State of Wyoming – Webinar Training (Broadband Maps)

PREPARED FOR THE STATE OF WYOMING/LIGHTBOX

MARCH 28, 2023

VERSION 1.0

Digital Solutions

LIGHTBOX | IRVINE CALIFORNIA

1 CONTENTS

Map 1 - Wyoming Broadband Availability Map:
https://lightbox-wy.maps.arcgis.com/apps/webappviewer/index.html?id=820974e8c6e64a89a7732a8b3243a68d
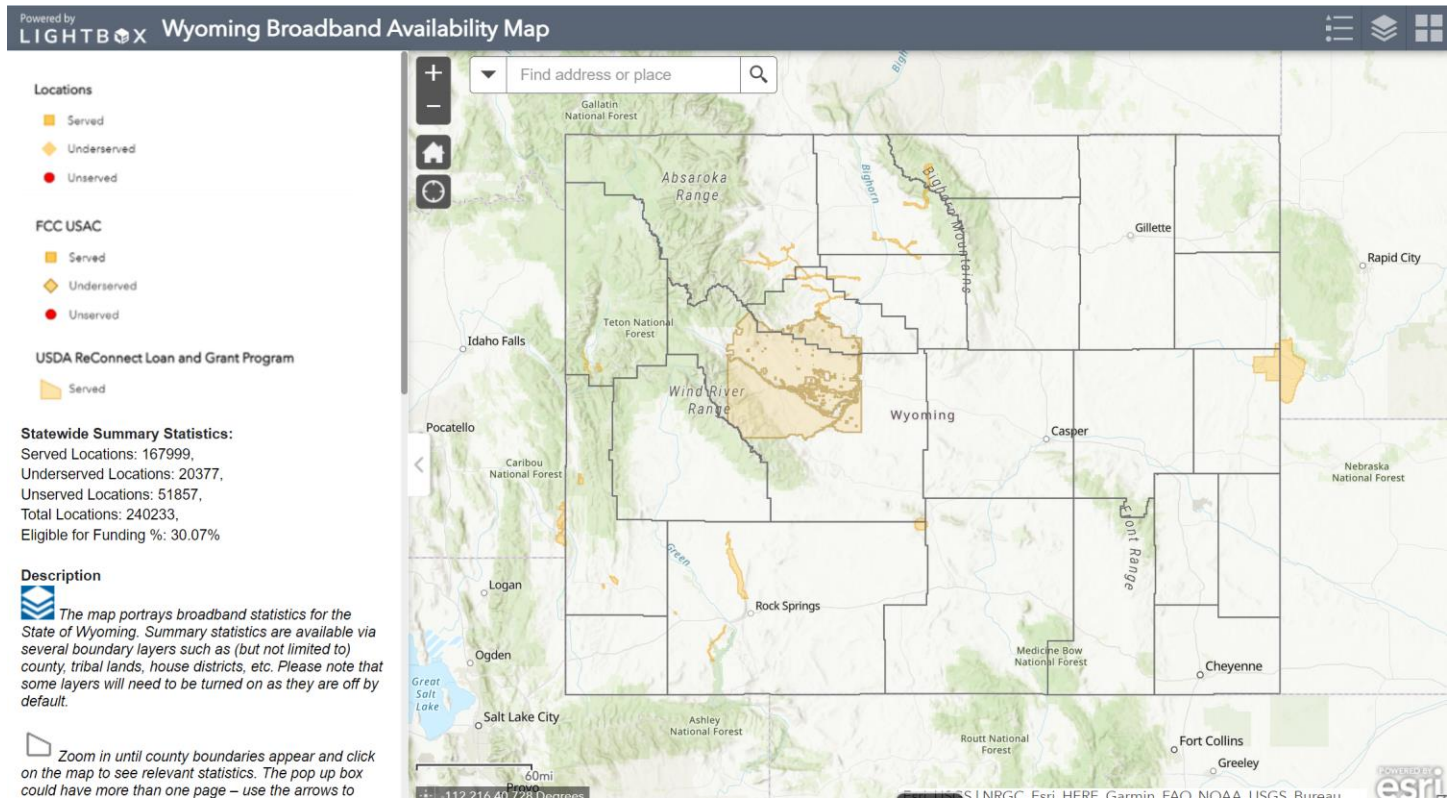
2.1 INTRODUCTION

