

White River Field Office Data Management System (WRDMS) Operator Manual



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How to Log Into the System

Locate the White River Data Management System (WRDMS) Site

Go to: <https://my.usgs.gov/wrfo>

Login using your username and password

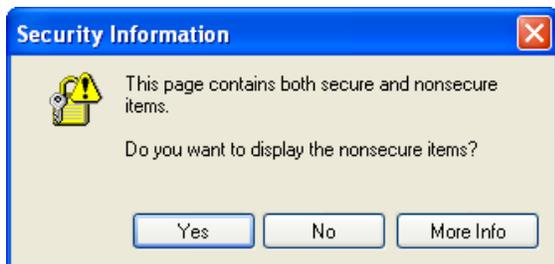
Change or Forgot Your Password

Please contact Ryan Snyder at rsnyder@blm.gov or Haylee Schweizer at schweizerh@usgs.gov .

NOTE: USGS utilizes my.usgs.gov for centralized user management for all applications hosted on the USGS site. Therefore, usernames and passwords are managed by the USGS User Profile store at <https://my.usgs.gov>. As a result, users are forwarded to this system to enter their authentication credentials. The myUSGS site has a team who helps with password resets and access questions. The WRDMS Application allows myUSGS to determine if a user is authorized and authenticated and does not store any user profile information.

Disable the Security Information Pop-Up

If you receive the following alert while using the application (only seen in Internet Explore), select **Yes**.



Introduction

WRDMS is an application used by the White River Field Office and energy companies to track and document disturbance and reclamation activities associated with oil and gas operations in the Mesa Verde Play area by utilizing buffering and the threshold concept. Operators have the ability to look at all data entered into the application but are only allowed to edit their own data. Agency managers have the ability to view as well as edit all data. The application allows querying of the data entered to provide useful information to all users.

When fully deployed, WRDMS information will be visible to the public through the web interface.

WRDMS Entry Page

Start: Entry Page (<http://my.usgs.gov/wrfo>)

When a WRDMS user logs into WRDMS, the first page displayed is the **Entry Page**. This is the page users will employ to navigate to the individual operator pages and reporting component.

The screenshot shows the WRDMS Entry Page with several key components:

- 3**: Refresh Map button
- 4**: Lease Holder/Operator Unit list with a search field
- 5**: Mesa Verde Status Summary table
- 6**: Reclamation Status Summary table
- 1**: Well Pad Operators list with a search field

Mesa Verde Status Summary:

Status	# Pads	Unreclaimed Acres
Planned Unapproved	15	89.75
Planned Approved	5	8.95
Construction	15	486.36
Drilling	4	23.25
Completion	4	7.70
Production	13	50.41
Abandoned	3	7.80

Reclamation Status Summary:

Reclamation	# Pads	Initiated Acres	# Pads	Acres Meeting Stds/Approved
Phase II	7	15.25	3	4.28
Final Abandonment	1	0	2	5.33

Lease Holder/Operator Unit:

- EXXON MOBIL CORP
- ANNE W PHILLIPS TR
- ENCANA OIL & GAS (USA) INC
- WILLIAMS PRODUCTION RMT CO
- BAI CROWN OIL

Leaseholder/Unit Operator Search: Find

Well Pad Operators:

- Exxon/ATO
- WR Delux Drilling
- Sonterra Energy LLC
- Williams/WPX
- Encana Ltd

Operator Search: Find

Figure 1: WRDMS Entry Page

Operators Section (1)

Start: Entry Page (<http://my.usgs.gov/wrfo>)

Because WRDMS has numerous operators, the **Operators** section provides a list of the 5 most used operators while allowing the ability to search for all operators in the application. Each name in the list is a link, and when selected, will navigate to that particular operator's page. This is the link used when an operator would like to add / edit data.

If the operator name doesn't appear in the operator list then a user can type the name of the operator into the **Find** box to select the correct operator and navigate to the operator page.

E.g. If an Exxon / XTO user logs in and select "Exxon/XTO" from the operator list, this user will be able to edit data. IF an Exxon/XTO user logs in and selects "WR Delux Drilling" from the operator list, this user will only be able to view WR Delux Drilling's data.

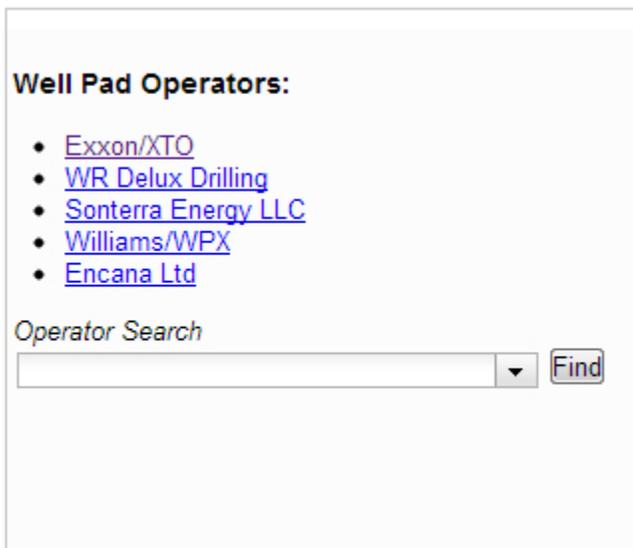


Figure 2: Operators Section

Reports, Downloads, & Interactive Maps Section (2)

Start: Entry Page (<http://my.usgs.gov/wrfo>)

Frequently Used Reports

The reports component is comprised of “canned” and ad hoc reports.

Canned Reports

A “canned” report is a report that has the criteria preselected so when the link is selected, the report runs automatically with minimal additional information required.

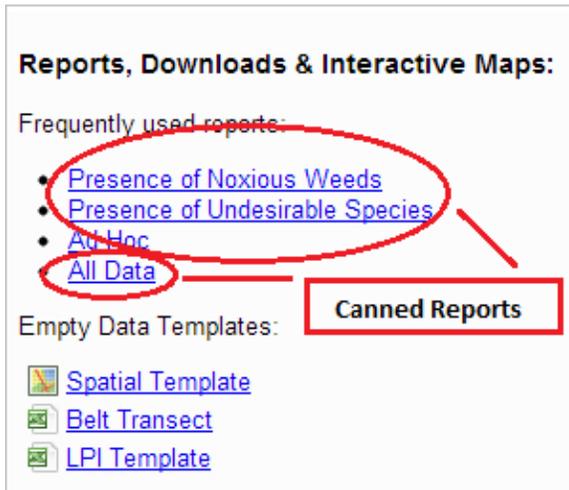


Figure 3: Canned Reports available in WRDMS

Presence of Noxious Weeds: Displays the type of noxious weeds present per location.

1. Select the **Presence of Noxious Weeds** link from the **Frequently Used Reports** section

The screenshot shows the following interface elements:

- Navigation bar: Home, Reporting, Modify Search, Map Report
- Search bar: Search Locations
- Section title: **Presence of Noxious Weeds**
- Table:

Operator	Name	Type	Weeds Present
Anschutz	BLM Ref. Point	Reference Point	Hyoscyamus niger L. (black henbane - HYNI) Lythrum salicaria L. (purple loosestrife - LYSA2)
SWEPI LP	ANT 2-6	Well Pad	Bromus tectorum L. (cheatgrass - BRTE) Cardaria draba (L.) Desv. (whitetop - CADR) Cardaria Desv. (whitetop - CARDA2)
2 Operator(s)		2 Locations	

Figure 4: Presence of Noxious Weeds Report

Presence of Undesirable Species: Displays the type of undesirable species present per location

1. Select the **Presence of Undesirable Species** link from the **Frequently Used Reports** section

Operator	Name	Type	Weeds Present
Anschutz	BLM Ref. Point	Reference Point	Hyoscyamus niger L. (black henbane - HYNI) Lythrum salicaria L. (purple loosestrife - LYSA2)
SWEPI LP	ANT 2-6	Well Pad	Bromus tectorum L. (cheatgrass - BRTE) Cardaria draba (L.) Desv. (whitotop - CADR) Cardaria Desv. (whitotop - CARD2)

2 Operator(s) 2 Locations

Figure 5: Presence of Undesirable Species Report

All Data Report: Displays all of the operators and the data they've entered

1. Select the **All Data** link from the **Frequently Used Reports** section

Operator	Name	Type	Dist Acres	Recl Acres	Last Seeding	Seed Mix	Last Spatial	Last Qualitative	Last Frequency	Last Intercept	Status
Anschutz	ARK	Road									Reclamation Not Started
Anschutz	BLM Ref. Point	Reference Point									
Anschutz	BLM Ref. Point	Reference Point									
Anschutz	BLM Ref. Point	Reference Point						07/23/2010			
Anschutz	Ref Point 1	Reference Point									
Anschutz	Ref Point 2	Reference Point									
Anschutz	Second Pad	Well Pad						07/23/2010			Interim Reclamation Full Development
Anschutz	Test Pad	Well Pad	15.73		04/01/2011	Cover Crops	07/02/2010	04/27/2011			Interim Reclamation Initiated
Anschutz	Test Pad X1	Pipeline									Reclamation Not Started
QEP Energy Company	Testing Pad	Reference Point									
QEP Energy Company	Testing Pad	Reference Point									
SWEPI LP	ANT 2-6	Well Pad	0.00	0.00	04/10/2011	Cover Crops	08/05/2011	05/20/2011			Interim Reclamation Initiated
SWEPI LP	Rb 7-31	Well Pad	8.52				07/01/2011				Final Reclamation Achieved
3 Operator(s)	13 Locations		24.25	0.00			3 w/ Reports	4 w/ Reports	0 w/ Reports	0 w/ Reports	2 Reclamation Not Started 1 Interim Reclamation Full Development 2 Interim Reclamation Initiated 1 Final Reclamation Achieved

Figure 6: All Data Report

Ad-Hoc Report

The Ad-Hoc report allows the user to select specific criteria to query in the application. Ad-Hoc reports provide much more criteria to select and query from as opposed to the canned reports.

1. Select the **Ad-Hoc** link from the **Frequently Used Reports** section

WRFO Reports

Text field to name report

Report Title: Enter text to display at top of report:

Scope: Operator: **All**
4-H PARTNERSHIP
AG ANDRIKOPOULOS RES
ALAMO CORPORATION
ALPINE OIL & GAS CORP

Location Type: **All**
Well Pad
Road
Pipeline
Other

Spatial Reports: Disturbance: **Either**
Has Disturbance
No Disturbance

Latest Report: than
09/05/2013

Min Disturbance: acres
Max Disturbance: acres
Min Reclamation: acres
Max Reclamation: acres

Reclamation: **Either**
Has Reclamation
No Reclamation

Status Reports: Status: **Drilling**
Completion
Production
Abandoned

Qualitative: **Either**
Has Qualitative
No Qualitative

Latest Qualitative: than
Older
Newer

Latest Intercept: than
09/05/2013

Intercept: **Either**
Has Intercept
No Intercept

Latest Seeding: than
09/05/2013

Select "Older" or "Newer" and enter a date to search for

Output Modes: Format: **Interactive Map**
Acrobat Reader (PDF)
Microsoft Excel (XLS)
ESRI Shapefile (ZIP)
Comma Separated Values File (CSV)

Sort by: **Operator Name, Location Name**
Ordered: **Ascending**

Weed Status: Select one or many: **Noxious**
Undesirable

Noxious or Undesirable Weed Species: Select one or many: **ACRE3 (Acroptilon repens - hardheads)**
ACROP (Acroptilon - hardheads)
AECY (Aegilops cylindrica - jointed goatgrass)
AGCR (Agropyron aristatum - crested wheatgrass)

Seeding Method: Select one or many: **Broadcast**
Drill
Other

Figure 7: Ad-Hoc criteria selection page

- Select specific criteria to refine the report results.

- Report Title:** Use this field to name the report
- Scope:** Select a specific operator and / or location type
- Spatial Reports:** Search for locations with specific spatial data
E.g. Search for locations only having disturbance with no reclamation
- Status Reports:** Search for locations with specific status report data
E.g. Search for locations with a specific status or has no qualitative data
- Output Modes:** Choose the output of the report; default is On-screen list (HTML)
 Reports can also be sorted by using the **Sort by** and **Ordered** fields
- Weed Status** Select the type of weed querying, choices are **Noxious** and **Undesirable Weeds**
- Noxious or Undesirable Weed Species:** Selecting weeds in this field will display locations that have the Specified weed present
- Seeding Method:** Specify a specific seeding method

- Select the **Run Report** button to produce the report or select the **Reset Form** button to display the **Ad Hoc Report** selection page again.

Ad-Hoc Report for All Data

Operator	Name	Type	Dist Acres	Recl Acres	Last Seeding	Seed Mix	Last Spatial	Last Qualitative	Last Frequency	Last Intercept	Status
Anschutz	ARK	Road									🚫 Reclamation Not Started
Anschutz	BLM Ref. Point	Reference Point									
Anschutz	BLM Ref. Point	Reference Point									
Anschutz	BLM Ref. Point	Reference Point						07/23/2010			
Anschutz	Ref Point 1	Reference Point									
Anschutz	Ref Point 2	Reference Point									
Anschutz	Second Pad	Well Pad						07/23/2010			🚧 Interim Reclamation Full Development
Anschutz	Test Pad	Well Pad	15.73		04/01/2011	Cover Crops	07/02/2010	04/27/2011			🚧 Interim Reclamation Initiated
Anschutz	Test Pad X1	Pipeline									🚫 Reclamation Not Started
QEP Energy Company	Testing Pad	Reference Point									
QEP Energy Company	Testing Pad	Reference Point									
SWEPI LP	ANT 2-6	Well Pad	0.00	0.00	04/10/2011	Cover Crops	08/05/2011	05/20/2011			🚧 Interim Reclamation Initiated
SWEPI LP	Rb 7-31	Well Pad	8.52				07/01/2011				✅ Final Reclamation Achieved
3 Operator(s)	13 Locations		24.25	0.00			3 w/ Reports	4 w/ Reports	0 w/ Reports	0 w/ Reports	2 🚫 Reclamation Not Started 1 🚧 Interim Reclamation Full Development 2 🚧 Interim Reclamation Initiated 1 ✅ Final Reclamation Achieved

Figure 8: Ad-Hoc Report results

Report Main Menu

After a report runs, the main menu bar at the top of the page changes and allows the user more options.



Figure 9: Report Main Menu

The options available in the **Report Main Menu** are described below from left to right.

Home:	Directs the user back to the Entry Page
Reporting:	Directs the user to the Ad-Hoc selection page
Modify Search:	Directs the user to the Ad-Hoc selection page
Map Report:	Displays a map containing all the locations in the report's results list
Acrobat Reader (PDF):	Outputs the displayed report in PDF format
Microsoft Excel (XLS):	Outputs the displayed report in Excel format
ESRI Shapefile (SHP):	Zips all of the spatial data for all locations listed in the report's results list
Comma-Separated (CSV):	Outputs the displayed report in a comma-separated file

WRDMS Map (3)

Start: **Entry Page** (<http://my.usgs.gov/wrfo>)

The **WRDMS Map** displays the Mesa Verde Play boundary, disturbance and reclamation areas, and buffered areas around disturbances.

By default all the layers are turned off; checking the box to the left of the layer name will allow the layer to display in the map. The user can also select a specific location type along with the spatial layer. Once all criteria have been selected, click the **Refresh Map** button to display the new criteria.

For more information on the location types, the user can click the “click for definitions” link.

Location Type	Definition
Well Pad	Location of oil and gas well drilling and development where the surface is disturbed. Well pads are approximately 1 – 9 acres in size and may have one or multiple wells.
Pipeline	Buried and surface pipelines for oil and gas development and production can either be on or off-lease/unit to serve a particular location or as a gathering system.
Roads	Lease and/or access roads built or used for operations.
Facility	Ancillary equipment used to support oil and gas development such as gas plants, compressor stations, produced water and condensate tanks, tank battery storage, centralized production or collection facilities, centralized fracking, staging areas, water recycling facilities.
Powerlines	Power Transmission lines, both for the support of oil and gas facilities and larger scale lines.
Other	Electric compressors, pipeline cathodic protection, etc. for support of oil and gas facilities and operations.

Figure 10: Definitions of Location Types

The **Print Map** button captures the map with the selected criteria displayed and allows the user to print the map. On the print page, the map is displayed along with a map legend below it which indicates what criteria is displayed.

Map Controls:

- Zoom in/out by using the gray sliding bar in the upper left corner of the map
- Change the background by selection Map, Aerial, or Terrain from the upper right corner of the map
- Pan the area by clicking the left mouse button and dragging
- For additional information about a spatial feature, select a specific disturbance or reclamation area, or reference point by zooming in then clicking on the polygon. This will cause a pop-up box to appear with more information regarding the specific spatial feature.

