

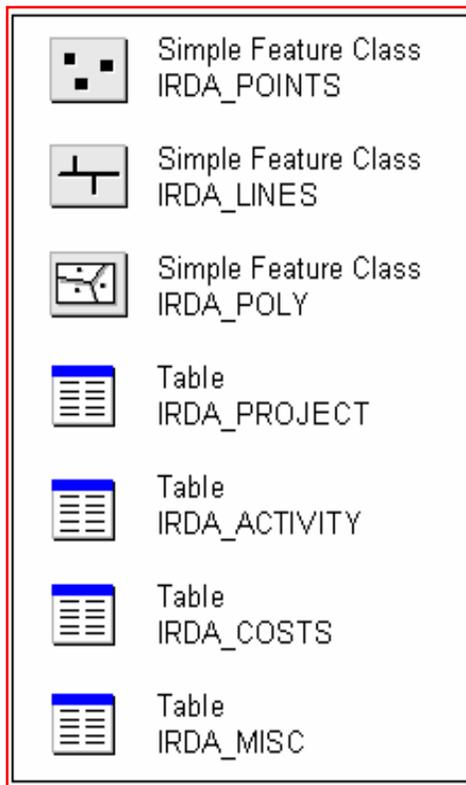
OR/WA BLM
IRDA EDIT GUIDE
AND
DATA DICTIONARY

April 6, 2006

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1. The IRDA Database



The IRDA database consists of the 7 objects shown above. The IRDA_PROJECT is related to all of the other items using the irda_id field. In order to add an item into the IRDA database it needs to be linked to an irda_id in the IRDA_PROJECT table. Tools are available in Citrix to automatically link new features created in the database to an existing or new IRDA project record.

2. Initial Setup Procedures

This section details the requirements and procedures regarding the initial setup of the editor's IRDA editing rights. The following should take place prior to any editing.

1. The user should have prior knowledge of the BLM's "ArcSDE Edit Processes."
***Note:** Although this class is not currently being taught, the ArcSDE Edit Processes guide contains useful information for SDE editing:
ftp://ftpint.or.blm.gov/gisweb/pdf/SDE_Edit_Processes.pdf

2. Approval by the District GIS Coordinator and the District Data Steward should be obtained.
3. A request must be placed by the District GIS Coordinator on the editor's behalf for IRDA edit rights (to include setup of Citrix Client and a Citrix workspace). This can be done from the Staff Information website after navigating to the appropriate district. The website link is <http://web.or.blm.gov/gis/support/staff/index.asp>.
4. Once you have received an email indicating setup is complete, verify that your Citrix Client is working and your workspace has been created. An example of a Citrix workspace path is \\blm\dfs\or\loc\gis\workspace\or\oso\jhruska.
5. Reference themes should be identified and uploaded/available from the editor's Citrix workspace.
6. The appropriate SDE connections need to be established. Information on setting up SDE connections can be found in the "Connecting to ArcSDE from ArcGIS" document at <ftp://ftpint.or.blm.gov/gisweb/pdf/ConnectArcSDE.latest.pdf>

More information regarding Citrix Client and Citrix workspaces can be found in the ArcSDE Edit Processes manual in Chapter 1, Section 5 (pp. 1–4). You may already have a hard copy of the manual, which you would have received for the BLM's ArcSDE Edit Processes training course. However, for the latest version of the document, it is advised that the user refer to the [online version](#) of the manual.

3. Tools and Toolbars

There are a number of additional toolbars and tools that can be added to the ArcMap document prior to editing. Some of these are necessary to the edit process, some are not. The additional toolbars and tools are available to make the edit process run as smoothly as possible.

4. ArcMap Setup

Information about new IRDA tools, adding layers, version creation, and snapping can be found in this section. For more generalized ArcSDE edit processes, refer to the [ArcSDE Edit Processes](#) user guide.

In addition, it is understood that there are a number of different ways to set up an edit session in ArcMap. With that said, the following sections outline a suggested order in which an IRDA edit session could be set up.

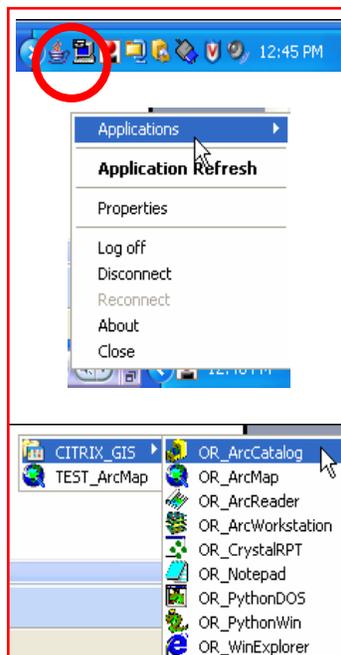
Since IRDA is part of the corporate database, editing tools are only available in Citrix ArcMap. The following steps will lead you through the process of getting Citrix ArcMap ready for IRDA editing.

5. Connecting to the Corporate Database

Prior to editing any data in IRDA a connection to the corporate database must be made in ArcCatalog. Once the connection is made you can go directly into Citrix ArcMap to edit data.

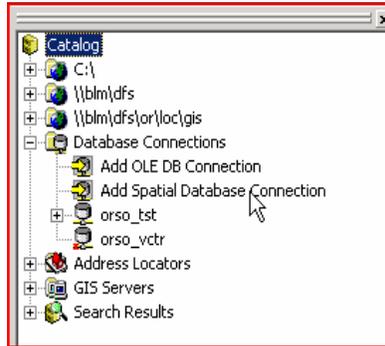
***Note:** If you already have a connection to oso_c, skip ahead to Section 6, “Launching Citrix ArcMap.”

Launch Citrix ArcCatalog by right clicking on the Citrix Program Neighborhood icon on your Windows Taskbar, and selecting Applications → CITRIX_GIS → OR_ArcCatalog .



Once ArcCatalog is open a connection to the IRDA database needs to be created.

Expand the Database Connections folder in the Catalog Tree and double click on **Add Spatial Database Connection**.