Orient the users on the map

Starting with the top and left-hand side:

- Title
  - This map has been built to portray broadband coverage for the State of Wyoming

- Static Legend (map description box)
  - This is an example of some of the key data layers contained within this map
  - Location Points are individual premises (houses, buildings) and each one has been color-coded based on its internet speed serviceability range.
  - Funding data (such as FCC USAC and USDA ReConnect) have been added to the map and have been color-coded based on its internet speed serviceability range.

- Map Description
  - This description conveys several pieces of information such as:
    - Purpose of the map
    - Information on how to use the features in the map and what they do
    - Business rules of how the serviceability categories were determined based on speed (e.g., served means that location has a speed equal to or greater than 100 Mbps down and 20 Mbps per up)
    - *NOTE: Excluding some wireless and satellite coverage*

Move over the far right-hand side (3 icons)

Use the Legend to view the legend for all visible layers

- Whatever layers are visible on the screen will appear within this legend

Use the Layer List to turn data layers on/off

- This allows a user to have control and turn layers on off
- If a layer is greyed out – it means that a user has to zoom in closer in order to see the data (e.g., Locations)

Use the base map Gallery to turn on satellite imagery or change the underlying base map

Navigate to left-hand side of the map

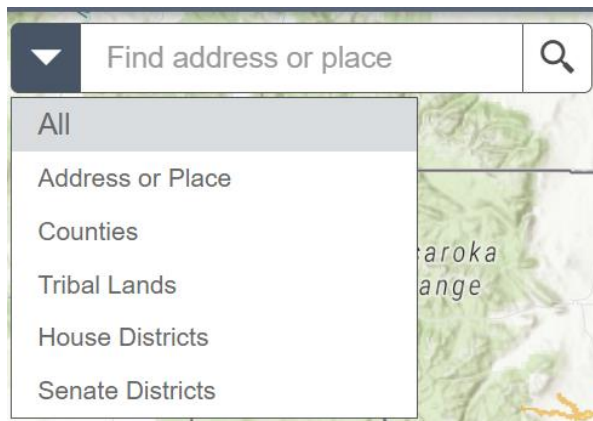Zoom allows a user to go in and out of the map OR use mouse scroll wheel to do this

Default extent (or the home button) – if you want to return to see entire State – you select this icon
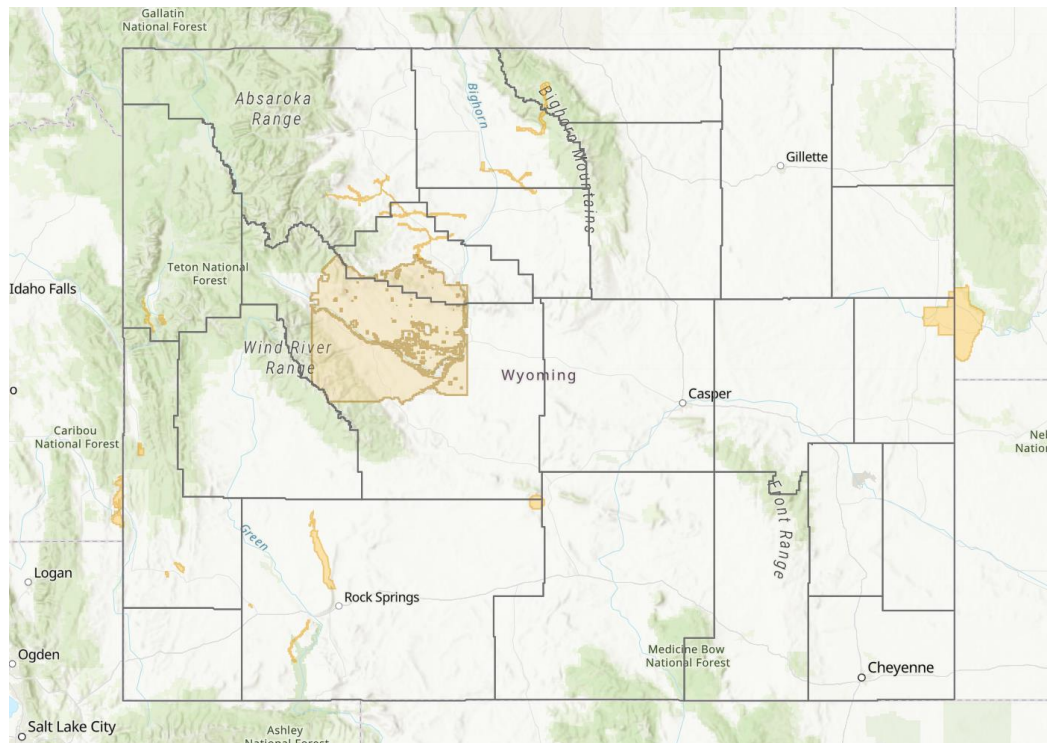
My location icon – if you select this – map will ask to use browser location and find you on the map (shortcut to having to type in your address)