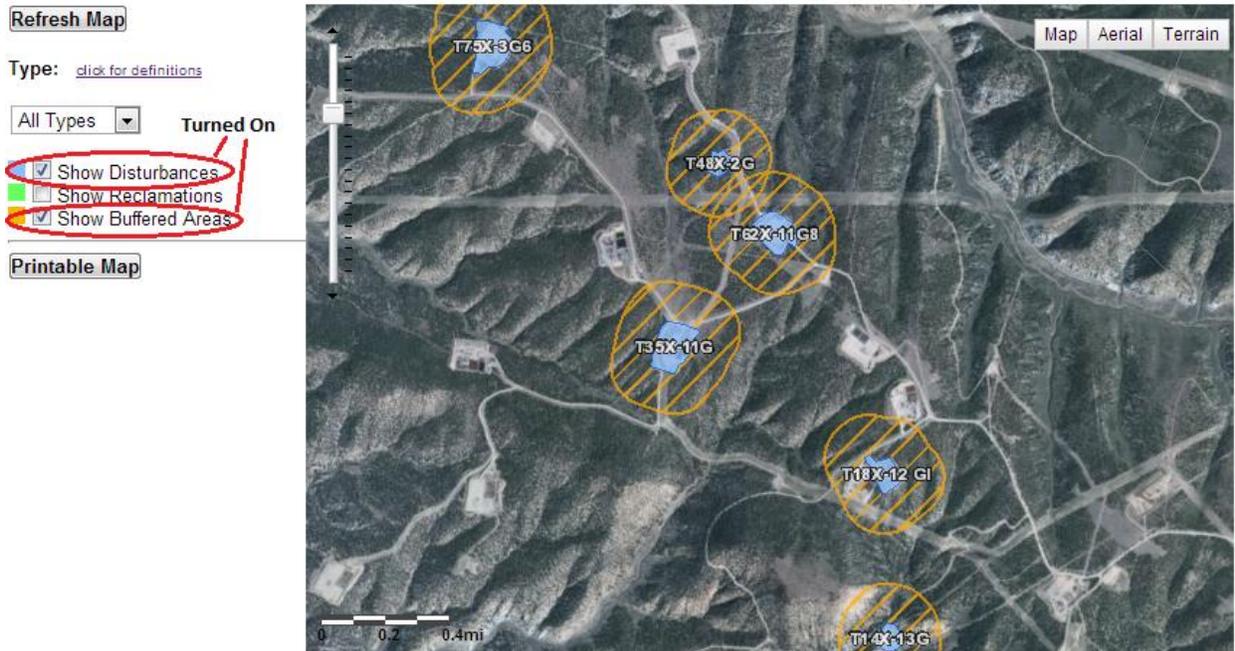


Figure 11: WRDMS map and layers

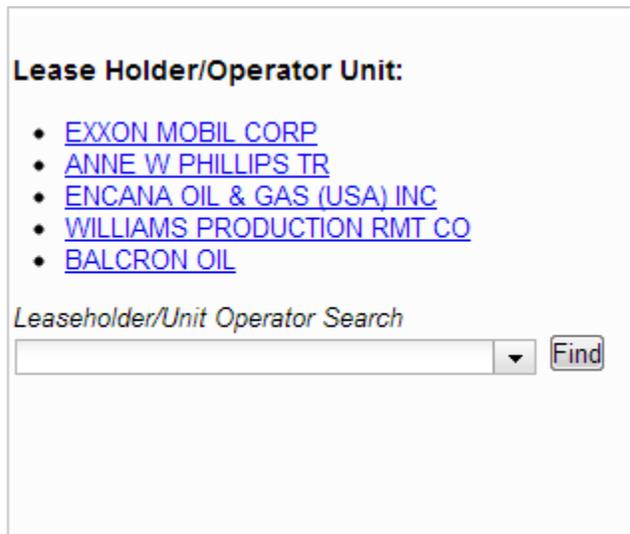
Lease Holder / Operator Unit (4)

Start: Entry Page (<http://my.usgs.gov/wrfo>)

Because WRDMS has numerous lease holders and operator units, the **Lease Holder/Operator Unit** section provides a list of the 5 most used lease holders/operator units while allowing the ability to search for all lease holders/operator units in the application. Each name in the list is a link, and when selected, will navigate to that particular lease holder's page.

If the lease holder name doesn't appear in the list then a user can type the name of the lease holder into the **Find** box to select the correct lease holder and navigate to the lease holder page.

E.g. If an EXXON MOBIL CORP user logs in and selects "EXXON MOBIL CORP" from the lease holder/operator unit list, this user will be able to edit data. If an EXXON MOBIL CORP user logs in and selects "ANNE W PHILLIPS TR" from the operator list, this user will only be able to view ANNE W PHILLIPS TR's data.



Lease Holder/Operator Unit:

- [EXXON MOBIL CORP](#)
- [ANNE W PHILLIPS TR](#)
- [ENCANA OIL & GAS \(USA\) INC](#)
- [WILLIAMS PRODUCTION RMT CO](#)
- [BALCRON OIL](#)

Leaseholder/Unit Operator Search

Figure 12: Lease Holder/Operator Unit selection

Mesa Verde Status Summary (5)

Start: Entry Page (<http://my.usgs.gov/wrfo>)

The **Mesa Verde Status Summary** chart shows a summary of all developments in the Mesa Verde Area. It displays the different statuses each oil and gas feature can be in, the number of features currently in that status, and the total number of unreclaimed acres occupied by those features. The user can hover over each one of the statuses to get the description of that status.

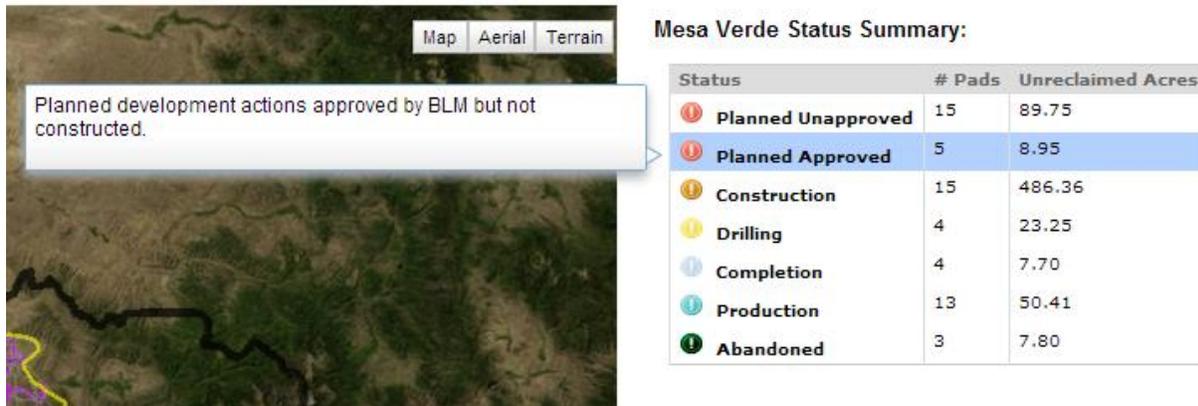


Figure 13: Mesa Verde Status Summary

Reclamation Status Summary (6)

The **Reclamation Status Summary** chart displays the statuses of reclamation, the number of features that have initiated that status, the total number of acres initiated in that status, the number of features meeting required standards in that status, and the total number of acres that have met the required standards for that reclamation status. The user can hover over each of the statuses to get its description.

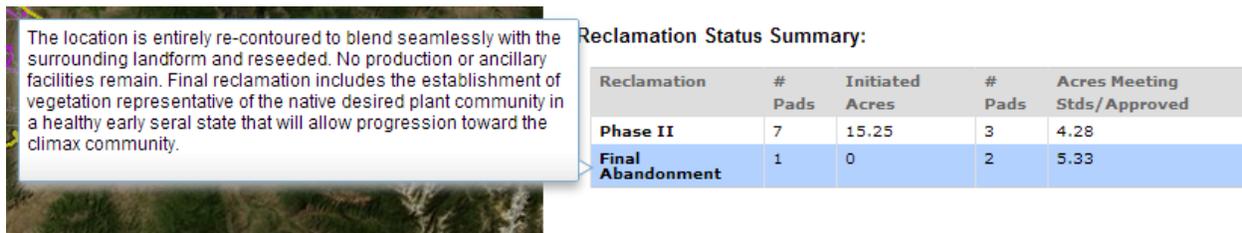


Figure 14: Reclamation Status Summary

Lease Holder / Operator Unit

Start: Entry Page (<http://my.usgs.gov/wrfo>) → Select a lease holder from the **Lease Holder / Operator Unit** list or search for a lease holder using the **Find** box to navigate to the **Lease / Unit Operator Summary Page**

The **Lease / Operator Summary Page** displays uploaded data specific to the lease holder selected from the **Lease Holder** section on the **Entry Page**. This page provides a detailed view of the lease holder's thresholds and status of uploaded locations.

Lease/Unit Operator Summary Page: EXXON MOBIL CORP

Map Controls:

Type: [click for definitions](#)

All Types ▾

Show Disturbances
 Show Reclamation Areas
 Show Buffer Areas

Downloads:

- [ESRI Shapefile \(.shp\)](#)
- [Microsoft Excel \(.xls\)](#)
- [Adobe Acrobat \(.pdf\)](#)

Lease/Unit Summary:

Status	# Pads	Unreclaimed Acres
Planned Unapproved	10	100.22
Planned Approved	0	0.00
Construction	4	104.00
Drilling	2	5.14
Completion	1	2.72
Production	2	7.83
Abandoned	0	0.00
Total	19	219.91

Reclamation Status Summary:

Reclamation	# Pads	Initiated Acres	# Pads	Acres Meeting Slides/Approved
Phase II	0	0	1	2.27
Final Abandonment	0	0	0	0

Threshold Tracking

Range and Status	Pads	Buffered Disturbance Acres	Total Range Acres	Max Threshold Acres	Threshold Used
Summer Range Acute	0	0.00	11,320.24	1,132.02	0%
Summer Range Collective	0	0.00	11,320.24	2,264.05	0%
Winter Range Acute	2	1164.75	70,867.67	7,086.77	16.44%
Winter Range Collective	2	1418.36	70,867.67	14,173.53	10.01%
Severe Winter Acute	5	1291.43	70,263.1	3,513.16	36.76%
Severe Winter Collective	6	1545.03	70,263.1	7,026.31	21.99%
Winter Concentration Areas Acute	0	0.00	0	0	0%
Winter Concentration Areas Collective	0	0.00	0	0	0%
Winter Conc./Severe Winter Acute	0	0.00	0	0	0%
Winter Conc./Severe Winter Collective	0	0.00	0	0	0%

Listing: All ▾

Name	Type	Range Type	Operator	Dist. Acres	Recl. Acres	Reclamation Approved	Last Seeding	Latest Belt Transect	Last Spatial	Last Qual.	Last Intercept	Status
pad101	Well Pad	Severe Winter Range	ALPINE OIL & GAS CORP	8.70	0.87	No			09/16/2012			Production
WILD HORSE 197-3A1	Well Pad	Severe Winter Range	Exxon/XTO	7.39	3.12	No			07/01/2012			Drilling
WILD HORSE 999-9A9	Well Pad	Severe Winter Range	Exxon/XTO	2.72		No			05/01/2012			Completion
pad101-Road	Road	Severe Winter Range	RISP INC	4.98		No			06/16/2012			Production
pad102	Well Pad	Severe Winter Range	RISP INC	8.44		No			09/16/2012			Construction
pad102-Road	Road	Severe Winter Range	RISP INC	3.81		No			06/16/2012			Construction
pad103	Well Pad	Severe Winter Range	RISP INC	2.27	2.27	No			09/16/2012			Production
pad103-Road	Road	Winter Range	RISP INC	2.25		No			06/16/2012			Production
pad104	Well Pad	Severe Winter Range	RISP INC	2.00	1.14	No			09/16/2012			Drilling
pad105	Well Pad	Severe Winter Range	RISP INC	8.89		No			09/16/2012			Planned

Figure 15: Lease/Operator Summary Page

Lease Holder / Operator Unit Map & Downloads (1)

The **Lease / Operator Map** functions the same as the map found on the **Entry Page**; however, the spatial data displayed on the **Lease / Operator Map** is specific to the lease holder chosen from the **Lease Holder / Operator Unit** section on the **Entry Page**.

For more information on the location types, the user can select the “click for definitions” link.

The **Downloads** section contains data downloads or information specific to the selected lease holder.

Lease/Unit Operator Summary Page: EXXON MOBIL CORP



Figure 16: Lease Holder Map with buffers, disturbance and reclamation layers turned on

Lease / Unit Summary Section (2)

The **Lease / Unit Summary** section exhibits a chart that quantifies the number of locations that have a specific status (e.g. Production) and cumulatively the amount of unreclaimed acres of those statuses.

For more information on each status, hovering over a status will display a pop-up box with a status definition.

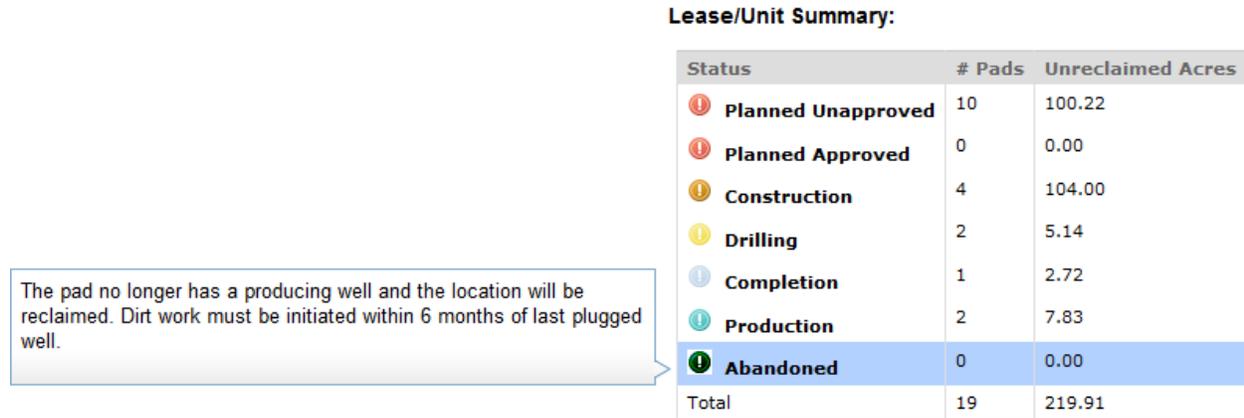


Figure 17: Lease/Unit Summary displaying 'Abandoned' status description

Reclamation Status Summary (3)

The **Reclamation Status Summary** chart displays only the lease holder's statuses of reclamation, the number of features that have initiated that status, the total number of acres initiated in that status, the number of features meeting required standards in that status, and the total number of acres that have met the required standards for that reclamation status. The user can hover over each of the statuses to get its description.

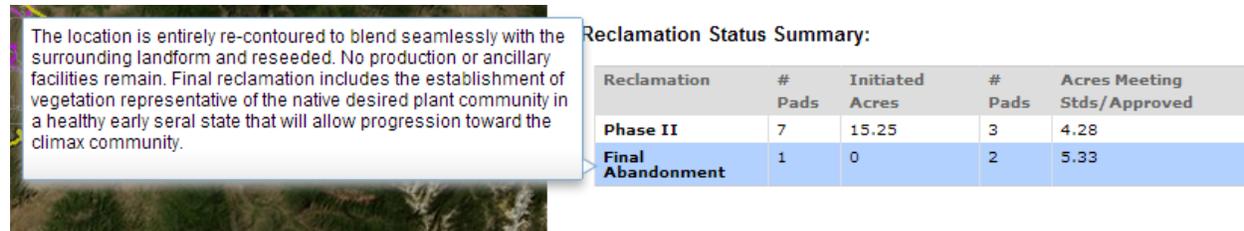


Figure 18: Reclamation Status Summary for Lease Holder

Threshold Tracking (4)

The WRDMS application utilizes the threshold and buffering concept to encourage operators to cluster drill as well as move the well to the production status quickly.

Threshold Tracking

Range and Status	Pads	Disturbance Acres	Total Range Acres	Max Threshold Acres	Percent of the Threshold Used	Percent of Range Used
Summer Range Acute	0	0.00	110,975.74	27,743.93	0%	0%
Summer Range Collective	0	0.00	110,975.74	27,743.93	0%	0%
Winter Range Acute	0	0.00	180,796.21	45,199.05	0%	0%
Winter Range Collective	0	0.00	180,796.21	45,199.05	0%	0%
Severe Winter Acute	0	0.00	31,444.47	7,861.12	0%	0%
Severe Winter Collective	0	0.00	31,444.47	7,861.12	0%	0%
Winter Concentration Areas Acute	0	0.00	17,771.94	4,442.98	0%	0%
Winter Concentration Areas Collective	0	0.00	17,771.94	4,442.98	0%	0%
Winter Severe/Concentration Acute	0	0.00	1,143.63	114.36	0%	0%
Winter Severe/Concentration Collective	0	0.00	1,143.63	228.73	0%	0%

Figure 19: Threshold Summary table

Buffering of Disturbance Polygons

When a disturbance polygon is uploaded into the application, a “buffer” polygon is created. This buffer is 200 meters extending from the perimeter of the disturbance polygon. This 200 meter buffer is calculated for each disturbance polygon, regardless of disturbance type (well pad, facility, pipeline, etc.)

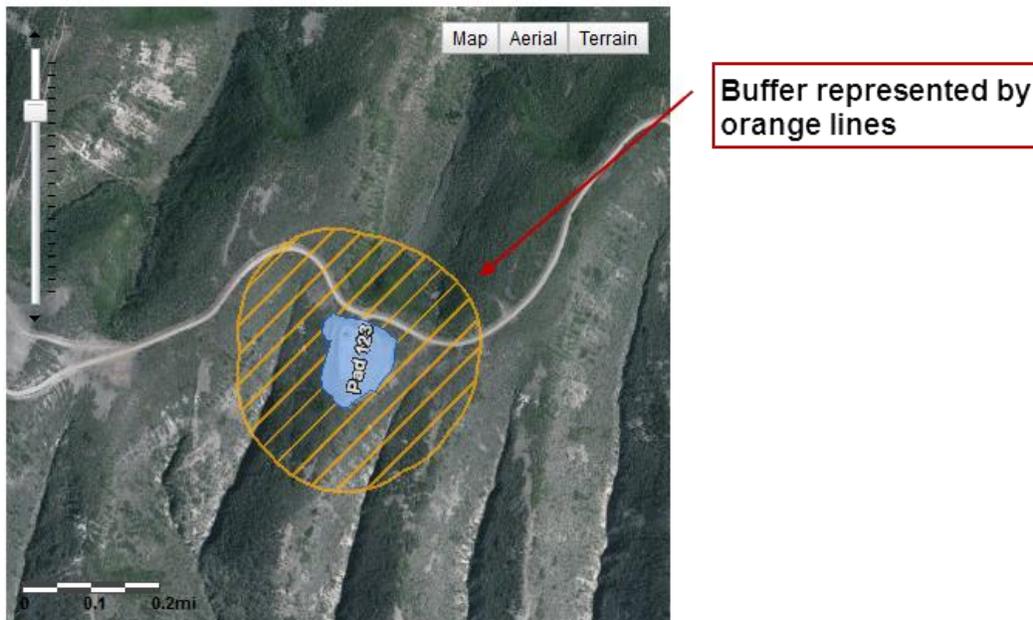


Figure 20: Buffer displaying around a disturbance polygon

As part of the upload process, calculations are made to identify the “potential” buffered disturbance acres that may be added to the specific lease. These calculations are made for each range type (Summer Range, Winter Range, etc.). The calculations take into account overlap between buffer areas so that the same acreage is not counted multiple times. In GIS terms, the disturbance buffers are “dissolved” into one polygon per range type.

