# **Core Indicator Reports**

After data collection and quality control, the next step in monitoring is extracting data for analysis. This document will guide you through extracting the AIM core indicators and a few common supplemental indicators from DIMA. Through both custom queries and formal reports, there are a variety of ways to summarize the data collected in DIMA. This document describes the methods for extracting basic information from DIMA reports to describe the Core AIM indicators. The indicators covered in this document are:

- Bare ground
- Vegetation composition
- Species of Management Concern
- Size of inter-canopy gaps
- Vegetation height
- Nonnative invasive plant species
- Soil Stability

#### Step 1: Access Reports in DIMA



**Step 2: Select your Site(s), Plot(s), and Line(s).** The sites and plots you select will depend on the area of interest and your management question.

Report Manager			
Report Manager	Select Date Range	Select Method	
	Start Date: Report	Canopy Gap with Species	_ Close
Report Level:	Jan - 1 - 2003 -	Continuous Line Intercept	
Selected Plot(s)	, _, _, _	Dry Weight	1
	End Date: Report	Gap Intercept	Help
	Sep - 9 - 2013 -	Line-Point Intercept Medium & High Intensity Ecol	Inv
		Method Tracking	
		Plant Density	-
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Select Sites/Flots/Lill			
Select Site(s)	Select Plot(s)	Select Line(s)	
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Brushy Loam	Aspen Woodland 2	Brushy Loam 11	2
Clayey Slopes & Foothills	Aspen Woodlan 3	Brushy Loam 11	3
Loamy Slopes	Brushy Loam 11	Brushy Loam 13	2
Mountain Loam	Brushy Loam 13	Brushy Loam 15	1
Pinyon-Juniper	Brushy Loam 15	Brushy Loam 15	2
Riparian & Swale	Brushy Loam 18	Brushy Loam 15	3
Rolling Loam	Brushy Loam 22	Brushy Loam 18	1
Stony Foothills	Clayey Slopes & 58	Brushy Loam 18	2
	Clayey Slopes & 59	Brushy Loam 22	1
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By Site     By Dist Target			
C By Plot Tags			

Step 3: Select the date range. The default date range will encompass all dates possible within your dataset

Report Manager	Select Date Range		Select Method			
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Select Site(s)	Select Plot(s)		Select Line(s)			
Aspen Woodland	Aspen Woodlan 1	*	Brushy Loam	11		1 ^
Brushy Loam	Aspen Woodlan 2		Brushy Loam	11		2
Clayey Slopes & Foothills	Aspen Woodlan 3		Brushy Loam	11		3
Dry Exposure	Aspen Woodlan 9	_	Brushy Loam	13		1
Loamy Slopes	Brushy Loam 11		Brushy Loam	13		2
Mountain Loam	Brushy Loam 13		Brushy Loam	15		1
Pinyon-Juniper	Brushy Loam 15		Brushy Loam	15		2
Riparian & Swale	Brushy Loam 18		Brushy Loam	15		3
Rolling Loam	Brushy Loam 22		Brushy Loam	18		1
Stony Foothills	Clayey Slopes & 58		Brushy Loam	18		2
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Report Manager	Stert Date Range	Select Method		Close
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Select Sites/Plots/Lin	es Qualifying Data Select	Report		
Select Site(s)	Select Plot(s)	Select Line(s:		
Aspen Woodland Brushy Loam Clayey Slopes & Foothills Dry Exposure Loamy Slopes Mountain Loam Pinyon-Juniper Riparian & Swale Rolling Loam Stony Foothills	Aspen Woodlan 1 Aspen Woodlan 2 Aspen Woodlan 3 Aspen Woodlan 9 Brushy Loam 11 Brushy Loam 13 Brushy Loam 15 Brushy Loam 18 Brushy Loam 18 Brushy Loam 22 Clayey Slopes & 58 Clayey Slopes & 59	<ul> <li>Aspen Woodland</li> <li>Brushy Loam</li> </ul>	1 1 2 2 3 3 3 3 9 9 9 11	1 ^ 2 ] 1 2 3 1 2 3 1 2 3 1 2 1 2
All Reset	All Reset shift-click to select continuous range; ct	Reset rI-click to select individual items		

Step 4: Select the method you would like to summarize in a report

Step 5: Select the report. This will vary by your indicator of interest. See the following steps for each indicator:

- Step 6: Bare ground
- Step 6: Vegetation composition
- Step 6,7: Species of Management Concern
- Step 6,7: Nonnative invasive plant species
- Step 8: Size of inter-canopy gaps
- Step 9: Vegetation height
- Step 10: Soil Stability

Step 6: Bare ground and vegetation composition. Click on "Select Report" and then select the "Indicators Report" and hit "Go..."