- Search bar
    - "All" will search for all 5 types of geography (address or place, counties, tribal lands, house districts, senate districts)
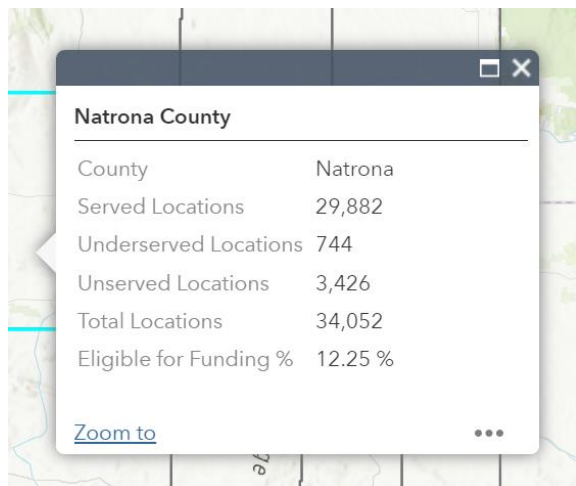

- Example inputs with ALL
    - Address = "222 E Collins Dr, Casper, WY, 82601, USA"
        - Type in 222 E COLLINS, and show the type-ahead capability to the tool
        - Type rest of address and show that it finds one record
        - Do not select record – this will occur later
        - NOTE: Short forms for directions and street types are recommended

    - County "Natrona"
        - Type "Natrona"
        - If you scroll down - county is listed at the bottom

    - Tribal Lands = "Wind River Reservation"
        - Type "Wind River Reservation"
        - If you scroll down – Tribal Land is listed at the bottom

    - House District "HD-12"
        - Type "HD-12"
        - If you scroll down – House District is listed at the bottom

    - Senate District "SD-12"
        - Type "SD-12"
        - If you scroll down – Senate District is listed at the bottom

2.2 MAP ORIENTATION

- Select a **County boundary**

Natrona County	
County	Natrona
Served Locations	29,882
Underserved Locations	744
Unserved Locations	3,426
Total Locations	34,052
Eligible for Funding %	12.25 %

Zoom to •••

- o Each boundary has a popup window that displays information
- o For a county – you see the following:
    - ▪ # of locations by the serviceability levels (served, underserved, unserved)
    - ▪ Total # of locations in that county
    - ▪ % of locations which are unserved/underserved