In the Spatial Database Connection window that opens enter the following parameters:

Server: ilmorso0db3

Service: orsovctr_sde

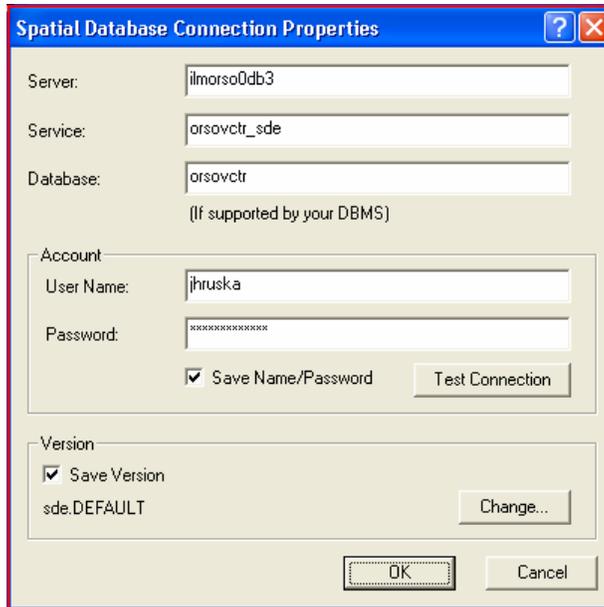
Database: orsovctr

Username: <your Corp login name> i.e., jhruska

Password: <your Corp password>

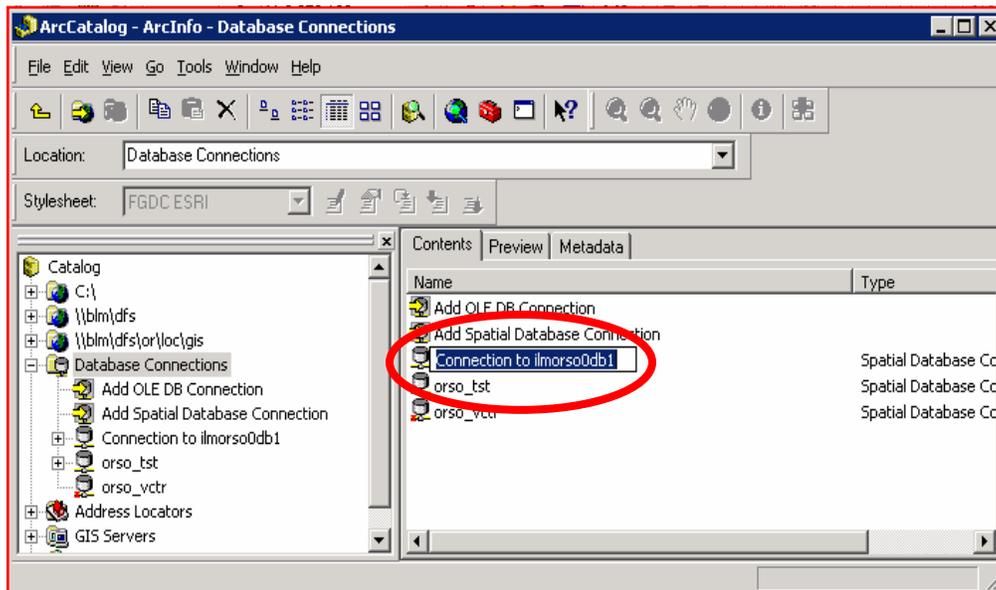
Place a checkmark next to **Save Name/Password**

Click the **Test Connection** button. If nothing happens you have a successful connection; if you get an error message check the above parameters and retry (see the following screen capture).



Once the form has been completed click **OK**.

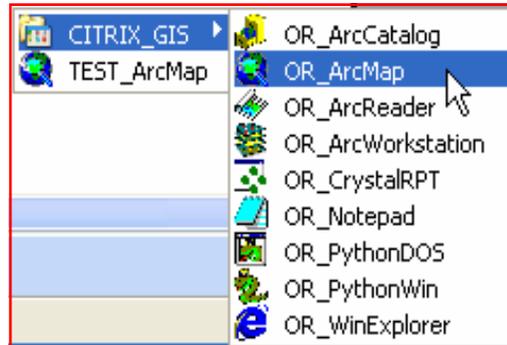
You should see a new connection in ArcCatalog.



Rename the new connection orsovctr (or something similar). Exit ArcCatalog.

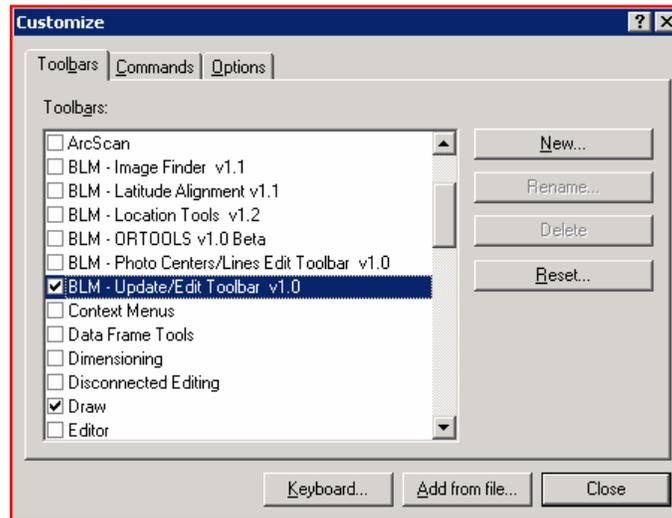
6. Launching Citrix ArcMap

Launch Citrix ArcMap from the Citrix Program Neighborhood.

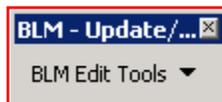


Click **OK** to dismiss the Notice of Monitoring window, and click **OK** again to start using ArcMap with a new map.

In order to edit IRDA data the BLM Update/Edit toolbar needs to be turned on. In the Customize window (Tools → Customize) place a checkmark next to **BLM –Update/Edit Toolbar**.

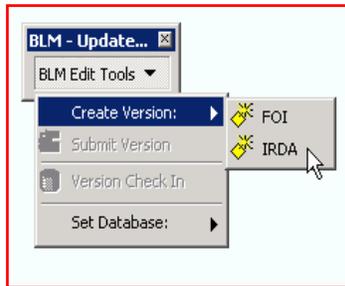


The toolbar should now be visible in your map; dock it anywhere you like.

