

Using NOC EGIS Citrix & Connecting to REA Server

Learn to Use NOC EGIS Citrix and Directly Access REA Data, Maps, Models

BLM Access Only

By logging into NOC EGIS Citrix you can access REA data, maps and models directly and use ArcMap, ArcCatalog, and Windows Explorer applications in the same environment (speeding up performance). You can also connect directly to the NOC REA server to access REA products (although this is likely the slower option). Either way, once you make a connection, you can access the REA folders and databases which give you can access to:

- Data (raster, vector and layer files)
- Metadata (.xml)
- Maps (.mxd)
- Models in Toolbox (.tbx) and/or Python Script (.py)
- Map Services (https), and
- Supporting documents for data, maps, and models (.pdf, .pptx, .docx, .xlsx).

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Part 1: Learn How to Use NOC EGIS Citrix

Request Membership to NOC EGIS Citrix Users Group

To access REA data, maps models and ArcGIS Desktop through Citrix, you must become a member of the NOC EGIS Citrix users group.

1. Submit a [Remedy ticket](#) and
 - a. Get **Citrix Receiver v4.2** installed on your computer (if you are in a Citrix state, you should already have this), and
 - b. request membership to the **NOC EGIS Citrix Group -- ilmGnirmEgisAppsProdXX** where **XX** is your state (e.g., ilmGnirmEgisAppsProdAZ).

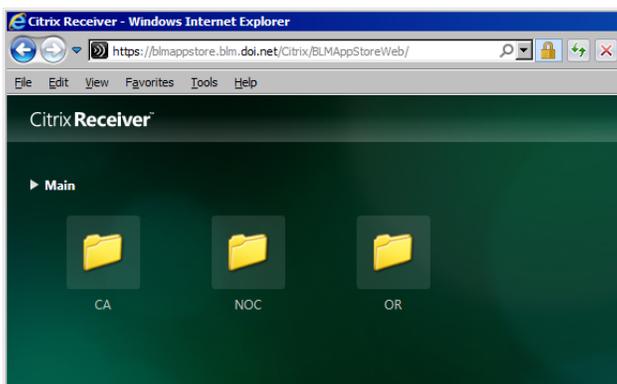
NOTE: All REA products have been upgraded to **ArcGIS 10.2** (some were previously 10.0) **so you should work in ArcMap or ArcCatalog 10.2**. The EGIS Citrix environment provides access to both 10.1 and 10.2. So be aware of difference in software versions.

Log into Citrix

You can log into Citrix one of two ways: Storefront Web Interface or using the Citrix Receiver Client.

Storefront web interface:

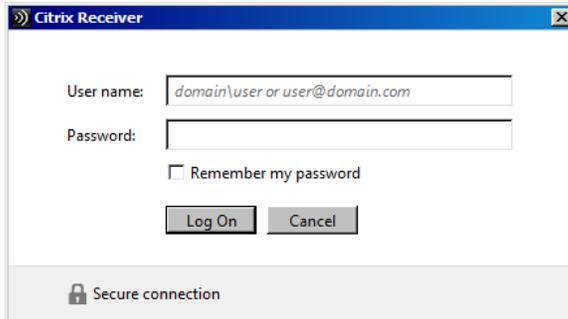
You can access the BlmAppStore web interface by opening Internet Explorer and going to this address <https://BlmAppStore.blm.doi.net>. The user will need to log in with their username and password. Once the user has logged in at the top level they will see folders for states that contain applications that they have been granted access to.



The user will click on the folder for state that has hosted their application and then browse to find and select their application.

Citrix Receiver Client:

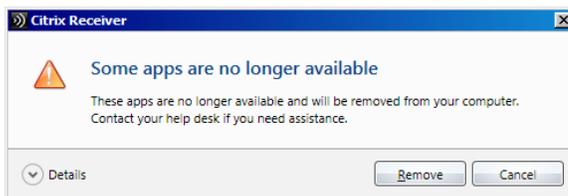
The Receiver client on your system is already configured to connect to the Storefront on startup. Upon log the user will be prompted to enter their username and password like SO:



Once the user enters their username and password the client will connect. If the user is launching applications from the Receiver client or the start menu > BlmCitrixAppStore they should not be prompted again for a username and password until they log off their desktop, reboot, or log off the receiver client. If the user checks the box **“Remember my password”** they will not be prompted again until they change their password or if the user right-clicks on the receiver client icon  in the system tray and select About > (expand) Advanced and clicks on Delete Passwords.



With the Receiver Program neighborhood functionality (*i.e.* start menu icons) the user may sometimes receive the following message after logging on. This is just part of the synchronization process. After the user logs on, if the client detects that applications have been removed or changed this message will be displayed. If the user clicks the Remove button any icons that have been removed from the users view will be removed from the Receiver client and the start menu.



The user can access the Receiver client from the start menu under Start > All Programs > Citrix Receiver or by right-clicking on the Receiver icon  in the system tray near the system time and then select open.

Open an Application in Citrix (e.g., ArcMap)

You can open application through the BLM Citrix Storefront but we recommend doing it through your Start Menu because it is easier to locate the applications.