- Select a **Federal Fund boundary**
    - o Federal funding boundaries have been added to the map as per legend
        - ▪ USDA ReConnect
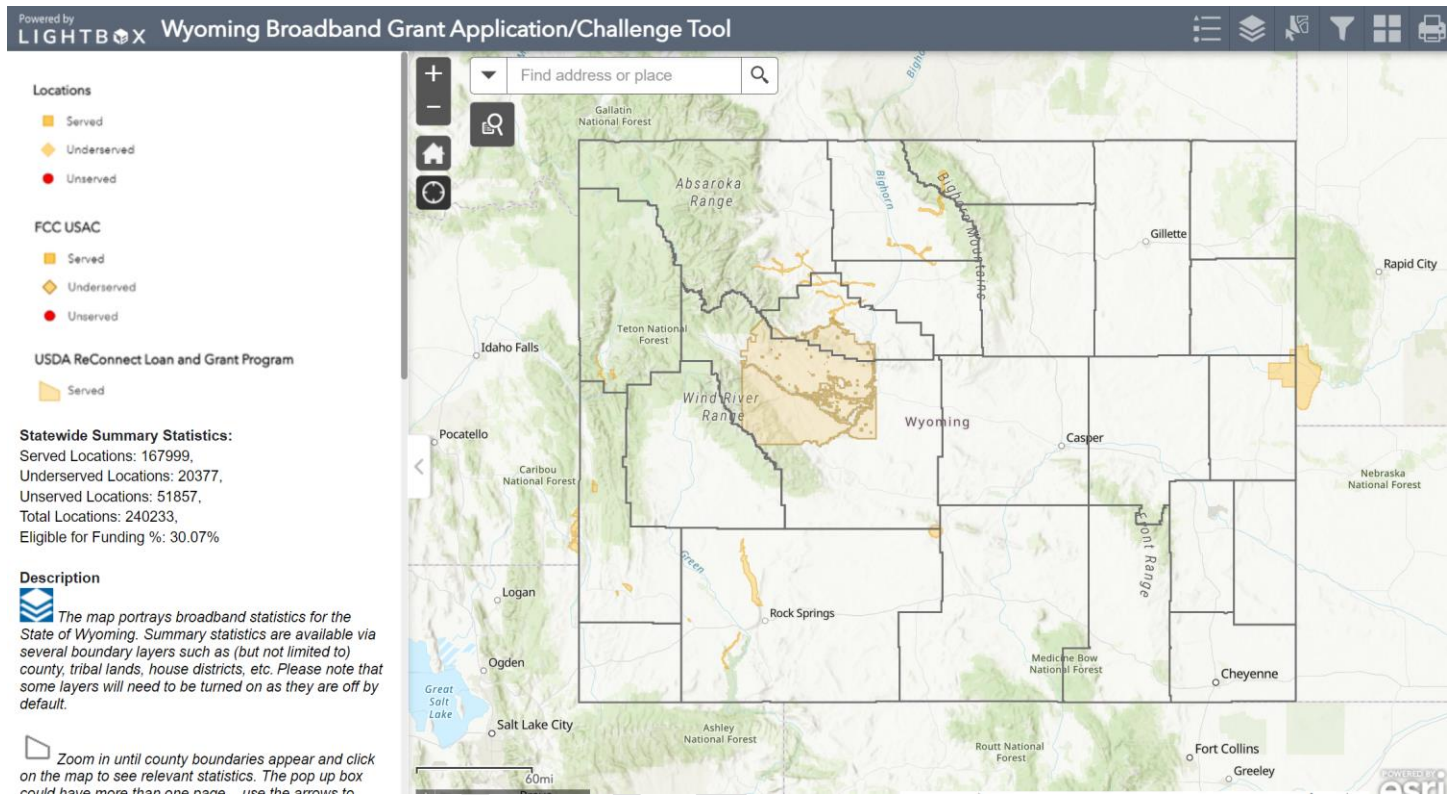
USDA ReConnect Loan and Grant Program

Applicant Name	All West / Wyoming Inc.
Program Type	ReConnect Program - FY2019
Funding Category	100% Grant
Service Area Type	PFSA
Application Name	101000148
Grant Amount Requested	$4,795,809.00
Loan Amount Requested	$0.00

- Zoom into an area where there is a USDA ReConnect boundary
    - o View cluster of points
    - o Zoom in further
    - o Select an address
    - o Address should be flagged as Served