Upload Spatial Reports for Operator WR Delux Drilling

Add locations if they don't already exist Yes No



Status	Name	FeatType	CollDate	DistType	Lease	Range	Buffer Acres
Ok	Pad 388-Cir	Well Pad	11/01/2012	disturbance	ENCANA OIL & GAS (USA) INC	Winter Range	69
Warning	Pad 499-Cir	Well Pad	11/01/2012	disturbance	ENCANA OIL & GAS (USA) INC	Severe Winter Range	76

ENCANA OIL & GAS (USA) INC
 A potential of 69 acres will be added to ENCANA OIL & GAS (USA) INC Winter Range threshold limit
 A potential of 76 acres will be added to ENCANA OIL & GAS (USA) INC Severe Winter Range threshold limit

Message indicates the potential acreage and range effected by the spatial upload

Figure 21: Potential acreage and range effected by the spatial upload

The message on the planning page indicates that the disturbances have the potential for adding “X” number of acres to the threshold limit (Figure 21). This indicates the maximum the disturbances would add to the limit; however, because the disturbance buffers are not added to the threshold limits until specific actions are taken (i.e. construction begins). It’s possible that a disturbance may be in a “planned” phase for a period of time and not contribute to the threshold limit.

Threshold Calculations

Threshold calculations are made for each leaseholder / range type combination. For each combination there is an acute disturbance calculation and a collective disturbance calculation. Depending on the status of the disturbance either the 200 meter buffer and corresponding area or the actual disturbance area is used in calculating the total disturbed area.

NOTE: If the disturbance is planned it is not included in the calculations

The 200 meter buffer is used when the following conditions are met:

- Pad status is: Construction, Drilling, Completion
- Pad status is: Production and Interim Reclamation is not yet approved or the trips to the site is > 7 per week

These disturbance criteria above are what make-up the **Acute** threshold disturbance limit.

The actual disturbance footprint is used when the following conditions are met:

- Pad status is **production**
 - Reclamation status is **Interim** or **Final Reclamation** approved by the BLM **AND**
 - Trips to the site is < 7 per week
- Pad status is **Abandoned**

These disturbances are added to the **Acute** disturbance acres to form the **Collective** disturbance limit.

Current Threshold Calculations:

Summer Range and Winter Range Acute disturbances :	Max of 10% of the lease/range type area
Summer Range and Winter Range Collective disturbances:	Max of 20% of the lease/range type area
Severe Winter Range, Winter Concentration Areas, Severe Winter Range/Winter Concentration area Acute disturbances:	Max of 5% of the lease/range type area
Severe Winter Range, Winter Concentration Areas, Severe Winter Range/Winter Concentration area Collective disturbances:	Max of 10% of the lease/range type area

Lease / Operator Location Summary Table (5)

The **Lease / Operator Location Summary Table** displays the most recent date the data was collected for each location of the specific lease holder. The user can navigate to a specific location’s page by clicking on a location’s name. By clicking on a collection date, the user will be directed to the specific report.

E.g. If the user selects the date in the “Last Spatial” column for pad101, the user will be directed to the spatial report for that date and location.

Name	Well Pad	Type	Range Type	Operator	Dist. Acres	Recl. Acres	Reclamation Approved	Last Seeding	Latest Belt Transect	Last Spatial	Last Qual.	Last Intercept	Status
pad101	Well Pad	Well Pad	Severe Winter Range	ALPINE OIL & GAS CORP	8.70	0.87		No		09/16/2012			Production
WILD	Other	Well Pad	Severe Winter Range	Exxon/XTO	7.39	3.12		No		07/01/2012			Drilling
WILD	Facility	Well Pad	Severe Winter Range	Exxon/XTO	2.72			No		05/01/2012			Completion
pad101-Road	Pipeline	Road	Severe Winter Range	RISP INC	4.98			No		06/16/2012			Production
pad102	Other	Well Pad	Severe Winter Range	RISP INC	8.44			No		09/16/2012			Construction
pad102-Road	Facility	Road	Severe Winter Range	RISP INC	3.81			No		06/16/2012			Construction
pad103	Powerline	Well Pad	Severe Winter Range	RISP INC	2.27	2.27		No		09/16/2012			Production
pad103-Road	Powerline	Road	Winter Range	RISP INC	2.25			No		06/16/2012			Production
pad104	Well Pad	Well Pad	Severe Winter Range	RISP INC	2.00	1.14		No		09/16/2012			Drilling
pad105	Well Pad	Well Pad	Severe Winter Range	RISP INC	8.89			No		09/16/2012			Planned
pad105-Road	Well Pad	Road	Winter Range	RISP INC	2.35			No		06/16/2012			Planned
pad106	Well Pad	Well Pad	Severe Winter Range	RISP INC	2.24	0.78		No		09/16/2012			Planned
pad106-Road	Road	Road	Winter Range	RISP INC	2.08			No		06/16/2012			Planned

Figure 22: Operator/Lease Location Summary Table

Operator Summary Page

Start: Entry Page (<http://my.usgs.gov/wrfo>) → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page**

The **Operator Summary Page** displays uploaded data specific to the operator selected from the **Operator** section on the **Entry Page**. This page provides a more detailed view of the operator’s activities and status of uploaded locations.

Operator Summary Page: WR Delux Drilling

Map Controls:

Type: [click for definitions](#)

All Types ▾

Show Disturbances
 Show Reclamation Areas
 Show Buffers

Auto-Zoom to Selection

[Refresh Map](#)

Downloads:

[ESRI Shapefile \(.shp\)](#)
[Microsoft Excel \(.xls\)](#)
[Adobe Acrobat \(.pdf\)](#)

Operator Summary:

Status	# Pad	Unreclaimed Acres
Planned Unapproved	6	78.84
Planned Approved	2	22.53
Construction	4	57.81
Drilling	0	0.00
Completion	0	0.00
Production	2	21.00
Abandoned	1	87.61
Total	15	267.79

Reclamation Status Summary:

Reclamation	# Pads	Initiated Acres	# Pads	Acres Meeting Stds/ Approved
Phase II	0	0	2	0
Final Abandonment	0	0	0	0

Listing: All

Name	Type	Dist. Acres	Recl. Acres	BLM Recl. Approved	Last Seeding	Latest Belt Transect	Last Spatial	Last Qual.	Last Intercept	Status	Plan Approved
Big TEST 987	Well Pad	87.61		No		02/09/2013	04/03/2012		01/16/2014	Abandoned	Yes
Existing road with no new disturbance-Road	Road	10.37		No			10/31/2013			Construction	Yes
JSD A123	Well Pad	7.09		No			01/02/2014			Production	Yes
JSD B123	Well Pad	16.75	7.66	No			02/03/2014			Planned	Yes
JSD BB2	Well Pad	15.64	5.51	No			01/02/2014			Planned	No
JSD F999	Facility	26.36		No			01/05/2014			Planned	No
JSD O321	Other	2.49		No			01/03/2014			Planned	No
P-12345	Pipeline	3.55		No			03/02/2014			Planned	No
Pad 123-456	Well Pad	38.17		No			03/03/2014			Planned	No
PCU 197-27B	Pipeline	6.40		No		06/06/2013	10/31/2013			Construction	Yes
PCU-197-27B	Well Pad	17.19		No		06/18/2013	10/31/2013		09/05/2014	Construction	No

Figure 23: Operator Summary Page

Operator Map (1)

The **Operator Map** functions the same as the map found on the **Entry Page**; however, the spatial data displayed on the **Operator Map** is specific to the operator chosen from the **Operator** section on the **Entry Page**.

For more information on the location types, the user can select the “click for definitions” link.

Operator Summary Page: Exxon/XTO

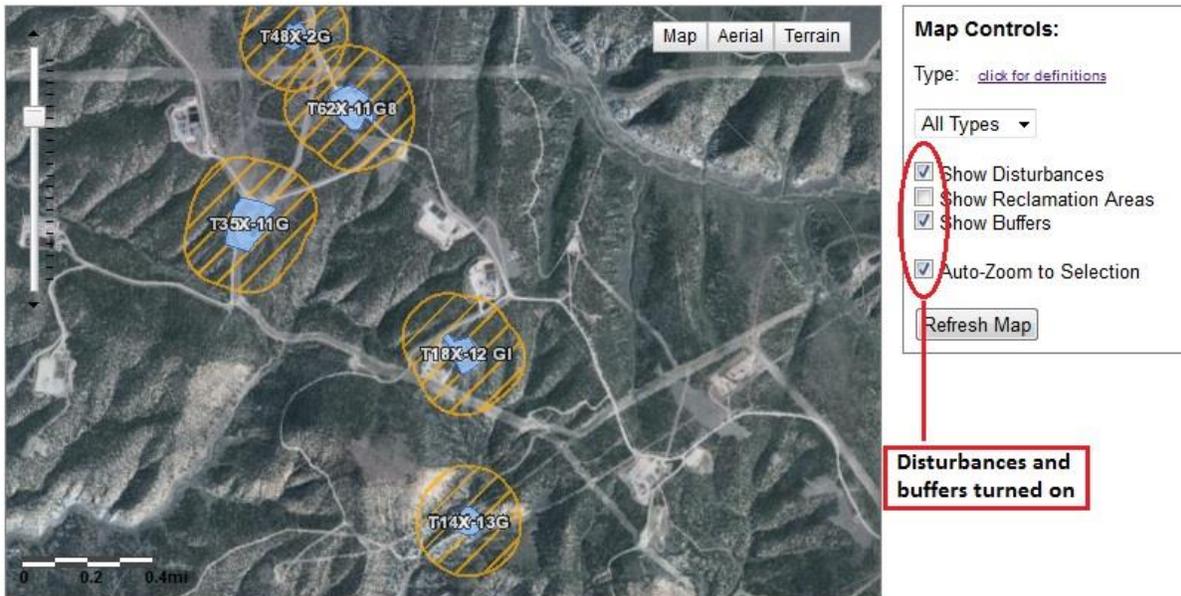


Figure 24: Operator Summary Map with disturbances and buffers displayed

The **Downloads** section contains downloads for information specific only to this operator.

Downloads:

-  [ESRI Shapefile \(.shp\)](#)
-  [Microsoft Excel \(.xls\)](#)
-  [Adobe Acrobat \(.pdf\)](#)

Operator Summary Section (2)

The **Operator Summary** section exhibits a chart that quantifies the number of locations that have a specific status (e.g. Production) and cumulatively the amount of unreclaimed acres of these statuses.

Operator Summary:

Status	# Pad	Unreclaimed Acres
 Planned Unapproved	11	58.95
 Planned Approved	4	5.05
 Construction	3	16.63
 Drilling	1	8.89
 Completion	0	0.00
 Production	4	14.42
 Abandoned	0	0.00
Total	23	103.94

Figure 25: Operator Summary Table

Operator Location Summary Table (3)

The **Location Summary Table** displays the most recent date the data was collected for each location. The user can navigate to a specific location’s page by clicking on a location’s name. By clicking on a collection date, the user will be directed to the specific report.

E.g. If the user selects the date in the “Last Spatial” column for “AAAAA”, the user will be directed to the spatial report for that date and location.

Name	Type	Dist. Acres	Recl. Acres	BLM Recl. Approved	Last Seeding	Latest Belt Transect	Last Spatial	Last Qual.	Last Intercept	Status	Plan Approved
AAAAA	Well Pad				No					Planned	Yes
Big Cir	Well Pad	0.00			No		03/09/2010			Production	Yes
Big Square	Well Pad	13.41	5.41		No		09/09/2011			Construction	Yes
Big TEST 987	Well Pad	87.61			No		04/03/2012			Construction	Yes
Dist 456	Well Pad	7.22	6.20		No	08/07/2012	10/02/2012		05/15/2010	Production	Yes
Dist 789	Well Pad	15.91	14.49		No		09/19/2012		05/15/2010	Production	Yes
Dist SD1277	Well Pad	4.75		Yes			09/19/2012			Abandoned	Yes
Floppy	Well Pad				No					Planned	Yes
Outside Circle	Well Pad	1243.88			No		09/09/2011			Planned	Yes
Outside Triangle	Well Pad	723.13			No		09/19/2011			Planned	Yes
Pad 123	Well Pad	6.99			No		09/19/2012			Construction	Yes
Pad 345	Well Pad	7.00	7.00	No			10/19/2012		05/15/2010	Production	Yes
Pad 456	Well Pad	5.99		Yes			09/19/2012			Abandoned	Yes

Figure 26: Operator Location Summary Table

Specify the Types of Locations to View (Listing Drop Down Menu)

The **Listing** drop down menu, located above the **Location Summary Table** (Figure 26), allows the user to specify the types of locations to view. If an operator has a large number of pads, selecting a specific type of location can significantly reduce the locations listed in the table and provide a more manageable list to view.

Reclamation Status Summary (4)

The **Reclamation Status Summary** chart displays only the operator's statuses of reclamation, the number of features that have initiated that status, the total number of acres initiated in that status, the number of features meeting required standards in that status, and the total number of acres that have met the required standards for that reclamation status. The user can hover over each of the statuses to get its description.

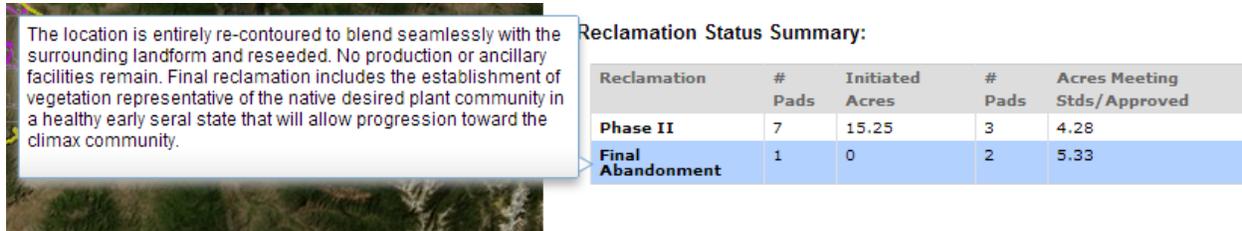


Figure 27: Reclamation Status Summary for Operators

Operator Summary Main Menu

Start: Entry Page (<http://my.usgs.gov/wrfo>) → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page**

The main menu at the top of the **Operator Summary Page** contains all of the necessary links to navigate the site and perform data entry activities.

From this menu the user can:

- Navigate to the **WRDMS Entry Page** by selecting **Home**
- Navigate to the reports page by selecting **Reporting**
- Add a new location by selecting **New Location**
- Batch upload spatial data by selecting **Upload Spatial Reports**
- Batch upload photographs by selecting **Upload Photographs**
- Batch upload qualitative and quantitative data by selecting **Upload Status Reports**
- Search for a location using the **Location Search** box
- **Add Modify Authorized User for <Operator Name>** - Once a user has been added to myUSGS and has been added to the correct WRFO community role, their email address can then be entered on this page to allow edit access to the specified operator page.



Figure 28: Main Menu and Location Search

Location Search

The **Location Search** (Figure 28) eases the search process by auto-populating a list of locations based on what the user begins to type (Figure 29).

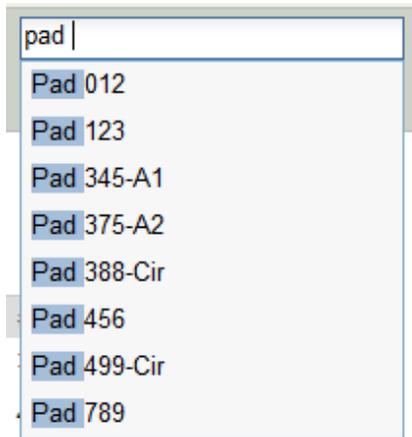


Figure 29: Example of the search auto-populating a list of potential locations based on what has been typed in the search box

Location Entry Page

Start: **Entry Page** (<http://my.usgs.gov/wrfo>) → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page** → select the **Name** of a location in the **Location Summary Table**

The **Location Entry Page** is a detailed view of the activities for a specific location. This page displays the spatial, photographs, documents, qualitative and quantitative data that have been uploaded into the application.

This page allows the user to edit data already entered into the application one record at a time as opposed to a batch upload. This is advantageous in the event data was erroneously entered for one or two specific fields of a report. Instead of performing a batch upload to replace all data the user selects the location with the incorrect data and fixes the specific fields.

Location: PCU-197-27B Operator: WR Delux Drilling Leaseholder: EXXON MOBIL CORP
Severe Winter Range

Navigation: (1)

- Summary
- Status Reports
- Spatial Reports
- Photographs
- Documents
- P-12345
- Pad 123-456
- PCU-197-27B
- PCU-197-27B
- 197-27B-Road
- PCU-197-28B
- PCU-197-28B

Downloads:

- ESRI Shapefile
- Microsoft Excel

Location Status: (2)

Type: Well Pad
Range Site: Desert Shallow Clay
Status: ● construction
Latest Spatial Report: 10/31/2013
Disturbed Acreage: 17.19 acres
Less than 8 Trips to this Pad per week: False
[Answer RHP Questions](#)

Latest Belt Transect: (3)

Collection Date: 06/18/2013
Transect: 357a

Species Code	Common Name	Count
ACONI	monkshood	87
ACGL	Rocky Mountain maple	3
EREN	Engelmann's fleabane	6
AGUR	nettleleaf giant hyssop	37
CALYP	fairy slipper	22

Map Legend: (4)

- Selected Location's Surface Disturbance
- Selected Location's Reclamation
- Other Location Surface Disturbance
- Other Location Reclamation
- Disturbance Buffer

Most Recent Documents: (5)

No documents for this location.

Most Recent Photographs: (6)

No photographs for this location.

Pad History: (7)

- Dec/04/2013 Status from Planned to Construction effective Dec/04/2013
- Dec/02/2013 Status from Construction to Planned effective Dec/02/2013
- Dec/02/2013 Status from Completion to Construction effective Dec/02/2013
- Nov/26/2013 Status from Drilling to Completion effective Nov/26/2013
- Nov/26/2013 Status from Construction to Drilling effective Nov/26/2013
- Nov/25/2013 Status from Planned to Construction effective Nov/25/2013
- Nov/24/2013 Status from Construction to Planned effective Nov/24/2013
- Nov/21/2013 Status from Planned to Construction effective Nov/21/2013

Figure 30: Location Entry Page

Navigation (1)

The **Navigation** box provides links to all the different activities performed on a pad and allows you to easily advance to the next or the previous location

- Summary:** Directs the user to the **Location Entry Page**
- Status Reports:** Navigates to the page that houses uploaded quantitative and qualitative data
- Spatial Reports:** Navigates to the page that houses uploaded spatial data
- Photographs:** Directs to the page that houses uploaded photographs
- Downloads:** ESRI Shapefile contains all spatial data ever uploaded for the specific location
Microsoft Excel contains **ALL** LPI and Belt Transect data uploaded for the location

Location Status (2)

On the **Location Entry Page**, the **Location Status** box displays the location type, range site, status, reclamation status, latest spatial report, the amount of disturbed acres, the amount of reclaimed acres, +/- 8 trips to the pad per week, and a link to the BMP (Best Management Practices) answers. The location name, type, and range site can be edited by using the “Pencil” icon found in the upper right corner of the box.

