From: Heller, Matthew
To: Doherty, Kevin; Kern, Tim; Finn, Sean
Subject: Re: Lek Data and LC Map
Date: Wednesday, May 21, 2014 6:56:54 PM
Attachments: Draft_LCMAP_Data_Provider_Instructions_v1.2.docx

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All,
Attached is the latest help document version. When the .org site gets up and running, I'll want to make appropriate changes to the document. Feel free to send edit request, comments, suggestions.

Kevin,
As soon as you know the data providers names and email address we can tie in with Lei Ann Wilson to create logins. The sooner the better to get these logins created. Once the logins are created you and I (and Sean possibly) can set up the respective folders and permissions on the .gov site. When the .org site is ready, we can work on that with folders/permissions.

Thinking ahead, should we set up access that you are the only non-"data provider" that has access to the data provider folders and the files within them? Or should Sean and I also have access? Either way is fine with me.

Thanks,
M.

On Tue, May 20, 2014 at 2:27 PM, Doherty, Kevin <kevin_doherty@fws.gov> wrote:

> Hi Tim,
>
> Yes I do think we would want to pre-make folders for each of the 11 states and have them in control of access. How long would it take to have the functionality of sciencebase.org?
>
> As far as data upload the simpler the better. Last time we go lek data a lot of it was simply in a excell spreed sheet with UTM. I will touch base to see in what form TNC got lek data so we do not have to guess.
>
> Cheers
> Kevin
>
> On Tue, May 20, 2014 at 8:59 AM, Kern, Tim <kernt@usgs.gov> wrote:
>
>> Hi
>>
>> Sorry for the late response:
>>
>> - Did we want to pre-make folders and assign write permissions to them for groups? I think we know what groups we are going to get data from, so we would just need the folder owner and a list of user that owner trusts to add data. We could set these up as Kevin gets emails from people.
>> - Minor typo in #3 if we keep that step --"...Name to folder per your office name…" should be "...Name the folder per your office name…"
>> - I think there should be an "upload shapefile" instruction versus 'identify an area on a

map" instruction. The workflows can be pretty different.

- Did you want to say anything about metadata files? If they have CSDGM (FGDC metadata XML) with their shapefiles (if they have these), they can do "Process Metadata" and fill in the other fields you ask for

The other change that is looming is that IF the states are worried about working against "sciencebase.**gov**", we have secured "sciencebase.**org**" to accommodate those users. This is not fully implemented yet, but just something we may want to mention to potential users.

Tim Kern
Chief, Information Science Branch
USGS Fort Collins Science Center
2150 Centre Ave, Building C
Fort Collins, CO 80526-8118
970-226-9366
970-226-9230 (fax)

On Mon, May 19, 2014 at 10:02 AM, Heller, Matthew <matthew_heller@fws.gov> wrote:

> Tim,
>
> Checking in on the status of the "mechanism to collect lek data though a state-controlled LC MAP community" configuration? I have a draft data upload instructions help document for Kevin to send out to state data providers (via Tom Remington). I was going to add verbiage to the help document noting that "the lek data uploaded to this LC MAP Greater Sage Grouse Lek Project Community folder is stored on a commercial (non-DOI) server and access state-controlled". Would you have any changes to this statement? I could also add in content on the subject to FOIA?
>
> I assume there will not be any special instructions for the upload of data to the commercial server and the process will be business as usual. Please let me know if there are special instructions.
>
> Today Kevin plans to email Tom R. a data request letter for Tom to send out to the states. Ideally the LC MAP upload instructions help document goes out with this data request letter. If the commercial server is not yet configured Tom R. may want to inform the state that the instructions are to come.
>
> Sorry for the short notice, feel free to email/call me anytime today,
> M.
>
> On Fri, May 2, 2014 at 3:55 PM, Finn, Sean <sean_finn@fws.gov> wrote:
>
>> Hi Tim,
>>
>> Seeing you say 'most questions answered' & making sure you're all set.
>>
>> I think you're right about the Tags - we should ID a basic set of tags that all data we post get. We can add additional tags to individual layers as needed. I will bring this up with the FWS SG GIS team and we will add it to the standard.
>>
>> Any other outstanding questions?

On Fri, May 2, 2014 at 11:38 AM, Kern, Tim <kernt@usgs.gov> wrote:

I think most of my questions were answered by a previous email. On your questions:

- "Loose relationships" vs "all in one community" are about managing data (who owns and can allow access) and not search limitations. LC MAP can present these all in a common view regardless of what community "owns" the data; it just related to permissions to view, edit, etc.
- Moving very large datasets is a potential headache, especially if those data are somewhat dynamic. LC MAP provides image services for very large raster data that lets modelers zoom into an area of interest for slicing/subsetting before processing. If the modeling need is landscape/West-wide level, then you would not use the image services (you would need the whole boat for model runs). Does FWS have permission to use GridFTP to move datasets around? That is what we implemented to access large datasets (over 200Gb).
- Since we have a global community set up for these data I do not think we need a special vocabulary.

Thanks, and sorry to be slow reading my previous emails.