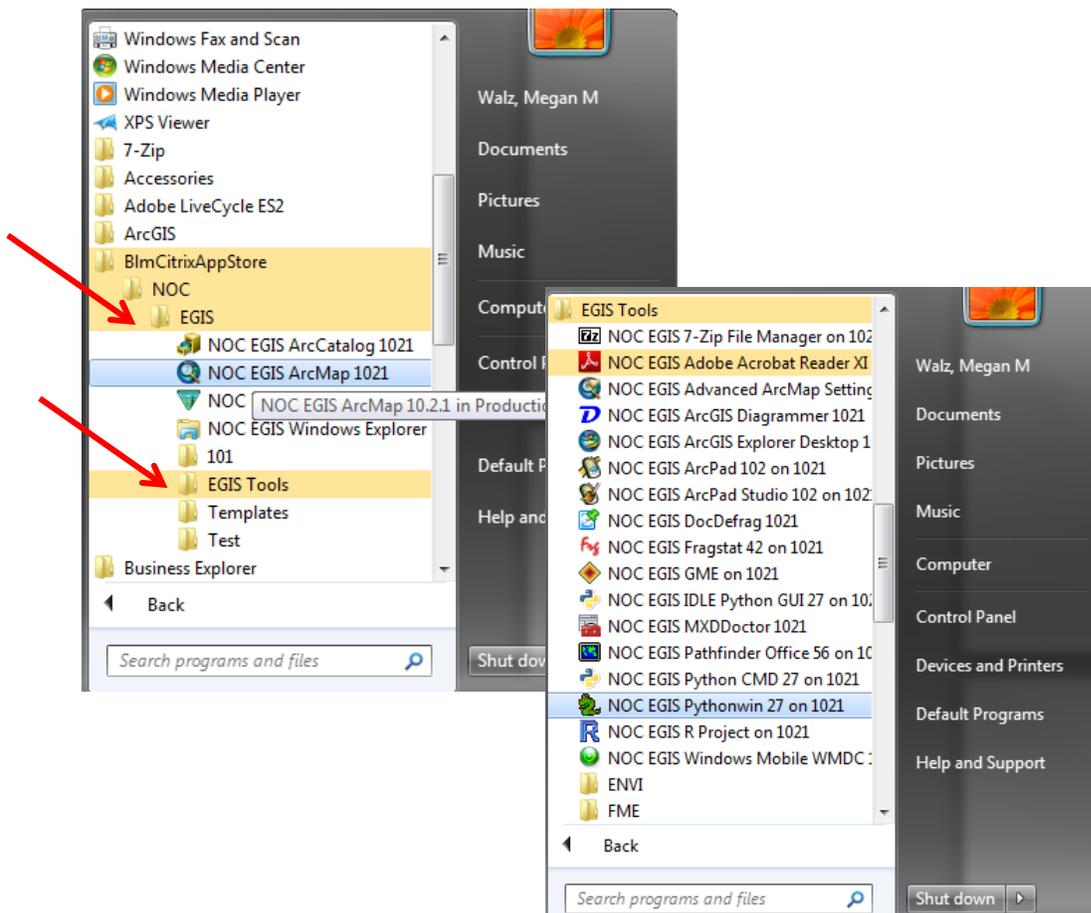
Start menu applications:

To open Citrix applications from the start menu click Start > All Programs > BlmCitrixAppStore. Here the user will see folders for states that contain applications that they have been granted access to. Click on the folder for the state that has hosted their application and then browse to find and select their application.

If the user did not already log on to the Receiver client on startup, or chose to save their password then the user will be prompted to enter their username and password before opening the application.

To access **ArcMap or ArcCatalog**, click on NOC>EGIS>NOC EGIS ArcMap 10.x or NOC>EGIS>NOC EGIS ArcCatalog 10.x

To access **other EGIS applications**, expand the EGIS Tools subfolder, you we see a list of other applications that are available to you:



Part 2: Access REA Products on the NOC Server

By logging into NOC EGIS Citrix you can access REA data, maps and models directly and use ArcMap, ArcCatalog, and Windows Explorer applications in the same environment (speeding up performance). We recommend this option. But you can also connect directly to the NOC REA server to access REA products (although this is likely the slower option) using the DFS path below in the blue box. Either way, once you make a connection to the server, you can access the REA folders and databases which give you can access to:

- Data (raster, vector and layer files)
- Metadata (.xml)
- Maps (.mxd)
- Models in Toolbox (.tbx) and/or Python Script (.py)
- Map Services (https), and
- Supporting documents for data, maps, and models (.pdf, .pptx, .docx, .xlsx).

Connect to REA Folders in ArcCatalog

Access raster data, layer files, maps, and models

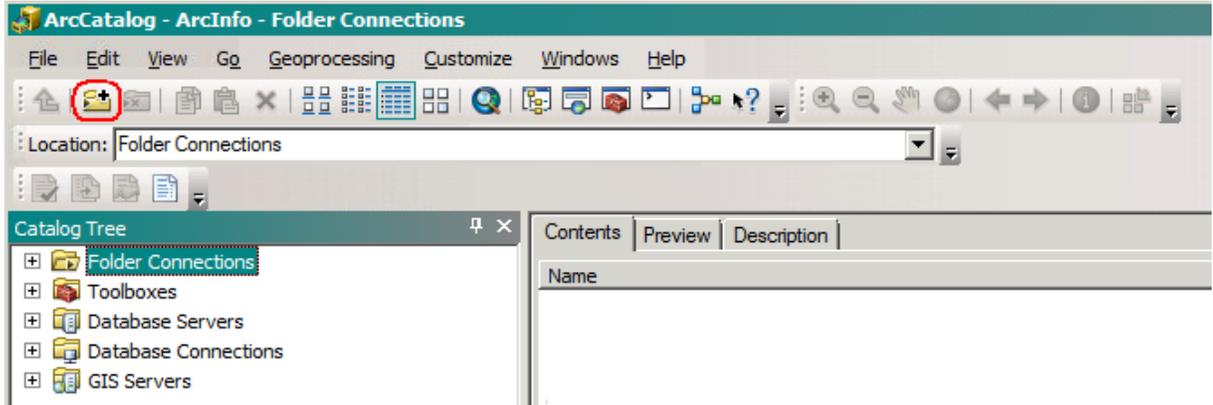
To directly access REA data files (such as raster data, data layers, map documents, and geoprocessing models and scripts), you need to connect to the REA folder that contain the files. Use the steps below to make the connection and see the Appendix to learn about how REA files are named. To access vector data, see *Connect to REA Databases in ArcCatalog*.