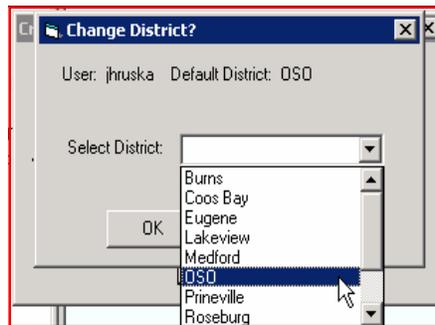


You need to create an editable version of the IRDA data which will later be submitted after you have made your edits. If you don't plan on editing you can add IRDA data directly from the connection you made in ArcCatalog to perform queries or analysis.

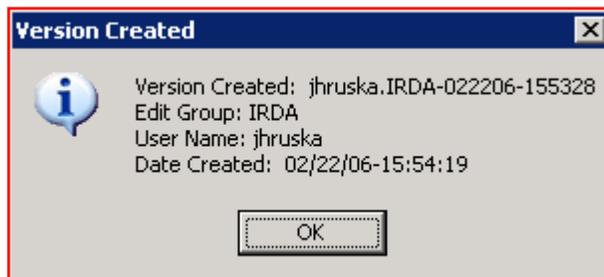
On the BLM Update/Edit tools toolbar select BLM Edit Tools → Create Version → IRDA.



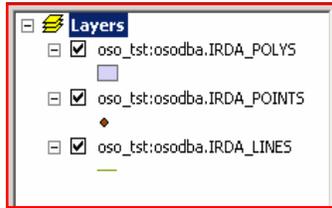
Your username and district should be displayed. If you are working with data from your district click **OK**; if not select the district that contains the data you will be editing.



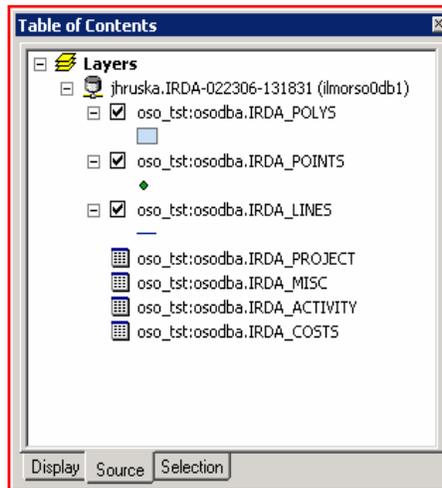
The version will be created and a message will be displayed to verify all of the version information. The version name will be your username along with a date and time stamp, i.e., jhruska.IRDA-022206-155328 was created by jhruska on 02/22/06 @ 15:53:28.



After you click **OK** you should see three layers have been added to your table of contents.



There are also four tables that have been added. You may need to click the source tab at the bottom of the table of contents to view the tables.



At this point additional layers may be added to your map that may be helpful in creating your new IRDA features (i.e., Streams, District Boundaries, DRGs, etc.).

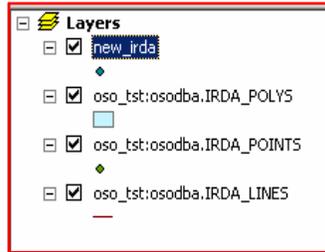
IRDA data can be entered into the database in two ways. Features can be attached to an existing project in the IRDA_PROJECT table or a new record can be created in the table. Each time a new project is created a unique ID for that record is created in the IRDA_ID field of the IRDA_PROJECT table. The IRDA_ID field is used to link all of the other IRDA features together.

7. Creating a New Project

The following example will show how to add a new project and features into that project.

In this case we will just be copying points from a shapefile into the IRDA_POINTS layer. You could also use the standard ArcMap edit tools to add new points, lines, or polygons to the IRDA layers.

Add the shapefile that contains your points (or lines) into ArcMap.

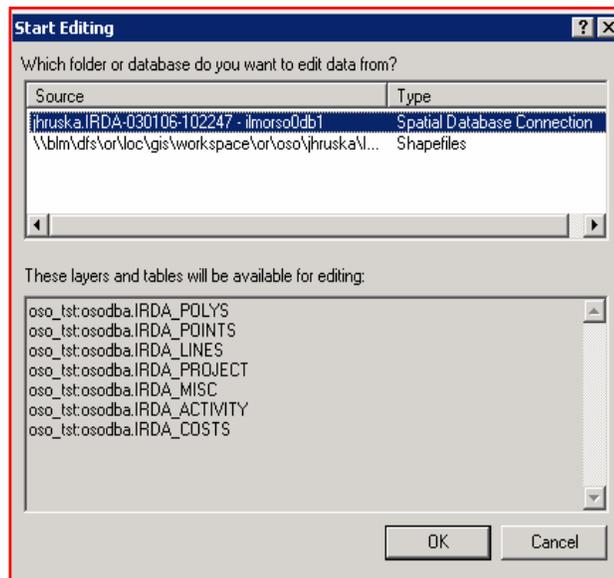


***Note:** When working in Citrix, make sure any data that you add to ArcMap is also in Citrix. You should have a workspace set up on Citrix to add data into before you use it in ArcMap. Use your desktop (local) version of ArcCatalog to move data into your Citrix workspace (network) (i.e., \\blm\dfs\or\loc\gis\workspace\or\oso\jhruska).

From the editor menu choose **Start Editing**.

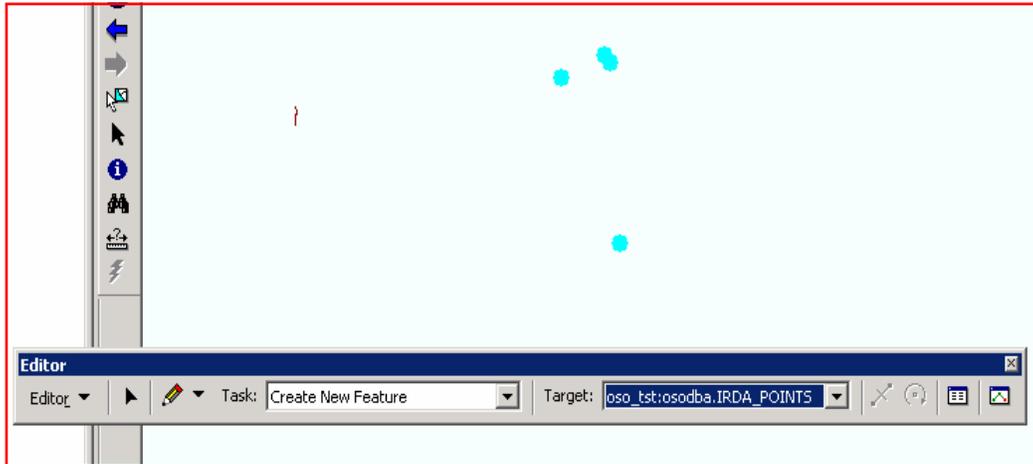


Choose the directory that contains your IRDA version and lists the IRDA layers since we will be adding data to these layers.