Tim Kern
Chief, Information Science Branch
USGS Fort Collins Science Center
2150 Centre Ave, Building C
Fort Collins, CO 80526-8118
970-226-9366
970-226-9230 (fax)

On Fri, May 2, 2014 at 11:27 AM, Juliusson, Lara <lara_juliusson@fws.gov> wrote:

Kevin, Tim and all,

My two cents,
I would second Kevin's answer to question 1) specifically that we do not want to slow down, or even stop model development due to having to work over a network. I do not know if this would be the case, but as a rule, I prefer to do geoprocessing locally.

2) Yes, we should be organizing these data together, but this can include just having shortcuts through LC MAP to other communities. I believe this is what we discussed the other day. I'm not sure what you mean, Tim, by "just maintaining loose relationships to expedite search and discovery?". Are you saying that not maintaining loose relationships slows down search and discovery? LC MAP's community structure would seem to provide this type of expedition. One question I have regarding using shortcuts, Matt and Sean, is how do we handle broken links?

3) Yes, I think we want these data to be able to be identified as developed to support, or

supporting the listing decision. I would think that including them within, or linked to by, LC MAP would do this, but if we want to explicitly by means of tags, or comments in the metadata, I think that would be helpful.

Thanks,
Lara

Lara Juliusson, GIS Biologist
Sage-grouse Energy Team
U.S. Fish and Wildlife Service,
Region 6, Lakewood, CO
Lara_Juliusson@fws.gov
303-236-9876

On Fri, May 2, 2014 at 11:08 AM, Doherty, Kevin <kevin_doherty@fws.gov> wrote:

Tim,

The answer to your first question is a bit unknown right now. I believe the SGI folks have access to the raw lek data and will be doing there own specific analyses, which will be integrated into the USFWS decision. We are having a modeling workshop within a month to hammer out these details. From my standpoint Its all about memory and processing time and if working over the internet causes a lag.

2nd) Yes, I believe we should be organizing the LC map into one community if possible. I have cced Lara, who is leading the USFWS GIS group so she can weigh in as well. Sean, Matt, Lara, is this consistent with the file structure we talked about the other day?

3rd) I also believe that is the case, but want the 3 folks above to weigh in.

Cheers
Kevin

On Fri, May 2, 2014 at 10:56 AM, Kern, Tim <kernt@usgs.gov> wrote:

Hi all -- I limited this reply to just the tech folks, but we can include FWS management if these are questions beyond our pay range.

As Kevin pointed out, we are setting up a mechanism to collect lek data though a state-controlled LC MAP community. We are assuming that USFWS modelers will need a way to do post-processing of these data within these state-controlled communities (combining shapefiles and geodatabases to build a region-wide dataset, generating grids from these data) in LC MAP. So far, so good.

Will there also be a need for the modelers to access data collected under the Sage Grouse Initiative, or is that a completely separate effort? Specifically, LC MAP has a request to serve some rather large datasets as mosiacs with color maps through an image server. The

first of these, mapped juniper data across the sage grouse range (5400 raster tiles, 750Gb), will be ready for upload in June. There are several other large datasets that are being developed now with a summer due date. If these efforts are linked, we have some questions:

1. Will you need the sage grouse initiative datasets as predictor layers as well? If so, do you need them on local systems or will you be able to work with the services provided by LC MAP?
2. Should we be organizing all sage grouse-related data together though a single LC MAP community, or just maintaining loose relationships to expedite search and discovery?
3. Is there any special treatment we should be giving products developed to support the listing decision? A specific set of tags?

Thanks for your time.

Tim Kern
Chief, Information Science Branch
USGS Fort Collins Science Center
2150 Centre Ave, Building C
Fort Collins, CO 80526-8118
970-226-9366
970-226-9230 (fax)

On Tue, Apr 29, 2014 at 2:53 PM, Doherty, Kevin <kevin_doherty@fws.gov> wrote:

> Noreen,
>
> I talked with Tim Kern, Chief of Information Science at the Ft Collins Science Center today along with Sean Finn & Matt Heller (science apps). They confirmed lek data could be housed within LC MAP and we would be able access, organize, and query lek data for spatial modeling.
>
> The USGS offered additional help to the USFWS to make this system of data storage work. The folks at USGS are going to set up an external server (amazon??) for the states to upload lek data. Ownership and access of the server and the lek data will be controlled by the states, but we can link to the data through LC MAP.
>
> We will need the lek data prior to the main data call for the conservation database. It will take ~ 3- 4 weeks to finish processing all of the spatial data which will be used as predictor variables for spatial modeling. After that it is delaying our efforts.
>
> Cheers
> Kevin

--

Kevin Doherty, PhD

Spatial Ecologist

United States Fish & Wildlife Service

(303) 921-0524
kevin_doherty@fws.gov

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(303) 921-0524
kevin_doherty@fws.gov

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Sean P. Finn, USFWS
Science Coordinator
Great Northern Landscape Conservation Cooperative
208.426.2697
http://greatnorthernlcc.org

Snake River Field Station
970 Lusk St.
Boise, ID 83706

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Matt Heller
Data Manager/GIS Administrator/Cartographer, USFWS
Great Northern Landscape Conservation Cooperative
2327 University Way, Suite 2
Bozeman, MT 59715

Phone: 406-994-7333
Matthew_Heller@fws.gov
greatnorthernlcc.org

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Kevin Doherty, PhD

Spatial Ecologist

United States Fish & Wildlife Service

(303) 921-0524
kevin_doherty@fws.gov

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2327 University Way, Suite 2
Bozeman, MT 59715