1. Open ArcCatalog.
 - a. WARNING: You may receive an initial Security Window as show below. Check the box for “Do not ask me again for this site”, and select Block Access.

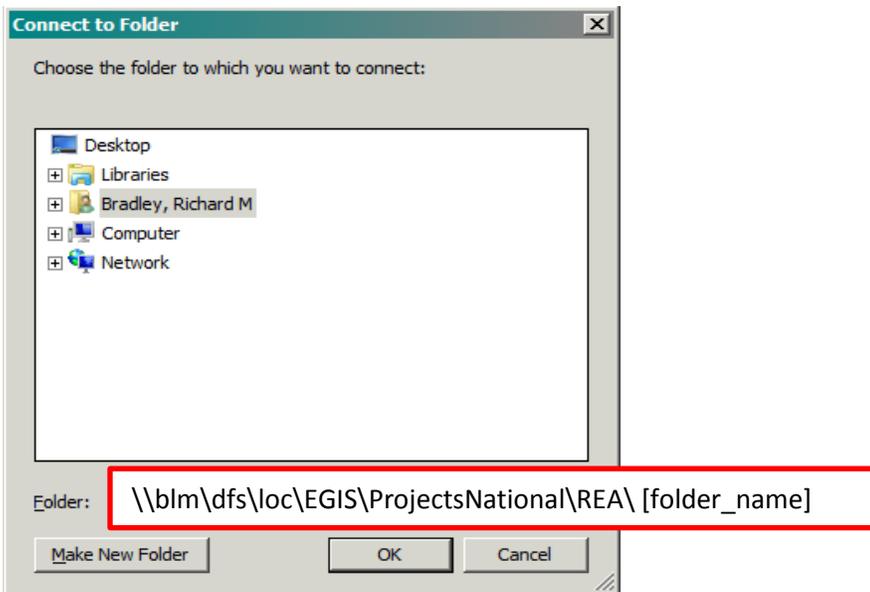


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2. Click the **Connect to Folder icon** in the ArcCatalog toolbar (it looks like a folder with a plus sign on it).



3. You will be presented with the **Connect to Folder dialog box** as shown below.
 - a. In the Folder box, enter the following: \\blm\dfs\loc\EGIS\ProjectsNational\REA\
[folder_name]
 - i. The [folder_name] corresponds to the REA folder you want to access. **A list of REA folder names is provided in the table below.**
 - ii. For example, the folder name for the Colorado Plateau REA (acronym = COP) is "COP_2010".
 - b. Click OK



List of REA Data Folders (they reflect the connection folders above)

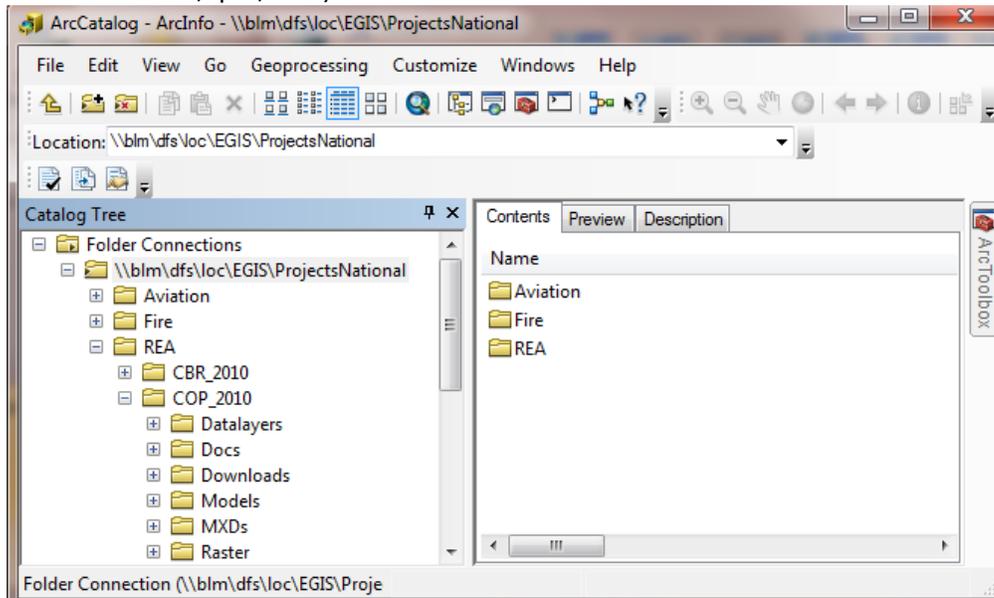
Note: If data is not yet available for an REA, you will not be able to connect to the folder.