Report Manager			
Report Manager	Select Date Range	Select Method	
Report Level: Selected Plot(s)	Start Date: Reset Jan • 1 • 2003 End Date: Reset Sep • 9 • 2013	<ul> <li>Gap Intercept</li> <li>Medium &amp; High Intensity Ecol. Inv. Method Tracking Plant Density</li> <li>Plant Production</li> <li>Plot Definition</li> <li>Rangeland Health Qual Asses.</li> <li>Soil Compaction</li> </ul>	Help
Select Sites/Plots/Lines	Qualifying Data Select	t Report	
Comprehensive Report Indicators Report Ground Cover Indicators	Excel Excel Excel	Go	
Average Heights and Shrub Heights, by Species Cover/Litter Summary Species Summary Checkbox Summary Height Summary by Positior Height Summary by Species All Detail Data	Shape Excel Excel Delimited Text Delimited Text Delimited Text Delimited Text Delimited Text Delimited Text		

Step 6.1 Select your indicators

Double click on the indicators you want from "Available Indicators"

In DIMA, bare ground, non-native invasive plant species, species of management concern and vegetation composition can be summarized from the same Line-point Intercept Indicators Report using the "Species" and "Bare Soil" indicators.

Bare Ground (Bare Soil) = # points with "None" in top canopy, no litter in lower canopies and "Soil" in final column

And the formula for vegetation composition is:

Species = # points w/ at least one hit of "Species A"

pecial Re	port P	aramete	ers
Select the Indica (Double-clicking	ators that works be	t are to be in st!)	cluded in the Report.
Available Indica Basal Cover	tors		Include in Report Bare Soil
Bedrock Biennial Boulder Cobble Cyanobacteria		>	Graminoid (Non-woody) Graminoid (Non-woody) Shrub (Woody) Species (Basal) Species (Foliar)
Embedded Litter Gravel Ground Cover			
Lichen Crust Litter Moss		<	
Other Perennial Rock			
Stone Sub-Shrub (Wood) Succulent (Wood)	y) )	ALL>	
Total Litter Tree (Woody) Vagrant Lichen Water Woody		<all< td=""><td></td></all<>	
Woody Litter	т Г	Show totals by	/ Year

Other helpful indicators that can also be generated within this report include:

- Total Foliar Cover
- Vegetation cover by functional group (forb, graminoid, shrub, tree). *Note, in order for this information to be summarized, you must have added growth habit and duration information to the species list. See the DIMA Quickstart for instructions.*

Step 6.2 Select "Proceed with Report". Depending on the number of plots you would like to summarize, the report may require a few minutes of processing time. Once the calculations are complete you will see this message:



Select "OK" and an Excel file will open.

## 12/14/2016

The Excel workbook will always have a standard set of worksheets:



For most plot level reporting, you will work with the Plot Totals tab.

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1 Site	Plot Indicator	1st Hit Avg	1st Hit StDev	Any Hit Avg	Any Hit StDev		
2 Aspen Woodland	1 Bare Soil	0.000	0.000				
3 Aspen Woodland	1 Forb/herb (Non-woody)	0.000	0.000	0.000	0.000		
4 Aspen Woodland	1 Graminoid (Non-woody)	0.000	0.000	0.000	0.000		
5 Aspen Woodland	1 Shrub (Woody)	0.000	0.000	0.000	0.000		
6 Aspen Woodland	1 ACGL (Basal)	0.000	0.000				
7 Aspen Woodland	1 ACHNA (Basal)	0.000	0.000				
8 Aspen Woodland	1 ACHY (Basal)	0.000	0.000				
9 Aspen Woodland	1 ACLE9 (Basal)	0.000	0.000				
10 Aspen Woodland	1 ACMI2 (Basal)	0.000	0.000				
11 Aspen Woodland	1 ACNE2 (Basal)	0.000	0.000				
12 Aspen Woodland	1 ACNE9 (Basal)	0.000	0.000				
13 Aspen Woodland	1 AF01 (Basal)	0.000	0.000				
14 Aspen Woodland	1 AF02 (Basal)	0.000	0.000				
15 Aspen Woodland	1 AGCR (Basal)	0.000	0.000				
16 Aspen Woodland	1 AGUR (Basal)	0.000	0.000				
17 Aspen Woodland	1 ALAL3 (Basal)	0.000	0.000				
18 Aspen Woodland	1 ALTE (Basal)	0.000	0.000				
19 Aspen Woodland	1 AMUT (Basal)	0.000	0.000				
20 Aspen Woodland	1 ANTEN (Basal)	0.000	0.000				
21 Aspen Woodland	1 AQCO (Basal)	0.000	0.000				
22 Aspen Woodland	1 AQUIL (Basal)	0.000	0.000				
23 Aspen Woodland	1 ARCA13 (Basal)	0.000	0.000				
24 Aspen Woodland	1 ARLU (Basal)	0.000	0.000				
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#### **Step 7: Species Inventory Report**