Phone: 406-994-7333
Matthew_Heller@fws.gov
greatnorthernlcc.org

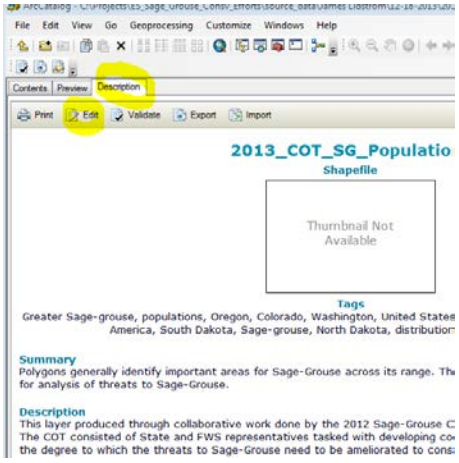
Greater Sage Grouse Lek Data Cataloging Instructions - Draft

Version 1.2 5/21/2014 Matt Heller

The purposes of the following instructions are to help state and other data providers upload Greater Sage Grouse lek data into LC MAP (a.k.a. Sciencebase). For any assistance, questions, comments or comments, contact Kevin Doherty (kevin_doherty@fws.gov), Matt Heller (matthew_heller@fws.gov), and/or Sean Finn (mailto:sean_finn@fws.gov)

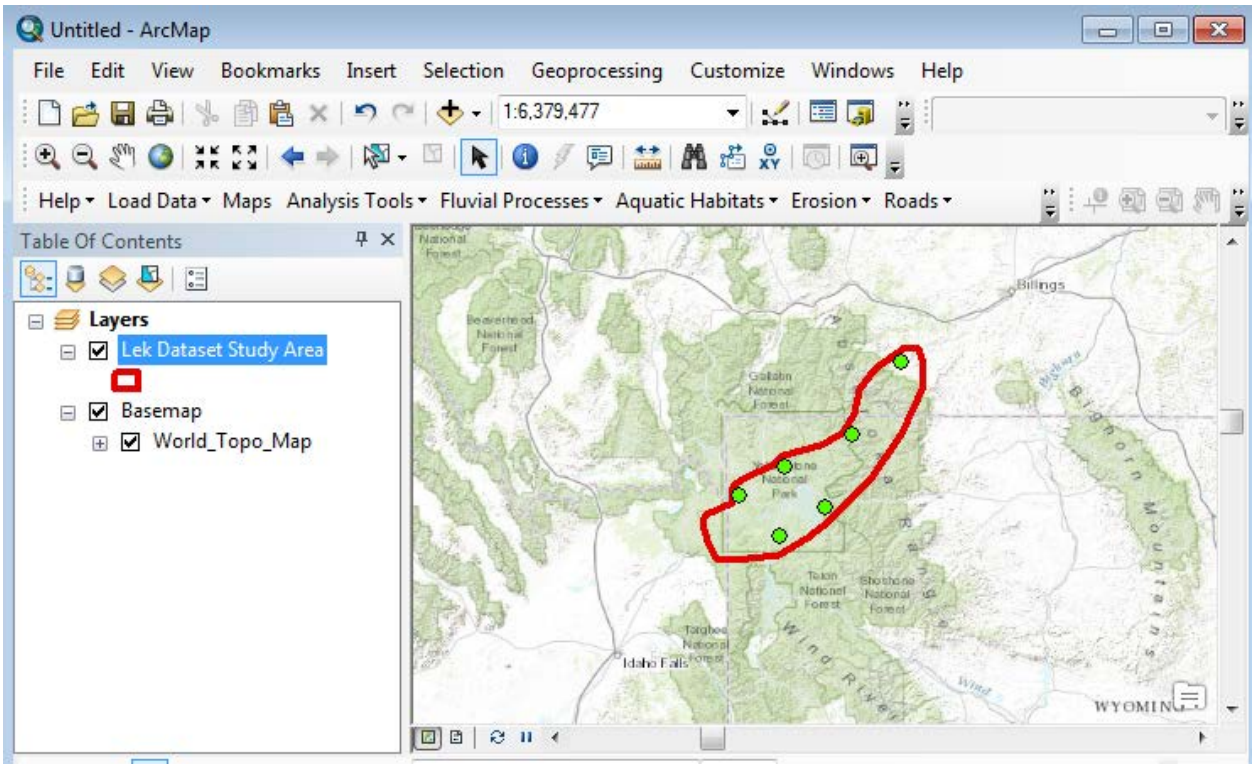
1) Metadata Preparation

To aid data entry, it is highly recommended that uploaded GIS files (i.e. shapefiles) have accompanying CSDGM (Content Standard for Digital Geospatial Metadata) metadata in the FGDC metdata XML format. If LC MAP recognizines the CSDGM metadat, LC MAP will auto-populate LC MAP metadata fields (Body, Purpose, Author, dates, tags, etc.). If shapefile metadata if visible in ArcGIS Desktop's ArcCatalog then the metadata should be compatible with LC MAP. Format verification and edits of metadata in this format can be done with ArcCatalog's Description tab.