Central Basin and Range	CBR_2010	Northern Great Basin	NGB_2011
Chihuahuan Desert	CHD_2012	Northwestern Great Plains	NWP_2011
Colorado Plateau	COP_2010	Seward Peninsula	SNK_2010
Madrean Archipelago	MAR_2012	Sonoran Desert	SOD_2010

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Middle Rockies	MIR_2011	Southern Great Plains	SGP_2012
Mojave Basin and Range	MBR_2010	Wyoming Basin	WYB_2011
North Slope	NOS_2012	Yukon Kuskokwim	YKL_2011

4. At this point you have added a data resource to ArcCatalog. NOTE: The content of your Catalog Tree may have additional and different connections than shown below. You can now expand these folders (e.g., Datalayers) and navigate to your chosen REA eco-region data (see next Step).
 - a. **This folder connection gives you access to all data except vector data** which are stored in an ArcSDE database which you will connect to in the next step.
 - b. To see non-spatial files such as Word documents or PDFs in the Docs folder, use the Windows Explorer applications. Or, to make them visible in ArcCatalog, go to the menu bar and click Customize, ArcCatalog Options, File Types tab, and click New Type... (such as .docx, .pdf, .xlsx).

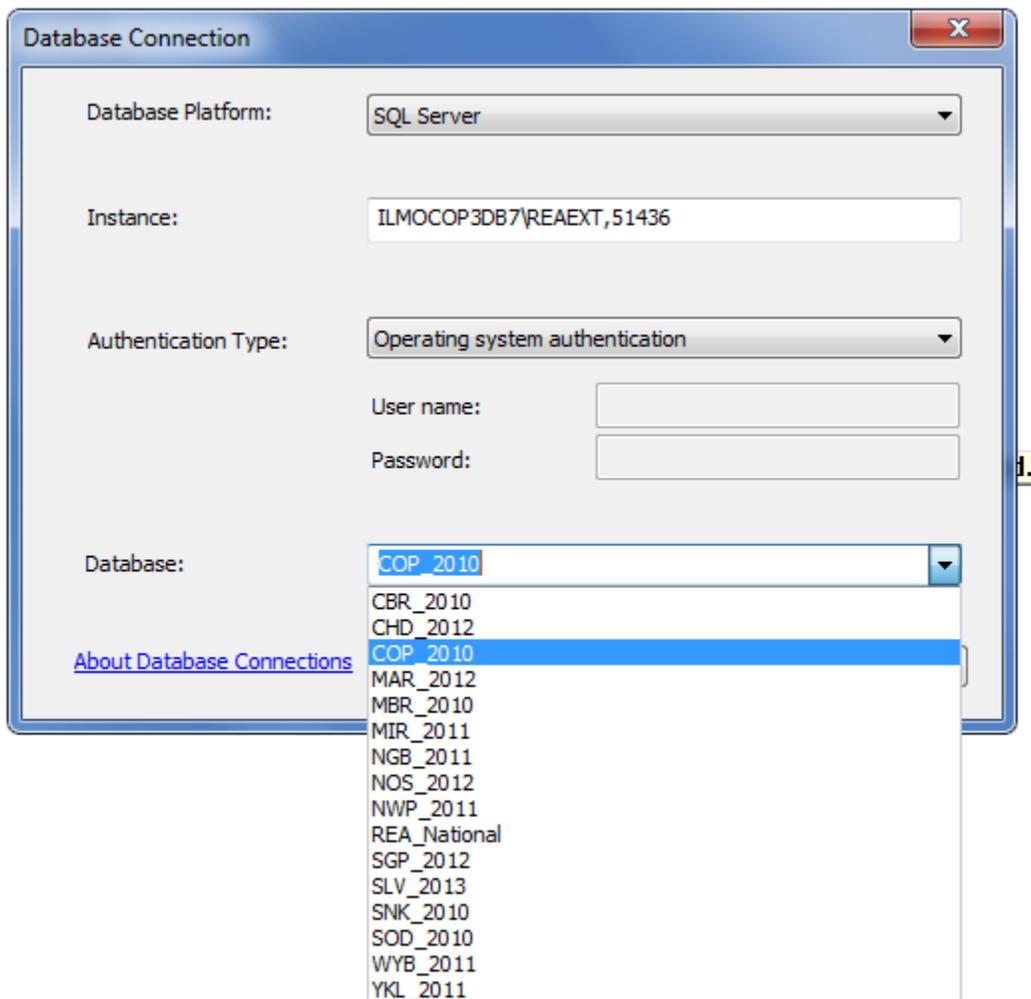


Connect to REA Databases in ArcCatalog

Access vector data

All vector data are stored in ArcSDE databases (not file folders). To access it, you need to connect to the REA database that contains the vector data. Use the steps below to make the connection and see Appendix A to learn about how REA files are named.