Location: **PCU-197-27B** Operator: WR Delux Drilling Leaseholder: EXXON MOBIL CORP
Severe Winter Range

Navigation:

- Summary
- Status Reports
- Spatial Reports
- Photographs
- Documents

↑ P-12345
↑ Pad 123-456
↑ PCU 197-27B
PCU-197-27B

Location Status:

Type: Well Pad
Range Site: Desert Shallow Clay
Status: [construction](#)
Latest Spatial Report: [10/31/2013](#)
Disturbed Acreage: 17.19 acres
Less than 8 Trips to this Pad per week: False
[Answer BMP Questions](#)

Location name, type, and range site can be edited using the edit tool

Figure 31: Location Status box

The **Status**, **Reclamation Status**, and number of trips to the pad per week can be edited by clicking on the status (e.g. “Production”). **BMP Answers** can be edited by clicking on the “Show/Edit BMP Answers” link. They must be answered before the location’s status can be changed to “Production”.

Location: PCU-197-27B Operator: WR Delux Drilling Leaseholder: EXXON MOBIL CORP
Severe Winter Range

Navigation:

- Summary
- Status Reports
- Spatial Reports
- Photographs
- Documents

↑ P-12345
↑ Pad 123-456
↑ PCU 197-27B
PCU-197-27B

Location Status:

Type: Well Pad
Range Site: Desert Shallow Clay
Status: [construction](#)
Latest Spatial Report: [10/31/2013](#)
Disturbed Acreage: 17.19 acres
Less than 8 Trips to this Pad per week: False
[Answer BMP Questions](#)

Link to change status data

Link to edit BMP Answers

Figure 32: Status and BMP Answers links

Latest Belt Transect (3)

The **Belt Transect** area displays the most recent status report (Line-point Intercept, Qualitative) as well as the most recent belt transect that have been uploaded for the specific location. If there have been no status reports uploaded then only the belt transect will display as seen in Figure 33.

Location Status:

Type: Well Pad
 Range Site: Desert Shallow Clay
 Status: construction
 Latest Spatial Report: [10/31/2013](#)
 Disturbed Acreage: 17.19 acres
 Less than 8 Trips to this Pad per week: False
[Answer BMP Questions](#)

Notice, status reports would appear between Location Status and Latest Belt Transect

Latest Belt Transect:

Collection Date: 06/18/2013
 Transect: 357a

Species Code	Common Name	Count
ACONI	monkshood	87
ACGL	Rocky Mountain maple	3
EREN	Engelmann's fleabane	6
AGUR	nettleleaf giant hyssop	37
CALYP	fairy slipper	22

Figure 33: Latest Belt Transect Display

Location Map (4)

The map displayed on the **Location Entry Page** presents the spatial data that has been uploaded for the specified site. A legend is displayed to describe each graphic on the map.

Map Legend

	Selected Location's Surface Disturbance
	Selected Location's Reclamation
	Other Location Surface Disturbance
	Other Location Reclamation
	Disturbance Buffer

Figure 34: Map Legend

Most Recent Documents (5)

The **Most Recent Documents** displays the most current documents that have been uploaded to the location. Select the **blue** link to the right of the document title to view the document.

Location Entry Page: Anadarko Compressor Station (EnCana)

Navigation:

- Summary
- Status Reports
- Spatial Reports
- Photographs
- Documents

AAA_KateTestABC
AAA_UnitTest
Anadarko Compressor Station
Bridger Compressor Station
CAB-11-19
CAB-11-25

Downloads:

- ESRI Shapefile
- Microsoft Excel

Location Status:

Type: Other
Status: Final Release
Latest Spatial Report: 12/21/2009
Disturbed Acreage: 5.57 acres

This location has no status reports.

Most Recent Documents:

Title	Name
Rollover Release Criteria	EnCana.xls

Most Recent Photographs:
No photographs for this location.

Figure 35: Most Recent Documents display

Most Recent Photographs (6)

The **Most Recent Photographs** area displays the most current photo collection that has been uploaded for the location. Each picture has edit tools in the upper left corner, which allows the user to delete or edit individual pictures.

Navigation:

- Summary
- Status Reports
- Spatial Reports
- Photographs
- Linked Reference Points

BLM Ref Point
Ref Point 1
Ref Point 2
Second Pad
Test Pad
Test Pad X
Test
ReferencePoint X

Downloads:

- Microsoft Excel

Location Status:

Type: Well Pad
Status: Interim Reclamation Full Development
Latest Seeding: 03/01/2011 (Other)
Latest Qualitative Report: 02/01/2011
Latest Frequency Report: 05/01/2009

Most Recent Status Report:

Entered By BLM

Collection Date: 02/01/2011
Data Source: testy
Years of Reclamation: Years 4-5
Seeding Date: 05/01/2009
Seed Mix: Cover Crops
Seeding Method: Broadcast
Topsoil Storage: Direct Haul
Months of Topsoil Storage: Unknown
Has Soil Been Amended? No

Qualitative:

Is seed germination apparent? Yes
Is the area free of undesirable materials (trash, construction materials, liquids, etc)? Yes
Is the soil stable with no indications of subsidence, slumping and/or significant erosion? Yes
Are other undesirable species absent? Yes
Is there evidence of good reproductive capability? Yes
Are noxious or undesirable weeds absent? No

No Spatial Data For Location

[Add a Spatial Report](#)

Most Recent Photographs: [\(Add Photograph\)](#)

<p>Close-up</p> <p>01/01/2001</p>	<p>East</p> <p>01/01/2001</p>
<p>North</p> <p>01/01/2001</p>	<p>Other</p> <p>01/01/2001</p>

Figure 36: Most Recent Photographs section

Pad History (7)

This area of the **Location Entry Page** records when events happen on to this location. This includes status changes, new data uploads, etc.

Pad History:

Sep/18/2012 Status from Planned to Production

Sep/18/2012 Reclamation Status from Phase I to Phase II Successful

Figure 37: Pad History

Adding and Editing a Location

Start: Entry Page (<http://my.usgs.gov/wrfo>) → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page**

Adding a New Location

There are two different links that can be used to add a new location to the application.

Link 1:

1. From the **Operator Summary Page** select the **New Location** link in the main menu bar

Operator Summary Page: WR Delux Drilling

Map Controls:

Type: [click for definitions](#)

All Types ▾

Show Disturbances
 Show Reclamation Areas
 Show Buffers
 Auto-Zoom to Selection

[Refresh Map](#)

Operator Summary:

Status	# Pad	Unreclaimed Acres
Planned Unapproved	7	131.49
Planned Approved	5	1967.01
Construction	8	142.21
Drilling	2	11.35
Completion	1	0.12
Production	4	2.45
Abandoned	2	10.73
Total	29	2265.37

Downloads:

- [ESRI Shapefile \(.shp\)](#)
- [Microsoft Excel \(.xls\)](#)
- [Adobe Acrobat \(.pdf\)](#)

Figure 38: Add a new location from the Operator Summary Page

2. Enter the name of the location and select the location type and range site descriptions from the drop down menus.

NOTE: It's recommended that naming conventions are consistent for all locations.

Create Location for WR Delux Drilling

Name: *

Location Type: *

Range Site Description: *

* designates required fields

Figure 39: Adding a new location and selecting Location Type and Range Site Description

3. Select **Create** to create and save the location or select **Cancel** to terminate the “add new location” process

Link 2

1. From the **Operator Summary Page** select the **Upload Spatial Reports**. This link is used to batch upload spatial data. (Please see Batch Uploads section for detailed instructions)

After selecting this link, a file can be chosen to upload. Once the file is selected, the system will “read” the data. If there are locations that do NOT exist in the application but are found in the uploaded file, the user will have the opportunity to allow the application to automatically create locations.

Upload Spatial Reports for Operator Yates

Add locations if they don't already exist Yes No



Status	Name	FeatType	CollDate	DistType
OK	Ant-1	Well Pad	01/01/2011	Disturbance

Figure 40: Adding a location using the batch upload feature

Editing a Location

Start: Entry Page (<http://my.usgs.gov/wrfo>) → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page**

The **Location Edit Tool** is found at the end of each row in the **Location Summary Table** on the **Operator Summary Page**.

Listing: All ▾

Name	Type	Dist. Acres	Recl. Acres	BLM Recl. Approved	Last Seeding	Latest Belt Transect	Last Spatial	Last Qual.	Last Intercept	Status	Plan Approved	Edit Location Tool
AAAAA	Well Pad				No					ⓘ Planned	Yes	
Big Circle	Well Pad	0.00			No		03/09/2010			ⓘ Production	Yes	
Big Square	Well Pad	13.41	5.41		No		09/09/2011			ⓘ Construction	Yes	
Big TEST 987	Well Pad	87.61			No		04/03/2012			ⓘ Construction	Yes	
Dist 456	Well Pad	7.22	6.20		No	08/07/2012	10/02/2012		05/15/2010	ⓘ Production	Yes	
Dist 789	Well Pad	15.91	14.49		No		09/19/2012		05/15/2010	ⓘ Production	Yes	
Dist SD1277	Well Pad	4.75		Yes			09/19/2012			ⓘ Abandoned	Yes	
Floppy	Well Pad				No					ⓘ Planned	Yes	
Outside Circle	Well Pad	1243.88			No		09/09/2011			ⓘ Planned	Yes	
Outside Triangle	Well Pad	723.13			No		09/19/2011			ⓘ Planned	Yes	
Pad 123	Well Pad	6.99			No		09/19/2012			ⓘ Construction	Yes	
Pad 345	Well Pad	7.00	7.00		No		10/19/2012		05/15/2010	ⓘ Production	Yes	
Pad 456	Well Pad	5.99		Yes			09/19/2012			ⓘ Abandoned	Yes	

Figure 41: Edit tool for locations

 Use the pencil icon to edit the location to edit the name location type and range site description.

NOTE: Only managers can delete spatial data

Edit Location for Exxon/XTO

The Disturbance/Reclamation Plan has been approved by the BLM

Name: *

Location Type: *

Range Site Description: *

Request Pad Ownership Transfer:

* designates required fields

Figure 42: Editing an existing location

Once the appropriate changes have been made, the user can select the **Save** button to save the changes or select the **Cancel** button to stop the edit process and discard changes.

Changing the Ownership of a Pad

When a pad has changed ownership, the current operator of the pad needs to initiate the change. Below are the steps to follow to accomplish this.

1. On the **Location Entry Page** select the **pencil icon** in the upper right corner of the **Location Status** box

Location: pad101 Operator: Exxon/XTO Leaseholder: EXXON MOBIL CORP
Severe Winter Range

Navigation:

- Summary
- Status Reports
- Spatial Reports
- Photographs
- Documents

297-2A5
52-19G
Facility_123
pad101
pad101-Road
pad103
pad103-Road

Downloads:

- ESRI Shapefile
- Microsoft Excel

Location Status:

Type: Well Pad
Range Site: PJ Woodlands
Status: [production](#)
Reclamation Status: Phase II Successful
Latest Spatial Report: [09/16/2012](#)
Disturbed Acreage: 8.70 acres
Reclamation: 0.87 acres
Less than 8 Trips to this Pad per week: False
[Show/Edit Bmp Answers](#)

Pad History:

Mar/19/2013	Reclamation Status from Phase I to Phase II Successful
Mar/19/2013	Status from Completion to Production
Mar/19/2013	Reclamation Status from Phase I to Phase I
Mar/19/2013	Status from Production to Completion
Mar/19/2013	Reclamation Status from Phase II Successful to Phase I
Nov/09/2012	Status from Construction to Production
Nov/09/2012	Reclamation Status from null to Phase II Successful
Oct/10/2012	Status from Abandoned to Construction
Oct/10/2012	Reclamation Status from Final Reclamation Successful to null
Sep/20/2012	Status from Planned to Abandoned
Sep/20/2012	Reclamation Status from null to Final Reclamation Successful
Sep/20/2012	Status from Completion to Planned
Sep/20/2012	Status from Production to Completion
Sep/20/2012	Reclamation Status from Phase II Successful to null
Sep/20/2012	Reclamation Status from Phase II Initiated to Phase II Successful
Sep/20/2012	Reclamation Status from Phase II Successful to Phase II Initiated
Sep/19/2012	Status from Completion to Production
Sep/19/2012	Reclamation Status from null to Phase II Successful
Sep/19/2012	Status from Production to Completion



Map Legend

- Selected Location's Surface Disturbance
- Selected Location's Reclamation
- Other Location Surface Disturbance
- Other Location Reclamation
- Disturbance Buffer

[Printable Map](#)

Most Recent Documents: [\(Add Document\)](#)
No documents for this location.

Most Recent Photographs: [\(Add Photograph\)](#)
No photographs for this location.

Figure 43: Edit tools for the location

2. Check the **Request Pad Ownership Transfer** check box

Edit Location for Exxon/XTO

The Disturbance/Reclamation Plan has been approved by the BLM

Name: *

Location Type: *

Range Site Description: *

Request Pad Ownership Transfer:

* designates required fields

This item is owned by operator Exxon/XTO. To initiate an ownership change, select a new operator from the list below. This request requires approval by a BLM Manager.

Change operator to:

Figure 44: Request Pad Ownership Transfer check box

3. Choose the new operator from the **Change operator to** drop down list and click **Save**

Edit Location for Ex

The Disturbance/Reclamation

Name: *

Location Type: *

Range Site Description: *

Request Pad Ownership T

* designates required fields

This item is owned by operator
the list below. This request r

Change operator to:

ANDERSON* THORNTON E
ANDRIKOPOULOS RESOURCES* A G
ANSCHUTZ CORPORATION* THE
ANSCHUTZ DRILLING CO. INC.
ARCH OIL & GAS COMPANY
ARCO OIL & GAS COOMPANY
ARGALI EXPL CO
ARGALI EXPLORATION COMPANY
ARGO OIL CORPORATION
ARROWHEAD ENERGY CORP
ARROWHEAD OIL COMPANY
ASAMERA OIL (US) INC
ASHTON BROS CO

operator from

Save Cancel

Figure 45: Select the operator that is to be the new owner of a location then select Save

4. Once **Save** is selected the following message will appear. From this screen, the user can select the **Back to Operator** button to return to the **Operator Summary Page**

Transfer Location pad101

Location pad101 updated

Your request to transfer pad101 from operator Exxon/XTO to operator AMER SODA LLP has been submitted. Email has been sent to the BLM Manager.

Back to Operator

Figure 46: Message indicating the request to change operator ownership has been submitted

Uploading Individual Spatial Reports

Start: **Entry Page** (<http://my.usgs.gov/wrfo>) → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page** → select the **Date** in the **Last Spatial** field for the particular location

OR

Entry Page → Select an operator from the **Operators list** to navigate to the **Operator Summary Page** → select the **Name** of the location to navigate to the **Location Entry Page** → select **Spatial Reports** from the **Navigation** box on the left side of the screen

Spatial Reports

Spatial Reports Box:

All spatial reports that have been uploaded into the application will appear in the box with the heading “Spatial Reports”. The report that is highlighted in **red** will appear on the right side of the screen.

If a spatial report doesn’t yet exist for a location, in place of the **Spatial Reports Box**, there will be text indicating no spatial reports exist and provides a link for the user to add one.

Location Entry Page: pad101 (Exxon/XTO)

Navigation:

- Summary
- Status Reports
- Spatial Reports**
- Photographs
- Documents

Downloads:

- ESRI Shapefile
- Microsoft Excel

Spatial Reports:

Date Collected	Dist. Acres	Recl. Acres
09/16/2012	8.70	0.87

Red highlighted report appears on the right

Printable Map

Figure 47: Spatial Reports Page

- **Green** polygons represent reclamation acreage
- **Blue** polygons represent disturbed acreage

Uploading an Individual Spatial Report

Start: **Entry Page** (<http://my.usgs.gov/wrfo>) → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page** → select the **Name** of a location in the **Location Summary Table**

Spatial Data Rules

Following is a list of rules for uploading spatial polygons into the application. These rules are also included in the **Spatial Template** found on the **Entry Page**.

General Shapefile Construction

1. Shapefile submissions must be zipped (a .zip file) and contain valid **DBF**, **SHP**, **SHX**, and **PRJ** files.
2. The **PRJ** file must contain legitimate projection information. The system will attempt to automatically transform the spatial data found in your shapefile to the system's internal projection, Web Mercator (EPSG:3857). This process may have varying degrees of accuracy and you should use the preview map to verify that the system has completed the transformation properly. To ensure maximum accuracy, use NAD-27, NAD-83, or WGS-84 for your projection's datum. Area calculations are determined by transforming to EPSG:26913 during the upload process.
3. Empty Spatial Templates are provided for WGS-84 Geographic, and NAD-83 UTM13N.
4. Disturbances and reclaimed spatial submissions must consist of a single polygon or multipolygon feature.
5. All polygons and multipolygons must conform to the OpenGIS Simple Features Specification for SQL
6. The implications of this are:
 - a. The shell and holes of all polygons cannot self-intersect.
 - b. Holes can touch the shell or another hole at a single point only. This means that holes cannot intersect one another at multiple points or in a line segment.
 - c. Polygon interiors must be connected (this is implied by the previous statement).
 - d. There is no requirement that a point where a hole touches the shell be a vertex.
 - e. The element Polygons in a MultiPolygon may touch at only a finite number of points (e.g. they may not touch in a line segment).
 - f. The interiors of the element Polygons in a MultiPolygon must be disjoint (e.g. they may not cross).

Associating Shapefile Records with Disturbed Areas

1. The system will allow users to associate one and only one record in a shapefile to a disturbance. All disturbed areas associated with a pad must be dissolved into a multipolygon record before submission.
2. If an area consists of multiple polygons (pad, equipment area, road), then these polygons must be made into a single multipolygon feature in the shapefile that conforms to the geometry

standards outlined above. Generally, polygons (except for pipelines) are not allowed to intersect more than 5% of the disturbance surface area. NOTE: The intersection constraint is for pad disturbance and reclamation areas, the buffer area associated with a disturbance can overlap other features.

3. The disturbance feature must represent the total disturbance area of the pad/location, including any areas that have been reclaimed.
4. A collection date must be supplied with the disturbance multipolygon.
5. The disturbance area can not overlap any disturbance areas for other features.

Associating Shapefile Records with Reclaimed Areas

1. The reclamation feature for the pad/location must be a subset of the current disturbance feature. In other words, it must be completely contained by the disturbance feature.
2. The system will allow users to associate one and only one record in a shapefile to the reclamation area. All reclaimed areas associated with a disturbance must be dissolved into a multipolygon record before submission.
3. The reclamation feature must represent the total reclaimed area of the pad/location, including any areas that areas that have been reclaimed in different timeframes.