3 MAP 2 – WYOMING BROADBAND GRANT APPLICANT/CHALLENGE MAP

Map 2 – Wyoming Broadband Grant Application/Challenge Map:

https://lightbox-wy.maps.arcgis.com/apps/webappviewer/index.html?id=d399bb5329b64103a630880e40ece3f2

NOTE:

- This map is credentialed (i.e., you require a username and password to access)
- If you require credentials and have not received them yet, please contact the Wyoming Business Council:
  - **Broadbandoffice@wyo.gov**

3.1 INTRODUCTION

Orient the users on the map

Start with the top and left-hand side:

- Title
  - This map has been built for Wyoming ISPs to extract data from the map to submit for applications

- Static Legend (map description box)
  - This is an example of some of the data layers contained within this map
  - Location Points are individual premises (houses, buildings) and each one has been color-coded based on its internet speed serviceability range.
  - Funding data (such as FCC USAC and USDA ReConnect) have been added to the map and have been color-coded based on its internet speed serviceability range.

- Map Description
  - This description conveys a number of pieces of information such as:
    - Purpose of the map
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    - Business rules of how the serviceability categories were determined based on speed (e.g., served means that location has a speed equal to or greater than 100 Mbps down and 20 Mbps per up)
    - *NOTE: Excluding some wireless and satellite coverage*

Move over the far right-hand side (6 icons)

Use the Legend to view the legend for all visible layers

- Whatever layers are visible on the screen will appear within this legend

Use the Layer List to turn data layers on/off

- This allows a user to have control and turn layers on off
- If a layer is greyed out – it means that a user has to zoom in closer in order to see the data (e.g., Locations)

Use the Select Eligible Locations button to extract data from the map

Use the Filter By County button to zoom in to a specific county of interest

Use the Print button to create an export of the map (e.g., pdf, jpeg)

Use the base map Gallery to turn on satellite imagery or change the underlying base map

Navigate to left-hand side of the map

Zoom allows a user to go in and out of the map OR use mouse to do this

Default extent (or the home button) – if you want to return to see entire State – you select this icon

My location icon – if you select this – map will ask to use browser location and find you on the map (shortcut to having to type in your address)

Query button allows you to learn high level information at the county or tribal lands
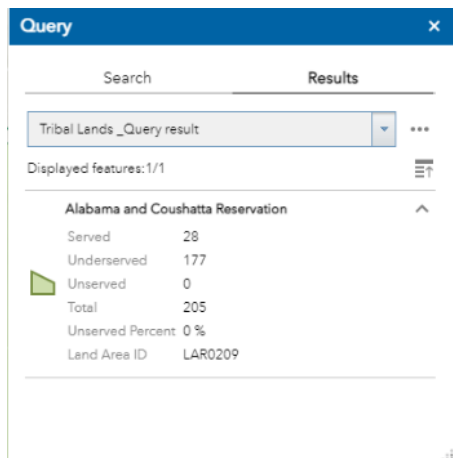
- Search bar

- Example inputs with ALL
    - Address = "222 E Collins Dr, Casper, WY, 82601, USA"
        - Type in 222 E COLLINS, and show the type-ahead capability to the tool
        - Type rest of address and show that it finds one record
        - Do not select record – this will occur later
        - NOTE: Short forms for directions and street types are recommended

    - County "Natrona"
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    - Tribal Lands = "Wind River Reservation"
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Served Locations	29,882
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Unserved Locations	3,426
Total Locations	34,052
Eligible for Funding %	12.25 %
FIPS Code	56025
Download Link	Download All County Locations