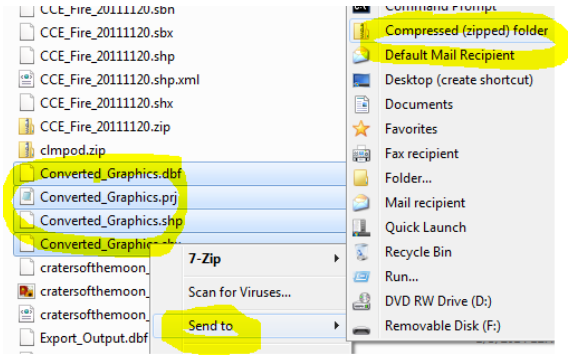


2) Spatial Data Extent Preparation
   a. Create a shapefile representing the general spatial extent of the dataset (i.e. project area) using GIS software such as ArcGIS Desktop's ArcMap.

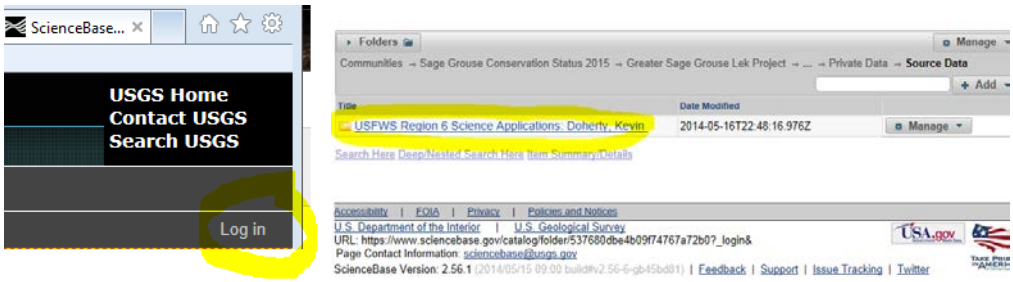
Note: If shapefiles to be uploaded in step 6 (below) represent the spatial extent of the dataset then this step2 may not be needed. LC MAP will not automatically create spatial representations ofdata in spreadsheet format (i.e. MS Excel) or GIS data in file/personal geodatabase format.



b. Compress the shapefile's files into a singe zip file.



3) LC MAP folders to post organizations data have been created in advance and given "read/write" access to know individuals.
   a. Navigate to https://www.sciencebase.gov/catalog/folder/537680dbe4b09f74767a72b0 → log in → open your folder. Your LC MAP folder will be visible to those given access per the request email.

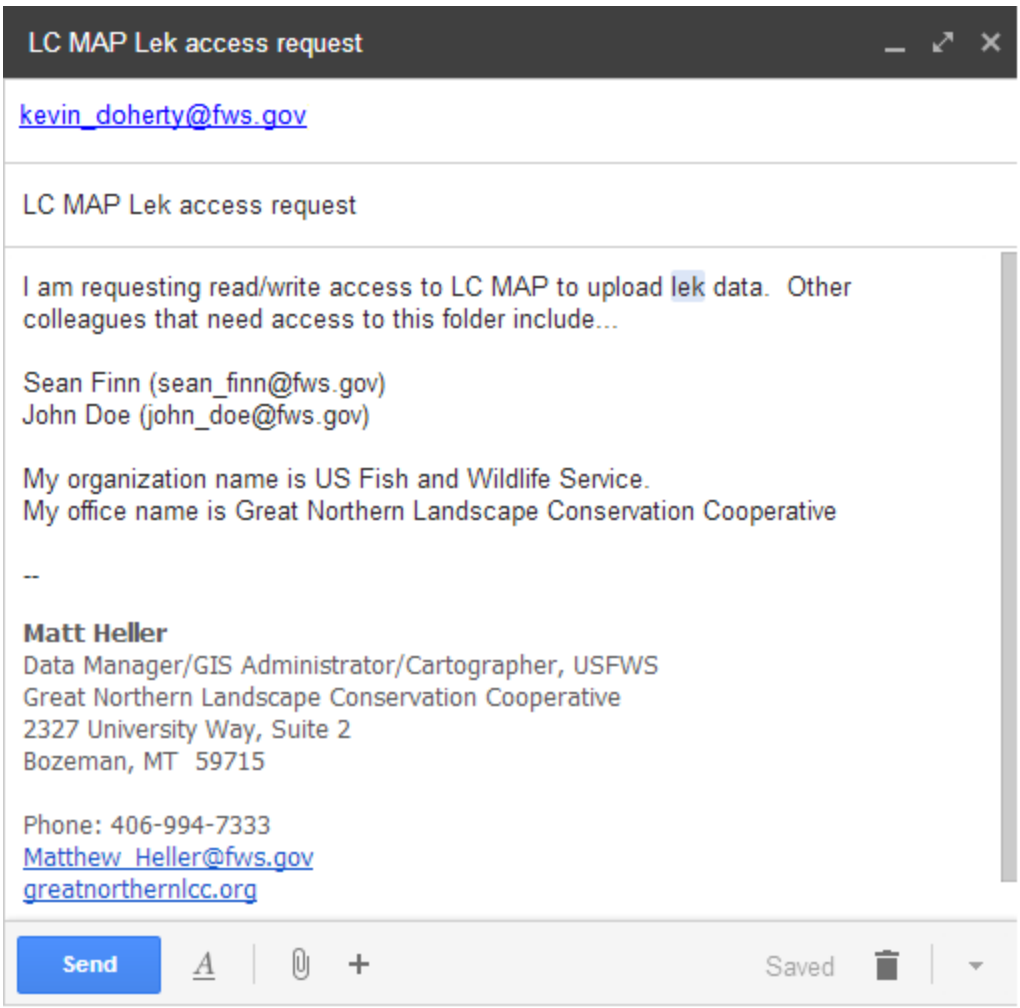


b. If access is denied or you folder is not visible, proceed to step 4.

