Gather ESD's for AIM

steppe, Michael Schmidt, K. Holsinger

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Ecological Site Descriptions serve to identify repeating motif across the landscape which are ecologically similar and respond to management in parallel fashions.

Traditionally, ESD's may be downloaded manually from the Jornada website via an NRCS soil mapping website which links to them. However this process can become tedious. Here I show a method for organization to generate their own script for:

- 1) Downloading and setting up the MLRA query box, you can also do this via
- 2) Downloading all ESD's from the Jornada
- 3) Generating a list of ESD'S within a certain distance of a location (e.g. AIM plot)

Download MLRA Database if your are unsure which region your field office is in

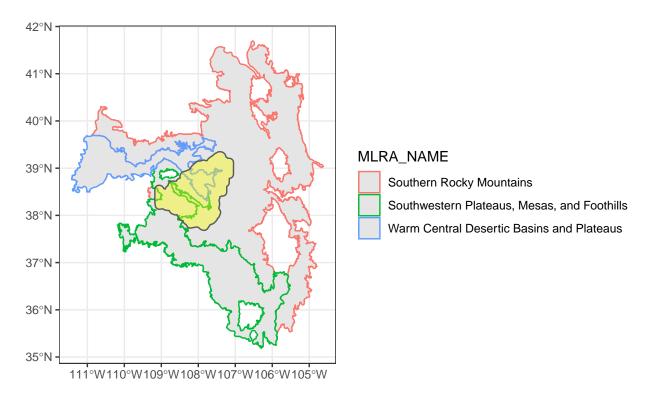
NRCS

I moved this file to my data/raw sub-directory, and renamed it 'nrcs_mlra' because it's initial name did not indicate it's function.

[1] "/home/reed/AIM_Field"

##				PARI	ENT_NAM		
##	1	GRAND JUNCTION	FIELD	OFFICE	SOUTHWEST	DISTRICT	OFFICE
##	2	UNCOMPAHGRE	FIELD	OFFICE	SOUTHWEST	DISTRICT	OFFICE
##	3	GUNNISON	FIELD	OFFICE	ROCKY MOUNTAIN	DISTRICT	OFFICE
##	4	WHITE RIVER	FIELD	OFFICE	NORTHWEST	DISTRICT	OFFICE
##	5	TRES RIOS	FIELD	OFFICE	SOUTHWEST	DISTRICT	OFFICE
##	6	COLORADO RIVER VALLEY	FIELD	OFFICE	NORTHWEST	DISTRICT	OFFICE

I work in the Uncompanger field office, hence I will filter for that administrative name ('ADMU_NAME'). An alternative it to filter by the District office ('PARENT_NAME'), for example the 'Southwest District Office'; note both of these are in all caps.



Create list of all ESD's for MLRA's

Download all Relevant ESD from Jornada

Using some code fleshed out by Michael Schmidt we can download the files below.

3 Generate a list of the relevant ESD's for each AIM point

We will just write these out as an excel like file.

You can hopefully download the state SSURGO database from here: NRCS SSURGO BOX

Be sure to check if your state has the 'spatial' component with it- if not it is a not go. For Colorado I had to individually download counties/areas and generate a reference data set from here.

For the UFO we had to create our own lookup data file...

Table 1: Ecological Sites Descriptions 2022 UFO AIM

Plot ID	Eco Site Code	Eco Site Name	Percent Area
AS-012	NA	NA	28.0
	R048AY250CO	Subalpine Loam	25.5
	F048AY449CO	Aspen Woodland	24.6
	F048AY918CO	Spruce-Fir Woodland	13.1
	R048AY247CO	Deep Clay Loam	8.7
	R048AY237CO	Stony Loam	4.2
	R048AY238CO	Brushy Loam	3.9
AS-013	NA	NA	45.6
	R048AY248CO	Mountain Clay Loam	34.1
	R048AY228CO	Mountain Loam	30.3

Table 1: Ecological Sites Descriptions 2022 UFO AIM (continued)

Plot ID	Eco Site Code	Eco Site Name	Percent Area
	R048AY238CO F048AY439UT R048AY255CO FCT237 G2602	Brushy Loam Mountain Shallow Loam (Ponderosa Pine) Pine Grasslands Ponderosa Pine Mountain Muhly - Arizona Fescue (Mumo-Fear2)	8.3 3.7 2.6 2.4 2.4
AS-016	R048AY247CO R048AY250CO S0517 D0503 F048AY449CO	Deep Clay Loam Subalpine Loam Big Sagebrush/Western Wheatgrass (Artr2/Pasm) Quaking Aspen/Thurber's Fescue (Potr5/Feth) Aspen Woodland	0.3 0.3 0.3 89.6 89.6
	F048AY918CO C0330 R048AY252CO R048AY241CO NA	Spruce-Fir Woodland Subalpine Fir - Engelmann Spruce/Geyer's Sedge (Abla-Pien/Cage2) Subalpine Clay Mountain Meadow NA	52.7 42.0 41.5 39.8 5.5
AS-017	FCT206 NA R048AY228CO R048AY248CO R048AY255CO	Spruce-Fir NA Mountain Loam Mountain Clay Loam Pine Grasslands	1.0 55.0 33.8 31.8 12.4
AS-020	F048AY439UT 048AY255CO_2 R048AY247CO R036XY289CO R036XY287CO	Mountain Shallow Loam (Ponderosa Pine) Pine Grasslands Deep Clay Loam Clayey Foothills Stony Foothills	11.2 1.1 90.2 8.7 8.5
GR-025	048AY284CO R036XY284CO R034BY315UT R036XY114CO R036XY284CO	Loamy Foothills Loamy Foothills Upland Shallow Clay Loam (Utah Juniper-Pinyon) Mountain Pinyon Loamy Foothills	1.0 1.0 0.1 76.7 76.7
GR-026	NA R036XY325CO R036XY326CO R036XY114CO R036XY284CO	NA Semidesert Loam Semidesert Sandy Loam Mountain Pinyon Loamy Foothills	16.2 7.2 7.2 62.6 62.6
GR-027	NA R036XY325CO R036XY326CO F048AY448CO R036XY114CO	NA Semidesert Loam Semidesert Sandy Loam Mountain Pinyon Mountain Pinyon	34.1 2.3 2.3 1.0 51.2
GR-028	R036XY325CO NA R036XY408CO R034BY404CO NA	Semidesert Loam NA Basin Shale Stony Saltdesert NA	26.2 13.5 9.2 29.3 27.6
	R034BY106UT	Desert Loam (Shadscale)	23.9