1. Open ArcCatalog.
2. Click **Database Connections**.
3. Double click **Add Database Connection**.
4. Enter the information in the figure below (selecting the preferred REA Database)
5. Click OK

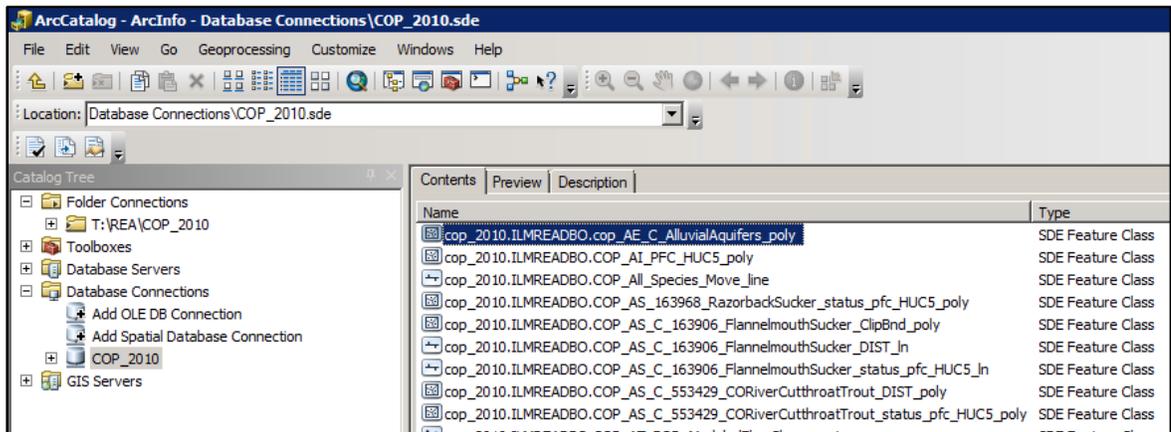


List of REA Folders (use these in the Connect to Folder dialog box shown above)

Note: If data is not yet available for an REA, you will not be able to connect to the database.

Central Basin and Range	CBR_2010	Northern Great Basin	NGB_2012
Chihuahuan Desert	CHD_2012	Northwestern Great Plains	NWP_2011
Colorado Plateau	COP_2010	Seward Peninsula	SNK_2010
Madrean Archipelago	MAR_2012	Sonoran Desert	SOD_2010
Middle Rockies	MIR_2011	Southern Great Plains	SGP_2012
Mojave Basin and Range	MBR_2010	Wyoming Basin	WYB_2011
North Slope	NOS_2012	Yukon Kuskokwim	YKL_2011

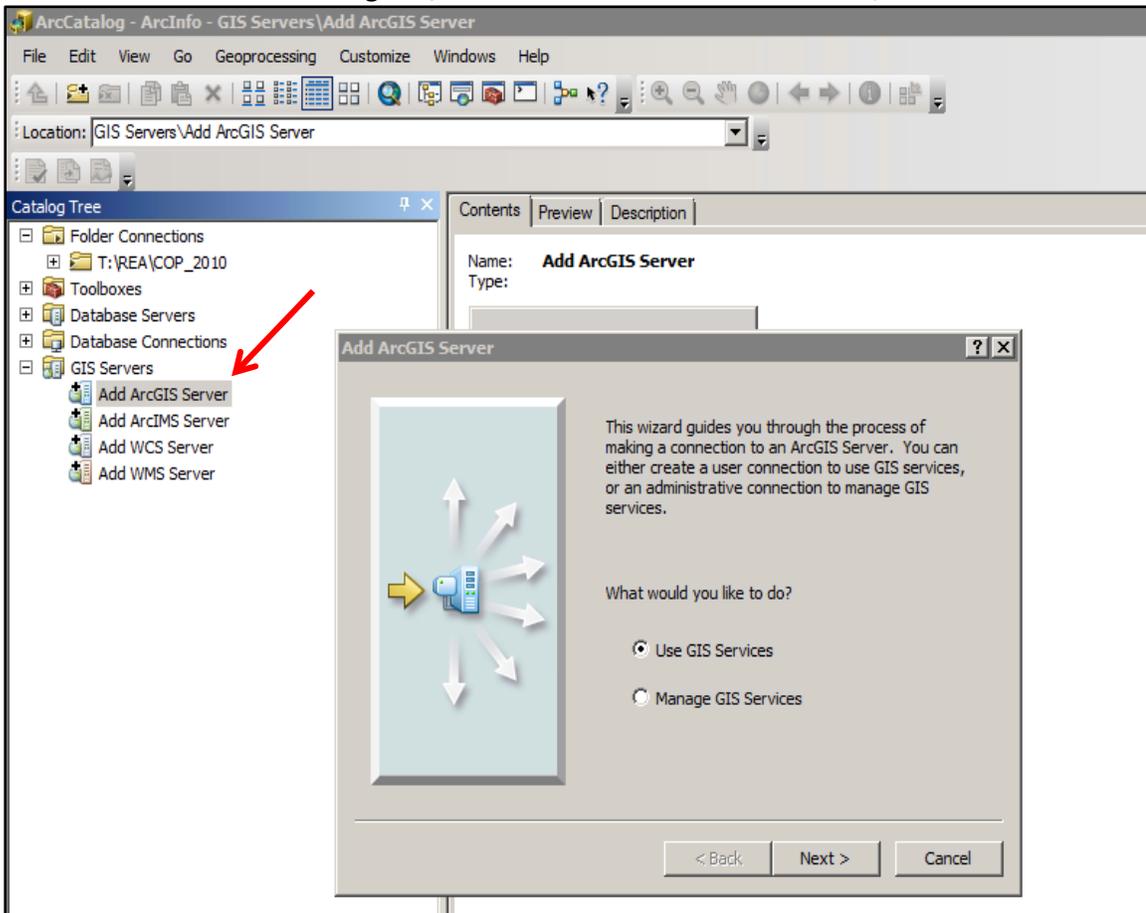
6. Once connected you will see a comprehensive list of all vector data.