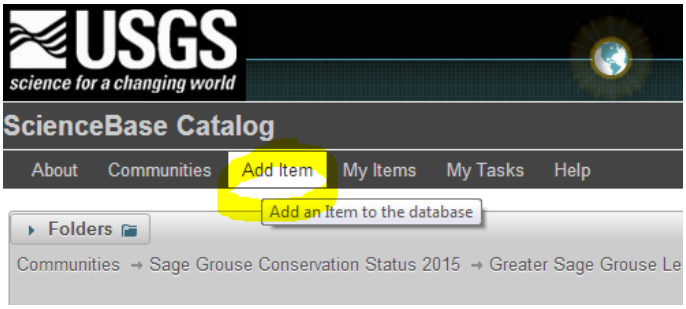
4) If your organizations LC MAP folder is not accessible or others need access, request "read/write" access by emailing Kevin Doherty (kevin_doherty@fws.gov). In the request, email include your organization name, office name, and note other users (and their email addresses) that also need "read/write" access to your folder on LC MAP.

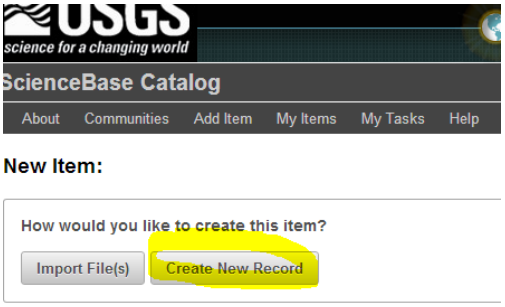
Note: Upon this request, a folder on LC MAP will also be verified and/or created and "read/write" access will be configured per request email.

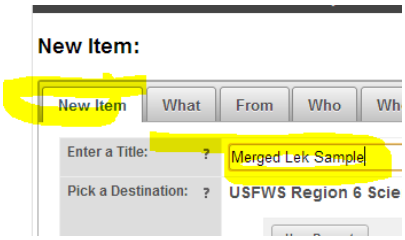
Email notification will be given when the request is fulfilled.



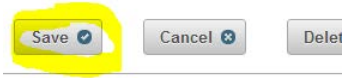
5) Create a new record for each data to be cataloged.
   a. Navigate to the you're LC MAP folder
   b. Click Add Item →click create a new record, and name it to the corresponding data file.



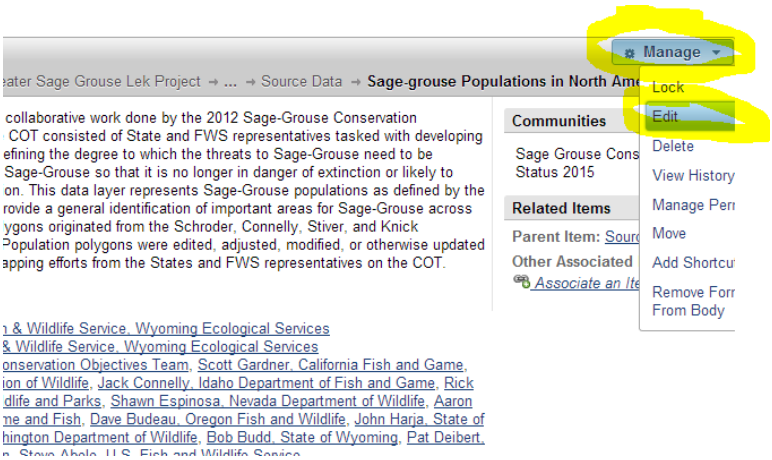




Note: at any time you can save edits by clicking the save button.



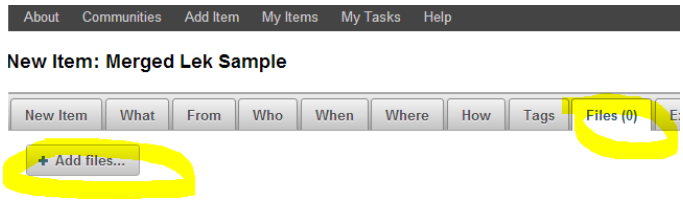
Note: to continue editing, click edit under the Manage menu

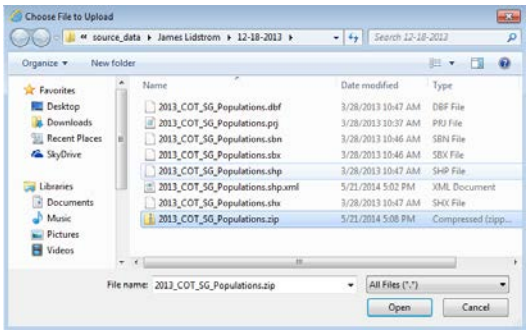


6) Upload data files

GIS Shapefile is prefered for upload, but other file formats can be uploaded.