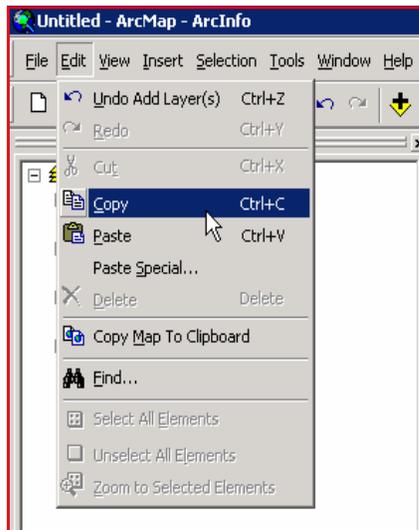


If needed set up your snapping environment so that new features snap together, Editor → Snapping (i.e., if you are adding culverts to the IRDA_POINTS layer you may want to snap to an existing road or streams layer).

Make sure that the points in your shapefile are selected and your target is set to the IRDA_POINTS layer.

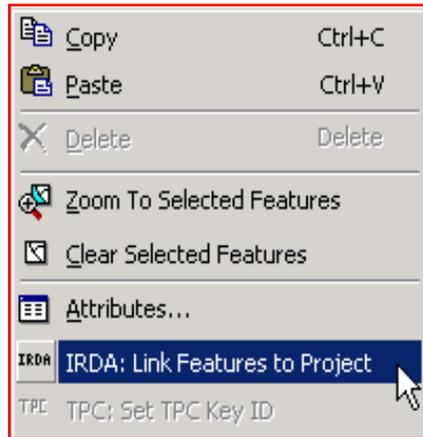


From the Edit menu choose **C**opy (or press **Ctrl+C** on the keyboard), and again from the Edit menu choose **P**aste (or press **Ctrl+V**).

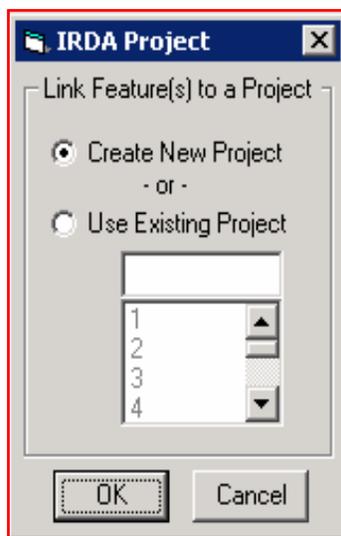


The points from your shapefile are now in the IRDA_POINTS layer but they need to be assigned to a project and attributed.

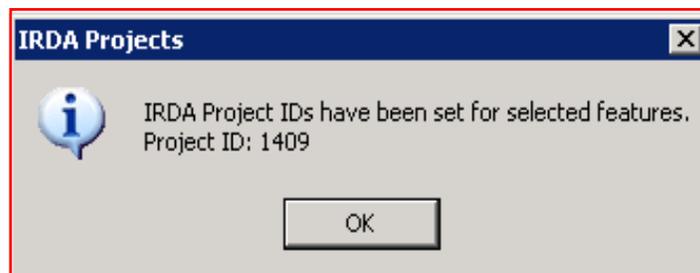
With your new IRDA_POINTS still selected right click with the Edit tool , and select **IRDA: Link Features to Project**.



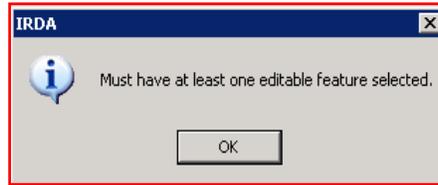
The IRDA tool gives you the option of creating a new project and assigning all of the selected features to that project or adding the selected features to an existing project.



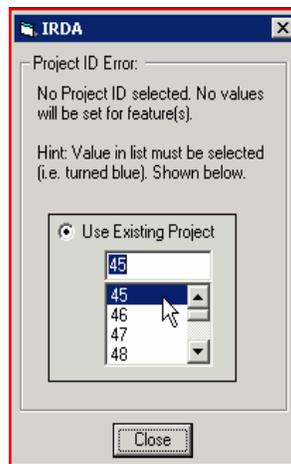
Click **OK** to Create a New Project.



If you do not have any selected features you will get an error telling you that IRDA features must be selected before creating a new project:

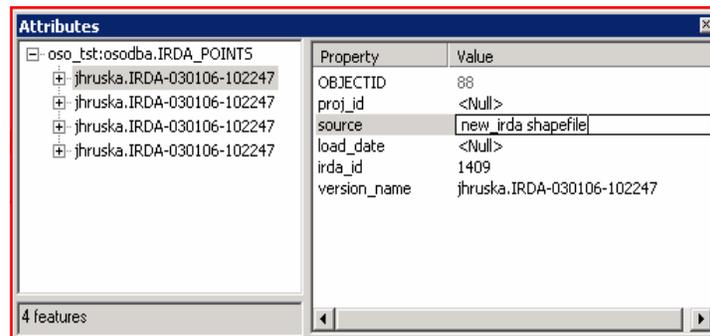


If you want to add the selected features to an existing IRDA project be sure to select the project number in the lower half of the selection window; if not you will see this error message:



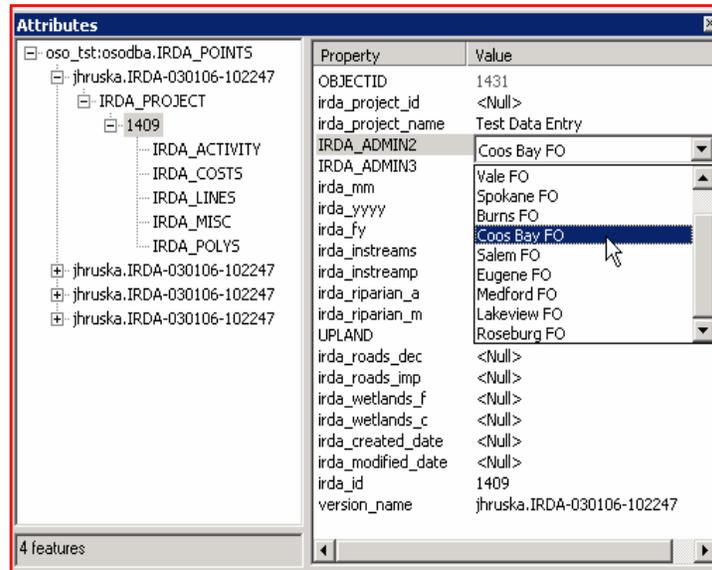
Now that our new project and features have been created we can use the standard ArcGIS attribute editor to add the attribute information to our project and points.