Table 1: Ecological Sites Descriptions 2022 UFO AIM (continued)

Plot ID	Eco Site Code	Eco Site Name	Percent Area
MMS-095	R036XY111CO R034BY006UT R034BY112UT R036XY114CO	Steep Shallow Clay Loam - (Pinyon-Utah Juniper) Alkali Flat (Greasewood) Desert Sand (Fourwing Saltbush) Mountain Pinyon	10.8 6.6 1.7 61.2
	R036XY284CO R048AY238CO R048AY247CO R036XY113CO R036XY287CO	Loamy Foothills Brushy Loam Deep Clay Loam Semidesert Juniper Loam Stony Foothills	61.2 25.5 18.7 9.2 9.2
	C1121 C1214 R048AY255CO NA F048AY439UT	Ponderosa Pine/Gambel Oak (Pipo/Quga) Douglas-Fir/Gambel Oak (Psme/Quga) Pine Grasslands NA Mountain Shallow Loam (Ponderosa Pine)	6.9 6.9 6.9 4.0 0.1
MMS-096	F048AY925CO R036XY113CO R036XY325CO R036XY114CO R036XY284CO	Ponderosa Pine Forest Semidesert Juniper Loam Semidesert Loam Mountain Pinyon Loamy Foothills	0.1 78.9 71.1 14.0 9.0
MMS-097	R036XY287CO R036XY289CO R048AY238CO R048AY247CO NA	Stony Foothills Clayey Foothills Brushy Loam Deep Clay Loam NA	6.6 5.3 0.1 0.1 66.4
	F048AY439UT R048AY248CO R048AY255CO R048AY303CO 048AY255CO_2	Mountain Shallow Loam (Ponderosa Pine) Mountain Clay Loam Pine Grasslands Loamy Slopes Pine Grasslands	14.1 9.7 9.4 9.2 8.5
MMS-098	F048AY449CO F048AY924CO R048AY228CO R048AY238CO R048AY247CO	Aspen Woodland Douglas Fir/Gambel Oak Mountain Loam Brushy Loam Deep Clay Loam	3.3 1.0 1.0 62.5 62.5
	R036XY289CO R036XY287CO R048AY241CO R036XY113CO R036XY325CO	Clayey Foothills Stony Foothills Mountain Meadow Semidesert Juniper Loam Semidesert Loam	50.2 48.3 26.0 4.5 4.5
MMS-099	R036XY284CO R048AY247CO R048AY238CO NA R048AY250CO	Loamy Foothills Deep Clay Loam Brushy Loam NA Subalpine Loam	2.7 59.1 35.8 4.7 0.3
MMS-100	048AY284CO R036XY284CO NA	Loamy Foothills Loamy Foothills NA	$0.0 \\ 0.0 \\ 38.4$

Table 1: Ecological Sites Descriptions 2022 UFO AIM (continued)

Plot ID	Eco Site Code	Eco Site Name	Percent Area
	F048AY448CO R036XY284CO	Mountain Pinyon Loamy Foothills	$35.8 \\ 24.6$
	F048AY439UT R048AY248CO R048AY255CO 048AY255CO_2 FCT237	Mountain Shallow Loam (Ponderosa Pine) Mountain Clay Loam Pine Grasslands Pine Grasslands Ponderosa Pine	18.7 16.0 9.1 5.2 3.2
MMS-101	G2602 R048AY238CO R048AY306UT R048AY320UT F048AY448CO	Mountain Muhly - Arizona Fescue (Mumo-Fear2) Brushy Loam Upland Loam (Wyoming Big Sagebrush) Upland Shallow Loam (Black Sagebrush) Mountain Pinyon	3.2 99.9 99.9 90.5 45.9
MMS-102	R034BY112UT R034BY117UT R034BY006UT 048AY284CO R036XY284CO	Desert Sand (Fourwing Saltbush) Desert Shallow Clay (Mat Saltbush) Alkali Flat (Greasewood) Loamy Foothills Loamy Foothills	0.0 55.7 17.2 12.5 12.5
	R034BY322UT NA R034BY024UT R034BY315UT R036XY289CO	Upland Shallow Loam (Two-Needle Pinyon / Utah Juniper) NA Wet Saline Meadow (Inland Saltgrass) Upland Shallow Clay Loam (Utah Juniper-Pinyon) Clayey Foothills	8.1 5.3 5.1 2.0 2.0
MMS-103	R034BY302UT NA R034BY404CO R034BY117UT R034BY109UT	Upland Clay (Western Wheatgrass) NA Stony Saltdesert Desert Shallow Clay (Mat Saltbush) Desert Loamy Clay (Shadscale)	0.2 79.0 9.3 5.7 3.6
MMS-104	R034BY006UT NA R034BY322UT R034BY106UT 048AY284CO	Alkali Flat (Greasewood) NA Upland Shallow Loam (Two-Needle Pinyon / Utah Juniper) Desert Loam (Shadscale) Loamy Foothills	2.4 60.6 31.6 7.8 3.5
MMS-105	R036XY284CO R048AY238CO R048AY228CO F048AY448CO R048AY306UT	Loamy Foothills Brushy Loam Mountain Loam Mountain Pinyon Upland Loam (Wyoming Big Sagebrush)	3.5 99.9 71.7 28.2 28.2
OT-117 OT-118	R048AY320UT R036XY326CO NA R036XY408CO NA	Upland Shallow Loam (Black Sagebrush) Semidesert Sandy Loam NA Basin Shale NA	7.5 78.0 18.2 3.8 50.9
	R034BY109UT R034BY104UT R034BY106UT R034BY116UT R034BY117UT	Desert Loamy Clay (Shadscale) Desert Clay (Shadscale) Alkali Flat (Greasewood) Desert Loam (Shadscale) Desert Shallow Clay (Mat Saltbush)	48.4 37.5 25.0 0.0 0.0