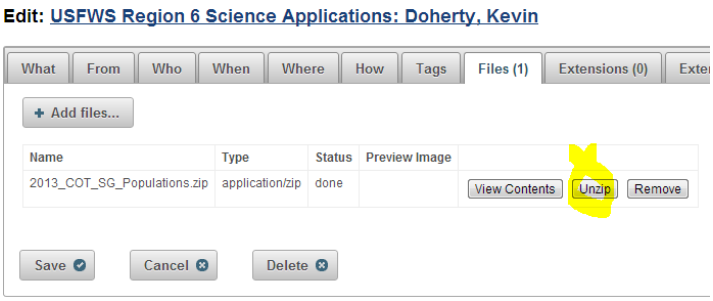
a. Click the Files tab→ click Add Files… button → navigate to file(s) to upload → click upload



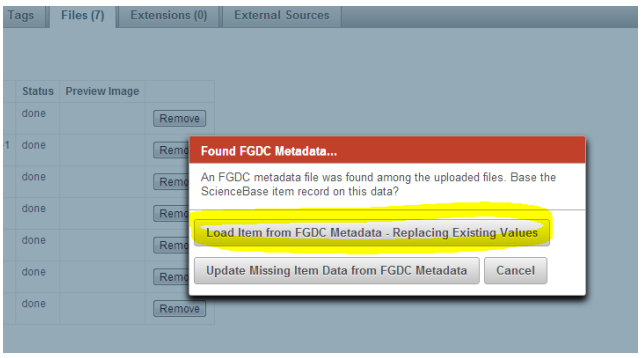


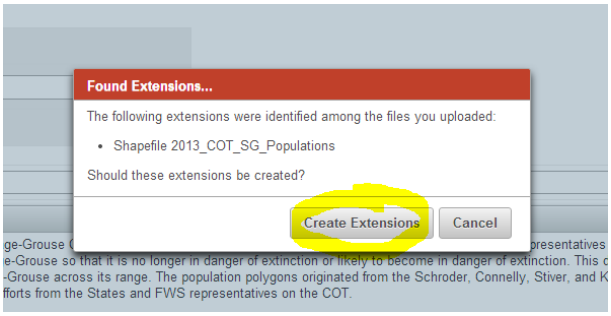
Note: GIS shapefile corresponding files can be zipped up before upload to save repetative loading of files.

b. If zip file was uploaded, Click Unzip if uploaded a zip file of the shapefile

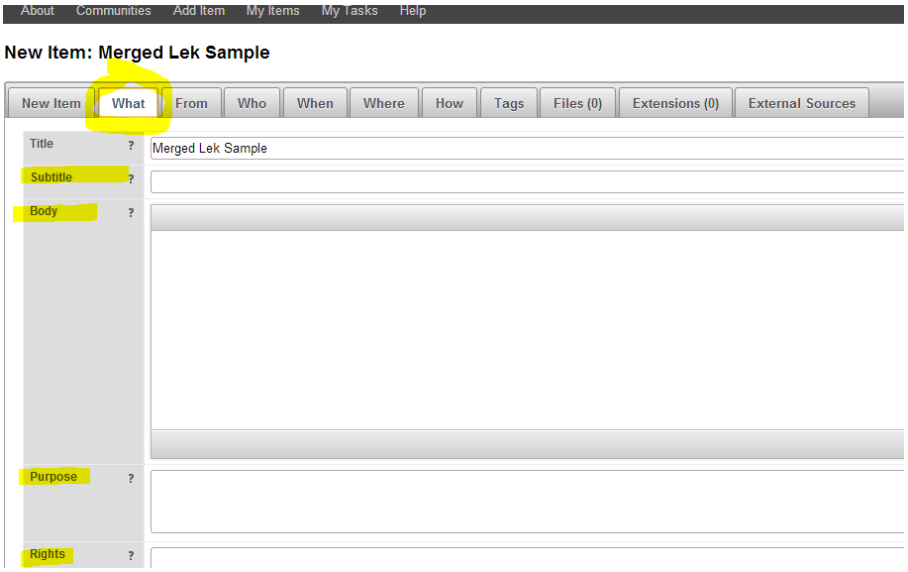


c. If prompted, Click “Load Item from FGDC…” and If prompted, Click “Create Extensions”