Multiple Pads in the Same Shapefile

1. If a shapefile contains multiple pads, roads, pipelines, and other features, it can be batch uploaded as long as it follows these rules:
 - a. Features can be uploaded if they do not already exist in the system but only if this is specified during the upload. Otherwise, the feature name (pad name, road name, etc) must already exist in the system, and the shapefile's use of that name must be identical to the one the system stores
 - b. If the system has a pad named SHB 1-31, the shapefile must name that pad SHB 1-31. Names like "shb1-31", "shb/cor 1-31", and "shb1a-31b" do not match up and will be rejected.
2. The Shapefile Data Dictionary (the attributes in the dbf) must conform to the following:
 - a. **Name** (Character(254)) -- The name of the feature. If this is a Well Pad, this should be the Pad name. If this is a pipeline, this should represent the beginning and end point of the pipeline. This will be unique for an operator.
 - b. **FeatType** (Character(254)) -- This is the type of feature. *Allowed Entries:* Well Pad, Road, Pipeline, Other.
 - c. **CollDate** (Date or Character(254)) -- Date the data was collected; this should represent the date of the observation, not processing. Format = MM/DD/YYYY.
 - d. **DistType** (Character(20)) -- *Allowed Entries:* disturbance or reclamation

NOTE: The shapefile can contain other fields but these will **NOT** imported

Uploading Spatial Data

Spatial reports can be entered individually using two different methods.

Method 1:

1. If spatial data hasn't been entered for the location, the user can select the **Add a Spatial Report** link found in the right corner of the **Location Entry Page**.

Location: Facility 123 Operator: Exxon/XTO Leaseholder:

The screenshot displays the 'Location Entry Page' for 'Facility 123'. On the left is a navigation menu with options like Summary, Status Reports, Spatial Reports, Photographs, and Documents. The main content area shows 'Location Status' as 'planned' and 'Pad History' as 'No pad history for this location.'. A prominent red box in the center-right contains the text 'No Spatial Data For Location' and a blue link 'Add a Spatial Report' circled in red. At the bottom, there are sections for 'Most Recent Documents' and 'Most Recent Photographs', both indicating no data is present for this location.

Figure 48: Add a Spatial Report when no spatial data has been entered for the location

2. Browse and select the zip file for upload

NOTE: Once **Submit** is selected it may take a few moments for the application to upload the data and verify that it contains no errors

Add New Spatial Report for Location Facility 123

Upload a ZIP file containing a valid shapefile (SHP) and its associated support files (PRJ, SHX, DBF, etc).

Upload ZIP File w/ Shapefile: * No file selected.

* designates required fields

The screenshot shows the bottom of the upload page with a grey bar containing a 'Submit' button with a document icon and a 'Cancel' button with a red 'X' icon.

Figure 49: Upload individual Spatial Report page

- If there are multiple SHP files included in the zip file the user will need to select which SHP needs to be uploaded into the system. (Figure 50)

Add New Spatial Report for Location Pad000

The file you uploaded contains more than one shapefile. Please select the one you wish to import from.

Filename

SpatialData/Pad000 - New.shp

SpatialData/Pad000 - Old.shp

 Submit  Cancel

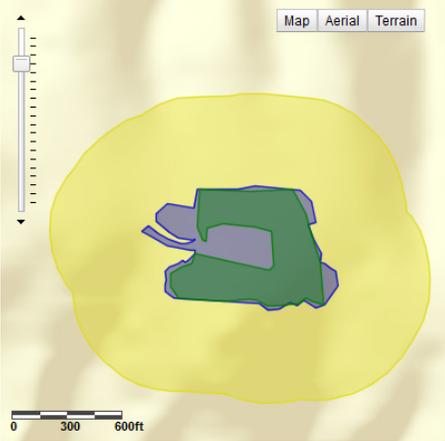
Figure 50: If a zip file contains multiple SHP files, the user must select the correct one to upload

- Once the file has been read into the application, the shapefile is displayed on the left with the attribute data displayed on the right. The user can review the spatial and attribute data to ensure it is correct.

Upload Spatial Reports for Operator WR Delux Drilling

Add locations if they don't already exist Yes No

Allow new reclamation areas to be smaller than the corresponding previous spatial report's reclamation area Yes No



Status	Name	FeatType	CollDate	DistType	Lease	Range	Buffer Acres
Ok	Demo Pad	Well Pad	01/01/2010	disturbance	XTO ENERGY INC	Winter Range	87
Warning	Demo Pad	Well Pad	01/01/2010	reclamation	XTO ENERGY INC	Winter Range	0

XTO ENERGY INC

A potential of 87 acres will be added to XTO ENERGY INC Winter Range threshold limit

 Save  Cancel

Figure 51: Spatial upload

- Select **Save**

The user can also cancel the spatial upload or go back to the list of SHP files to pick a different file.

6. Once the upload is complete a message will appear on the following screen indicating if the upload was successful.



Figure 52: Message displayed after a successful upload

Method 2

From the **Location Entry Page**, select the **Add Spatial Report** link from the main menu bar and follow steps 2 – 5 found in **Method 1** above.

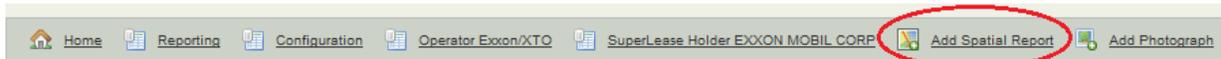


Figure 53: Main menu bar found at the top of the Location Entry Page

Uploading, Editing and Deleting Individual Photographs

Start: Entry Page (<http://my.usgs.gov/wrfo>) → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page** → select the **Name** of the location to navigate to the **Location Entry Page**

Uploading Photographs

From the **Location Entry Page**, the user can use three different links to upload individual photo collections.

The screenshot displays the USGS WRFO system interface for a specific location. At the top, a navigation bar includes links for Home, Reporting, Configuration, Operator: ScottTest, SuperLease Holder: ENCANA OIL & GAS (USA) INC, Add Spatial Report, and **Add Photograph** (circled in red with a red '1'). A search box for locations is also present.

The main content area shows details for **Location: Pad 345 Winter Range**, **Operator: ScottTest**, and **Leaseholder: ENCANA OIL & GAS (USA) INC**. The **Location Status** section indicates the site is a **Well Pad** in **Aspen Woodlands** with a status of **construction**. It lists the latest spatial report as **10/29/2012**, a disturbed acreage of **7.00 acres**, and a reclamation area of **3.16 acres**. A **Map Legend** defines symbols for surface disturbance, reclamation, and a disturbance buffer.

On the left, a **Navigation** menu lists **Summary**, **Status Reports**, **Spatial Reports**, **Photographs** (circled in red with a red '3'), and **Documents**. Below this are links for **Pad 345**, **Pad 375**, and **Ref Point**. A **Downloads** section offers **ESRI Shapefile** and **Microsoft Excel** formats.

At the bottom, the **Most Recent Documents** and **Most Recent Photographs** sections both show "No documents for this location." and "No photographs for this location." respectively. The **Add Photograph** link in the photograph section is circled in red with a red '2'.

Figure 54: Upload photograph navigation

Links 1 and 2

Links 1 and 2 will take the user to the **Add Photograph** page for the specific location. Link 3 has an interim page that will be illustrated later.

1. Enter the required data into the **Add Photograph** form

Add Photograph for Location Demo Pad

Collection Date: * (MM/DD/YYYY)

Location: Demo Pad

Direction: * **Drop Down Choices**

Comment:

JPG, GIF, or PNG Image: * No file selected.

* designates required fields

Figure 55: Add Photograph Page

NOTE: Collection Date, Direction and Image are required

Image formats accepted are:

- JPG
- GIF
- PNG

2. Use the **Browse** button to search your computer for a photo to upload
3. Select **Save** to complete the **Add Photograph** process or select **Cancel** to stop the process
4. Once the photo is uploaded, the user will be returned to the **Location Entry Page**. If the uploaded photo is the most recent it will appear in the **Most Recent Photographs** area on the **Location Entry Page**

If more photos need uploaded, select the **blue Add Photograph** link in the upper right corner of the **Most Recent Photographs** area.

Location: Pad 375 Operator: ScottTest Leaseholder: ENCANA OIL & GAS (USA) INC
Severe Winter Range

Navigation:

- Summary
- Status Reports
- Spatial Reports
- Photographs**
- Documents

Location Status:

Type: Well Pad
 Status: [construction](#)
 Latest Spatial Report: [10/28/2012](#)
 Disturbed Acreage: 13.52 acres
 Reclamation: 7.10 acres
 Less than 8 Trips to this Pad per week: False
[Answer Bmp Questions](#)

Downloads:

- ESRI Shapefile
- Microsoft Excel

Pad History:

Jun/04/2013 Status from Planned to Construction effective Jun/04/2013

Map Legend:

- Selected Location's Surface Disturbance
- Selected Location's Reclamation
- Other Location Surface Disturbance
- Other Location Reclamation
- Disturbance Buffer

Most Recent Documents:

Title	Name	Actions
Test Document	ServiceDefCreation.docx	

Most Recent Photographs:

[\(Add Photographs\)](#)

Close-up photo: 10/29/2012

Figure 56: Use the "Add Photographs" link to upload more photos

By selecting the **Photographs** link on the **Location Entry Page**, the user can view all the photo records that have been uploaded for the location.

Photos are grouped in 30 day intervals by **Collection Date**. The most recent photo record is highlighted **red** in the **Photograph Groups** area and the photos are also displayed on the right. The user can select the "magnifying glass" icon next to other records to view the photos in the **Selected Photographs** area (Figure 57).

Photograph Groups:

Start	End	Photos
01/01/2001	01/01/2001	8
03/03/2000	03/03/2000	3
03/03/1999	03/31/1999	5

Selected Photographs:

[\(Add Photograph\)](#)

Close-up photo: 01/01/2001

East photo: 01/01/2001

Figure 57: Photo records are grouped in 30 day intervals

Link 3

If the location has no photos, selecting link 3 (Figure 54) will bring the user to the following page:

Location Entry Page: ANT_2-6 (SWEPI LP)

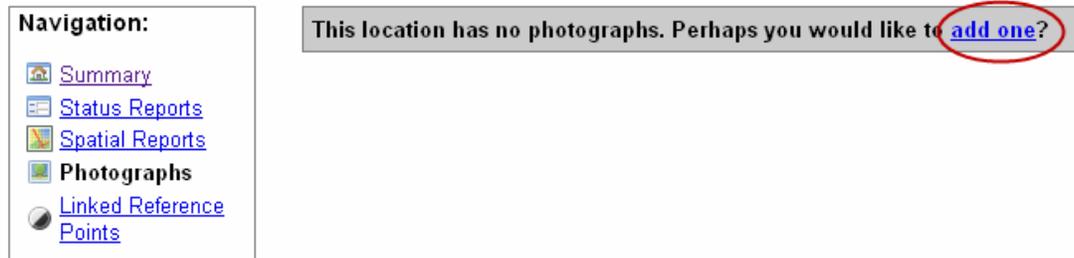


Figure 58: Using the Photographs link from the Navigation box directs the user to this page

Once the user selects the **blue add one** text, the page will direct to the **Add Photograph Page** (Figure 55).

Editing and Deleting Uploaded Photographs

Start: **Entry Page** (<http://my.usgs.gov/wrfo>) → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page** → select the **Name** of the location to navigate to the **Location Entry Page**

The most current photos can be edited and deleted from the **Location Entry Page**. To edit or delete older photos, the user must select the **Photographs** link from the **Navigation** box located on the left side of the page.

Edit and Delete Most Recent Photographs

From the **Location Entry Page**, use the icons found in the upper left corner of each photo to edit / delete a photo.



Use the "X" to delete the selected photo



Use the pencil icon to edit the photos information, such as, direction, collection date, etc.

Location: Pad 375 Operator: ScottTest Leaseholder: ENCANA OIL & GAS (USA) INC
Severe Winter Range

Navigation:

- Summary
- Status Reports
- Spatial Reports
- Photographs**
- Documents
- Pad 345
- Pad 375
- Ref Point

Downloads:

- ESRI Shapefile
- Microsoft Excel

Location Status:

Type: Well Pad
Status: construction
Latest Spatial Report: 10/29/2012
Disturbed Acreage: 13.52 acres
Reclamation: 7.10 acres
Less than 8 Trips to this Pad per week: False
[Answer Rmp Questions](#)

Map Legend

- Selected Location's Surface Disturbance
- Selected Location's Reclamation
- Other Location Surface Disturbance
- Other Location Reclamation
- Disturbance Buffer

Most Recent Documents:

Title	Name	Actions
Test Document	ServiceDefCreation.docx	X Pencil

Most Recent Photographs:

Image	Direction	Date
	East	10/29/2012

Figure 59: Use the edit tools located in the left corner of each image to edit / delete the photo

Edit and Delete Photographs

To edit any photo regardless of collection date, select the **Photographs** link from the **Navigation** box located on the left side of the **Location Entry Page**.

Photos are grouped into collections based on the collection date entered and edit tools can be found in the upper left corner of each photo. If more photos need to be added, the **blue Add Photograph** link is found in the upper right corner of the **Selected Photographs** box.

Location Entry Page: Second Pad (Anschutz)

The screenshot displays the 'Location Entry Page: Second Pad (Anschutz)'. On the left is a 'Navigation' sidebar with links for Summary, Status Reports, Spatial Reports, **Photographs** (circled in red), Linked Reference Points, BLM Ref. Point, Ref Point 1, Ref Point 2, Second Pad, Test Pad, Test Pad X, Test ReferencePoint X, and Downloads (Microsoft Excel). The main area is divided into three sections: 'Photograph Groups' with a table showing a collection of 8 photos from 01/01/2001 to 01/01/2001; 'Selected Photographs' showing a grid of 8 photos with edit tools (pencil and delete icons) in the top-left corner of each; and an '(Add Photograph)' link in the top-right corner. A red box highlights the 'Photographs' link in the navigation sidebar, and another red box highlights the 'Add Photograph' link. A red arrow points from the 'Photograph Groups' table to the 'Selected Photographs' grid, with a label 'Edit tools'. A text box states: 'This location has one collection of photographs. There are 8 photos in this collection.'

Figure 60: Photographs Page

Edit Photographs

Users can edit photos one at a time by selecting the pencil icon in the upper left corner of each photo. Once the pencil icon is selected, the edit screen will appear.

Edit Photograph for Location Second Pad

The screenshot shows the edit form for a photograph. At the top is a thumbnail of the photo. Below it are the following fields: 'Collection Date: *' with a date picker set to 01/01/2001; 'Location:' with a text field containing 'Second Pad'; 'Direction: *' with a dropdown menu set to 'Close-up'; and 'Comment:' with a text area containing 'Batch upload on 2011-04-15-09-08'. A red asterisk indicates required fields. At the bottom are 'Update' and 'Cancel' buttons.

Figure 61: All fields can be changed when editing a photo except for the Location field

On the edit screen the user can change all of the fields except **Location**. Once the changes have been made, select **Update** to save the changes or select **Cancel** to terminate the edit process.

Delete Photographs

Users can only delete photos one at a time by selecting the **red "X"** found in the left corner of each photo. Once the "X" is selected, the user will be asked to verify that they want to delete the selected photo.

Delete Photo for Location Second Pad

Are you sure you want to delete this photo from location *Second Pad*?



Figure 62: Application verifying photo deletion

The user can then select **Yes** to complete the delete process or **No** to cancel the delete process.

Uploading, Editing and Deleting Individual Status Reports

Start: **Entry Page** (<http://my.usgs.gov/wrfo>) → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page** → select the **Name** of the location to navigate to the **Location Entry Page** → select the **Status Report** link found in the **Navigation** box on the left side of the screen

Status Reports

Please see the **Data Dictionaries** section of the manual which provides the definitions for each field contained within the data forms.

From the **Location Entry Page**, the **Status Reports** link is found in the **Navigation** box on the left side of the screen. This link directs the user to the page that houses all of the status reports that have been uploaded into the system.

There are two different **Status Reports** a user must enter for each location

1. Line-point Intercept (LPI)
2. Belt Transect

Status Reports Box:

All status reports that have been uploaded into the application will appear in the box with the heading **Status Reports**. The report that is highlighted in red will appear on the right side of the screen.

If a status report doesn't yet exist for a location, in place of the **Status Reports** box, there will be text indicating no status reports exist and provides a link for the user to add one.

Location Entry Page: Mountain Demo Ref Point (DEMO Operator)

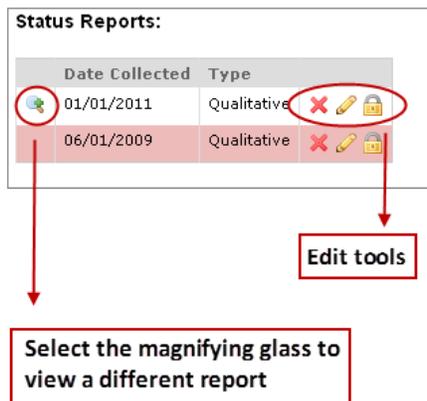
The screenshot shows the 'Status Reports' page for 'Mountain Demo Ref Point (DEMO Operator)'. On the left is a 'Navigation' sidebar with links for Summary, Status Reports, Photographs, Documents, and Downloads. The 'Status Reports' section shows a table with one entry: '12/12/2011 Intercept'. This entry is highlighted in red. A red box with an arrow points to this entry, containing the text 'Red highlighted report appears on the right'. To the right, the 'Selected Status Report' panel displays details: Entered By BLM, Collection Date: 12/12/2011, Observer: Scott, Recorder: Scott, Data Source: Scott, Transect Number: 123-1234, Direction: 234, and Notes: Test abcdef. Below this is a table with 6 points and 5 columns: Top Canopy, Lower Canopy1, Lower Canopy2, Lower Canopy3, and Soil Surface.

Point	Top Canopy	Lower Canopy1	Lower Canopy2	Lower Canopy3	Soil Surface
1	NONE				S
2	NONE				S
3	NONE				S
4	NONE				S
5	NONE				S
6	NONE				S

Figure 63: Line-point Intercept (LPI) status report being displayed on the Status Reports page

Status Reports Edit Tools:

Edit tools can also be found in the top right corner of the **Selected Status Report**.



- 🔍 Select the magnifying glass to view a different status report
- ✖️ Select the “X” to delete a status report
- 🖋️ Select the pencil to edit a status report
- 🔒 The lock indicates a manager, such as a user with the BLM, has entered the status report. These reports are not editable by operators.