The species inventory report is accessed through the Species Richness Method and can be used to detect the presence/absence of non-native invasive species and species of management concern. There are two reports, the "Species List" which lists all selected plots, the species count and the actual species recorded on a horizontal access. The "Species List-Vertical" which lists each species recorded per plot in a separate worksheet in Excel

Report Manager			
Report Manager Report Level: Selected Site(s)	Select Date Range Start Date: Reset Jan v 1 v 2003 v End Date: Reset Sep v 10 v 2013 v	Select Method Method Tracking Plant Density Plant Production Plot Definition Rangeland Health Qual Asses. Soil Compaction Soil Stability Species Reports Species Richness	Close
Select Sites/Plots/Lines	Qualifying Data Select Rep Output Format Excel Excel	Go	
Processing complete			

### Species List Example Report

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3	Brushy Loam	Brushy Loam	13	08/31/11	1	1		39			ACLE9	ACMI2		ACNE9	AF01	
4	Brushy Loam	Brushy Loam	15	09/08/11	1	1		43		ACHY				ACNE9	AF01	
5	Brushy Loam	Brushy Loam	18	07/27/11	1	1		36				ACMI2		ACNE9		
6	Brushy Loam	Brushy Loam	22	08/29/11	1	1		35		ACHY	ACLE9					
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# Species List-Vertical Example Report