Table 1: Ecological Sites Descriptions 2022 UFO AIM (continued)

Plot ID	Eco Site Code	Eco Site Name	Percent Area
OT-119	R036XY111CO R036XY328CO R048AY238CO 048AY284CO R048AY405UT	Steep Shallow Clay Loam - (Pinyon-Utah Juniper) Semidesert Clay Loam Brushy Loam Loamy Foothills Mountain Loam (Mountain Big Sagebrush)	63.8 63.7 19.0 11.0 11.0
OT-120	R036XY445CO F048AY448CO R036XY114CO R036XY113CO R036XY287CO	Steep Colluvial Slopes Mountain Pinyon Mountain Pinyon Semidesert Juniper Loam Stony Foothills	10.4 7.9 6.9 68.3 41.5
	NA R036XY325CO R034BY322UT 048AY284CO R036XY284CO	NA Semidesert Loam Upland Shallow Loam (Two-Needle Pinyon / Utah Juniper) Loamy Foothills Loamy Foothills	27.8 26.9 3.1 0.7 0.7
OT-121	F048AY448CO R048AY238CO R048AY255CO NA R036XY113CO	Mountain Pinyon Brushy Loam Pine Grasslands NA Semidesert Juniper Loam	42.6 42.6 42.6 27.1 26.9
OT-122	R036XY325CO R036XY284CO R036XY326CO NA R034BY109UT	Semidesert Loam Loamy Foothills Semidesert Sandy Loam NA Desert Loamy Clay (Shadscale)	26.9 3.1 0.2 70.2 20.1
OT-123	R034BY006UT R034BY106UT R034BY404CO R034BY117UT R036XY113CO	Alkali Flat (Greasewood) Desert Loam (Shadscale) Stony Saltdesert Desert Shallow Clay (Mat Saltbush) Semidesert Juniper Loam	6.8 1.2 1.0 0.6 62.9
	R036XY325CO R036XY287CO R036XY111CO R036XY328CO R036XY284CO	Semidesert Loam Stony Foothills Steep Shallow Clay Loam - (Pinyon-Utah Juniper) Semidesert Clay Loam Loamy Foothills	37.9 25.0 21.7 21.7 7.7
OT-124	NA 048AY284CO R034BY322UT R034BY334UT NA	NA Loamy Foothills Upland Shallow Loam (Two-Needle Pinyon / Utah Juniper) Upland Stony Loam (Wyoming Big Sagebrush) NA	5.5 4.0 2.2 2.2 52.8
OT-125	R036XY114CO R036XY326CO R036XY113CO R036XY325CO R036XY114CO	Mountain Pinyon Semidesert Sandy Loam Semidesert Juniper Loam Semidesert Loam Mountain Pinyon	26.1 14.0 7.2 7.2 69.8
	NA	NA	28.6

Table 1: Ecological Sites Descriptions 2022 UFO AIM (continued)

Plot ID	Eco Site Code	Eco Site Name	Percent Area
ОТ-126	R036XY325CO R036XY326CO R034BY109UT R034BY104UT	Semidesert Loam Semidesert Sandy Loam Desert Loamy Clay (Shadscale) Desert Clay (Shadscale)	1.7 1.7 84.9 84.3
PJ-155	R034BY006UT R034BY106UT R034BY117UT NA R036XY289CO	Alkali Flat (Greasewood) Desert Loam (Shadscale) Desert Shallow Clay (Mat Saltbush) NA Clayey Foothills	40.3 17.5 17.5 0.7 53.8
PJ-158	R036XY287CO R048AY247CO R034BY315UT R036XY113CO R036XY287CO	Stony Foothills Deep Clay Loam Upland Shallow Clay Loam (Utah Juniper-Pinyon) Semidesert Juniper Loam Stony Foothills	50.8 46.1 3.0 51.9 39.1
	R036XY114CO R036XY284CO R036XY325CO C1121 C1214	Mountain Pinyon Loamy Foothills Semidesert Loam Ponderosa Pine/Gambel Oak (Pipo/Quga) Douglas-Fir/Gambel Oak (Psme/Quga)	25.3 25.3 23.0 12.6 12.6
PJ-159	R048AY238CO R048AY255CO R036XY289CO R034BY009UT R036XY289CO	Brushy Loam Pine Grasslands Clayey Foothills Loamy Bottom (Basin Big Sagebrush) Clayey Foothills	12.6 12.6 10.3 3.7 59.5
	R036XY287CO R048AY238CO R048AY247CO R036XY284CO R034BY006UT	Stony Foothills Brushy Loam Deep Clay Loam Loamy Foothills Alkali Flat (Greasewood)	58.3 38.4 38.4 13.1 2.9
	R034BY106UT R034BY117UT R036XY113CO R036XY325CO R048AY241CO	Desert Loam (Shadscale) Desert Shallow Clay (Mat Saltbush) Semidesert Juniper Loam Semidesert Loam Mountain Meadow	2.9 2.9 2.9 2.9 2.0
PJ-160 PJ-161	NA R036XY114CO R036XY325CO R036XY326CO R036XY284CO	NA Mountain Pinyon Semidesert Loam Semidesert Sandy Loam Loamy Foothills	53.2 42.2 4.7 4.7 37.5
	R036XY114CO R036XY408CO NA R036XY325CO R036XY326CO	Mountain Pinyon Basin Shale NA Semidesert Loam Semidesert Sandy Loam	34.0 29.2 23.5 3.5 1.7
PJ-162	R036XY113CO R036XY325CO R036XY287CO	Semidesert Juniper Loam Semidesert Loam Stony Foothills	79.2 51.9 32.5