Connect to REA Map Services in ArcCatalog

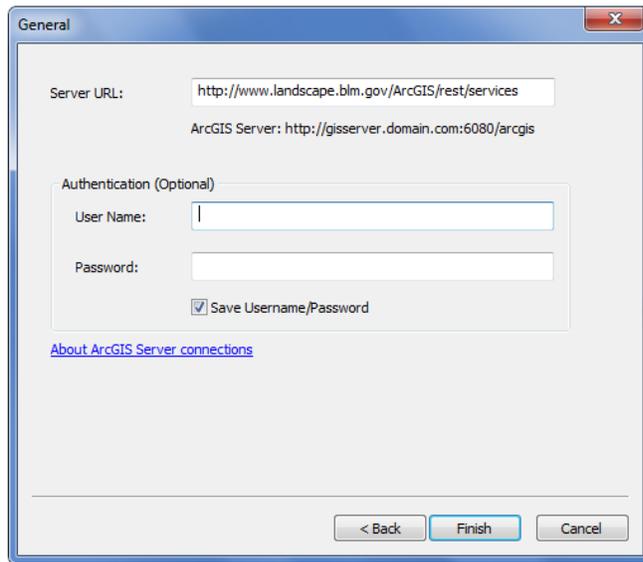
Besides viewing map documents directly in ArcMap, you can also view maps as map services using the following steps.

1. Open ArcCatalog.
2. Click on **GIS Servers** in the Catalog Tree.
3. Double-click **Add ArcGIS Server**.
4. In the **Add ArcGIS Server dialog box**, select **Use GIS Services** radio button, click **Next**.



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- For the Server URL, enter a URL found in the table below. They are specific to each REA.



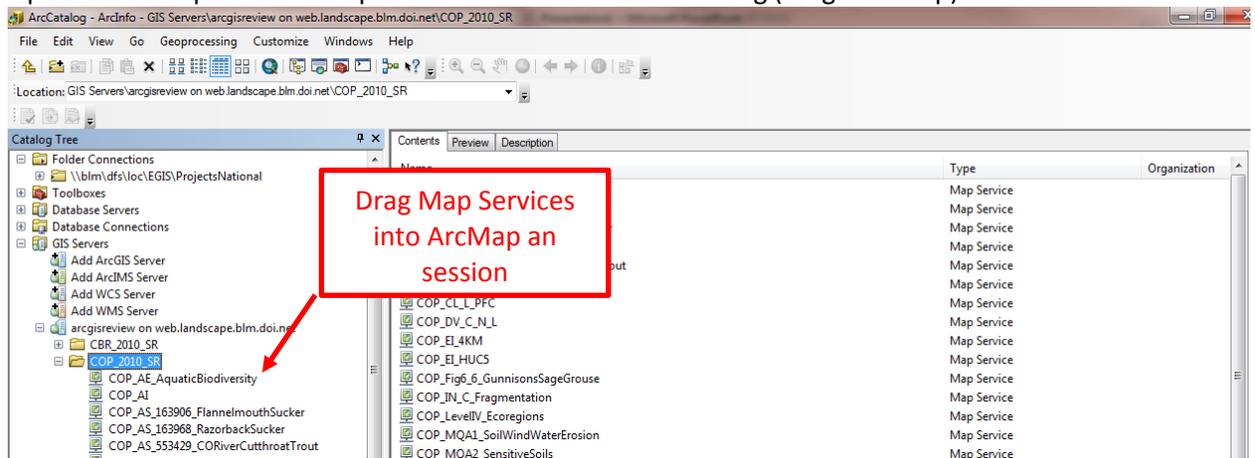
COP	http://www.landscape.blm.gov/arcgis/rest/services
SOD	http://www.landscape.blm.gov/arcgis/rest/services
CBR	http://www.landscape.blm.gov/arcgis/rest/services
MBR	http://www.landscape.blm.gov/arcgis/rest/services
SNK	http://www.landscape.blm.gov/SNKarcgis/rest/services
MIR	http://www.landscape.blm.gov/MIRarcgis/rest/services
NWP	http://www.landscape.blm.gov/NWParcgis/rest/services
NGB	http://www.landscape.blm.gov/NGBarcgis/rest/services
YKL	http://www.landscape.blm.gov/YKLarcgis/rest/services
MAR	http://www.landscape.blm.gov/MARarcgis/rest/services
WYB	http://www.landscape.blm.gov/WYBarcgis/rest/services
SGP	http://www.landscape.blm.gov/SGParcgis/rest/services
NOS	http://www.landscape.blm.gov/NOSarcgis/rest/services

Copying and pasting one of these URL's into an internet browser will take you to a map services directory for the REA.

- Click Finish
 - NOTE:** A Security Alert dialog may appear: Click **Yes**. (This is a self-signed certificate from the internal ArcGIS server and should be safe behind the BLM firewall)
- Note the new connection to the server in the right side detail panel. Rename the connection if desired.
- Expand the connection and then expand the folder for your desired REA eco-region. The map services should appear.

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9. Open an ArcMap session and pull in the service from ArcCatalog (drag and drop).



For further reference, the link to ESRI below explains very well how to connect from ArcMap/ArcCatalog: <http://resources.arcgis.com/en/help/main/10.1/index.html#//01540000047m000000>

Appendix A

List of REAs and Acronyms

Below is a list of REAs and their corresponding 3-letter codes which are used in naming files, folders, and databases.