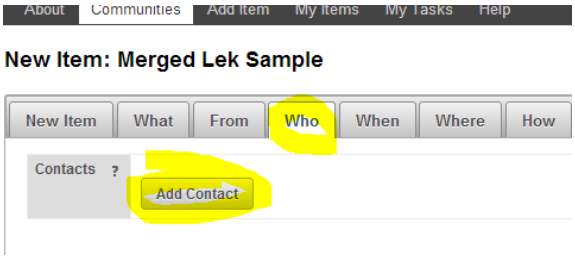


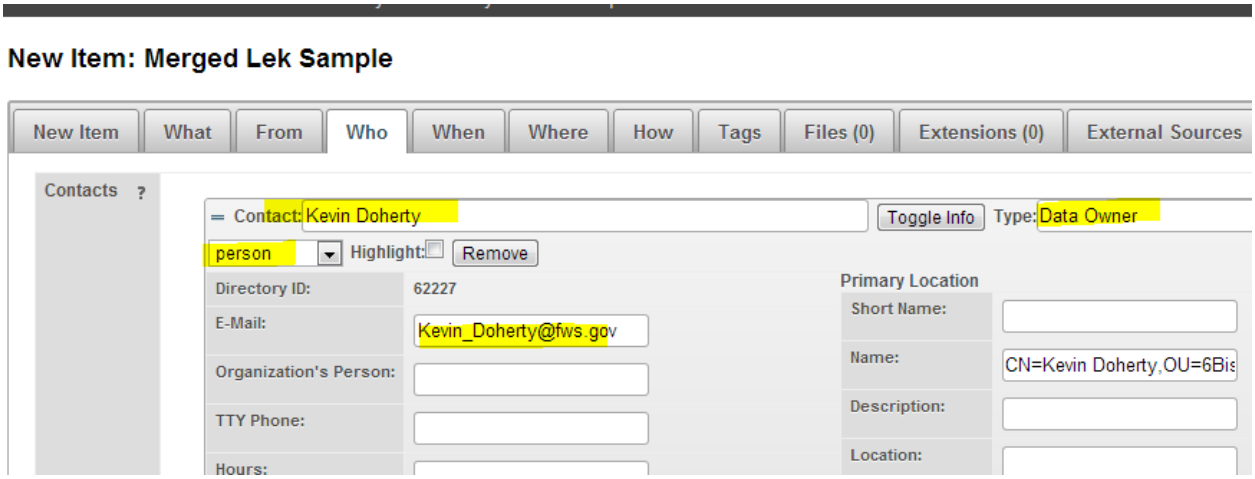


7) Click What tab and verify/edit approriate metadata (body, purpose, etc.)

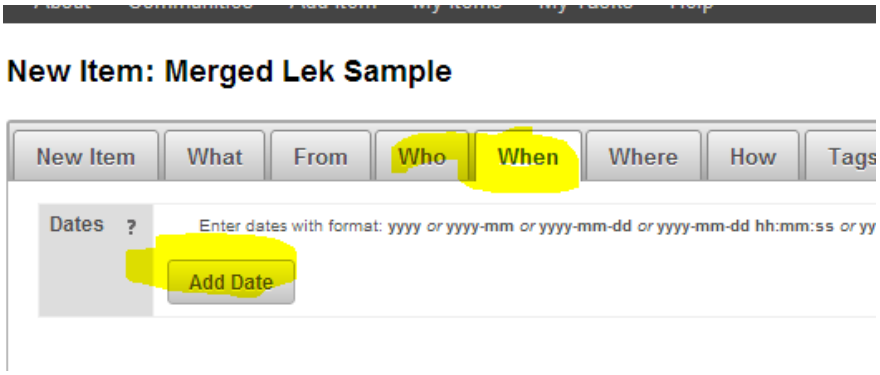


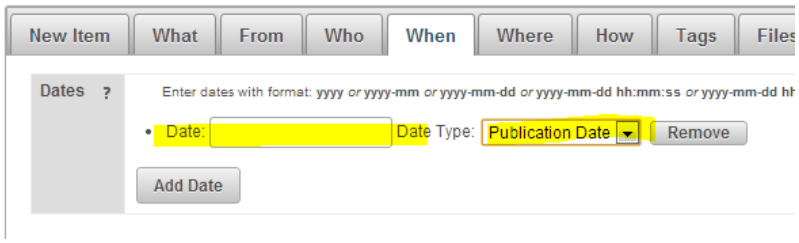
8) Click Who tab to verify/edit add appropriate contacts (including the data owner)





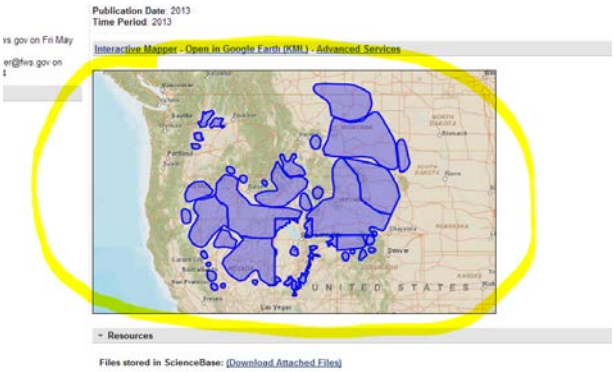
9) Click When tab to verify/edit appropriate data information



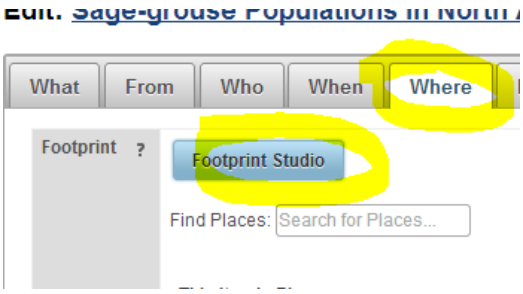


10) Enter general spatial extent information (e.g. project boundary).