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2       Brushy Loam       11       08/23/11       1       52         3       ACGL       Acer glabrum Torr.       08/23/11       1       52         4       ACMI2       Achillea millefolium L.       08/23/11       1       52         4       ACMI2       Achillea millefolium L.       08/23/11       1       52         5       ACNE2       Acer egundo L.       08/23/11       1       52         6       AGUR       Agastache urticifolia (Benth.) Kuntze       08/23/11       1       1       6         6       AGUR       Agastache urticifolia (Benth.) Kuntze       0       0       0       0       0       0         7       ALAL3       Alyssum alyssoides (L.) L.       0	1	SiteID	SiteName	PlotID	) FormDate	LineID	SubPlotID	SubPlotDesc	SpeciesCount	
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5 ACNE2 Acer negundo L.   6 AGUR Agastache urticifolia (Benth.) Kuntze   7 ALAL3 Alyssum alysoides (L.) L.   8 AMUT Amelanchier utahensis Koehne   9 AQUIL Aquilegia L.   10 BASA3 Balsamorhiza sagittata (Pursh) Nutt.   11 BRIN2 Bromus inermis Leyss.   12 CAGE2 Carex geyeri Boott   13 CASTI2 Castilleja Mutis ex L f.   14 CHENO Chenopodium L.   15 CIAR4 Cirsium arvense (L.) Scop.   16 COUM Comandra umbellata (L.) Nutt.   17 CRAC2 Crepis acuminata Nutt.   18 ELCA4 Elymus Greene   20 ERUM Eriogonum umbellatum Torr.   21 FRAGA Fragaria L.   22 FRSP Frasera speciosa Douglas ex Griseb.   23 GABO2 Galium boreale L.   24 GEAMH Gertainum richardsoni Fisch. & Trauty.   # 4 * M Metadata 11 / 13 / 15 / 18 / 22 / Sheet3 / 20 / 14 //14 / 10 / 10 / 15 / 18 / 22 / Sheet3 / 20 / 14 //14 //15 / 18 / 22 / Sheet3 / 20 / 14 //14 //15 / 18 / 22 / Sheet3 / 20 / 14 //14 //15 / 18 / 22 / Sheet3 / 20 / 14 //14 //15 / 18 / 22 / Sheet3 / 20 //14 //14 //15 / 18 / 22 / Sheet3 / 20 //14 //14 //15 //18 / 22 / Sheet3 / 20 //14 //14 //15 //18 / 22 / Sheet3 / 20 //14 //14 //15 //18 / 22 //14 //14 //15 //18 / 22 //14 //15 //18 / 22 //14 //15 //18 / 22 //14 //14 //15 //18 / 22 //14 //14 //15 //18 / 22 //14 ///14 //15 //18 / 20 //14 //14 //15 //18 / 22 //14 ///14 //15 //18 / 22 //14 ///14 //15 //18 //18 //18 //18 //18 //18 //18	4	ACMI2	Achillea millefolium L.							
6       AGUR       Agastache urticifolia (Benth.) Kuntze         7       ALAL3       Alyssum alyssoides (L.) L.         8       AMUT       Amelanchier utahensis Koehne         9       AQUIL       Aquilegia L.         10       BASA3       Balsamorhiza sagittata (Pursh) Nutt.         11       BRIN2       Bromus inermis Leyss.         12       CAGE2       Carex geyeri Boott         13       CASTI2       Castilleja Mutis ex L. f.         14       CHENO       Chenopodium L.         15       CIAR4       Cirsium arvense (L.) Scop.         16       COUM       Comandra umbellata (L) Nutt.         17       CRAc2       Crepis acuminata Nutt.         18       ELCA4       Elymus canadensis L.         19       EREX4       Erigeron eximius Greene         20       ERUM       Eriogonum umbellatum Torr.         21       FRAGA       Fragaria L.         25       GABO2       Galium boreale L.         26       GEAIMH       Gerainalla amarella (L.) Böerner ssp. heterosepala (Engelm.) J.M. Gillett         25       GERI       Gerainum richardsonii Fisch. & Trauty.         *       *       *         *       *       *	5	ACNE2	Acer negundo L.							
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8 AMUT Amelanchier utahensis Koehne   9 AQUIL Aquilegia L.   10 BASA3 Balsamorhiza sagittata (Pursh) Nutt.   11 BRIN2   12 CAGE2   Carex geyeri Boott 1   13 CASTI2   Castilleja Mutis ex L. f.   14 CHENO   Chenopodium L.   15 CIAR4   Cirsum arvense (L.) Scop.   16 COUM   17 CRAC2   Crepis acuminata Nutt.   18 ELCA4   Elymus canadensis L.   19 EREX4   Erigeron eximius Greene   20 ERUM   Eriogonum umbellatum Torr.   21 FRAGA   Fragaria L.   25 Frasera speciosa Douglas ex Griseb.   26 Gallum boreale L.   26 GABO2   Gallum boreale L.   24 GERMH   Geranium richardsonii Fisch. & Trautv.   K 4 + Metadata   11   21   FReady	7	ALAL3	Alyssum alyssoides (L.) L.							
9 AQUIL Aquilegia L.   10 BASA3 Balsamorhiza sagittata (Pursh) Nutt.   11 BRIN2   Bromus inermis Leyss.   12 CAGE2   Carex geyeri Boott   13 CASTI2   Castilleja Mutis ex L. f.   14 CHENO   Chenopodium L.   15 CIAR4   Cirsium arvense (L.) Scop.   16 COUM   Comandra umbellata (L.) Nutt.   17 CRAC2   Crepis acuminata Nutt.   18 ELCA4   Elymus canadensis L.   19 EREX4   Erigeron eximius Greene   20 ERUM   21 FRAGA   Frageria L.   22 FRSP   Frasera speciosa Douglas ex Griseb.   23 GABO2   Galium boreale L.   24 GEAMH   Genanium richardsonii Fisch. & Trautv.   Ready	8	AMUT	Amelanchier utahensis Koehne							
10 BASA3 Balsamorhiza sagittata (Pursh) Nutt.   11 BRIN2 Bromus inermis Leyss.   12 CAGE2 Carex geyeri Boott   13 CASTI2 Castilleja Mutis ex L.f.   14 CHENO Chenopodium L.   15 CIAR4 Cirsium arvense (L.) Scop.   16 COUM Comandra umbellata (L.) Nutt.   17 CRAC2 Crepis acuminata Nutt.   18 ELCA4 Elymus canadensis L.   19 EREX4 Erigeron eximius Greene   20 ERUM Eriogonum umbellatum Torr.   21 FRAGA Fragaria L.   22 FRSP Frasera speciosa Douglas ex Griseb.   23 GABO2 Galium boreale L.   24 GEAMH Gentianella amarella (L.) Böerner ssp. heterosepala (Engelm.) J.M. Gillett   25 GER1 Geranium richardsonii Fisch. & Trautv.	9	AQUIL	Aquilegia L.							
11 BRIN2 Bromus inermis Leyss.   12 CAGE2 Carex geyeri Boott   13 CASTI2 Castilleja Mutis ex L f.   14 CHENO Chenopodium L.   15 CIAR4 Cirsium arvense (L.) Scop.   16 COUM Comandra umbellata (L) Nutt.   17 CRAC2 Crepis acuminata Nutt.   18 ELCA4 Elymus canadensis L.   19 EREX4 Erigeron eximius Greene   20 ERUM Eriogonum umbellatum Torr.   21 FRAGA Fragaria L.   22 FRSP Frasera speciosa Douglas ex Griseb.   23 GABO2 Galium boreale L.   24 GEAMH Gentianella amarella (L) Böerner ssp. heterosepala (Engelm.) J.M. Gillett   25 GER1 Geranium richardsonii Fisch. & Trautv.	10	BASA3	Balsamorhiza sagittata (Pursh) Nutt.							
12       CAGE2       Carex geyeri Boott         13       CASTI2       Castilleja Mutis ex L f.         14       CHENO       Chenopodium L.         15       CIAR4       Cirsium arvense (L.) Scop.         16       COUM       Comandra umbellata (L.) Nutt.         17       CRAC2       Crepis acuminata Nutt.         18       ELCA4       Elymus canadensis L.         19       EREX4       Erigeron eximius Greene         20       ERUM       Eriogonum umbellatum Torr.         21       FRAGA       Fragaria L.         22       FRSP       Frasera speciosa Douglas ex Griseb.         23       GABO2       Galium boreale L.         24       GEAMH       Gentianella amarella (L.) Böerner ssp. heterosepala (Engelm.) J.M. Gillett         25       GERI       Geranium richardsonii Fisch. & Trautv.         #       +       Metadata       11 / 13 / 15 / 18 / 22 / Sheet3 / 2	11	BRIN2	Bromus inermis Leyss.							