Zoom to •••
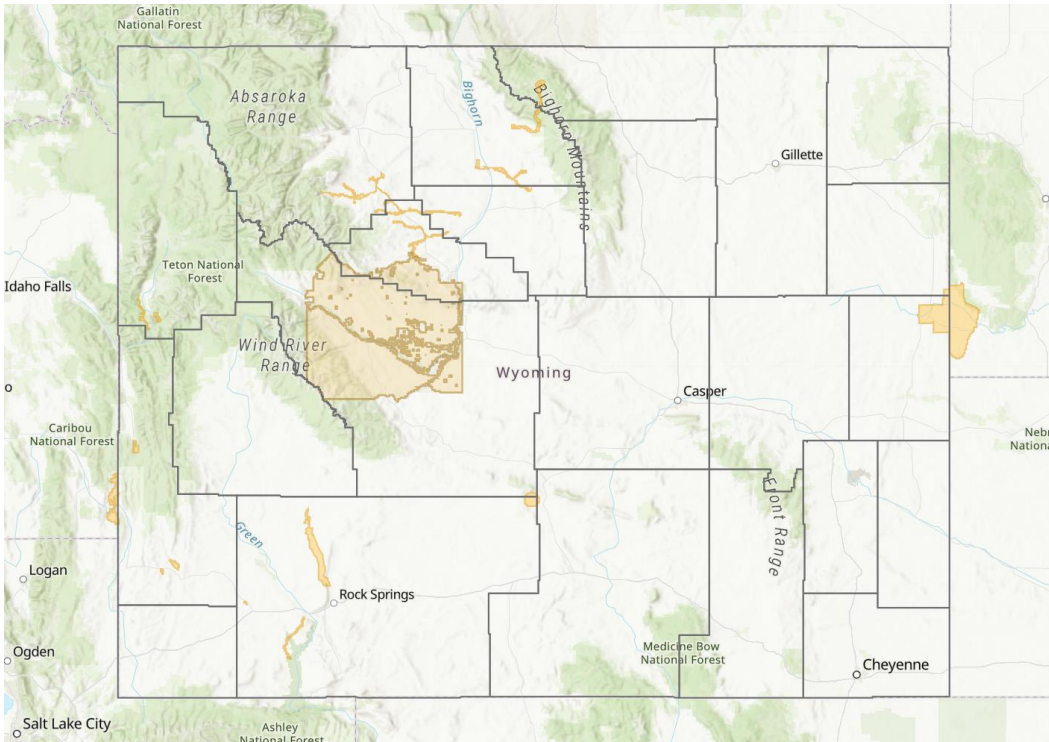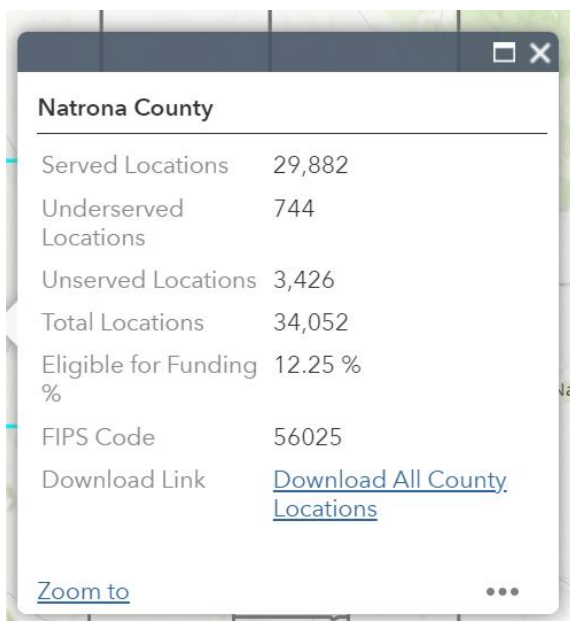
- Each boundary has a popup window that displays information
- For a county – you see the following:
  - # of locations by the serviceability levels (served, underserved, unserved)
  - Total # of locations in that county
  - % of locations which are unserved
  - A download link will be available if locations are present for that county

- Select a **Federal Fund boundary**
  - Federal funding boundaries have been added to the map as per legend
    - USDA ReConnect

USDA ReConnect Loan and Grant Program

Applicant Name	All West / Wyoming Inc.
Program Type	ReConnect Program - FY2019
Funding Category	100% Grant
Service Area Type	PFSA
Application Name	101000148
Grant Amount Requested	$4,795,809.00
Loan Amount Requested	$0.00