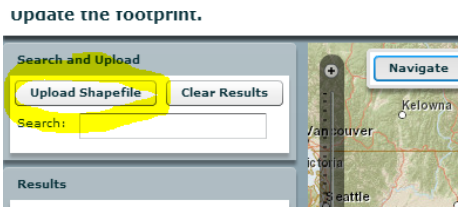
Note: If shapefiles to be uploaded in step 6 (above) represent the spatial extent of the dataset then this step may not be needed. Representation of step 6 can be visible after saving edits.

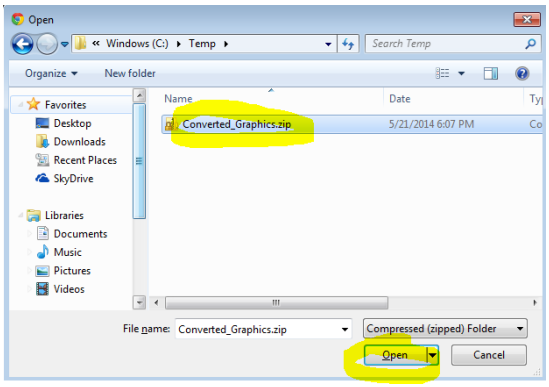


a. Click Where tab → Footprint Studio button

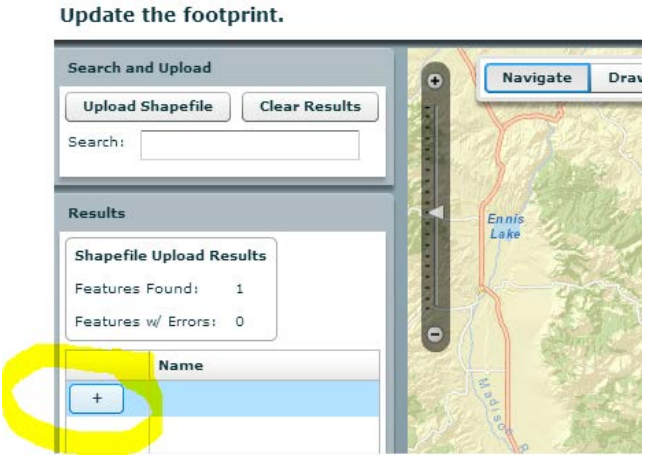


b. Click Upload Shapefile button → navigate to the .zip file (See step 2) → click Open

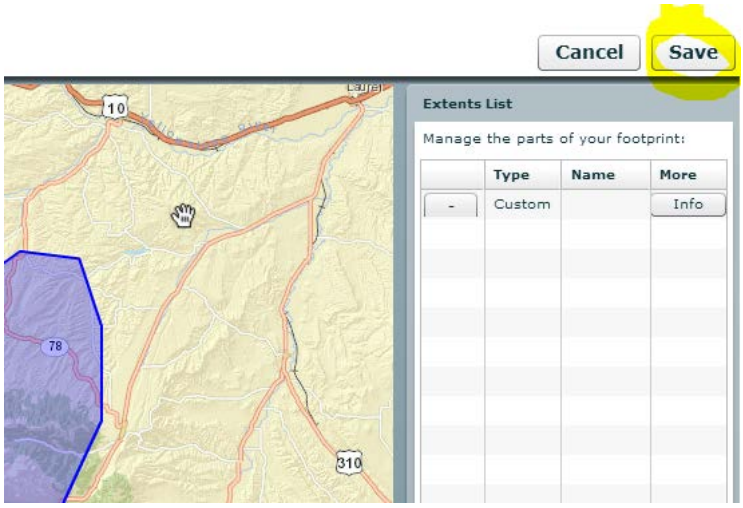




c. Click the + button to add the shapefile

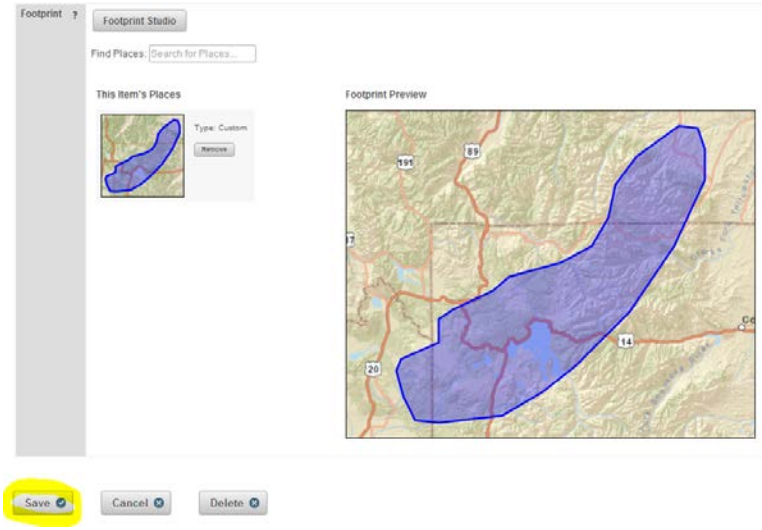


d. Click the save button (upper right)



Note: Display of the boudary may take a minute

11) Click Save


Footprint
Footprint Studio
Find Places:
Search for Places...
This Item's Places
Type: Custom
Remove
Footprint Preview
191
89
14
20
Save
Cancel
Delete