol	Common Name	Synonym
Agropyron cristatum	Agcr	Crested wheatgrass	---
Agropyron inerme	Agin5	Tall slender wheatgrass	---
Agropyron scribneri	Agsc4	Spreading wheatgrass	---
Agropyron smithii	Agsm	Western wheatgrass	---
Agropyron spp.	AGROP	Wheatgrass	---
Agropyron trachycaulum	Agtr	Slender wheatgrass	---
Agrostis spp.	AGROS	Bentgrass	---
Agrostis stolonifera	Agst2	Creeping bentgrass	---
Alopecurus geniculatus	Alge2	Water foxtail	---
Andropogon barbinodis	Anba6	Cane beardgrass	---
Andropogon saccharoides	Ansa5	Silver beardgrass	---
Andropogon scoparius	Ansc	Little bluestem	---
Aristida longiseta	Arlo3	Red threeawn	---
Aristida spp.	ARIST	Threeawn	---
Blepharoneuron tricholepis	Bltr	Pine dropseed	---
Bouteloua barbata	Boba2	Sixweeks grama	---
Bouteloua curtipendula	Bocu	Sideoats grama	---
Bouteloua eriopoda	Boer4	Black grama	---
Bouteloua gracilis	Bogr2	Blue grama	---
Bouteloua hirsuta	Bohi2	Hairy grama	---
Bromus anomalus	Bran	Nodding brome	---
Bromus ciliatus	Brci2	Fringed brome	---
Bromus rubens	Brru2	Foxtail/Red brome	---
Calamagrostis spp.	CALAM	Reedgrass	---
Carex bella	Cabe3	Beautiful sedge	---
Carex foenea	Cafo3	Sedge	---
Carex spp.	CAREX	Sedge	---
Chloris virgata	Chvi4	Feather fingergrass	---
Cynodon dactylon	Cyda	Bermuda grass	---
Dactylis glomerata	Dagl	Orchard grass	---
Danthonia intermedia	Dain	Timber oatgrass	---
Danthonia parryi	Dapa2	Parry oatgrass	---
Eleocharis spp.	ELEOC	Spikerush	---
Equisetum spp.	EQUIS	Horsetail	---
Eragrostis intermedia	Erin	Plains lovegrass	---
Festuca arizonica	Fear2	Arizona fescue	---
Festuca ovina	Feov	Sheep fescue	---
Hilaria belangeri	Hibe	Curly mesquite	---
Hilaria jamesii	Hija	Galleta	---
Hilaria mutica	Himu2	Tobosa	---
Juncus spp.	JUNCU	Rush	---
Koeleria pyramidata	Kopy	Mountain/Prairie junegrass	---
Leptochloa dubia	Ledu	Green sprangletop	---
Luzula spicata	Lusp4	Wood rush	---
Lycurus phleoides	Lyph	Wolftail	---
Muhlenbergia emersleyi	Muem	Bullgrass	---
Muhlenbergia longiligula	Mulo	Longtongue muhly	---
Muhlenbergia minutissima	Mumi2	Minute muhly	---

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Scientific Name	Symbol	Common Name	Synonym
Muhlenbergia montana	Mumo	Mountain muhly	---
Muhlenbergia porteri	Mupo2	Bush muhly	---
Muhlenbergia pungens	Mupu2	Sandhill muhly	---
Muhlenbergia richardsonis	Muri	Mat muhly	---
Muhlenbergia torreyi	Muto2	Ring muhly	---
Muhlenbergia virescens	Muvi2	Screwleaf muhly	---
Muhlenbergia wrightii	Muwr	Spike muhly	---
Oryzopsis hymenoides	Orhy	Indian ricegrass	---
Panicum bulbosum	Pabu	Bulb panicum	---
Panicum obtusum	Paob	Vine mesquite	---
Phleum alpinum	Phal2	Mountain timothy	---
Piptochaetium fimbriatum	Pifi	Pinyon ricegrass	---
Poa fendleriana	Pofe	Muttongrass	---
Poa pratensis	Popr	Kentucky bluegrass	---
Poa rupicola	Poru	Timberline bluegrass	---
Setaria macrostachya	Sema5	Plains bristlegrass	---
Sitanion hystrix	Sihy	Bottlebrush squirreltail	---
Sitanion spp.	SITAN	Squirreltail	---
Sporobolus cryptandrus	Spcr	Sand dropseed	---
Sporobolus interruptus	Spin5	Black dropseed	---
Stipa comata	Stco4	Needle-and-thread grass	---
Trichachne californica	Trca	Arizona\California cottontop	---
Tridens pulchellus	Trpu	Fluffgrass	---
Trisetum montanum	Trmo5	Rocky Mountain trisetum	---
Trisetum spicatum	Trsp2	Spike trisetum	---