Table 1: Ecological Sites Descriptions 2022 UFO AIM (continued)

Plot ID	Eco Site Code	Eco Site Name	Percent Area
	R036XY289CO C1121	Clayey Foothills Ponderosa Pine/Gambel Oak (Pipo/Quga)	$11.4 \\ 6.2$
	C1214 R048AY238CO R048AY255CO R036XY114CO R036XY284CO	Douglas-Fir/Gambel Oak (Psme/Quga) Brushy Loam Pine Grasslands Mountain Pinyon Loamy Foothills	6.2 6.2 6.2 3.2 3.2
PJ-163	R034BY009UT R036XY289CO R036XY287CO R034BY302UT R034BY315UT	Loamy Bottom (Basin Big Sagebrush) Clayey Foothills Stony Foothills Upland Clay (Western Wheatgrass) Upland Shallow Clay Loam (Utah Juniper-Pinyon)	0.4 62.9 35.2 20.4 10.2
PJ-164	NA 048AY284CO R036XY284CO NA F048AY448CO	NA Loamy Foothills Loamy Foothills NA Mountain Pinyon	7.6 1.8 1.8 50.5 33.6
	R048AY238CO R048AY255CO R036XY113CO R036XY325CO R036XY284CO	Brushy Loam Pine Grasslands Semidesert Juniper Loam Semidesert Loam Loamy Foothills	33.6 33.6 12.3 12.3 3.0
PJ-165	R036XY326CO R036XY114CO R036XY284CO NA F048AY448CO	Semidesert Sandy Loam Mountain Pinyon Loamy Foothills NA Mountain Pinyon	0.6 59.1 59.1 36.8 3.2
PJ-166	R036XY325CO R036XY326CO R036XY113CO R036XY287CO R034BY322UT	Semidesert Loam Semidesert Sandy Loam Semidesert Juniper Loam Stony Foothills Upland Shallow Loam (Two-Needle Pinyon / Utah Juniper)	0.9 0.9 80.9 69.7 16.7
PJ-167	R036XY325CO NA R036XY113CO R036XY325CO R036XY287CO	Semidesert Loam NA Semidesert Juniper Loam Semidesert Loam Stony Foothills	9.4 2.4 99.5 71.4 8.1
PJ-168	R036XY289CO R036XY326CO NA R036XY114CO R036XY408CO	Clayey Foothills Semidesert Sandy Loam NA Mountain Pinyon Basin Shale	0.3 34.5 32.5 23.4 9.6
PJ-169	R036XY325CO R036XY284CO NA R048AY255CO F048AY448CO	Semidesert Loam Loamy Foothills NA Pine Grasslands Mountain Pinyon	6.9 3.2 40.5 31.6 19.2

Table 1: Ecological Sites Descriptions 2022 UFO AIM (continued)

Plot ID	Eco Site Code	Eco Site Name	Percent Area
	R036XY284CO R048AY228CO F048AY439UT 048AY255CO_2 R048AY248CO	Loamy Foothills Mountain Loam Mountain Shallow Loam (Ponderosa Pine) Pine Grasslands Mountain Clay Loam	16.7 16.3 16.1 10.6 3.9
PJ-170	FCT237 G2602 R048AY303CO F048AY448CO R048AY238CO	Ponderosa Pine Mountain Muhly - Arizona Fescue (Mumo-Fear2) Loamy Slopes Mountain Pinyon Brushy Loam	3.3 3.3 0.1 55.6 55.6
PP-176	R048AY255CO NA R036XY114CO R036XY326CO R036XY114CO	Pine Grasslands NA Mountain Pinyon Semidesert Sandy Loam Mountain Pinyon	55.6 37.5 7.0 0.0 86.6
	R036XY284CO C1121 C1214 R048AY238CO R048AY255CO	Loamy Foothills Ponderosa Pine/Gambel Oak (Pipo/Quga) Douglas-Fir/Gambel Oak (Psme/Quga) Brushy Loam Pine Grasslands	82.2 8.3 8.3 8.3 8.3
PP-177	R036XY113CO R036XY287CO R036XY289CO R036XY325CO R036XY289CO	Semidesert Juniper Loam Stony Foothills Clayey Foothills Semidesert Loam Clayey Foothills	2.6 2.5 2.5 1.4 57.4
	R036XY287CO R034BY404CO NA R034BY322UT R048AY247CO	Stony Foothills Stony Saltdesert NA Upland Shallow Loam (Two-Needle Pinyon / Utah Juniper) Deep Clay Loam	50.1 18.6 17.3 4.3 0.1
PP-178	NA R048AY248CO F048AY439UT R048AY238CO 048AY255CO_2	NA Mountain Clay Loam Mountain Shallow Loam (Ponderosa Pine) Brushy Loam Pine Grasslands	54.1 42.1 16.6 3.6 0.2
PP-179	R048AY247CO R048AY255CO R036XY287CO R036XY289CO R034BY404CO	Deep Clay Loam Pine Grasslands Stony Foothills Clayey Foothills Stony Saltdesert	0.2 0.2 53.1 53.1 29.7
PP-180	NA R048AY238CO C1121 R048AY255CO R036XY114CO	NA Brushy Loam Ponderosa Pine/Gambel Oak (Pipo/Quga) Pine Grasslands Mountain Pinyon	17.2 52.2 47.8 47.8 40.7
	R036XY284CO	Loamy Foothills	37.5