Figure 64: Status Reports edit tools

Editing and Deleting Status Reports

Start: **Entry Page** (<http://my.usgs.gov/wrfo>) → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page** → select the **Name** of the location to navigate to the **Location Entry**.

Data Entry Error Message

If any required fields are left blank or the wrong data format is entered, a **red** error box will appear indicating the errors that have been encountered with the submission of a **Status Report**.



Figure 65: Example error messages encountered when entering data for a Status Report

Editing an Existing Line-point Intercept Report

There are many rules for entering data into the Top Canopy, Lower Canopy Layers, and Soil Surface fields. Please carefully read all bullet points to ensure the data is entered correctly.

- Verify **Top Canopy** and **Soil Surface** fields have data entered
- Verify that all species codes are valid. Check the USDA Plant Database at: <http://plants.usds.gov/java>
- Verify there are NO duplicate species found in the **Top Canopy** and **Lower Canopy Layers** fields
- Verify the codes **L** and **WL** are only found in the **Lower Canopy Layers** fields
- Verify the codes **R, BR, LC, S, M, EL,** and **D** are only found in the **Soil Surface** field
- Verify **NONE** is only found in the **Top Canopy** field

NOTE: To add more than one **LPI Report** to a location the **Transect Number** must be different for each report.

E.g. Location CAB-31 can have multiple **LPI Reports** if there are no duplicate **Collection Dates**. If there are multiple **LPI Reports** with the same **Collection Date** then the **Transect Numbers** must be different.

1. Use the **pencil icon** to add / edit species that have been encountered along the transect

In all of the species selection pop up boxes, the user can either select the species by activating the drop down menu using the down arrow to the right of the field or start typing in the species name. The species list will auto-populate based on what the user types in this field.

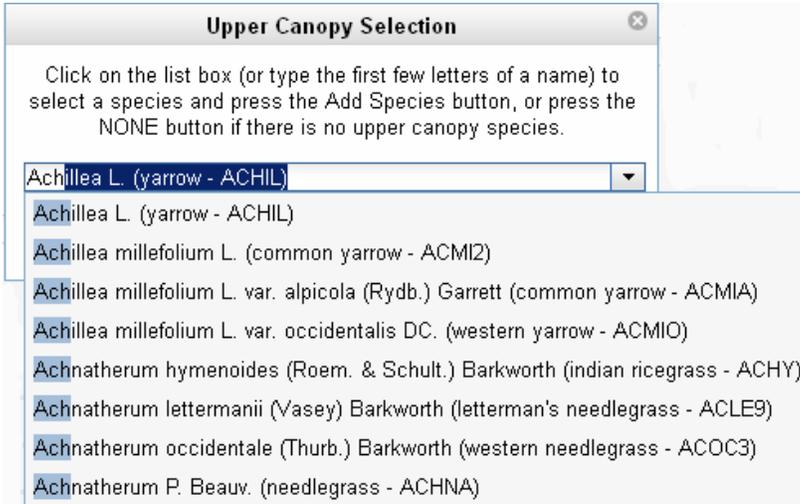


Figure 66: Example of the species list auto-populating based on the characters typed in

- a. **Top Canopy** – this field must be filled out with either a species code or the word “NONE”. “NONE” indicate there is no top canopy.

Selecting the pencil icon in the top canopy field will activate the **Upper Canopy Selection** pop up box. The user can select a species from the drop down menu or select the **NONE** button to fill in the top canopy field.

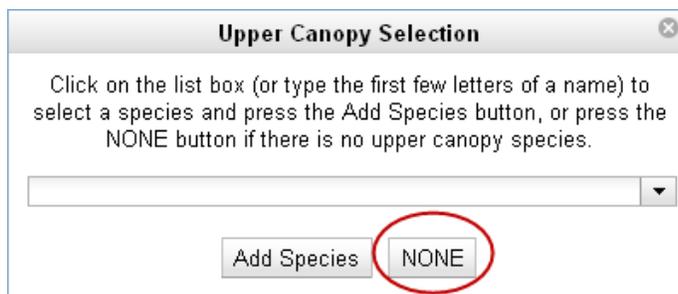


Figure 67: Top Canopy species selection box

- b. **Lower Canopy Layers** – up to 3 species codes can be entered for this layer. Duplicate species codes amongst the **Lower Canopy Layers** and the **Top Canopy** is **NOT** allowed.

E.g. Figure 68, point 1 and 2 are invalid because there are duplicate species codes. Point 3 is the only valid entry.

Lower Canopy Layers				
Point	Top Canopy *	Code1	Code2	Code3
1	MENTH	WL	WL	
2	MENTH	MENTH	WL	
3	NONE	WL	MENTH	

Figure 68: Example of valid and invalid entries

Selecting the pencil icon in the lower canopy fields will activate the **Lower Canopy Selection** pop up box. The user can select from the **Species** field or the **Layer** field.

If a species is selected from the **Species** field, the user must select the **Add Species** button to add the species to the form.

The **Layer** field contains codes specific to the **Lower Canopy Layers** fields. If a code is selected from this field, the user must select the **Add Layer** button to add the code to the form.

Lower Canopy Selection ✕

Click on the species list box (or type the first few letters of a name) to select a species and press the Add Species button, or click on the lower canopy layer list box to select a layer and press the Add Layer button.

Species:

Add Species

Layer:

Add Layer

Figure 69: Lower Canopy Layers species selection box

- c. **Soil Surface** – this field can contain a species code or a code specific to the soil surface. A species code entered in the **Top Canopy** or the **Lower Canopy Layers** fields are allowed to be entered in the **Soil Surface** field. In this case duplicate species codes are permitted.

Selecting the pencil icon in the **Soil Surface** fields will activate the **Soil Surface Selection** pop up box. The user can select from the **Species** field or the **Soil Surface** field.

If a species is selected from the **Species** field, the user must select the **Add Species** button to add the species to the form.

The **Soil Surface** field contains codes specific to the **Soil Surface** field. If a code is selected from this field, the user must select the **Add Soil Surface** button to add the code to the form.

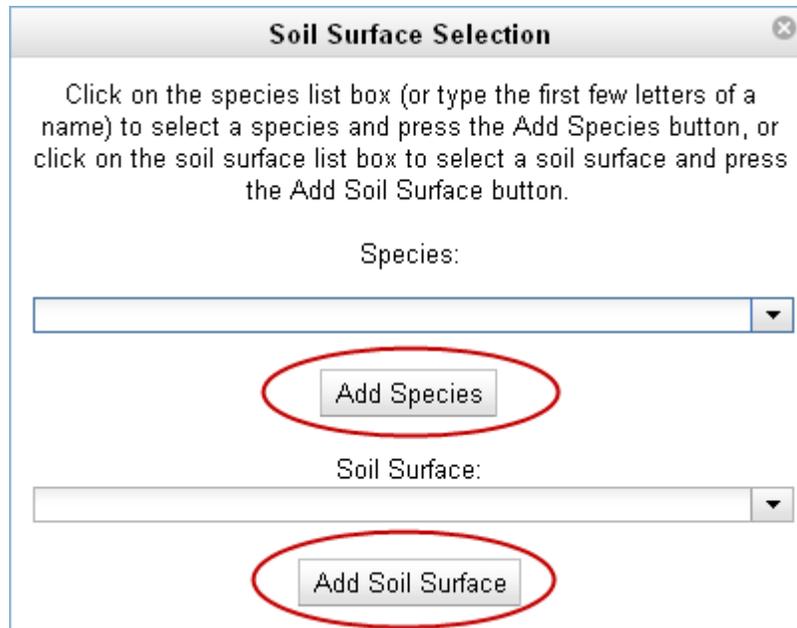


Figure 70: Soil Surface species selection pop up box

3. After all data has been entered, select the **Save** button to save the data or select **Cancel** button to stop the process.

NOTE: **ALL** 150 points must contain data or the following error will occur.

ⓘ There are errors for at least one of the points (required fields or bad codes). Please correct the fields in red, below.

Figure 71: Error message displayed when data is missing from any point

When data is missing from a point, the field will be outlined in red. Please see Figure 72 below for an example.

	Lower Canopy Layers				
Point	Top Canopy *	Code1	Code2	Code3	Soil Surface *
1	<input type="text"/>				
2	AF1	<input type="text"/>	<input type="text"/>	<input type="text"/>	M

Figure 72: The fields outlined in red are missing required data

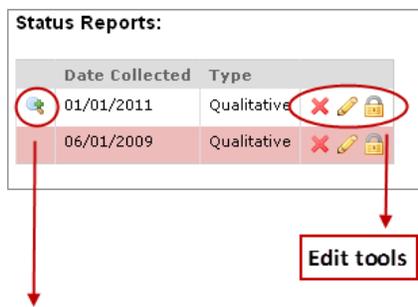
Deleting an Existing Status Report

Start: **Entry Page** (<http://my.usgs.gov/wrfo>) → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page** → select the **Date** in the Status Report column in the Location Summary Table for any location

OR

Entry Page → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page** → select the **Name** of the location in the Location Summary Table to navigate to the **Location Entry Page** → select **Status Reports** from the **Navigation** box on the left side of the screen

To edit or delete an existing **Status Report**, the user can use the edit tools found to the right at the end of each row (Figure 73).



Select the magnifying glass to view a different report

- Select the magnifying glass to view a different status report
- Select the "X" to delete a status report
- Select the pencil to edit a status report
- The lock indicates a manager, such as a user with the BLM, has entered the status report. These reports cannot be edited by operators.

Figure 73: Edit tools used to edit and delete existing Status Reports

1. Select the appropriate tool to the right of the record to edit / delete – the record does not need to be highlighted in red in order to edit.

2. By selection the pencil icon, the user may edit the form as necessary and select the **Save** button to save the changes or select **Cancel** to undo changes.
 - a. If the “X” icon is selected, the user will be presented with a confirmation page to delete the specified record. Select **Yes** to confirm deletion of the record or select **No** to cancel the delete process.

Delete Status Report for Location Dist 456

Are you sure you want to delete this status report from location *Dist 456*?

Collection Date: 05/13/2016
 Observer: Scott Dawson
 Recorder: Scott
 Data Source: Scott's eco monitoring
 Transect Number: 99-A
 Direction: 135
 Notes: This is where the comments go. Blah, blah, blah. Check to make sure the 150 points line-up correctly. DIST456

Point	Top Canopy	Lower Canopy1	Lower Canopy2	Lower Canopy3	Soil Surface
1	ABAR				ABAR
2	ABEL				ACTAE
3	NONE	AGGL	AGOSE		S
4	ACGL	CIVU			S
5	ACONI				CIVU
6	ACRE3	COAR4			COLLO
7	NONE				S
8	ABAR				S
9	ABEL	COLLI			COLLO
10	ABRON				S
11	ACGL	SIUM			S
12	ACONI				S
13	ACRE3				S
14	NONE				S
15	ABAR	ZIVE			S
16	ABEL				S
17	ABRON				S
18	ACGL				S
19	ACONI				S
20	ACRE3				S
21	NONE				S
22	ABAR				S
23	ABEL				S
24	ABRON				S
25	ACGL				S

Total # Perennial Grasses/Total # Perennial Bunch Grasses: 0/0
 Total # Forbs: 71
 Total # Shrubs: 13
 Percent Canopy Cover: 81
 Percent Bare Ground: 19
 Percent Basal Cover: 6

Yes No

Figure 74: Confirmation page for deleting an LPI Report

Batch Uploads

Start: **Entry Page** (<http://my.usgs.gov/wrfo>) → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page**.

Spatial Data Batch Uploads

Spatial Data Batch Upload Rules

Following is a list of rules for uploading spatial polygons into the application. These rules are also included in the **Spatial Template** found on the **Entry Page**.

General Shapefile Construction

1. Shapefile submissions must be zipped (a .zip file) and contain valid **DBF**, **SHP**, **SHX**, and **PRJ** files.
2. The **PRJ** file must contain legitimate projection information. The system will attempt to automatically transform the spatial data found in your shapefile to the system's internal projection, Web Mercator (EPSG:3857). This process may have varying degrees of accuracy and you should use the preview map to verify that the system has completed the transformation properly. To ensure maximum accuracy, use NAD-27, NAD-83, or WGS-84 for your projection's datum. Area calculations are determined by transforming to EPSG:26913 during the upload process.
3. Empty Spatial Templates are provided for WGS-84 Geographic, and NAD-83 UTM13N.
4. Disturbances and reclaimed spatial submissions must consist of a single polygon or multipolygon feature.
5. All polygons and multipolygons must conform to the OpenGIS Simple Features Specification for SQL
6. The implications of this are:
 - a. The shell and holes of all polygons cannot self-intersect.
 - b. Holes can touch the shell or another hole at a single point only. This means that holes cannot intersect one another at multiple points or in a line segment.
 - c. Polygon interiors must be connected (this is implied by the previous statement).
 - d. There is no requirement that a point where a hole touches the shell be a vertex.
 - e. The element Polygons in a MultiPolygon may touch at only a finite number of points (e.g. they may not touch in a line segment).
 - f. The interiors of the element Polygons in a MultiPolygon must be disjoint (e.g. they may not cross).

Associating Shapefile Records with Disturbed Areas

1. The system will allow users to associate one and only one record in a shapefile to a disturbance. All disturbed areas associated with a pad must be dissolved into a multipolygon record before submission.
2. If an area consists of multiple polygons (pad, equipment area, road), then these polygons must be made into a single multipolygon feature in the shapefile that conforms to the geometry standards outlined above. Generally, polygons (except for pipelines) are not allowed to intersect more than 5% of the disturbance surface area. NOTE: The intersection constraint is for pad disturbance and reclamation areas, the buffer area associated with a disturbance can overlap other features.
3. The disturbance feature must represent the total disturbance area of the pad/location, including any areas that have been reclaimed.
4. A collection date must be supplied with the disturbance multipolygon.
5. The disturbance area cannot overlap any disturbance areas for other features.

Associating Shapefile Records with Reclaimed Areas

1. The reclamation feature for the pad/location must be a subset of the current disturbance feature. In other words, it must be completely contained by the disturbance feature.
2. The system will allow users to associate one and only one record in a shapefile to the reclamation area. All reclaimed areas associated with a disturbance must be dissolved into a multipolygon record before submission.
3. The reclamation feature must represent the total reclaimed area of the pad/location, including any areas that areas that have been reclaimed in different timeframes.

Multiple Pads in the Same Shapefile

1. If a shapefile contains multiple pads, roads, pipelines, and other features, it can be batch uploaded as long as it follows these rules:
 - a. Features can be uploaded if they do not already exist in the system but only if this is specified during the upload. Otherwise, the feature name (pad name, road name, etc) must already exist in the system, and the shapefile's use of that name must be identical to the one the system stores
 - b. If the system has a pad named SHB 1-31, the shapefile must name that pad SHB 1-31. Names like "shb1-31", "shb/cor 1-31", and "shb1a-31b" do not match up and will be rejected.
2. The Shapefile Data Dictionary (the attributes in the dbf) must conform to the following:
 - a. **Name** (Character(254)) -- The name of the feature. If this is a Well Pad, this should be the

- Pad name. If this is a pipeline, this should represent the beginning and end point of the pipeline. This will be unique for an operator.
- b. **FeatType** (Character(254)) -- This is the type of feature. *Allowed Entries:* Well Pad, Road, Pipeline, Other.
 - c. **CollDate** (Date or Character(254)) -- Date the data was collected; this should represent the date of the observation, not processing. Format = MM/DD/YYYY.
 - d. **DistType** (Character(20)) -- *Allowed Entries:* disturbance or reclamation

NOTE: The shapefile can contain other fields but these will **NOT** imported

Uploading Batch Spatial Files

1. Select the **Upload Spatial Reports** link in the main menu at the top of the page.



Figure 75: Select the Upload Spatial Reports link to start the batch upload spatial process

2. Use the **Browse** button to search your computer for a zipped **spatial** file to upload.

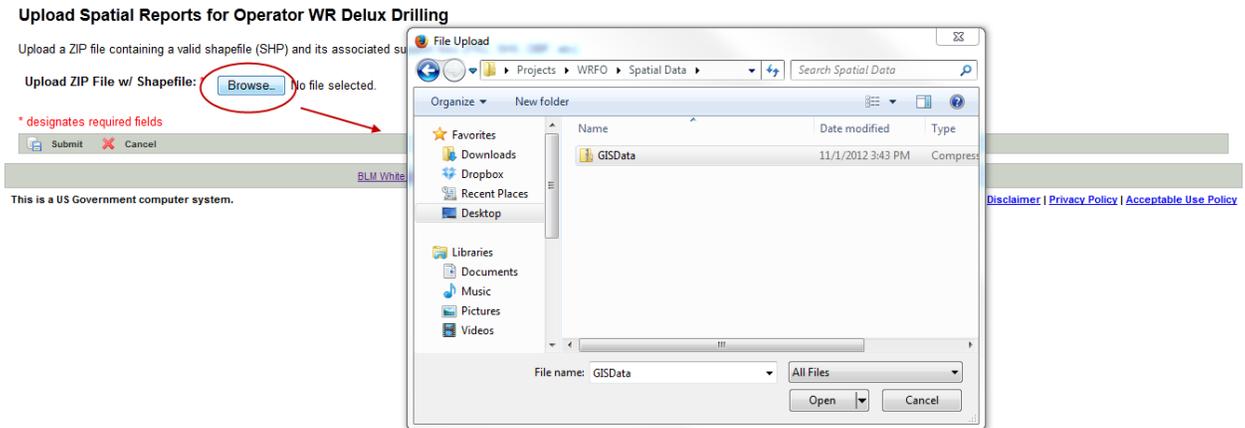


Figure 76: Spatial batch upload screen

3. Select the **Submit** button after the zip file has been selected
4. Select the SHP file to uploaded (if necessary) and select the **Submit** button

NOTE: The zip file can contain multiple SHP files. See Figure 77 for an example.

Upload Spatial Reports for Operator SWEPI LP

The file you uploaded contains more than one shapefile. Please select the one you wish to import from.