Click the **Attribute** button on the Editor toolbar .



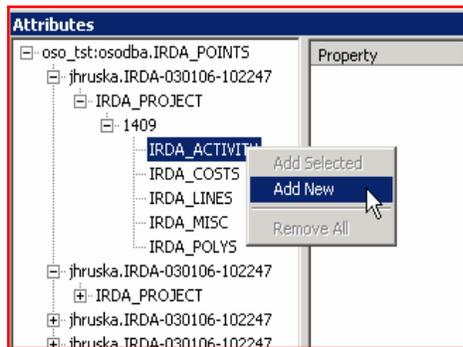
The Attributes window contains all of your selected features. The project that we just created (#1409) is listed under irda_id. If needed you can populate the source field for each one of your new IRDA_POINTS.

If we expand the record for our first point we can view the attributes of the IRDA_PPROJECT, IRDA_ACTIVITY, IRDA_COSTS, IRDA_LINES, IRDA_MISC, and IRDA_POLYS tables.



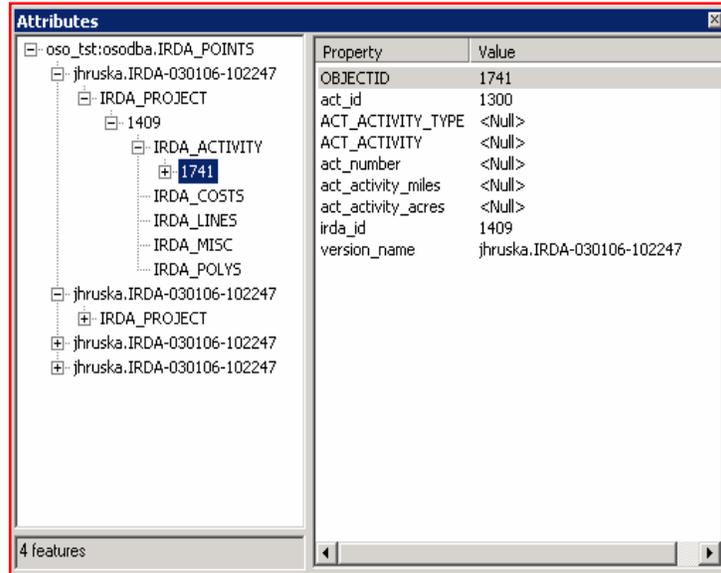
With the project still selected the attributes of that project can be populated by clicking in each field of the attribute value. Some attributes will have domains to choose from while others are manually entered. Once all the project information has been entered be sure to save your edits (Editor → Save Edits).

To add a new activity to this project, right click on **IRDA_ACTIVITY** and select **Add New**.

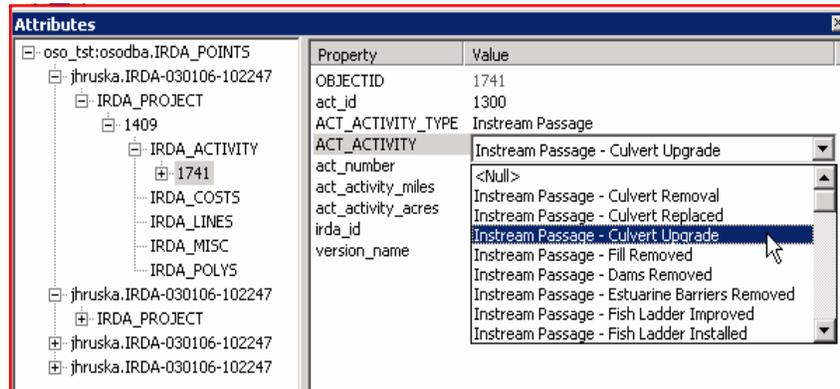


A new record is added to the Activity table (in this case objectid 1741) and displayed in the attribute window.

Click on the record, #1741 under IRDA_ACTIVITY, to display the attributes.



You may need to adjust the size of the Attributes window to see the entire pick list. Select the appropriate attributes and be sure to save your edits after you are done.



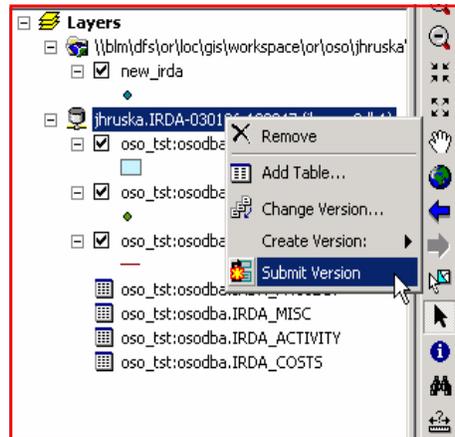
Enter the rest of the project information for the selected project in the tables and save your edits (Editor → Save Edits).

Four new sites have been added to the IRDA_POINTS layer. They are all now linked to an IRDA_PROJECT (#1409) which in turn has additional tables and information linked to that project.

8. Submitting a Version

After you have made all of your edits you need to submit your version back to the corporate database. You will receive an email notifying you when the default version has been updated and you will be able to see your new IRDA events in the database.

Save edits and stop editing. Right click on your version name and select **Submit Version**.



After the version is validated you will see the **Metadata: Process Description** screen.

Metadata: Process Description

Contact Information

Update Contact Info

Your Version has passed submission edit checks.

Please enter Contact Information for metadata updates first, and then fill out process description and source information for each featureclass or table that was updated.