Table 1: Ecological Sites Descriptions 2022 UFO AIM (continued)

Plot ID	Eco Site Code	Eco Site Name	Percent Area
	C1214 R048AY247CO R036XY287CO R036XY289CO	Douglas-Fir/Gambel Oak (Psme/Quga) Deep Clay Loam Stony Foothills Clayey Foothills	8.5 4.4 4.2 4.2
RI-205	R036XY113CO R034BY106UT NA R034BY117UT R034BY404CO	Semidesert Juniper Loam Desert Loam (Shadscale) NA Desert Shallow Clay (Mat Saltbush) Stony Saltdesert	2.9 41.8 38.1 8.8 4.8
RI-209	R034BY006UT R034BY112UT R036XY114CO R036XY284CO R036XY326CO	Alkali Flat (Greasewood) Desert Sand (Fourwing Saltbush) Mountain Pinyon Loamy Foothills Semidesert Sandy Loam	3.4 3.1 51.3 51.3 39.7
RI-210	R036XY325CO R036XY287CO NA R034BY109UT R034BY104UT	Semidesert Loam Stony Foothills NA Desert Loamy Clay (Shadscale) Desert Clay (Shadscale)	17.6 7.5 1.3 74.7 68.9
	R034BY117UT R034BY006UT R034BY106UT NA R034BY009UT	Desert Shallow Clay (Mat Saltbush) Alkali Flat (Greasewood) Desert Loam (Shadscale) NA Loamy Bottom (Basin Big Sagebrush)	33.8 30.7 27.7 13.8 1.4
RI-211	R034BY115UT NA R036XY114CO R036XY408CO R036XY284CO	Desert Sandy Loam (Indian Ricegrass) NA Mountain Pinyon Basin Shale Loamy Foothills	1.4 38.0 37.1 12.5 11.3
RI-212	R036XY287CO R036XY325CO R036XY326CO R036XY113CO R036XY113CO	Stony Foothills Semidesert Loam Semidesert Sandy Loam Semidesert Juniper Loam Semidesert Juniper Loam	6.8 5.7 5.6 0.0 100.0
RI-213	R036XY325CO R036XY287CO R034BY009UT NA R036XY114CO	Semidesert Loam Stony Foothills Loamy Bottom (Basin Big Sagebrush) NA Mountain Pinyon	62.0 36.7 4.0 76.6 21.7
RI-214	R036XY326CO R036XY113CO R036XY325CO R036XY287CO R034BY009UT	Semidesert Sandy Loam Semidesert Juniper Loam Semidesert Loam Stony Foothills Loamy Bottom (Basin Big Sagebrush)	1.8 100.0 79.3 20.3 10.4
SD-392	R034BY104UT R034BY109UT R034BY006UT	Desert Clay (Shadscale) Desert Loamy Clay (Shadscale) Alkali Flat (Greasewood)	66.5 64.2 31.9

Table 1: Ecological Sites Descriptions 2022 UFO AIM (continued)

Plot ID	Eco Site Code	Eco Site Name	Percent Area
	$\begin{array}{c} {\rm NA} \\ {\rm R034BY117UT} \end{array}$	NA Desert Shallow Clay (Mat Saltbush)	$23.4 \\ 22.8$
SD-393	R034BY106UT R036XY114CO R036XY284CO NA F048AY448CO	Desert Loam (Shadscale) Mountain Pinyon Loamy Foothills NA Mountain Pinyon	13.7 58.1 58.1 37.2 3.9
SD-394	R036XY325CO R036XY326CO NA R034BY106UT R034BY322UT	Semidesert Loam Semidesert Sandy Loam NA Desert Loam (Shadscale) Upland Shallow Loam (Two-Needle Pinyon / Utah Juniper)	0.9 0.9 71.0 20.7 8.2
SD-395	048AY284CO R036XY284CO R036XY445CO NA R034BY322UT	Loamy Foothills Loamy Foothills Steep Colluvial Slopes NA Upland Shallow Loam (Two-Needle Pinyon / Utah Juniper)	3.4 3.4 45.3 35.7 14.4
	048AY284CO R036XY284CO R034BY101UT R036XY111CO R034BY006UT	Loamy Foothills Loamy Foothills Desert Alkali Bench (Castlevalley Saltbush) Steep Shallow Clay Loam - (Pinyon-Utah Juniper) Alkali Flat (Greasewood)	1.5 1.5 1.2 0.8 0.7
SD-399	R034BY106UT R034BY112UT NA R034BY404CO R034BY106UT	Desert Loam (Shadscale) Desert Sand (Fourwing Saltbush) NA Stony Saltdesert Desert Loam (Shadscale)	0.2 0.2 57.7 19.2 9.5
	R034BY109UT R034BY009UT R034BY006UT R034BY104UT R034BY117UT	Desert Loamy Clay (Shadscale) Loamy Bottom (Basin Big Sagebrush) Alkali Flat (Greasewood) Desert Clay (Shadscale) Desert Shallow Clay (Mat Saltbush)	9.0 7.5 5.6 3.5 3.0
SD-400 SD-401	R036XY113CO R036XY325CO R036XY287CO R034BY009UT R036XY113CO	Semidesert Juniper Loam Semidesert Loam Stony Foothills Loamy Bottom (Basin Big Sagebrush) Semidesert Juniper Loam	91.2 76.3 23.6 14.0 37.2
	R036XY325CO NA R036XY326CO R036XY114CO R036XY405CO	Semidesert Loam NA Semidesert Sandy Loam Mountain Pinyon Loamy Bottom	37.2 35.3 26.6 0.8 0.2
SD-402	NA R034BY106UT R034BY109UT R034BY104UT R034BY117UT	NA Desert Loam (Shadscale) Desert Loamy Clay (Shadscale) Desert Clay (Shadscale) Desert Shallow Clay (Mat Saltbush)	53.5 25.5 21.1 21.0 6.8