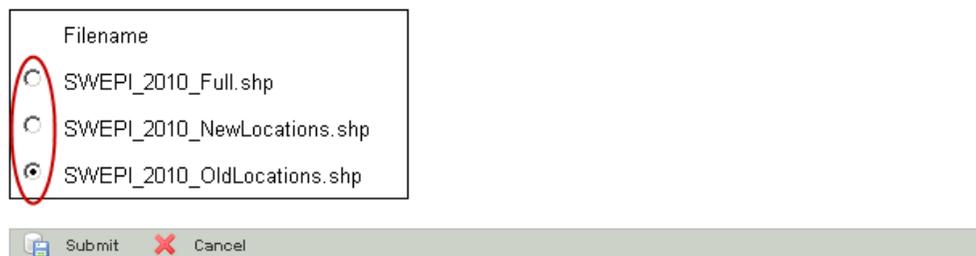


Figure 77: Select the SHP file to upload into the application

- The following page will display the locations that are contained within the selected SHP. The **Status** column found at the beginning of the table indicates whether errors or warnings associated with the location exist. If there are no errors the status is displayed as **OK**.

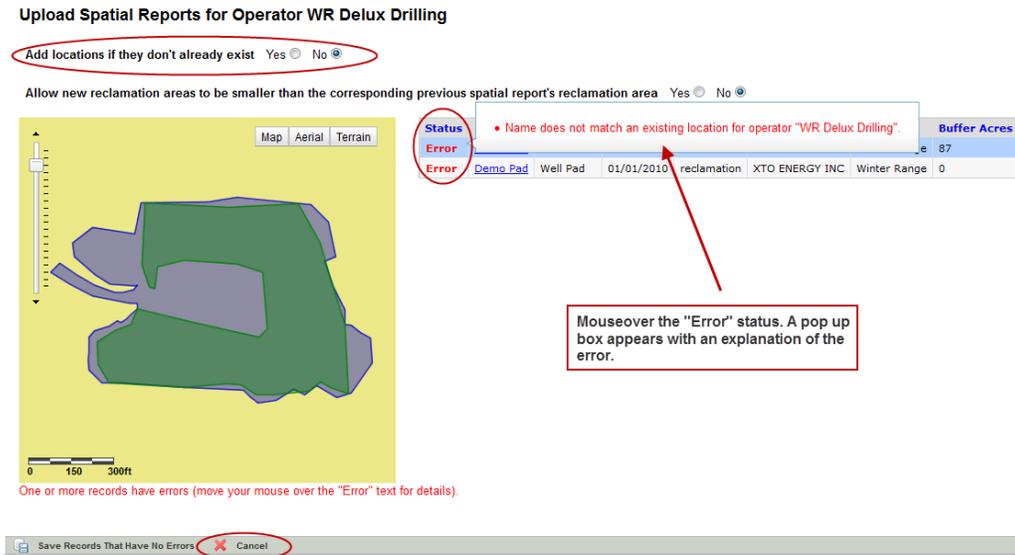


Figure 78: List of locations with errors contained within an SHP file displaying an error message

If the location doesn't yet exist in the application, select **Yes** to the **Add locations if they don't already exist** question found at the top of the screen. This will create the new location and upload the corresponding shapefile(s).

E.g. If Demo Pad doesn't exist, by selecting **Yes**, the process will create a location named Demo Pad.

Figure 78 above displays the explanation for the **Error** status.



Figure 79: The "yes" radio button is selected

NOTE: Yes is selected for the **Add locations if they don't already exist**. This has changed the status of the entries to **Error** and **OK** respectively.

6. Only records in a shapefile that have a status of **Warning** or **OK** will be uploaded when the **Save** button is selected. Once all locations have the appropriate statuses, select the **Save** button.
7. After the upload has completed successfully, the user will be brought to the **Operator Summary Page**. Above the map will be a **blue** box indicating the upload was successful.

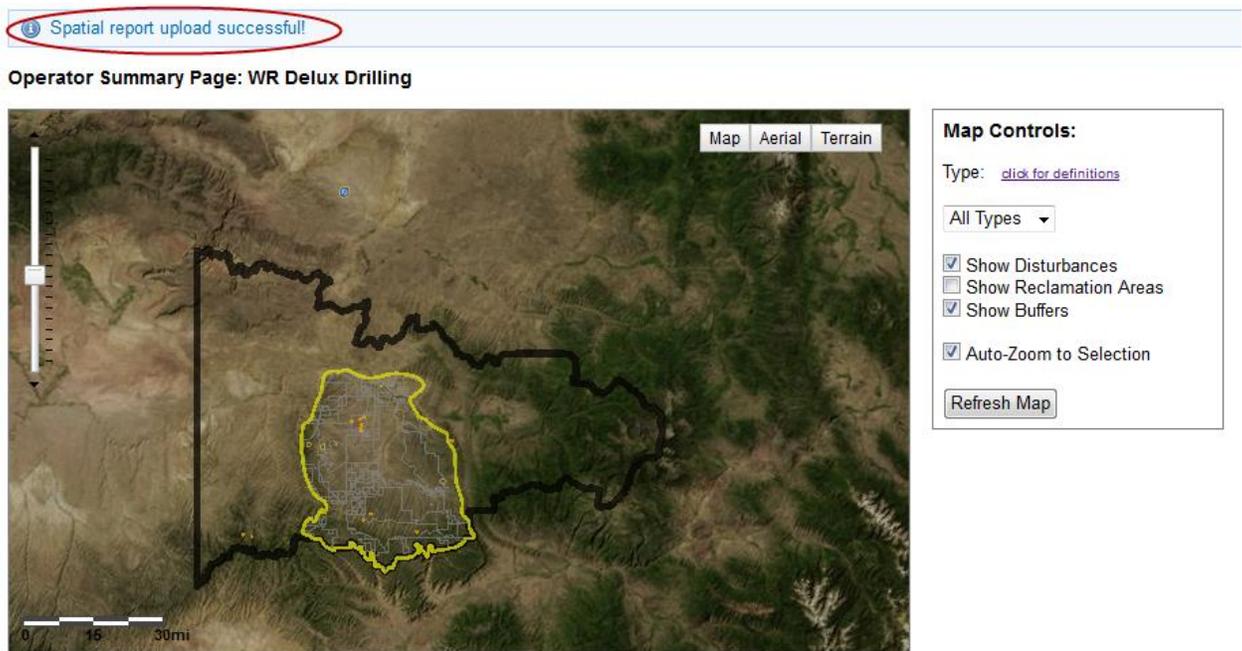


Figure 80: Blue spatial upload successful message

Photograph Batch Uploads

Photograph Naming Conventions

Ensure the photos are named as <location name>_<direction as N, S, E, W, Close-up>

Direction choices are:

N = North

S = South

E = East

W = West

O = Other

Close-up

Example: North facing picture of CAN 1-25 would be named CAN_1-25_N

NOTE: Do **NOT** leave any spaces in the photograph name; use an underscore (_) for spaces in a name.
There is no naming convention for the name of the zip file

Uploading Batch Photograph Files

Start: Entry Page (<http://my.usgs.gov/wrfo>) → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page**.

1. Select the **Upload Photographs** link in the main menu at the top of the page



Figure 81: Select the Upload Photograph link to start the batch upload photo process

2. Use the **Browse** button to search your computer for a zipped **photo** file to upload.

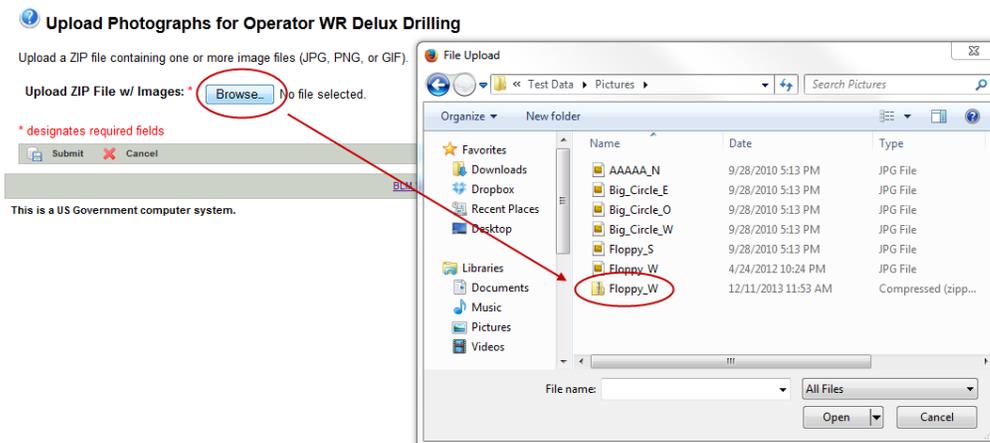


Figure 82: Photograph batch upload screen

3. Select the **Submit** button
4. The following page will list the photos that are contained within the zip file. If there are any errors found with a photo, it will be indicated in the **Status** column. See Figure 83 below.

NOTE: **Collection Date** is required.

Image formats accepted are:

- JPG
- GIF
- PNG

If there are any photos with errors, only the **Cancel** button is displayed at the bottom of the page. All errors must be fixed before an upload can successfully complete.

Upload Photographs for Operator Anschutz

Collection (MMDD/YYYY)

- File name must begin with a name that matches an existing location for operator "Anschutz".
- File name must end with a direction string that is in the following list [C, N, E, S, W, O].

Status	File	Location	Direction
Error	Mesa_3-19.jpg		
Ok	Mesa_3-19_W.jpg	Mesa 3-19	W
Ok	Mesa_8-10_E.gif	Mesa 8-10	E

Mouseover the "Error" status. A pop up box appears which explains why there is an error with Mesa_3-19.jpg.

Because there's an error, the "Save" button doesn't appear

One or more files have errors (move your mouse over the "Error" text for details). Please correct and try your upload again.

Cancel

Figure 83: Displaying an error with a photograph. Notice the "Save" button doesn't appear

- Once all errors have been fixed and all photos have a status of **OK**, select the **Save** button.

Upload Photographs for Operator Anschutz

Collection Date: * Required: This date will be assigned to all photos in this upload.
(MM/DD/YYYY)

Status	File	Location	Direction
Ok	Mesa_3-19_S.jpg	Mesa 3-19	S
Ok	Mesa_3-19_W.jpg	Mesa 3-19	W
Ok	Mesa_8-10_E.gif	Mesa 8-10	E
Ok	Mesa_8-10_N.png	Mesa 8-10	N

All statuses must be "OK" before the "Save" button appears



Figure 84: Because all photos have a status of "OK", the "Save" button appears at the bottom of the screen

- After the photos are uploaded successfully, the user will be brought to the **Operator Summary Page**. A **blue** box will appear above the map indicating the upload was successful.

Photo upload successful!

Operator Summary Page: WR Delux Drilling

Map Controls:
 Type: [click for definitions](#)
 All Types ▾
 Show Disturbances
 Show Reclamation Areas
 Show Buffers
 Auto-Zoom to Selection
 Refresh Map

Operator Summary:

Status	# Pad	Unreclaimed Acres
Planned Unapproved	0	0.00
Planned Approved	0	0.00
Construction	6	85.16
Drilling	0	0.00
Completion	0	0.00
Production	0	0.00
Abandoned	1	87.61
Total	7	172.77

Downloads:
[ESRI Shapefile \(shp\)](#)
[Microsoft Excel \(xls\)](#)
[Adobe Acrobat \(pdf\)](#)

Figure 85: Blue photo upload successful message

Downloading Data Forms

Start: Entry Page (<http://my.usgs.gov/wrfo>)

1. The user must be logged into the WRDMS application
2. Select the **Belt Transect** or **LPI Template** found in the **Reports, Downloads & Interactive Maps** section under the **Downloads** heading.

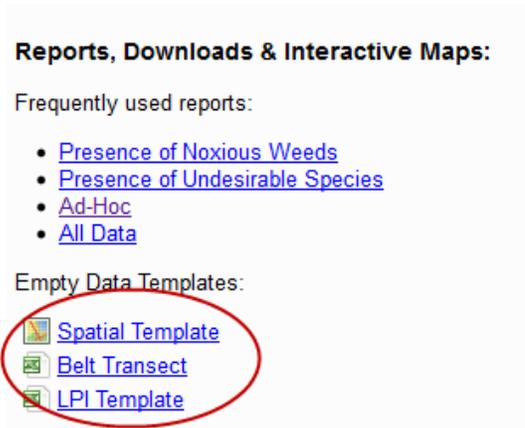


Figure 86: Links to download the data forms

3. These links will allow the user to download or save the form. Once the name of the data form has been selected a gray pop up box appears. This allows the user to choose between saving and opening the file.

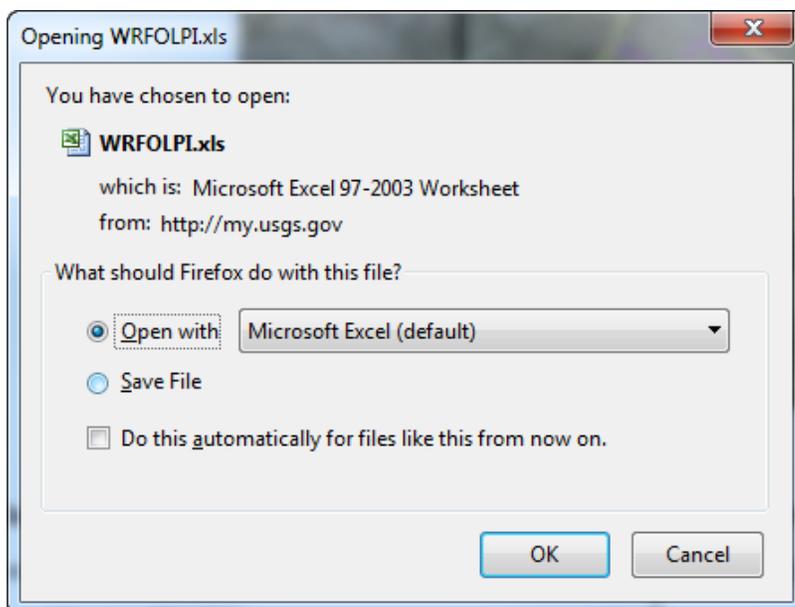


Figure 87: Downloading data forms from the WRDMS Entry Page

Line-point Intercept Batch Upload

Line-point Intercept File Naming Convention

It is recommended that each **Line-point Intercept** data form be named according to what has been entered into the **Site** field within the data form.

E.g. The text in the **Site** field is ANT 2-6; name the LPI form ANT_2-6.xls

NOTE: Do **NOT** leave any spaces in the file name; use an underscore (**_**) for spaces in the name.

There is no naming convention for the name of the zip file.

Uploading Batch Line-point Intercept Files

Start: **Entry Page** (<http://my.usgs.gov/wrfo>) → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page**.

1. Select the **Upload Status Reports** link in the main menu at the top of the page.



Figure 88: Select the Upload Status Reports link to begin the batch upload process

2. Use the **Browse** button to the right of the **LPI Status Report (zip file)** file upload box to search your computer for a zipped **Line-point Intercept** file to upload.

Upload Status Reports for WR Delux Drilling

Note: Only 1 zip file may be uploaded at a time for LPI .

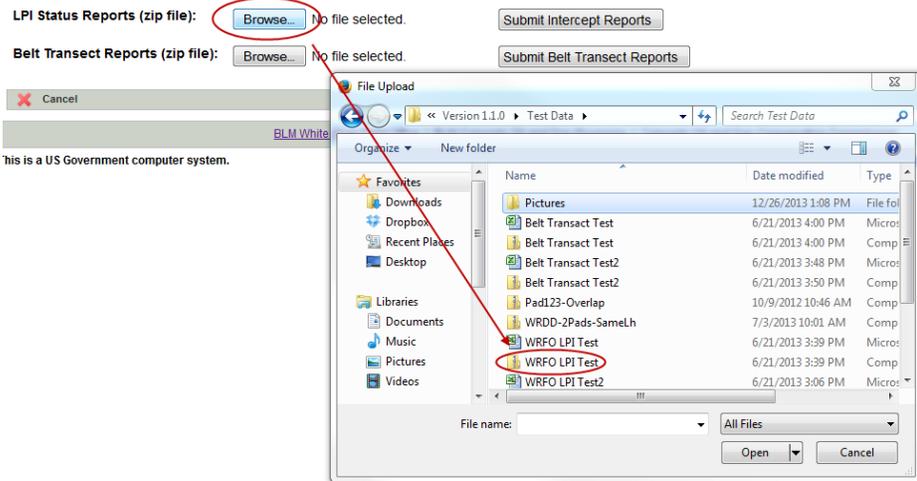


Figure 89: LPI batch upload controls

3. Select **Submit Intercept Reports** button
4. Once the zip file has been successfully uploaded, the user will be brought back to the **Upload Status Reports** page and a **blue** box will appear indicating the upload was successful.

Upload Status Reports for WR Delux Drilling

Note: Only 1 zip file may be uploaded at a time for LPI .

Spreadsheet uploaded successfully from Excel.

LPI Status Reports (zip file): No file selected.

Belt Transect Reports (zip file): No file selected.

Figure 90: Blue upload successful message

Belt Transect Batch Upload

Belt Transect File Naming Convention

It is recommended that each **Belt Transect** data form be named according to what has been entered into the **Location** field within the data form.

E.g. The text in the **Location** field is ANT 2-6; name the LPI form ANT_2-6.xls

NOTE: Do **NOT** leave any spaces in the file name; use an underscore (**_**) for spaces in the name.

There is no naming convention for the name of the zip file.

Uploading Batch Belt Transect Files

Start: **Entry Page** (<http://my.usgs.gov/wrfo>) → Select an operator from the **Operators list** or search for an operator using the **Find** box to navigate to the **Operator Summary Page**.

1. Select the **Upload Status Reports** link in the main menu at the top of the page.



Figure 91: Select the Upload Status Reports link to begin the batch upload process

2. Use the **Browse** button to the right of the **Belt Transect Reports (zip file)** file upload box to search your computer for a zipped **Belt Transect** file to upload.

Upload Status Reports for WR Delux Drilling

Note: Only 1 zip file may be uploaded at a time for LPI .