Process Description

Feature Class: oso_tst:osodba.IRDA_LINES

Process Description:

Source Used: FOI LUA LLI
 GTRN DRG DQG

Other Sources:

Process Date: Mar 3 2006

Continue Version Submission Cancel Version Submission

Click the **Update Contact Info** button to enter your contact information (you cannot submit until you enter contact info).

Contact Information

To automatically populate form, select a district: State Office

Contact Person: Jeremy Hruska

Contact Organization: Bureau of Land Management - State Office District

Contact Position: GIS Training Guru

Address Type: Mailing and Physical Address

Address: 333 SW 1st Avenue

City: Portland

State: OR Postal Code: 97204 Country: USA

Voice:

FAX: 503-808-6308

Email: jhruska@or.blm.gov

OK

Cancel

After your contact info has been entered you can enter the process description for the edits that you have made. All edits should be documented in the process description window by selecting the feature class that edits were made to and entering a brief description of the edit. If tables were also edited, select each table from the feature class list and add a process description.

Process Description

Feature Class: oso_tst.osodba.IRDA_POINTS

Process Description: Added new points to IRDA_POINTS layer

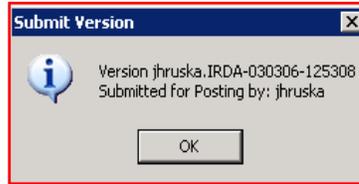
Source Used: FOI LUA LLI
 GTRN DRG DOQ

Other Sources: GPS

Process Date: Mar 3 2006

Continue Version Submission Cancel Version Submission

After you have completed the Metadata window click the **Continue Version Submission** button to submit your version. You will receive a message box telling you that your version has been submitted.

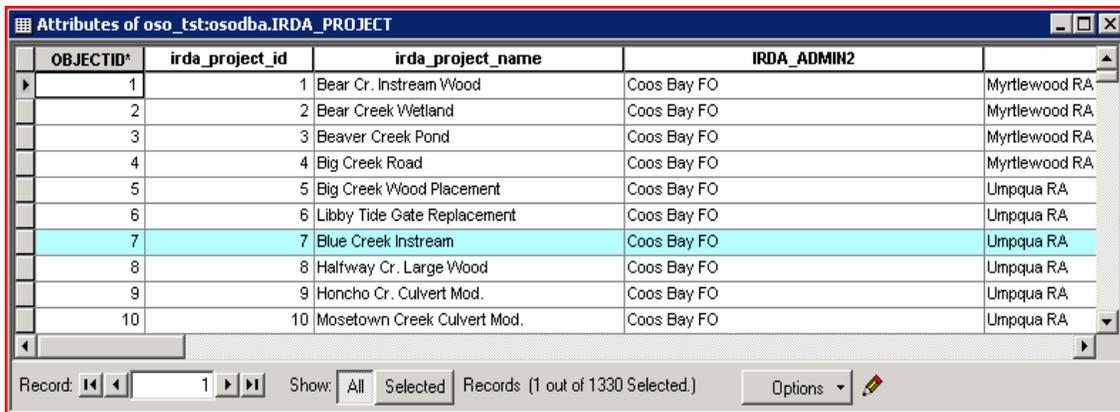


Once your version has been submitted you can no longer edit it. You should still save the map document that you were working in until your version has been accepted in case there are any problems with the submission process.

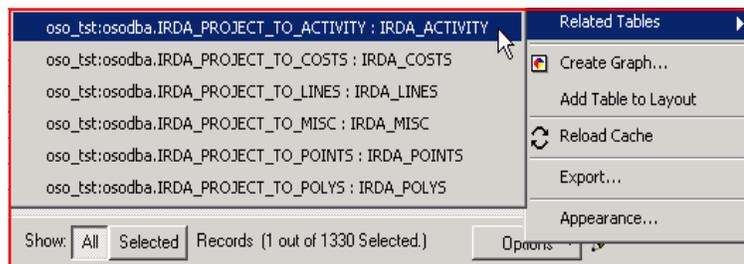
9. Deleting a Project

If you need to delete a project all of the features (points, lines, and polygons) and tables (Activity, Costs, Misc.) associated with that project must be deleted first or they will be left in the database without being attached to a project.

Select the project from the IRDA_PROJECT table that needs to be deleted.



From the Table Options menu select **Related Tables** and the first table listed in the menu.



Once the new table opens delete the selected records by clicking the gray square next to the selected row and pressing the delete key. If there are no selected records, choose the next table in the Related Tables list from the IRDA_PROJECT table until all related tables return with no selected records.

OBJECTID*	cost_id	COST_FUND_TYPE	cost_contribution	irda_id*
11	5	Other	25850	5 InitialLoad
12	5	Other	15000	5 InitialLoad
13	5	Other	700	5 InitialLoad
14	6	6650 - Jobs in the Woods	19500	6 InitialLoad
15	6	Other	26146	6 InitialLoad
16	6	Other	25000	6 InitialLoad
17	6	Other	11058	6 InitialLoad
18	6	6650 - Jobs in the Woods	12481	6 InitialLoad
19	7	6650 - Jobs in the Woods	8795	7 InitialLoad
20	8	6650 - Jobs in the Woods	43065	8 InitialLoad

Once all of the related records have been deleted the record in the IRDA_PROJECT table can be deleted.

10. Data Dictionary

IRDA_POINT (point feature class)

Field Name	Field Type	Length	Description
objectid			Internal feature number.
proj_id	Double		IRDA project identification. Identifier to distinguish individual projects.
irda_id	Double		Unique identifier automatically created when a new project is created. This field is used to link all of the IRDA features together.
source	Text	75	Source of point feature that is being added into IRDA.
load_date	Date		Date point was created.
version_name	Text	50	Name of version.
shape	Geometry		Default field stores feature class spatial information.

IRDA_ARC (line feature class)

Field Name	Type	Length	Description
objectid			Internal feature number.
proj_id	Double		IRDA project identification. Identifier to distinguish individual projects.
irda_id	Double		Unique identifier automatically created when a new project is created. This field is used to link all of the IRDA features together.
source	Text	75	Source of point feature that is being added into IRDA.
load_date	Date		Date point was created.
version_name	Text	50	Name of version.
shape	Geometry		Default field stores feature class spatial information.
SE_Length(shape)	Double		Automatically calculated length of line segment.