Table 1: Ecological Sites Descriptions 2022 UFO AIM (continued)

Plot ID	Eco Site Code	Eco Site Name	Percent Area
SD-403	R034BY006UT R036XY408CO NA R036XY114CO R036XY284CO	Alkali Flat (Greasewood) Basin Shale NA Mountain Pinyon Loamy Foothills	4.4 52.6 16.1 14.1 14.1
SD-404	R036XY326CO R036XY325CO R036XY287CO NA R034BY109UT	Semidesert Sandy Loam Semidesert Loam Stony Foothills NA Desert Loamy Clay (Shadscale)	10.2 7.0 6.9 80.2 11.5
SD-405	R034BY006UT R034BY104UT R034BY117UT R034BY106UT NA	Alkali Flat (Greasewood) Desert Clay (Shadscale) Desert Shallow Clay (Mat Saltbush) Desert Loam (Shadscale) NA	10.6 3.8 1.4 1.0 47.3
	R034BY404CO R034BY117UT R034BY109UT R034BY006UT R034BY112UT	Stony Saltdesert Desert Shallow Clay (Mat Saltbush) Desert Loamy Clay (Shadscale) Alkali Flat (Greasewood) Desert Sand (Fourwing Saltbush)	30.8 7.6 6.8 3.3 3.3
SD-406	R034BY104UT 048AY284CO R036XY284CO NA R034BY117UT	Desert Clay (Shadscale) Loamy Foothills Loamy Foothills NA Desert Shallow Clay (Mat Saltbush)	2.4 1.0 1.0 27.5 23.9
	R034BY109UT R034BY404CO R034BY006UT R034BY106UT 048AY284CO	Desert Loamy Clay (Shadscale) Stony Saltdesert Alkali Flat (Greasewood) Desert Loam (Shadscale) Loamy Foothills	18.0 9.2 8.0 5.2 3.8
SD-407	R036XY284CO R034BY024UT R034BY112UT NA R034BY404CO	Loamy Foothills Wet Saline Meadow (Inland Saltgrass) Desert Sand (Fourwing Saltbush) NA Stony Saltdesert	3.8 3.6 2.8 42.3 39.8
SD-408	R034BY117UT R034BY112UT R034BY006UT R034BY106UT NA	Desert Shallow Clay (Mat Saltbush) Desert Sand (Fourwing Saltbush) Alkali Flat (Greasewood) Desert Loam (Shadscale) NA	11.2 5.3 1.5 51.5 36.4
SD-409	R034BY112UT R036XY113CO NA R034BY109UT R034BY104UT	Desert Sand (Fourwing Saltbush) Semidesert Juniper Loam NA Desert Loamy Clay (Shadscale) Desert Clay (Shadscale)	8.3 3.8 61.4 36.8 14.6
	R034BY117UT	Desert Shallow Clay (Mat Saltbush)	13.3

Table 1: Ecological Sites Descriptions 2022 UFO AIM (continued)