13       CASTI2       Castilleja Mutis ex L f.         14       CHENO       Chenopodium L.         15       CIAR4       Cirsium arvense (L.) Scop.         16       COUM       Comandra umbellata (L.) Nutt.         17       CRAC2       Crepis acuminata Nutt.         18       ELCA4       Elymus canadensis L.         19       EREX4       Erigeron eximius Greene         20       ERUM       Eriogonum umbellatum Torr.         21       FRAGA       Fragaria L.         22       FRSP       Frasera speciosa Douglas ex Griseb.         23       GABO2       Galium boreale L.         24       GEAMH       Gentianella amarella (L.) Böerner ssp. heterosepala (Engelm.) J.M. Gillett         25       GERI       Geranium richardsonii Fisch. & Trautv.         # 4 + bl       Metadata       11 / 13 / 15 / 18 / 22 / Sheet3 / 2	12	CAGE2	Carex geyeri Boott							- 11
14 CHENO       Chenopodium L.         15 CIAR4       Cirsium arvense (L.) Scop.         16 COUM       Comandra umbellata (L.) Nutt.         17 CRAC2       Crepis acuminata Nutt.         18 ELCA4       Elymus canadensis L.         19 EREX4       Erigeron eximius Greene         20 ERUM       Eriogonum umbellatum Torr.         21 FRAGA       Fragaria L.         22 FRSP       Frasera speciosa Douglas ex Griseb.         23 GABO2       Galium boreale L.         24 GEAMH       Gentianella amarella (L.) Böerner ssp. heterosepala (Engelm.) J.M. Gillett         25 GERI       Geranium richardsonii Fisch. & Trautv.         If 4 + H       Metadata         11 / 13 / 15 / 18 / 22 / Sheet3 / 2	13	CASTI2	Castilleja Mutis ex L. f.							- 11
15       CIAR4       Cirsium arvense (L.) Scop.         16       COUM       Comandra umbellata (L.) Nutt.         17       CRAC2       Crepis acuminata Nutt.         18       ELCA4       Elymus canadensis L.         19       EREX4       Erigeron eximius Greene         20       ERUM       Eriogonum umbellatum Torr.         21       FRAGA       Fragaria L.         22       FRSP       Frasera speciosa Douglas ex Griseb.         23       GABO2       Galium boreale L.         24       GEAMH       Gentianella amarella (L.) Böerner ssp. heterosepala (Engelm.) J.M. Gillett         25       GERI       Geranium richardsonii Fisch. & Trautv.         #       +       Metadata       11         11       13       15       18	14	CHENO	Chenopodium L.							- 11
16       COUM       Comandra umbellata (L) Nutt.         17       CRAC2       Crepis acuminata Nutt.         18       ELCA4       Elymus canadensis L.         19       EREX4       Erigeron eximius Greene         20       ERUM       Eriogonum umbellatum Torr.         21       FRAGA       Fragaria L.         22       FRSP       Frasera speciosa Douglas ex Griseb.         23       GABO2       Galium boreale L.         24       GEAMH       Gentianella amarella (L) Böerner ssp. heterosepala (Engelm.) J.M. Gillett         25       GERI       Geranium richardsonii Fisch. & Trautv.         # 4 + M       Metadata       11 / 13 / 15 / 18 / 22 / Sheet3 / 2	15	CIAR4	Cirsium arvense (L.) Scop.							- 11
17 CRAC2       Crepis acuminata Nutt.         18 ELCA4       Elymus canadensis L.         19 EREX4       Erigeron eximius Greene         20 ERUM       Eriogonum umbellatum Torr.         21 FRAGA       Fragaria L.         22 FRSP       Frasera speciosa Douglas ex Griseb.         23 GABO2       Galium boreale L.         24 GEAMH       Gentianella amarella (L.) Böerner ssp. heterosepala (Engelm.) J.M. Gillett         25 GERI       Geranium richardsonii Fisch. & Trautv.         # 4 + M       Metadata         11 / 13 / 15 / 18 / 22 / Sheet3       4	16	COUM	Comandra umbellata (L.) Nutt.							- 11
18       ELCA4       Elymus canadensis L.         19       EREX4       Erigeron eximius Greene         20       ERUM       Eriogonum umbellatum Torr.         21       FRAGA       Fragaria L.         22       FRSP       Frasera speciosa Douglas ex Griseb.         23       GABO2       Galium boreale L.         24       GEAMH       Gentianella amarella (L.) Böerner ssp. heterosepala (Engelm.) J.M. Gillett         25       GERI       Geranium richardsonii Fisch. & Trautv.         V       V       V	17	CRAC2	Crepis acuminata Nutt.							- 11
19       EREX4       Erigeron eximius Greene         20       ERUM       Eriogonum umbellatum Torr.         21       FRAGA       Fragaria L.         22       FRSP       Frasera speciosa Douglas ex Griseb.         23       GABO2       Galium boreale L.         24       GEAMH       Gentianella amarella (L). Böerner ssp. heterosepala (Engelm.) J.M. Gillett         25       GERI       Geranium richardsonii Fisch. & Trautv.         V       V       V         Ready       Image: Comparison of the compari	18	ELCA4	Elymus canadensis L.							- 11
20       ERUM       Eriogonum umbellatum Torr.         21       FRAGA       Fragaria L.         22       FRSP       Frasera speciosa Douglas ex Griseb.         23       GABO2       Galium boreale L.         24       GEAMH       Gentianella amarella (L.) Böerner ssp. heterosepala (Engelm.) J.M. Gillett         25       GERI       Geranium richardsonii Fisch. & Trautv.         V → Metadata       11 / 13 / 15 / 18 / 22 / Sheet3 / ?       V         Ready       Image: Construct the second seco	19	EREX4	Erigeron eximius Greene							- 11
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22       FRSP       Frasera speciosa Douglas ex Griseb.         23       GABO2       Galium boreale L.         24       GEAMH       Gentianella amarella (L) Böerner ssp. heterosepala (Engelm.) J.M. Gillett         25       GERI       Geranium richardsonii Fisch. & Trautv.         If I > 1       13       15       18       22       Sheet3       Image: Sheet3	21	FRAGA	Fragaria L.							- 11
23       GABO2       Galium boreale L.         24       GEAMH       Gentianella amarella (L.) Böerner ssp. heterosepala (Engelm.) J.M. Gillett         25       GERI       Geranium richardsonii Fisch. & Trautv.         If I >>       Metadata       11 / 13 / 15 / 18 / 22 / Sheet3 / ?         Ready       Image: Comparison of the state	22	FRSP	Frasera speciosa Douglas ex Griseb.							
24       Gentianella amarella (L) Boerner ssp. heterosepala (Engelm.) J.M. Gillett         25       GERI         Geranium richardsonii Fisch. & Trautv.         If I >>         Ready	23	GABO2	Galium boreale L.							- 11
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## Step 8: Size of intercanopy gaps