IRDA_POLY (polygon feature class)

Field Name	Type	Length	Description
objectid			Internal feature number.
proj_id	Double		IRDA project identification. Identifier to distinguish individual projects.
irda_id	Double		Unique identifier automatically created when a new project is created. This field is used to link all of the IRDA features together.
source	Text	75	Source of point feature that is being added into IRDA.
load_date	Date		Date point was created.
version_name	Text	50	Name of version.
shape	Geometry		Default field stores feature class spatial information.
SE_Area(shape)	Double		Automatically calculated area of polygon.
SE_Length(shape)	Double		Automatically calculated length of polygon line segment.

IRDA_PROJECT (table)

Field Name	Type	Length	Description
objectid			Internal feature number.
irda_project_id	Long Integer	10	IRDA project identification. Identifier to distinguish individual projects.
irda_project_name	Text	30	Stream or project name, used as a reference for the project. For stream name: accepted or colloquial name from the National Geographic Names Information System (GNIS).
irda_admin2	Text	35	Pick list stores BLM state office name. See table for dom_IRDA_admin2.
irda_admin3	Text	40	Pick list stores BLM resource area. See table for dom_IRDA_admin3.
irda_mm	Long Integer	10	Month project was completed (in mm format).
irda_yyyy	Long Integer	10	Year project was completed (in yyyy format).
irda_fy	Long Integer	10	Fiscal year project was completed (in yyyy format).
irda_instreams	Double		Instream—Structure; miles of stream treated. Includes actions designed to change or modify stream complexity and structure, including but not limited to placement of large woody debris, construction of weirs/deflectors, creation of pools, placement of boulders, rock gabions, gravel placement, development or improvement of side channels, alcoves, or other actions designed to improve stream structure.
irda_instreamp	Double		Instream—Passage; Miles of stream accessed to the nearest tenth of a mile. Includes actions designed to protect and improve fish passage for juvenile or adult fish including but not limited to: culvert removal, culvert upgrade, fish ladders improved or installed, irrigation diversions, fish screens.
irda_riparian_a	Double		Riparian acres; acres treated. Includes actions designed to improve, restore, or maintain quality and/or conditions of riparian zone vegetation; including but not limited to planting, fencing, off channel watering, beaver management,

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			invasive, plant control, livestock rotation or other management, stand conversion.
irda_riparian_m	Double		Riparian miles; miles of stream within the treated area to the nearest tenth of a mile. Includes actions designed to improve, restore, or maintain quality and/or conditions of riparian zone vegetation; including but not limited to planting, fencing, off channel watering, beaver management, invasive plant control, livestock rotation or other management, stand conversion.
irda_upland	Double		Upland acres treated. Includes actions designed in upland areas to minimize risk to riparian/aquatic system health and functions; including but not limited to: slope stabilization/revegetation, silvicultural treatments, livestock exclusion fencing.
irda_roads_dec	Double		Road decommissioning. Miles of roads decommissioned to the nearest tenth of a mile. Includes actions designed to make roads hydrologically stable and self-maintaining. Actions may range from full obliteration to water barring along with culvert removal.
irda_roads_imp	Double		Road improvements. Miles treated to the nearest tenth of a mile. Includes actions/ activities designed to reduce sediment and improve stability or to allow more natural functioning of stream and flood plain—including but not limited to drainage, upgrades, stabilization, and relocation.
irda_wetlands_f	Double		Wetlands (Freshwater). Acres treated. Activities designed to create, maintain, or restore freshwater wetland habitat.
irda_wetlands_c	Double		Wetlands (Coastal Estuary). Acres treated. Activities designed to create, maintain, or restore coastal estuary wetland habitat.
irda_id	Long Integer	10	Unique identifier automatically created when a new project is created. This field is used to link all of the IRDA features together.
version_name	Text	50	Name of version.

IRDA_ACTIVITY (table)

Field Name	Type	Length	Description
objectid			Internal feature number.
act_id	Long Integer		Activity ID.
act_activity_type	Text	50	Pick list stores activity type. See table for dom_IRDA_activity_type
act_activity	Text	30	Pick list stores activity. See table for dom_IRDA_activity
act_number	Long Integer	10	Number of locations (e.g., culverts) for the specified activity. Not applicable to all activities.
act_activity_miles	Double		Accomplishment miles for the specified activity. This is a portion of the total miles stored in the project table provided so that accomplishment miles can be shown for specific activities like culvert removal. This is not required for all activities. The type of miles (treated vs. accessed) varies by activity.
act_activity_acres	Double		Accomplishment acres for the specified activity. This is a portion of the total acres stored in the project table provided so that accomplishment acres can be show for specific activities like upland planting. This is not required for all activities.
irda_id	Long Integer	10	Unique identifier automatically created when a new project is created. This field is used to link all of the IRDA features together.
version_name	Text	50	Name of version.

IRDA_COSTS (table)

Field Name	Type	Length	Description
objectid			Internal feature number.
cost_id	Long Integer	10	Cost ID.
cost_fund_type	Text	50	Funding type codes selected from pick list. See table for dom_IRDA_fund_type.
cost_contribution	Long Integer	10	Total cost contributed by agency or partner. Costs in whole dollars. Cost may be rounded to the nearest \$1000 or \$100, but enter as dollars (e.g., \$45,465 may be entered as 45465 or 45000). Summarizes costs associated with project by contributor, including but not limited to, project costs, contributions, planning, monitoring, maintenance and administration costs, this field should reflect the best estimate of the total costs.
irda_id	Long Integer	10	Unique identifier automatically created when a new project is created. This field is used to link all of the IRDA features together.
version_name	Text	50	Name of version.

IRDA_MISC (table)

Field Name	Type	Length	Description
objectid			Internal feature number.
misc_id	Long Integer	10	Misc ID.
misc_title	Text	70	Title of additional data item (e.g., project start date).
misc_value	Text	60	Value of additional data item.
misc_uom	Text	20	Unit of measure for the additional data item (e.g., mile, acre, foot, etc.).
irda_id	Long Integer	10	Unique identifier automatically created when a new project is created. This field is used to link all of the IRDA features together.
proj_id	Long Integer	10	Project ID.
version_name	Text	50	Name of version.