Plot ID	Eco Site Code	Eco Site Name	Percent Area
SD-410	R034BY106UT R034BY006UT R034BY104UT R034BY109UT	Desert Loam (Shadscale) Alkali Flat (Greasewood) Desert Clay (Shadscale) Desert Loamy Clay (Shadscale)	12.8 3.2 85.9 63.6
SD-411	R034BY106UT R034BY117UT R034BY006UT NA R034BY006UT	Desert Loam (Shadscale) Desert Shallow Clay (Mat Saltbush) Alkali Flat (Greasewood) NA Alkali Flat (Greasewood)	47.3 41.1 28.5 6.4 32.3
	NA R034BY404CO R034BY109UT R034BY104UT R034BY117UT	NA Stony Saltdesert Desert Loamy Clay (Shadscale) Desert Clay (Shadscale) Desert Shallow Clay (Mat Saltbush)	29.0 22.2 17.0 11.8 10.5
SD-412	R034BY106UT R034BY009UT R034BY115UT R034BY109UT R034BY104UT	Desert Loam (Shadscale) Loamy Bottom (Basin Big Sagebrush) Desert Sandy Loam (Indian Ricegrass) Desert Loamy Clay (Shadscale) Desert Clay (Shadscale)	6.0 0.7 0.6 73.7 66.6
	R036XY113CO R036XY325CO R034BY106UT R034BY117UT R034BY006UT	Semidesert Juniper Loam Semidesert Loam Desert Loam (Shadscale) Desert Shallow Clay (Mat Saltbush) Alkali Flat (Greasewood)	24.9 24.9 18.6 18.4 10.3
SD-413	R034BY009UT R034BY115UT NA R036XY325CO R036XY113CO	Loamy Bottom (Basin Big Sagebrush) Desert Sandy Loam (Indian Ricegrass) NA Semidesert Loam Semidesert Juniper Loam	0.2 0.2 0.0 53.8 51.7
	R034BY009UT R036XY287CO R034BY106UT R034BY115UT R034BY121UT	Loamy Bottom (Basin Big Sagebrush) Stony Foothills Desert Loam (Shadscale) Desert Sandy Loam (Indian Ricegrass) Desert Shallow Loam (Shadscale)	31.7 21.4 20.8 15.5 14.1
SD-414	R034BY104UT R034BY006UT R034BY109UT R034BY117UT R034BY011UT	Desert Clay (Shadscale) Alkali Flat (Greasewood) Desert Loamy Clay (Shadscale) Desert Shallow Clay (Mat Saltbush) River Floodplain (Fremont Cottonwood)	5.8 4.1 3.1 2.9 1.0
	R036XY289CO R036XY287CO R034BY117UT NA R048AY247CO	Clayey Foothills Stony Foothills Desert Shallow Clay (Mat Saltbush) NA Deep Clay Loam	30.1 29.8 26.0 22.0 14.1
	R048AY248CO 048AY284CO R036XY284CO	Mountain Clay Loam Loamy Foothills Loamy Foothills	4.1 3.6 3.6

Table 1: Ecological Sites Descriptions 2022 UFO AIM (continued)

Plot ID	Eco Site Code	Eco Site Name	Percent Area
	R048AY228CO R048AY238CO	Mountain Loam Brushy Loam	3.6 3.6
SS-294	R034BY404CO R034BY404CO NA R036XY289CO R036XY287CO	Stony Saltdesert Stony Saltdesert NA Clayey Foothills Stony Foothills	0.5 46.5 23.1 22.5 18.4
SS-295	R034BY006UT R034BY106UT NA F048AY448CO R048AY238CO	Alkali Flat (Greasewood) Desert Loam (Shadscale) NA Mountain Pinyon Brushy Loam	6.1 1.8 52.0 16.2 16.2
	R048AY255CO R036XY113CO R036XY325CO R036XY326CO R036XY114CO	Pine Grasslands Semidesert Juniper Loam Semidesert Loam Semidesert Sandy Loam Mountain Pinyon	16.2 12.4 12.4 10.8 8.7
SS-296	R036XY284CO R036XY114CO NA R036XY284CO R036XY325CO	Loamy Foothills Mountain Pinyon NA Loamy Foothills Semidesert Loam	0.0 42.3 32.0 31.0 18.7
SS-297	R036XY326CO R036XY408CO R036XY405CO R036XY287CO NA	Semidesert Sandy Loam Basin Shale Loamy Bottom Stony Foothills NA	6.6 6.3 1.1 0.7 53.3
	R034BY106UT R034BY117UT R034BY109UT R034BY006UT R034BY404CO	Desert Loam (Shadscale) Desert Shallow Clay (Mat Saltbush) Desert Loamy Clay (Shadscale) Alkali Flat (Greasewood) Stony Saltdesert	15.0 11.9 11.2 4.1 2.7
SS-298	R034BY322UT R048AY238CO R048AY306UT R048AY320UT F048AY448CO	Upland Shallow Loam (Two-Needle Pinyon / Utah Juniper) Brushy Loam Upland Loam (Wyoming Big Sagebrush) Upland Shallow Loam (Black Sagebrush) Mountain Pinyon	1.7 99.9 99.9 99.9 43.1
SS-299	R036XY114CO R036XY408CO R036XY325CO NA R036XY326CO	Mountain Pinyon Basin Shale Semidesert Loam NA Semidesert Sandy Loam	37.8 33.8 13.8 10.3 6.4
SS-300	F048AY448CO R036XY114CO R036XY284CO NA F048AY448CO	Mountain Pinyon Mountain Pinyon Loamy Foothills NA Mountain Pinyon	2.0 49.5 31.3 26.8 20.7

Table 1: Ecological Sites Descriptions 2022 UFO AIM (continued)