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USDA Forest Service, R3, WSA, Arizona TES -- Shrubs List: Coconino NF

Scientific Name	Symbol	Common Name	Synonym
Acacia greggii	Acgr	Catclaw acacia	-0-
Acer glabrum	Acgl	Rocky Mountain maple	-0-
Agave palmeri	Agpa3	Palmer century plant	-0-
Agave spp.	AGAVE	Century plant	-0-
Amelanchier utahensis	Amut	Utah serviceberry	-0-
Arctostaphylos pungens	Arpu5	Pointleaf manzanita	-0-
Atriplex canescens	Atca2	Four-wing saltbush	-0-
Baccharis pteronioides	Bapt	Yerba-de-pasmo	-0-
Baccharis sarothroides	Basa2	Desertbroom/Resinbrush	-0-
Berberis fremontii	Befr	Fremont barberry	-0-
Berberis haematocarpa	Beha	Red barberry	-0-
Berberis repens	Bere	Oregon grape	-0-
Brickellia californica	Brca3	California brickellbush	-0-
Calliandra spp.	CALLI	False mesquite	-0-
Canotia holacantha	Caho3	Crucifixion-thorn	-0-
Ceanothus fendleri	Cefe	Fendler ceanothus	-0-
Ceanothus greggii	Cegr	Desert ceanothus	-0-
Celtis pallida	Cepa8	Desert hackberry	-0-
Cercocarpus montanus	Cemo2	Mountain-mahogany	-0-
Chamaebatiaria millefolium	Chmi2	Fernbush	-0-
Chilopsis linearis	Chli2	Desert-willow	-0-
Chrysothamnus depressus	Chde2	Dwarf rabbit brush	-0-
Chrysothamnus nauseosus	Chna2	Rubber rabbit brush	-0-
Chrysothamnus viscidiflorus	Chvi8	Sticky rabbit brush	-0-
Condalia lycioides	Coly2	Graythorn	-0-
Cornus stolonifera	Cost4	Red-osier dogwood	-0-
Cowania mexicana stansburiana	Comes	Cliffrose	-0-
Cowania subintegra	Cosu6	Cliffrose	-0-
Dalea formosa	Dafo	Feather indigobush	-0-
Encelia farinosa	Enfa	White brittlebush	-0-
Ephedra spp.	EPHED	Mormon tea/joint-fir	-0-
Eurotia lanata	Eula5	Winter-fat	-0-
Fallugia paradoxa	Fapa	Apache-plume	-0-
Forestiera neomexicana	Fone	New Mexican olive/Ironwood	-0-
Garrya wrightii	Gawr3	Wright silktassel	-0-
Holodiscus dumosus	Hodu	Mountain spray/Rock-spiraea	-0-
Jamesia americana	Jaam	Waxflower/Cliffbush	-0-
Juniperus communis	Juco6	Common juniper	-0-
Krameria parvifolia glandulosa	Krpag	Sticky range ratany	-0-
Larrea divaricata	Ladi2	Creosotebush	-0-
Lonicera involucrata	Loin5	Bearberry honeysuckle	-0-
Lycium pallidum	Lypa	Pale wolfberry/Tomatillo	-0-
Mammillaria spp.	MAMMI	Pincushion cactus	-0-
Mimosa biuncifera	Mibi3	Catclaw mimosa/Wait-a-bit	-0-
Nolina microcarpa	Nomi	Sacahuista/Beargrass	-0-
Opuntia engelmannii	Open3	Prickly pear	-0-
Opuntia leptocaulis	Ople	Deasert Christmas cactus	-0-
Opuntia macrorhiza	Opma2	Prickly pear	-0-