Domains:

dom_IRDA_admin2

Domain Codes and Descriptions irda_admin2

Code	Description
Prineville FO	Prineville FO
Vale FO	Vale FO
Spokane FO	Spokane FO
Burns FO	Burns FO
Coos Bay FO	Coos Bay FO
Salem FO	Salem FO
Eugene FO	Eugene FO
Medford FO	Medford FO
Lakeview FO	Lakeview FO
Roseburg FO	Roseburg FO

dom_IRDA_admin3

Domain Codes and Descriptions irda_admin3

Code	Description
Andrews RA	Andrews RA
Three Rivers RA	Three Rivers RA
Myrtlewood RA	Myrtlewood RA
Umpqua RA	Umpqua RA
Siuslaw RA	Siuslaw RA
Upper Willamette RA	Upper Willamette RA
Klamath Falls RA	Klamath Falls RA
Lakeview RA	Lakeview RA
Ashland RA	Ashland RA
Butte Falls RA	Butte Falls RA
Glendale RA	Glendale RA
Grants Pass RA	Grants Pass RA
Central Oregon RA	Central Oregon RA
Deschutes RA	Deschutes RA
South River RA	South River RA
Swiftwater RA	Swiftwater RA
Cascades RA	Cascades RA
Marys Peak RA	Marys Peak RA
Tillamook RA	Tillamook RA
Border RA	Border RA
Wenatchee RA	Wenatchee RA
Baker RA	Baker RA
Jordan RA	Jordan RA
Malhuer RA	Malhuer RA

dom_IRDA_fund_type

<i>Domain Codes and Descriptions</i>		<i>irda_fund_type</i>
Code	Description	
CCS	CCS	
CMRD	CMRD - Roads	
CWKV	CWKV - KV	
NFN3	NFN3 - Rehab & Restoration	
NFRG	NFRG - Range	
NFVW	NFVW - Watershed Vegetation	
NFWF	NFWF - Fish & Wildlife	
1010	1010 - Soil, Water, Air	
1020	1020 - Range	
1040	1040 - Riparian	
1120	1120 - Fish	
1110	1110 - Wildlife	
1150	1150 - T & E	
1654	1654 - Infrastructure Improvement	
5882	5882 - County Payments (Title II)	
6110	6110 - Construction / Flood \$	
6230	6230 - Transportation Maintenance	
6310	6310 - Forest Management	
6320	6320 - Reforestation and Forest Development	
6333	6333 - Soil, Water, Air	
6334	6334 - Wildlife Habitat	
6650	6650 - Jobs in the Woods	
Flood	Flood - Emergency Flood	
Other	Other	
Unknown	Unknown	

dom_IRDA_activity_type

<i>Domain Codes and Descriptions</i>		<i>irda_activity_type</i>
Code	Description	
Instream Passage	Instream Passage	
Riparian	Riparian	
Roads Decommissioned	Roads Decommissioned	
Roads Improved	Roads Improved	
Upland	Upland	
Wetlands Coast	Wetlands Coast	
Wetlands Fresh	Wetlands Fresh	

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dom_IRDA_activity

<i>Domain Codes and Descriptions</i>	<i>irda_activity</i>
Code	Description
Culvert Removal	Instream Passage - Culvert Removal
Culvert Replacement	Instream Passage - Culvert Replacement
Culvert Upgrade	Instream Passage - Culvert Upgrade
Fill Removed	Instream Passage - Fill Removed
Dams Removed	Instream Passage - Dams Removed
Estuarine Barriers Removed	Instream Passage - Estuarine Barriers Removed
Fish Ladder Improved	Instream Passage - Fish Ladder Improved
Fish Ladder Installed	Instream Passage - Fish Ladder Installed
Fish Screens	Instream Passage - Fish Screens
Irrigation Diversions	Instream Passage - Irrigation Diversions
Log Jam Removal	Instream Passage - Log Jam Removal
Road Crossing – Ford	Instream Passage - Road Crossing – Ford
Other	Instream Passage - Other
Boulders	Instream Passage - Boulders
Channel Connectivity	Instream Passage - Channel Connectivity
Deflectors	Instream Passage - Deflectors
Gravel Placement	Instream Passage - Gravel Placement
Large Woody Debris	Instream Passage - Large Woody Debris
Off-Channel: Alcove	Instream Passage - Off-Channel: Alcove
Off-Channel: Pond	Instream Passage - Off-Channel: Pond
Off-Channel: Side Channel	Instream Passage - Off-Channel: Side Channel
Rootwads	Instream Passage - Rootwads
Weirs	Instream Passage - Weirs
Beaver Management	Riparian - Beaver Management
Fencing	Riparian - Fencing
Fish Habitat Acquired	Riparian - Fish Habitat Acquired
Invasive Plant Control	Riparian - Invasive Plant Control
Livestock Rotation	Riparian - Livestock Rotation
Livestock Stream Crossing	Riparian - Livestock Stream Crossing
Long-term Easement Established	Riparian - Long-term Easement Established
Off Channel Watering	Riparian - Off Channel Watering
Planting	Riparian - Planting
Prescribed Burn	Riparian - Prescribed Burn
Stand Conversion	Riparian - Stand Conversion
Stand Thinning	Riparian - Stand Thinning
Streambank Stabilized	Riparian - Streambank Stabilized
Closed	Roads Decommissioned - Closed
Eliminate	Roads Decommissioned - Eliminate
Drainage	Roads Improved - Drainage
Relocation	Roads Improved - Relocation
Stabilization	Roads Improved - Stabilization
Upgrades	Roads Improved - Upgrades
Erosion Structures	Upland - Erosion Structures
Livestock Exclusion Fencing	Upland - Livestock Exclusion Fencing
Slope Stabilization	Upland - Slope Stabilization
Stand Management	Upland - Stand Management
Water Development	Upland - Water Development
Wetland Acquired/Protected	Wetlands Coast - Wetland Acquired/Protected
Wetland Creation	Wetlands Coast - Wetland Creation
Wetland Enhancement	Wetlands Coast - Wetland Enhancement
Wetland Restoration	Wetlands Coast - Wetland Restoration

Relationships:

IRDA_PROJECT to IRDA_ACTIVITY
IRDA_PROJECT to IRDA_COSTS
IRDA_PROJECT to IRDA_LINES
IRDA_PROJECT to IRDA_MISC
IRDA_PROJECT to IRDA_POINTS
IRDA_PROJECT to IRDA_POLYS