Plot ID	Eco Site Code	Eco Site Name	Percent Area
SS-305	R036XY289CO R048AY247CO R036XY326CO R036XY325CO R036XY113CO	Clayey Foothills Deep Clay Loam Semidesert Sandy Loam Semidesert Loam Semidesert Juniper Loam	18.3 9.7 2.9 1.2 93.7
	R036XY325CO R036XY287CO R036XY289CO C1121 C1214	Semidesert Loam Stony Foothills Clayey Foothills Ponderosa Pine/Gambel Oak (Pipo/Quga) Douglas-Fir/Gambel Oak (Psme/Quga)	62.9 11.0 4.8 1.5
SS-306	R048AY238CO R048AY255CO R036XY113CO R036XY287CO R036XY325CO	Brushy Loam Pine Grasslands Semidesert Juniper Loam Stony Foothills Semidesert Loam	1.5 1.5 100.0 51.4 47.5
SS-307	R034BY009UT R036XY326CO NA R036XY114CO R036XY113CO	Loamy Bottom (Basin Big Sagebrush) Semidesert Sandy Loam NA Mountain Pinyon Semidesert Juniper Loam	5.2 40.1 31.0 16.7 12.3
SS-308	R036XY325CO R036XY114CO R036XY284CO R036XY325CO R036XY326CO	Semidesert Loam Mountain Pinyon Loamy Foothills Semidesert Loam Semidesert Sandy Loam	12.3 87.1 87.1 12.2 12.2
SS-309	NA R036XY114CO R036XY284CO R036XY287CO R036XY289CO	NA Mountain Pinyon Loamy Foothills Stony Foothills Clayey Foothills	0.7 69.7 69.3 19.0 19.0
	R036XY113CO R036XY325CO C1121 C1214 R048AY238CO	Semidesert Juniper Loam Semidesert Loam Ponderosa Pine/Gambel Oak (Pipo/Quga) Douglas-Fir/Gambel Oak (Psme/Quga) Brushy Loam	10.4 2.8 0.9 0.9
SS-310	R048AY255CO R034BY404CO R034BY117UT NA R034BY212UT	Pine Grasslands Stony Saltdesert Desert Shallow Clay (Mat Saltbush) NA Semidesert Loam (Wyoming Big Sagebrush)	0.9 79.0 20.4 18.2 16.9
SS-311	R034BY302UT R048AY242CO R048AY331UT R036XY114CO R036XY284CO	Upland Clay (Western Wheatgrass) Dry Mountain Shale Upland Stony Loam (Pinyon-Utah Juniper) Mountain Pinyon Loamy Foothills	2.1 0.7 0.7 66.9 66.9
	R036XY325CO	Semidesert Loam	14.8

Table 1: Ecological Sites Descriptions 2022 UFO AIM (continued)

Plot ID	Eco Site Code	Eco Site Name	Percent Area
	R036XY326CO NA R036XY408CO R035XY262CO	Semidesert Sandy Loam NA Basin Shale Salt Flats	14.8 11.3 7.0 0.1
SS-312	R036XY284CO R036XY114CO NA F048AY448CO R036XY315UT	Loamy Foothills Mountain Pinyon NA Mountain Pinyon Upland Shallow Loam (Pinyon/Utah Juniper)	57.4 41.7 28.4 17.1 8.7
	R048AY247CO R036XY289CO R048AY228CO R048AY238CO F048AY439UT	Deep Clay Loam Clayey Foothills Mountain Loam Brushy Loam Mountain Shallow Loam (Ponderosa Pine)	3.3 3.2 2.5 0.7 0.5
SS-313	R048AY255CO R036XY114CO R036XY284CO R036XY113CO R036XY325CO	Pine Grasslands Mountain Pinyon Loamy Foothills Semidesert Juniper Loam Semidesert Loam	0.5 65.9 65.9 16.7 13.9
	R036XY287CO R036XY289CO R048AY238CO R048AY247CO C1121	Stony Foothills Clayey Foothills Brushy Loam Deep Clay Loam Ponderosa Pine/Gambel Oak (Pipo/Quga)	11.0 10.0 7.4 4.3 3.1
SS-314	C1214 R048AY255CO R048AY247CO R048AY238CO R048AY229CO	Douglas-Fir/Gambel Oak (Psme/Quga) Pine Grasslands Deep Clay Loam Brushy Loam Rocky Loam	3.1 3.1 84.8 17.2 12.4
SS-315	R048AY250CO NA R036XY114CO R036XY284CO R036XY287CO	Subalpine Loam NA Mountain Pinyon Loamy Foothills Stony Foothills	1.5 1.2 47.8 44.3 36.5
	R036XY113CO R036XY289CO C1121 C1214 R048AY238CO	Semidesert Juniper Loam Clayey Foothills Ponderosa Pine/Gambel Oak (Pipo/Quga) Douglas-Fir/Gambel Oak (Psme/Quga) Brushy Loam	34.3 9.0 8.9 8.9 8.9
SS-316	R048AY255CO R036XY325CO NA R036XY114CO F048AY448CO	Pine Grasslands Semidesert Loam NA Mountain Pinyon Mountain Pinyon	8.9 6.8 57.2 22.9 19.9
SS-317	R036XY284CO R036XY289CO R048AY238CO	Loamy Foothills Clayey Foothills Brushy Loam	11.7 0.5 51.2

Table 1: Ecological Sites Descriptions 2022 UFO AIM (continued)

Plot ID	Eco Site Code	Eco Site Name	Percent Area
	NA Boas Avenedo	NA D. J. J.	39.0
	R048AY229CO	Rocky Loam	31.4
	R048AY247CO	Deep Clay Loam	21.0
	R034BY322UT	Upland Shallow Loam (Two-Needle Pinyon / Utah Juniper)	6.0
	R048AY245CO	Mountain Swale	2.0
	R034BY112UT	Desert Sand (Fourwing Saltbush)	0.5
SS-318	R036XY289CO	Clayey Foothills	47.7
	R036XY287CO	Stony Foothills	43.2
	NA	NA	30.7
	R034BY315UT	Upland Shallow Clay Loam (Utah Juniper-Pinyon)	11.6
	R034BY302UT	Upland Clay (Western Wheatgrass)	9.9
	R048AY247CO	Deep Clay Loam	1.5
	048AY284CO	Loamy Foothills	0.7
	R036XY284CO	Loamy Foothills	0.7
SS-319	R036XY326CO	Semidesert Sandy Loam	87.9
	NA	NA	10.5
	R036XY113CO	Semidesert Juniper Loam	1.6
	R036XY325CO	Semidesert Loam	1.6
SS-320	F048AY448CO	Mountain Pinyon	51.4
	R036XY284CO	Loamy Foothills	48.7
	NA	NA	12.3