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Scientific Name	Symbol	Common Name	Synonym
Opuntia phaeacantha	Opph	Prickly pear	-0-
Opuntia polyacantha	Oppo	Plains prickly pear	-0-
Opuntia spinosior	Opsp2	Cane cholla	-0-
Opuntia spp.	OPUNT	Prickly pear/Cholla	-0-
Opuntia whipplei	Opwh	Whipple cholla	-0-
Pachistama myrsinites	Pamy	Mountain lover	-0-
Potentilla fruticosa	Pofr4	Shrubby/Bush cinquefoil	-0-
Prosopis velutina	Prve	Velvet mesquite	-0-
Prunus virginiana	Prvi	Common chokecherry	-0-
Purshia tridentata	Putr2	Antelopebrush/Bitterbrush	-0-
Quercus dunnii	Qudu3	Dunn oak	-0-
Quercus emoryi	Quem	Emory oak	-0-
Quercus gambelii	Quga	Gambel oak	-0-
Quercus turbinella	Qutu2	Turbinella oak	-0-
Rhamnus crocea ilicifolia	Rhcri	Hollyleaf redberry	-0-
Rhus ovata	Rhov	Sugar sumac	-0-
Rhus radicans	Rhra6	Poison ivy	-0-
Rhus trilobata	Rhtr	Squawberry/Squawbush	-0-
Ribes cereum	Rice	Wax currant	-0-
Ribes montigenum	Rimo2	Gooseberry currant	-0-
Ribes pinetorum	Ripi	Orange gooseberry	-0-
Ribes spp.	RIBES	Currant	-0-
Robinia neomexicana	Rone	New Mexico locust	-0-
Rosa arizonica	Roar5	Arizona rose	-0-
Rosa fendleri	Rofe2	Fendler rose	-0-
Rosa spp.	ROSA5	Rose	-0-
Rosa woodsii	Rowo	Woods wildrose	-0-
Rubus parviflorus	Rupa	Western thimbleberry	-0-
Rubus spp.	RUBUS	Blackberry, Raspberry ...	-0-
Salix exigua	Saex	Coyote willow	-0-
Salix lasiandra	Sala5	Pacific willow	-0-
Salix scouleriana	Sasc	Scouler willow	-0-
Salix spp.	SALIX	Willow	-0-
Sambucus spp.	SAMBU	Elder/Elderberry	-0-
Sorbus dumosa	Sodu2	Arizona mountain-ash	-0-
Symphoricarpos oreophilus	Syor2	Mountain snowberry	-0-
Tetradymia canescens	Teca2	Spineless/Gray horsebrush	-0-
Vitis arizonica	Viar2	Canyon/Arizona grape	-0-
Yucca baccata	Yuba	Banana yucca	-0-
Yucca elata	Yuel	Soaptree yucca	-0-

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Scientific Name	Symbol	Common Name	Synonym
Abies concolor	Abco	White fir	-0-
Abies lasiocarpa arizonica	Ablaa	Corkbark fir	-0-
Acer grandidentatum	Acgr3	Bigtooth/Canyon maple	-0-
Acer negundo	Acne2	Boxelder	-0-
Alnus oblongifolia	Alob2	Arizona/New Mexican alder	-0-
Celtis reticulata	Cere2	Netleaf hackberry	-0-
Cupressus arizonica glabra	Cuarg	Arizona cypress	-0-
Fraxinus spp.	FRAXI	Ash	-0-
Fraxinus velutina	Frve2	Velvet ash	-0-
Juglans major	Juma	Arizona walnut	-0-
Juniperus deppeana	Jude2	Alligator juniper	-0-
Juniperus erythrocarpa	Juer	Redberry juniper	-0-
Juniperus monosperma	Jumo	Oneseed juniper	-0-
Juniperus osteosperma	Juos	Utah juniper	-0-
Juniperus scopulorum	Jusc2	Rocky Mountain juniper	-0-
Picea engelmannii	Pien	Engelmann spruce	-0-
Pinus aristata	Piar	Bristlecone pine	-0-
Pinus edulis	Pied	Pinyon pine	-0-
Pinus fallax	Pifa	Arizona pinyon pine	-0-
Pinus ponderosa scopulorum	Pipos	Ponderosa pine	-0-
Pinus strobiformis	Pist3	Southwestern white pine	-0-
Platanus wrightii	Plwr2	Arizona sycamore	-0-
Populus angustifolia	Poan3	Narrowleaf cottonwood	-0-
Populus fremontii	Pofr2	Fremont cottonwood	-0-
Populus tremuloides	Potr5	Quaking aspen	-0-
Pseudotsuga menziesii glauca	Psmeg	Douglas-fir	-0-
Quercus arizonica	Quar	Arizona white oak	-0-
Quercus emoryi	Quem	Emory oak	-0-
Quercus gambelii	Quga	Gambel oak	-0-
Salix amygdaloides	Saam2	Peachleaf willow	-0-

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