REA	3-Letter Code
Central Basin and Range	CBR
Chihuahuan Desert	CHD
Colorado Plateau	COP
Madrean Archipelago	MAR
Middle Rockies	MIR
Mojave Basin and Range	MBR
North Slope	NOS
Northern Great Basin	NBB
Northwestern Great Plains	NWP
Seward Peninsula	SNK
Sonoran Desert	SOD
Southern Great Plains	SGP
Wyoming Basin	WYB
Yukon Kuskokwim	YKL

Appendix B

REA File Naming Conventions

There is a standard format used when naming REA files, including data, map, and model files. Understanding this format will help users decipher the content of the files. The following charts provide guidance on the REA file naming convention. Format varies with file type; however, all file names begin with a 3-letter code of an ecoregion (e.g., “COP” for the Colorado Plateau REA).

Format for file naming convention (based on file type)

File Type	File Naming Convention	Example	Description
Dataset	EC_Category_Status_Subject_Modifier_Type	NGB_TS_C_175855_GreaterSageGrouse	Dataset showing the current status of Greater Sage-Grouse in the NGB REA
Map	EC_Category_Description	NGB_TS_Greater_SageGrouse_C_N_L_Status.mxd	Map showing the current, near-term, and long-term status of Greater Sage-Grouse in the NGB REA
Model	EC_Category_ModelType_Description	NGB_TS_Geo_GreaterSageGrouse_C_Status.tbx	Geoprocessing model (Toolbox file) that analyzes the current status of Greater Sage-Grouse in the NGB REA

Examples of REA file names (and how to interpret them)

1. CBR_TS_C_175855_GRSG_Occ_Habitat_poly (CBR Terrestrial Species Greater Sagegrouse current occupied habitat polygons)
2. MIR_TG_C_SensitiveSoils_HUC5 (MIR Terrestrial Group current sensitive soils by HUC)
3. SOD_AE_C_303d_stream_DN_tbl (SOD Aquatic Ecosystem Current 303d stream density access database table)
4. SOD_AE_C_ImpairedStream_density_huc5 (SOD aquatic ecosystem current impaired stream density by HUC)
5. COP_DV_C_LCM (COP development current landscape condition model index)
6. MIR_IV_N_40524_DN_poly (MIR near-term forecast density of invasive cheatgrass (*Bromus tectorum*) polygons)
7. MIR_IV_C_ALL_HUC5 (MIR All Invasives current status by HUC poly)
8. MIR_IV_C_ALLA_4km (MIR All aquatic Invasives current status 4km raster)
9. CBR_CL_N_TM_AV (CBR climate change near-term forecasted average temperature)
10. NGB_DV_C_ALL_DIST_4km (NGB all development current distribution 4km raster)
11. NGB_DV_C_RDS_DN (NGB development current road network density)

REA codes used in file naming convention

File Naming Codes		
EC^r	CBR CHD COP MAR MIR MBR NOS NGB NWP SNK SOD SGP WYB YKL	Central Basin and Range Chihuahuan Desert Colorado Plateau Madrean Archipelago Middle Rockies Mojave Basin and Range North Slope Northern Great Basin Northwestern Great Plains Seward Peninsula Sonoran Desert Southern Great Plains Wyoming Basin Yukon Kuskokwim
CATEGORY^r		
Conservation Elements	AE AG AR AS EI NV PL TES TG TS	Aquatic/Riparian Ecosystem Aquatic/Riparian Group Avian Richness Aquatic/Riparian Species Ecological Integrity Native Vegetation Places Terrestrial Ecosystem Terrestrial Group Terrestrial Species
Change Agents	CL DV FI IV	Climate Development Fire Invasives
Attribute Indicator	AT IN	Attribute Indicator
STATUS^r	C N L H	Current Near-Term Long-Term Historic

SUBJECT⁺	175855 AI Dust GR Gra IBA LCM MigratoryBirds MR NV OilGas PH Pop PPT RD Rds RESolar SA Soil SP TE TM or Temp TI Trans Urb Veg VI WQ	Species code: ITIS serial number for Greater Sage-grouse Aquatic intactness Dust Ecosystem name or abbreviation: Grassland Grazing Important bird areas Landscape condition model Species Group name or abbreviation Macro-invertebrate species richness Native vegetation Oil & Gas change agent pH Population Precipitation Renewable energy development Roads Solar renewable energy Species abundance Soil Solar potential Threatened & endangered species Temperature Terrestrial intactness Transportation Urbanization Veg code from LANDFIRE EVT, NLCD, SWReGAP, etc Vegetation intactness Water quality
MODIFIER⁺	Ann AV AVhigh AVlow Dif Dist DN Ext Fall Footprint FR Frag Ind MAX MIN OccHab Prct PriorityZone Sd Spr Summ Win YrRnd	Annual Average Average high Average low Difference Distribution Density Extent Fall Footprint, corridor, flyway Frequency Fragmentation Index Maximum Minimum Occupied Habitat Percent Priority zones for solar renewable energy Standard deviation Spring Summer Winter Year-round

TYPE⁺	30m 4km HUC Ln Poly Pt Tbl	30-meter raster 4km PRISM raster HUC polygon Line Polygon Point Table
ModelType⁺	Climate Conceptual Ecolnt Fragstats Geo Intact MaxEnt	Climate Conceptual Ecological integrity FRAGSTATS Geoprocessing Intactness MaxEnt

^r = You are required to use these codes (do not change or add new codes)
⁺ = You can add new/modify codes in these sections of the file name to better describe the file; these are some commonly used examples.