The size of intercanopy gaps can be generated from the Gap Intercept Method Report.

Start Date:       Peret         Jan       1       2016         Jan       1       2016         End Date:       Peret         Dec       5       2016         Method Tracking       Plant Density       -         Select Sites/Plots/Lines       Qualifying Data       Select Report         Select Sites/Plots/Lines       Output Format       Go         Deport       Output Format       Go         Select Sites Gap Probability Distribution       Delimited Text       Select	1		Select Method	)ate Range	-Select Da	Report Manager
Comprehensive Report       Output Format         Gap Intercept Summary       Delimited Text         Scaled Gap Probability Distribution       Excel	Close	<b>.</b>	Canopy Gap with Species Combined LPI/Gap Continuous Line Intercept Dry Weight Gao Intercept	ate: Reset	Start Dat	Report Level: Selected Plot(s)
Select Sites/Plots/Lines Qualifying Data Select Report	Help		Line-Point Intercept Medium & High Intensity Ecol. Inv. Method Tracking Plant Density	v 5 v 2016 v		
			Go	Output Format Excel Delimited Text Excel	y Distribution	Report Comprehensive Report Gap Intercept Summary All Detail Data Scaled Gap Probability I
Processing complete					le	Processing complet

Step 8.1 Select the Comprehensive Report and click "Go..."