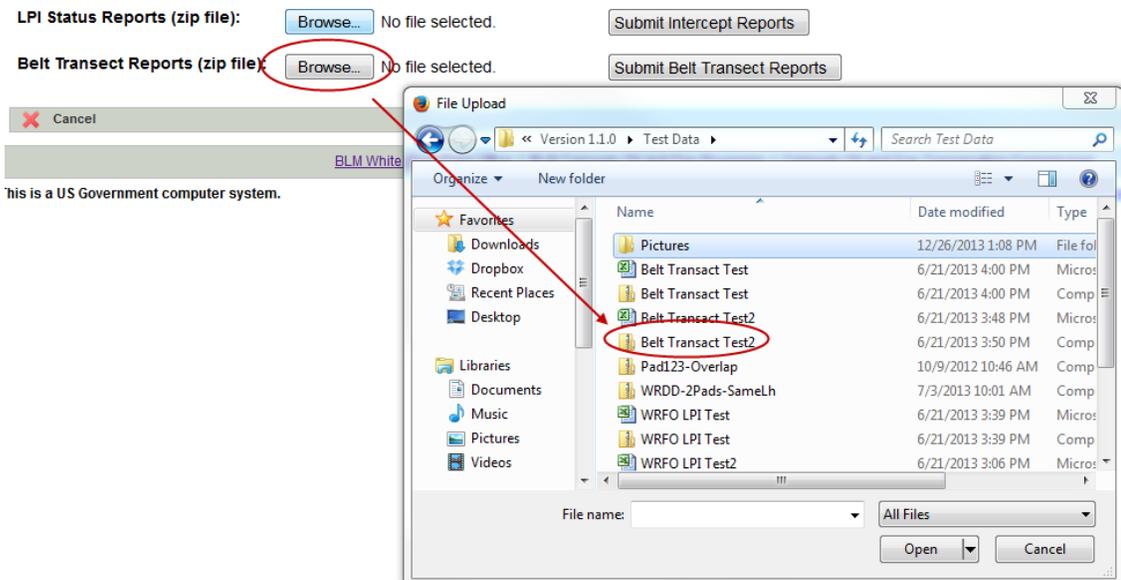


Figure 92: Belt Transect zip file upload

3. Select **Submit Belt Transect Reports** button
4. Once the zip file has been successfully uploaded, the user will be brought back to the **Upload Status Reports** page and a **blue** box will appear indicating the upload was successful.

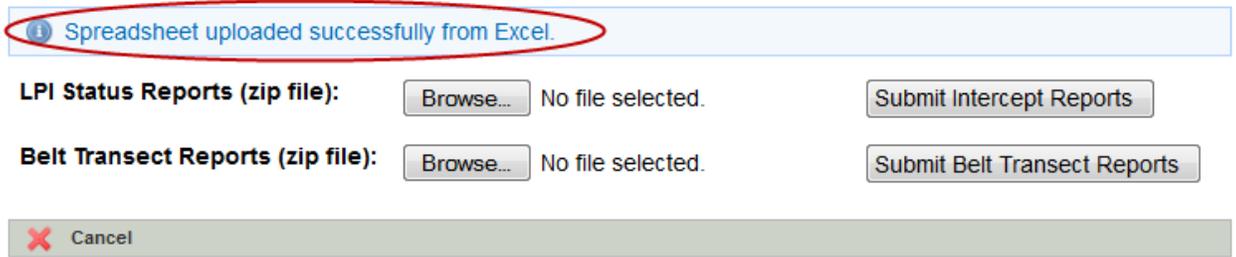


Figure 93: Blue upload successful message

Batch Upload Error Messages and Guidelines

Errors and Messages Encountered on the Line-point Intercept Batch Upload

All error messages will have the file name that the error is found in at the end of the message.

“File must be a zip file”

- Verify that the file being uploaded is a zip file

“Operator not found at row: <row #>”

- Verify that there is data in the **Operator** field in the data form
- Verify that the name is spelled correctly in the **Operator** field in the data form
- Verify there are no extra spaces before, after or in the middle of the name

“Observer not found at row: <row #>”

- Verify that there is data in the **Observer** field in the data form

“Site not found at row: <row #>”

- Verify that there is data in the **Site** field in the data form
- Verify that the **Site** exists in the **Location Summary Table**; if not use the **Add New Location** feature to add it
- Verify that the **Site** name is spelled exactly as it appears in the application
- Make sure spaces are in the appropriate places
- Make sure periods (.) are used when appropriate

E.g. If the correct name is ANT 2-6 then there MUST be a space between ANT and 2.

- Edit the location name in the application by selecting the pencil icon located to the right, at the end of the row in the **Location Summary Table**. Make sure there isn't a space at the end of the location name

“Transect Number not found at row: <row #>”

- Verify that there is data in the **Transect #** field in the data form

“Recorder not found at row: <row #>”

- Verify that there is data in the **Recorder** field in the data form

“Direction invalid at row: <row #>”

- Verify that there's data in the **Direction** field in the data form
- Verify that the data entered in the **Direction** field is numeric between 0 – 359. **NO** alpha characters are accepted in this field.

“Collection Date not found at row: <row #>”

- Verify that there is a date entered in the **Collection Date** field in the data form

“Duplicate Collection Date <day, date and time>”

Multiple line-point intercept status reports can be uploaded for the same location on the same date as long as the transect numbers are different. The definition of a duplicate line-point intercept form is when the **Site Name**, **Collection Date**, and **Transect #** are the same between 2 or more status reports.

- Verify that there are no duplicate LPI forms within the zip file being uploaded.

E.g. LPI1 and LPI2 both have the following data entered:

Site Name = ANT-24

Collection Date = 06/30/2011

Transect # = N12

NOTE: If there are multiple forms within the same zip file that are duplicates, the batch upload feature will accept the first file it encounters and will display the duplicate collection date for all subsequent duplicate forms.

- Verify that the **Site Name**, **Collection Date**, and **Transect #** are correct. If an error is found correct it. If no correction is necessary and the information in the 3 fields are correct then delete one of the duplicate forms
- Verify that there are no other LPI status reports entered into the application for the location listed in the **Site Name** field of the form that also have the same data entered in the **Site Name**, **Collection Date**, and **Transect #** fields.
 - When the duplicates are found in the application and in the zip file, the user must delete either the status report from the application or delete the form from the zip file.

“Invalid Species, duplicate species or invalid Soil Surface found at row: <row #>”

There are many rules for entering data into the **Top Canopy**, **Lower Canopy Layers**, and **Soil Surface** fields. Please carefully read all bullet points to ensure the data is entered correctly.

- Verify that the **Top Canopy** and **Soil Surface** fields have data entered
- Verify that all species codes are valid. Check the USDA Plant Database at <https://plants.usda.gov/java>
- Verify that there are NO duplicate species found in the **Top Canopy** and **Lower Canopy Layers** fields.
- Verify that the codes **L** and **WL** are only found in the **Lower Canopy Layers** fields
- Verify that the codes **R**, **BR**, **LC**, **S**, **M**, **EL**, and **D** are only found in the **Soil Surface** field
- Verify that **NONE** is only found in the **Top Canopy** field
- Verify that points 1 – 75 and 76 – 150 appear in rows 15 – 89. If they do not, the data form is corrupted and a new form will need to be downloaded, filled out, and uploaded

Errors and Messages Encountered on the Belt Transect Batch Upload

All error messages will have the file name that the error is found in at the end of the message.

“File must be a zip file”

- Verify that the file being uploaded is a zip file

“Observer or Recorder not found at row <row #>”

- Verify that there’s data in the **Observer** and **Recorder** data fields on the data form

“Location not found at row <row #>”

- Verify that there is data in the **Site** field in the data form
- Verify that the **Site** exists in the **Location Summary Table**; if not use the **Add New Location** feature to add it
- Verify that the **Site** is spelled exactly as it appears in the application
- Make sure spaces are in the appropriate places
- Make sure periods (.) are used when appropriate

“Transect Number or Transect Direction not Found at row: <row #>”

- Verify that there is data in the **L – P Transect Number** field in the data form
- Verify that there is data in the **Transect Direction** field in the data form

“Valid Date not Found at row: <row #>”

- Verify that there is a date entered in the **Date** field in the data form
- Verify date is in mm/dd/yyyy format

“Direction invalid at row: <row #>”

- Verify that there’s data in the **Direction** field in the data form
- Verify that the data entered in the **Direction** field is numeric between 0 – 359. **NO** alpha characters are accepted in this field.

“Duplicate Collection Date <day, date and time>”

Multiple belt transect status reports can be uploaded for the same location on the same date as long as the transect numbers are different. The definition of a duplicate belt transect form is when the **Location**, **Date**, and **L – P transect number** are the same between 2 or more belt transect status reports.

- Verify that there are no duplicate LPI forms within the zip file being uploaded.

E.g. BeltTransect1 and BeltTransect2 both have the following data entered:
Location = ANT-24
Date = 06/30/2011
L – P Transect Number = N12

NOTE: If there are multiple forms within the same zip file that are duplicates, the batch upload feature will accept the first file it encounters and will display the duplicate date error for all subsequent duplicate forms.

- Verify that the **Location, Date, and L – P Transect Number** are correct. If an error is found correct it. If no correction is necessary and the information in the 3 fields are correct then delete one of the duplicate forms
- Verify that there are no other belt transect status reports entered into the application for the location listed in the **Location** field of the form that also have the same data entered in the **Location, Date, and L – P Transect Number** fields.
 - When the duplicates are found in the application and in the zip file, the user must delete either the status report from the application or delete the form from the zip file.

“Invalid Species <species code> found at row: <row #>”

- Verify that all species codes are valid. Check the USDA Plant Database at <https://plants.usda.gov/java>

Data Dictionaries

Line-point Intercept Data Dictionary

Operator - The name of the operator

Observer – The individual who observes or “calls out” the data

Data Source – The company who provides the data (e.g. name of a contractor, business, etc.)

Site – The name of the well pad, road, pipeline, equipment area, etc.

Transect # - The number of a transect for a site (e.g. 1 of 1, 1 of 3, etc.)

Recorder – The individual who records / writes the observed/ called out data

Direction – The direction of a transect (numeric value)

Collection Date – The date the data was collected

Top Canopy – The first species the pin flag intercepts, if none is encountered, record **NONE***

Lower Canopy Layers (Code 1 – 3) – The 2nd, 3rd and 4th species the pin flag intercepts, or herbaceous litter (L), woody litter (WL), etc. (>5 MM, ~1/4” diameter).*

*If a species is intercepted in the top canopy and a lower canopy, it is ONLY recorded in the top canopy. Similarly, if a species is intercepted in more than one of the lower canopy levels (i.e. code 1 – 3), it is only recorded in the first code where it intercepts. In other words, if a species is intercepted more than once in the top canopy, and any of the three lower canopy layers, it is recorded only in the first layer of intercept.

Belt Transect Data Dictionary

Observer – The individual who observes or “calls out” the data

Location – The name of the well pad, road, pipeline, equipment area, etc.

L – P Transect Number - The line-point intercept transect number for a site (e.g. 1 of 1, 1 of 3, etc.)

Recorder – The individual who records / writes the observed/ called out data

Operator - The name of the operator

Transect Direction – The direction of a transect (numeric value)

Date – The date the data was collected

Species Code – The code of the species encountered

Individual Tally – Individual tick marks for every time the same species is encountered

Individual Count -The sum of the individual tally marks as a numeric value

Examples of Completed Data Forms

Completed Line-point Intercept Form

Line-Point Intercept Indicator Calculations											
USDS Plant Database: http://plants.usda.gov/java/											
All calculations are done in the application after the data has been successfully uploaded.											
You must fill in all applicable yellow cells. Fill in Lower Canopy Layer cells where appropriate.											
* Indicates required fields											
Operator *	WR Delux Drilling			Observer *	Me		Data Source	Me			
Site *	Dist 456	Transect # *	2	Recorder *	Me		Line Length is 150 meters				
Direction *	359	Collection Date *	06/21/13		Intercept (Point) Spacing Interval is 1 meter						
			mm/dd/yyyy								
Pt.	Top Canopy*	Lower Canopy Layers			Soil Surface*	Pt.	Top Canopy*	Lower Canopy Layers			Soil Surface*
		Code1	Code2	Code3				Code1	Code2	Code3	
1	RATR				RATR	76	RATR	ALYSS	MEOF	SAKA	S
2	SAKA	L			RATR	77	MENTH				S
3	MENTH	WL			S	78	AF1				S
4	AF1	PTERI			L	79	SALU				L
5	AF1	L			R	80	SAKA	AF1	SAKA		R
6	SALU	SABE2	SAKA	SARA2	EL	81	PTERI				S
7	NONE				M	82	NONE				R
8	NONE				BR	83	PTERI	AFI	MEOF		R
9	NONE				D	84	ALYSS	AFI	MEOF		S
10	NONE				S	85	ALYSS	AFI	SABE2		M
11	NONE				S	86	ALYSS	AFI	SABE2		D
12	NONE				S	87	NONE				S
13	NONE				S	88	NONE				R
14	NONE				S	89	NONE				S
15	AF1	ALYSS	MEOF	SAKA	S	90	NONE				EL
16	ALYSS				S	91	NONE				S
17	ALYSS	AF1			S	92	NONE				S
18	ALYSS				S	93	NONE				D
19	ALYSS	AF1	SAKA		S	94	NONE				S
20	ALYSS				S	95	NONE				S
21	ALYSS				S	96	NONE				S
22	ALYSS	AFI	MEOF		S	97	NONE				M
23	ALYSS	AFI	MEOF		S	98	NONE				S
24	ALYSS	AFI	SABE2		S	99	NONE				S
25	ALYSS	AFI	SABE2		S	100	AF1	ALYSS	SAKA	MEOF	M
26	ALYSS				S	101	AF1	SAKA			S
27	ALYSS				S	102	AF1	ALYSS			S
28	ALYSS				S	103	AF1	MEOF	SAKA		S
29	NONE				S	104	AF1	SABE2			S
30	NONE				S	105	AF1	L			S

31	NONE				S	106	AF1	WL			S
32	NONE				S	107	AF1	PTERI	SARA2	MEOF	S
33	NONE				S	108	AF1				S
34	NONE				S	109	AF1				S
35	NONE				S	110	AF1	ALYSS	SAKA	MEOF	S
36	NONE				S	111	AF1	SAKA			S
37	NONE				S	112	AF1	ALYSS			S
38	RATR	ALYSS	MEOF	SAKA	S	113	AF1	MEOF	SAKA		S
39	MENTH				S	114	AF1	SABE2			S
40	AF1				S	115	AF1	L			S
41	SALU				L	116	AF1	WL			S
42	SAKA	AF1	SAKA		R	117	AF1	PTERI	SARA2	MEOF	S
43	PTERI				S	118	AF1				S
44	NONE				R	119	AF1				S
45	PTERI	AFI	MEOF		R	120	AF1				S
46	ALYSS	AFI	MEOF		S	121	AF1	ALYSS	SAKA	MEOF	S
47	ALYSS	AFI	SABE2		M	122	AF1	SAKA			S
48	ALYSS	AFI	SABE2		D	123	AF1	ALYSS			S
49	NONE				S	124	AF1	MEOF	SAKA		S
50	NONE				S	125	AF1	SABE2			S
51	NONE				S	126	AF1	L			S
52	NONE				S	127	AF1	WL			S
53	NONE				S	128	AF1	PTERI	SARA2	MEOF	S
54	NONE				S	129	AF1				S
55	NONE				S	130	NONE				S
56	NONE				S	131	NONE				S
57	NONE				S	132	NONE				S
58	NONE				S	133	NONE				S
59	NONE				S	134	NONE				S
60	NONE				S	135	NONE				S
61	RATR	ALYSS	MEOF	SAKA	S	136	NONE				S
62	MENTH				S	137	NONE				S
63	AF1				S	138	NONE				S
64	SALU				L	139	NONE				S
65	SAKA	AF1	SAKA		R	140	NONE				S
66	PTERI				S	141	NONE				S
67	NONE				R	142	NONE				S
68	PTERI	AFI	MEOF		R	143	NONE				S
69	ALYSS	AFI	MEOF		S	144	NONE				S
70	ALYSS	AFI	SABE2		M	145	NONE				S
71	ALYSS	AFI	SABE2		D	146	NONE				S
72	NONE				S	147	NONE				S
73	NONE				S	148	NONE				S
74	NONE				S	149	NONE				S
75	NONE				S	150	NONE				S

Notes:

Enter any important comments here to upload into the application.

Top canopy codes: Species code, or NONE (no canopy).						Soil Surface (do not use litter): Species Code (for basal intercept)				
			Unknown Species Codes: AF# = annual forb PF# = perennial forb AG# = annual graminoid PGB# = perennial graminoid bunch PGR# = perennial graminoid rhizomatous SH# = shrub TR# = tree			LC = biological crust R = rock fragment S = soil without any other soil surface code EL = embedded litter M = moss BR = bedrock D = duff				
Lower canopy layers codes: Species code L = herbaceous litter WL = woody litter, >5 mm (~1/4 in) diameter										
						<i>*Bare ground occurs ONLY when Top canopy = NONE, Lower canopy layers are empty (no L), and Soil surface = S.</i>				
<i>*This form was adapted from the Line-point intercept data collection form developed by the Jornada Arid Lands Research Programs.</i>										
						The original form can be found at: http://jornada.nmsu.edu/monit-assess/data-collection/excel				

Line-point Intercept Data Formats Accepted per Field

Required Fields

Operator:	Alphanumeric
Observer:	Alphanumeric
Site:	Alphanumeric
Transect #:	Alphanumeric
Recorder:	Alphanumeric
Direction:	Numeric range 0 – 359
Collection Date:	mm/dd/yyyy, will not accept any date prior to 01/01/1990
Top Canopy:	Alphanumeric, only species codes and “NONE” accepted
Soil Surface:	Alphanumeric, only species and soil surface codes accepted

Soil Surface Codes:

- BR = Bedrock
- EL = Embedded Litter
- LC = Biological Crust
- D = Duff
- M = Moss
- R = Rock Fragment
- S = Soil

Optional Field

Data Source:	Alphanumeric
Lower Canopy Layers (Code 1-3):	Alphanumeric, only species and layer codes accepted

Layer Codes:

- L = Herbaceous Litter
- WL = Woody Litter

Notes: Alphanumeric

Completed Belt Transect Data Form

Belt Transect		
Observer:	Me	Recorder: Me
Location:	Pad 456	Operator: WR Delux Drilling
L-P Transect Number:	1 of 2	Transect Direction (°): 360
		Date: 6/6/2013
<i>EXAMPLE</i>		
<i>SPECIES</i>	<i>INDIVIDUAL TALLY</i>	<i>INDIVIDUAL COUNT</i>
<i>ARTR4</i>		27
<i>Do not count grass species</i>		
SPECIES CODE	INDIVIDUAL TALLY	INDIVIDUAL COUNT
ABAR		10
ABEL		8
ACBL		4
AECY		12
AF1		1
SARA2		6
SABE2		3
RATR		18

Belt Transect Data Formats Accepted per Field

Required Fields

Observer:	Alphanumeric
Location:	Alphanumeric
L – P Transect Number:	Alphanumeric
Recorder:	Alphanumeric
Operator:	Alphanumeric
Transect Direction:	Numeric range 0 - 359
Date:	mm/dd/yyyy, will not accept any date prior to 01/01/1990

Optional Field

Species Code:	Alphanumeric, only species codes accepted
Individual Tally:	Alphanumeric
Individual Count:	Numeric