Abbreviations used in file naming convention

Abbreviation	Description
Lease	(current) leases
ALLA	all aquatic
ALLT	all terrestrial
TRANS	all transportation
AE	aquatic ecosystem CE
AG	aquatic group CE
AI	Aquatic Intactness
AS	aquatic species CE
AV	average
AvHigh	average high
AvLow	average low
AR	Avian richness
CL	climate CA
CV	Coefficient of Variance
COPMixedLowSagbrushShrublnd	Colorado Plateau Mixed Low Sagebrush Shrubland
CritHab	critical habitat
CryptogamicCrust	cryptogamic Crust
C	current status
std	data standard (BLM)
DN	density
DV	development CA
DSTNC	distance
DIST	distribution
EI	ecological integrity CE
CBR	ecoregion
COP	ecoregion
MBR	ecoregion
MIR	ecoregion

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NGP	ecoregion
SOD	ecoregion
SPN	ecoregion
WYB	ecoregion
EmergentHerbaceousWetland	emergent herbaceous wetland
EXT	extent
FI	fire CA
ForestWoodland	Forest & Woodland
FR	frequency
FRQ	frequency
GR	grassland ecosystem
Grasslands	Grasslands
GRA	Grazing (development change agent)
GBFoothillLowerMontaneRiparianWoodlandandShrublandStream	Great Basin Foothill and Lower Montane Riparian Woodland and Shrubland/Stream
GBLakeReservoir	Great Basin Lake/Reservoir
GBPinyonJuniperWoodland	Great Basin Pinyon-Juniper Woodland
GBSemiDesertChaparral	Great Basin Semi-Desert Chaparral
GBSpringsSeeps	Great Basin Springs and Seeps
GBXericMixedSagebrushShrubland	Great Basin Xeric Mixed Sagebrush Shrubland
IBA	Important Bird Areas
IND	index
INT	intactness
ITIS	integrated taxonomic information system
IMBDesertWash	Inter-Mountain Basin Desert Wash
IMBActiveStabilizedDune	Inter-Mountain Basins Active and Stabilized Dune
IMBAspenMixedConiferForestWoodland	Inter-Mountain Basins Aspen-Mixed Conifer Forest and Woodland
IMBBigSagebrushShrubland	Inter-Mountain Basins Big Sagebrush Shrubland
IMBBigSagebrushSteppe	Inter-Mountain Basins Big Sagebrush Steppe
IMBCliffCanyon	Inter-Mountain Basins Cliff and Canyon

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IMBCurlLeafMtnMahoganyWoodlandShrubland	Inter-Mountain Basins Curl-leaf Mountain Mahogany Woodland and Shrubland
IMBGreasewoodFlat	Inter-Mountain Basins Greasewood Flat
IMBMixedSaltDesertScrub	Inter-Mountain Basins Mixed Salt Desert Scrub
IMBMontaneSagebrushSteppe	Inter-Mountain Basins Montane Sagebrush Steppe
IMBPlaya	Inter-Mountain Basins Playa
IMBSemiDesertGrassland	Inter-Mountain Basins Semi-Desert Grassland
IMBSemiDesertShrubSteppe	Inter-Mountain Basins Semi-Desert Shrub-Steppe
IMBSubalpineLimberBristleconePineWoodlnd	Inter-Mountain Basins Subalpine Limber-Bristlecone Pine Woodland
IV	invasives CA
LCM	landscape condition model
L	long-term forecast status
MR	macro-invertebrate species richness
MJMidElevMixedDesertScrub	Mojave Mid-Elevation Mixed Desert Scrub
MogollonChaparral	Mogollon Chaparral
NV	native vegetation CE
N	near-term forecast status
NAS	Nonindigenous Aquatic species
NAAridWestEmergentMarshAndPond	North American Arid West Emergent Marsh and Pond
NAWarmDesertBedrockCliffAndOutcrop	North American Warm Desert Bedrock Cliff and Outcrop
NAWarmDesertPavement	North American Warm Desert Pavement
NAWarmDesertBadland	North American Warm Desert Badland
OccHab	occupied habitat
OpenWater	open water
PRCNT	percent
PH	ph
PinyonPine	Pinyon Pine
POP	population (human)
PRECIP	precipitation
RNG	range

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REC	Recreation (development change agent)
RE	renewable energy
RDS	roads
RMAlpineMontaneWetMeadowAlpineLake	Rocky Mountain Alpine-Montane Wet Meadow/Alpine Lake
RMAspenForestWoodland	Rocky Mountain Aspen Forest and Woodland
RMSubAlpineMontaneRiprnWdIndShrbIndStrm	Rocky Mountain Subalpine-Montane Riparian Woodland and Shrubland/Stream
RMAlpineTurf	Rocky Mountain Alpine Turf
ShrubScrub	Shrub/Scrub
ErodableSoils	Soils of Conservation Concern (high erodability)
SP	solar potential
SparseVegetatedBarren	sparsely vegetated/barren
SA	species abundance
SMSemiDesertChaparral	Sonora-Mojave Semi-Desert Chaparral
SMCreosotebushWhiteBursageDesertScrub	Sonora-Mojave Creosotebush-White Bursage Desert Scrub
SonoraMidElevDesertScrub	Sonoran Mid-Elevation Desert Scrub
SMMixedSaltDesertScrub	Sonora-Mojave Mixed Salt Desert Scrub
StdDev	Standard Deviation
TM	temperature
TES	terrestrial ecosystem CE
TG	terrestrial group CE
TI	Terrestrial Intactness
TS	terrestrial species CE
TE	threatened & endangered species richness
URB	urbanization
VI	vegetation intactness
WQ	water quality
WoodyWetlandRiparian	woody wetland & riparian
YrRnd	year-round