Step 8.2 Set gap category thresholds. Conventional categories are 25-50, 51-100, 101-200, >200 and will be used if no other values are provided. After you add your thresholds, click "Proceed with Report".

You may sp the % cove	ecify up to five thresholds, for accumulating r of gaps for each category.
Th	reshold 1: 25
Th	reshold 2: 50
Th	ireshold 3: 100
Th	reshold 4:  200

You will get a message saying "Report will now be displayed" and then click "OK"



# Example Canopy Gap Report

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2			25-50	<u>51-100</u>	<u>101-200</u>	>200		25-50	<u>51-100</u>	<u>101-200</u>	>200	
3 Brushy Loam	11	Sum (cm)	64.7	0	0	0	Sum (cm)	0	0	0	0	
4 Brushy Loam	11	Percent of Line	1.3	0	0	0	Percent of Line	0	0	0	0	=
5 Brushy Loam	13	Sum (cm)	63.5	56.5	0	0	Sum (cm)	0	0	0	0	
6 Brushy Loam	13	Percent of Line	1.3	1.1	0	0	Percent of Line	0	0	0	0	
7 Brushy Loam	15	Sum (cm)	248.7	354.3	414	234	Sum (cm)	0	0	0	0	
8 Brushy Loam	15	Percent of Line	5	7.1	8.3	4.7	Percent of Line	0	0	0	0	
9 Brushy Loam	18	Sum (cm)	22	0	0	0	Sum (cm)	0	0	0	0	
10 Brushy Loam	18	Percent of Line	0.4	0	0	0	Percent of Line	0	0	0	0	
11 Brushy Loam	22	Sum (cm)	284	219	56	0	Sum (cm)	0	0	0	0	
12 Brushy Loam	22	Percent of Line	5.7	4.4	1.1	0	Percent of Line	0	0	0	0	
13 I	Summary Data by Plot	% Cover by Gap Th	nresholds	Summar	y Data by Li	ne 🖉 Shi	4					▼ ▶ [
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#### **Step 9: Vegetation Height**

Step 9.1 Select the "Line-Point Intercept" Method and the "Average Heights and Shrub Shape" Excel Report and then click "Go..."

eport Manager	Select Date Range	Select Method	_1
Report Level: Selected Site(s)	Start Date: Reset Jan v 1 v 2003 v End Date: Reset Sep v 10 v 2013 v	Canopy Gap with Species Combined LPI/Gap Continuous Line Intercept Dry Weight Gap Intercept Line-Point Intercept Medium & High Intensity Ecol. Inv. Method Tracking Plant Density	Close Help
Coloct Citos/Diots/Linos	Qualifying Data Select F	Report	
Select Sites/Plots/Lilles			
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Comprehensive Report	Excel		
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You will get a message saying "Report will now be displayed" and then click "OK"

Example Height Report—you need to scroll to the right to see the Woody/Herbaceous height data

*Note:In 2011 the woody/herbaceous height fields did not exist in DIMA. Convention was to record woody height in the "Top Layer" and Herbaceous Height in the "1<sup>st</sup> Lower Layer".* 

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3	Brushy Loam	13	71.450	0.212	67.700	2.404	0.	.000	0.00	0.000	
4	Brushy Loam	15	53.000	4.331	37.600	8.942	0.	.000	0.00	0.000	
5	Brushy Loam	18	279.700	120.632	42.789	5.672	0.	.000	0.00	0.000	
6	Brushy Loam	22	53.800	29.274	56.800	7.920	0.	.000	0.00	0.000	
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## Step 10: Soil Stability Report

Step 10.1 Select the Soil Stability Method and the "All Details Data Report" and add a destination folder.

Report Manager			
Report Manager Report Level: Selected Plot(s)	Select Date Range Start Date: Reset Jan v 1 v 2003 v End Date: Reset Sep v 10 v 2013 v	Select Method Method Tracking Plant Density Plant Production Plot Definition Rangeland Health Qual Asses. Soil Compaction Soil Stability Species Reports Species Richness	Close
Select Sites/Plots/Lines	Qualifying Data Select Rep Output Format Delimited Text	Go Go Go Change	

Step 10.2 Select "Go". A delimited text file will open. There are several ways to convert a delimited text file into an Excel document. The simplest is to open the file from Excel and use steps 10.6 onward described below. An alternative method starts at 10.3.



Step 10.3 Select all of the content in the text file

Step 10.4 Open an Excel workbook and copy the text into the Excel file

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3	Deep (	Cut;"De	ep Cut	5";"8/9/2	013";	"1";"1";"	16";"N	IC";"0:15";"5	:15";"Surf	ace";"3";"F	alse";			=
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8	Deep (	Cut;"De	ep Cut	5";"8/9/2	013";	"1";"2";"	8";"NC	C";"1:30";"6:3	80";"Surfa	ce";"6";"Fa	lse";			
9	Deep (	Cut;"De	ep Cut	5";"8/9/2	013";	"1";"2";"	16";"N	IC";"1:45";"6	:45";"Surf	ace";"3";"F	alse";			
10	Deep (	Cut;"De	ep Cut	5";"8/9/2	013";	"1";"2";"	24";"G	i";"2:00";"7:0	0";"Surfa	ce";"4";"Fal	lse";			
11	Deep (	Cut;"De	ep Cut	5";"8/9/2	013";	"1";"2";"	32";"G	i";"2:15";"7:1	.5";"Surfa	ce";"2";"Fal	lse";			
12	Deep (	Cut;"De	ep Cut	5";"8/9/2	013";	"1";"2";"	40";"N	IC";"2:30";"7	:30";"Surf	ace";"4";"F	alse";			
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14	Deep (	Cut;"De	ep Cut	5";"8/9/2	013";	"1";"3";"	8";"NC	c";"3:00";"8:0	0";"Surfa	ce";"3";"Fa	lse";			
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Step 10.5: Currently the information for each line is housed in a single cell. Select the Data tab, the first column of data and then the "Text to Columns" button.

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4	Deep	Cut;	"Deep Cut 5";"8/9/	2013";	"1";"1";"24	4";"@	G";"0:30";"5:3	0";"Surfac	e";"4";"Fals	se";		
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13	Deep	Cut;	"Deep Cut 5";"8/9/	2013";	"1";"2";"4	8";"S	sh";"2:45";"7:4	45";"Surfa	ce";"2";"Fa	lse";		
14	Deep	Cut;	"Deep Cut 5";"8/9/	2013";	"1";"3";"8	';"N(	C";"3:00";"8:0	0";"Surfac	e";"3";"Fal	se";		
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Step 10.6 When the Convert Text to Column Wizard Pops up, select next:

Convert Text to Columns Wizard - Step 1 of 3	
The Text Wizard has determined that your data is Delimited.	
If this is correct, choose Next, or choose the data type that best describes your data.	
Original data type	
Choose the file type that best describes your data:	
Preview of selected data:	
1 Site;"Plot";""Date";"Box #";"Line";"Pos";"Veg";"In";"Dip";"Type	
2 Deep Cut; "Deep Cut 5"; "8/9/2013"; "1"; "1"; "8"; "G"; "0:00"; "5:00";	
A Deep Cut; "Deep Cut 5"; "8/9/2013"; "1"; "1"; "16"; "NC"; "0:15"; "5:15	
5 Deep Cut; "Deep Cut 5"; "8/9/2013"; "1"; "1"; "32"; "NC"; "0:45"; "5:45	
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Step 10.7 Check the "Semicolon box" under Delimiters and click "Finish"

Convert 1	Text to	o Colu	mns	Wiz	ard - Step 2	2 of 3						?	x
This screen lets you set the delimiters your data contains. You can see how your text is affected in the preview below.													
Delimite	rs												
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Step 10.8 The soil stability values will now be summarized per line for each plot

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7	Deep Cut	Deep Cut	8/9/2013	1	1	48	NC	1:15	6:15	Surface	3	FALSE	
8	Deep Cut	Deep Cut	8/9/2013	1	2	8	NC	1:30	6:30	Surface	6	FALSE	
9	Deep Cut	Deep Cut	8/9/2013	1	2	16	NC	1:45	6:45	Surface	3	FALSE	
10	Deep Cut	Deep Cut	8/9/2013	1	2	24	G	2:00	7:00	Surface	4	FALSE	
11	Deep Cut	Deep Cut	8/9/2013	1	2	32	G	2:15	7:15	Surface	2	FALSE	
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Note, if you would like to join all of the indicators together in a single table, generate the Plot Definition report. Make sure all of the data tables you are joining are summarized by the same unit (site, plot, or line). Import all of the tables into a database in Access or ArcGIS. Use the Plot ID as the "Join" link. If you have duplicate plot numbers, concatenate the site and plot IDs to create a unique ID value. This process will be described in further detail in a separate document.

Your organization may have completed this step for you (e.g., BLM's TerrADat), so be sure to ask before completing these steps.

# **Contacts**

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