- Zoom into an area where there is a USDA ReConnect boundary
  - View cluster of points
  - Zoom in further
  - Select an address
  - Address should be flagged as Served

Filtering (show only wanted records)

- If you are interested in just looking at specific types of properties
- Open table view (i.e., use the arrow at the bottom of the screen)

- Select Options

- Select Filter

- The following window pops up:

- Select Add expression

- Fill out the following:

- Select OK button

- Previous view of map (before filter)
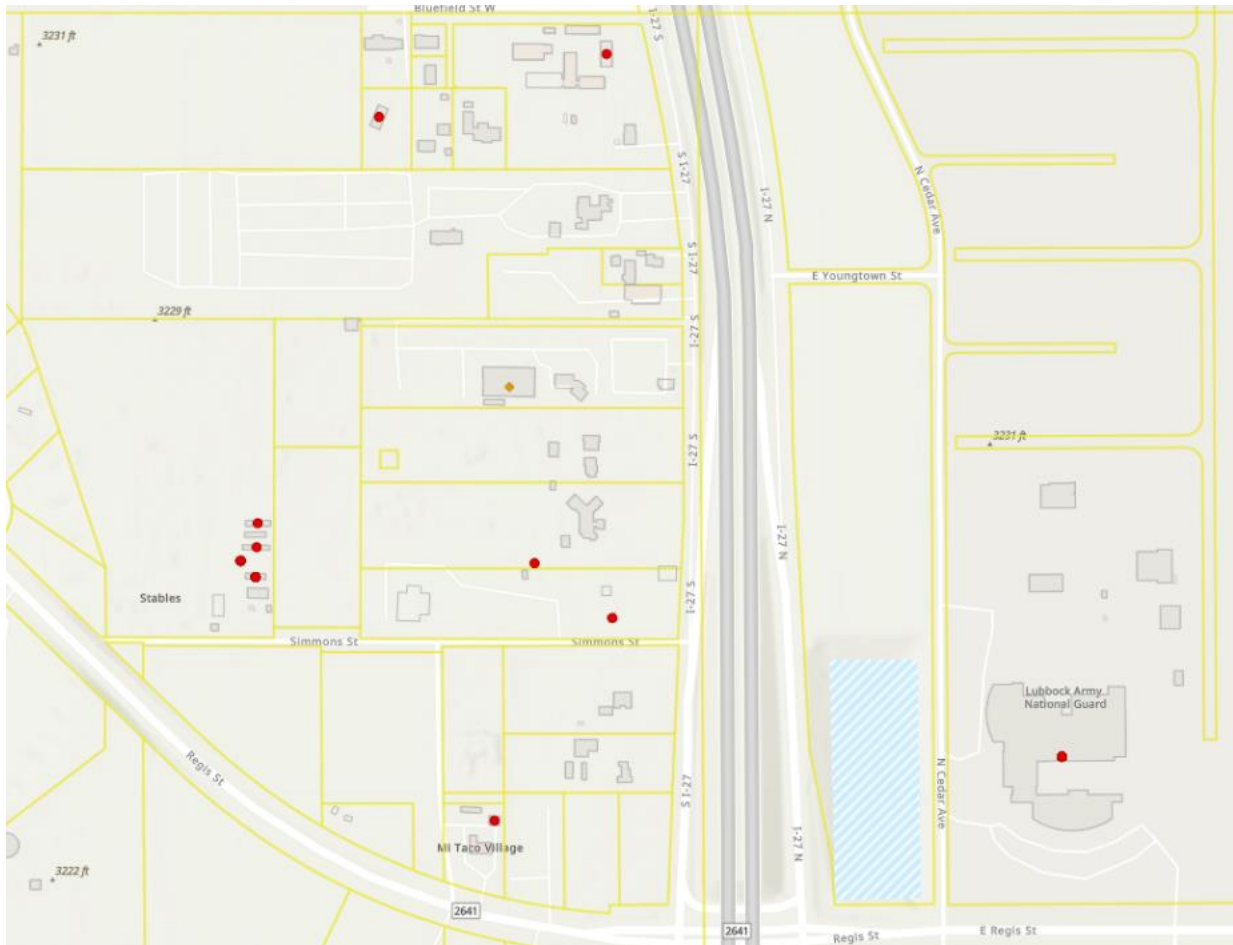
- Current view of map (after filter) showing just one type (underserved)
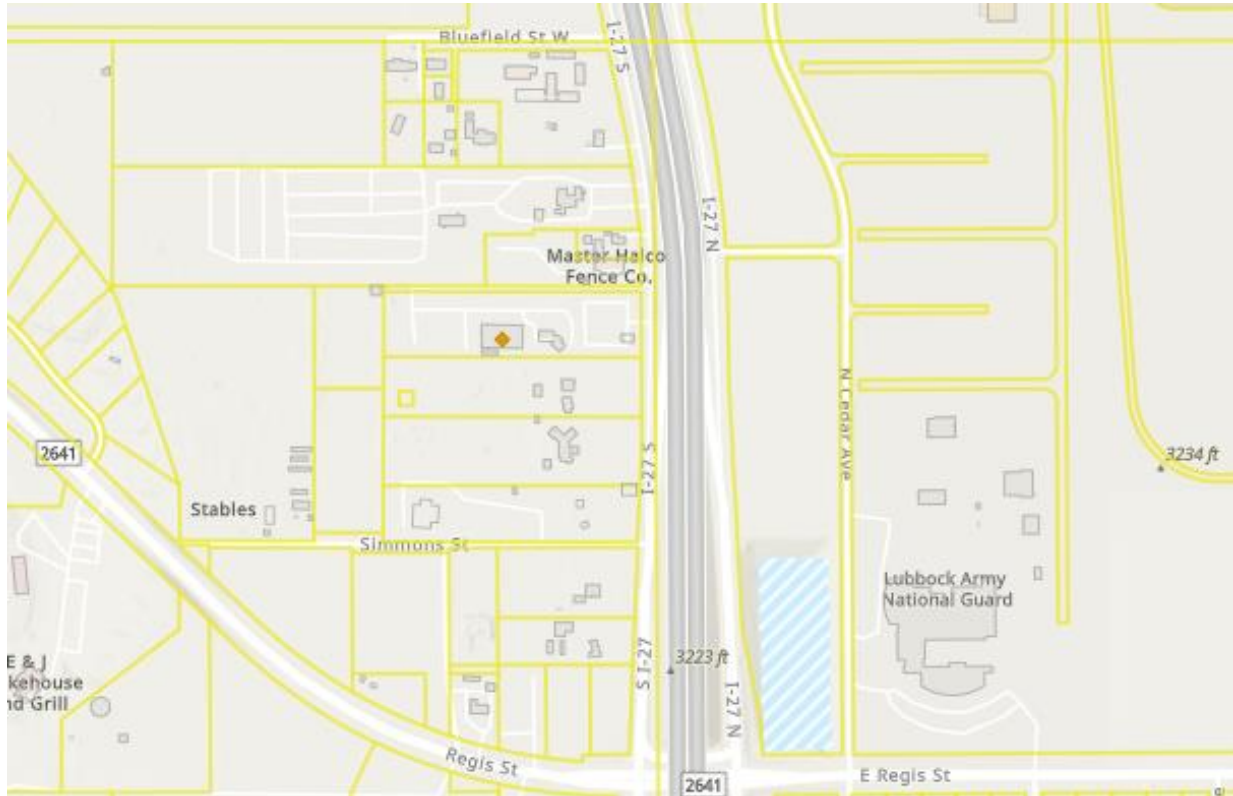
- If you want to remove the filter – return to filter screen and select the X beside the query

3.3 DOWNLOAD LOCATIONS FOR WHOLE COUNTY

Natrona County

Served Locations	29,882
Underserved Locations	744
Unserved Locations	3,426
Total Locations	34,052
Eligible for Funding %	12.25 %
FIPS Code	56025
Download Link	Download All County Locations

Zoom to
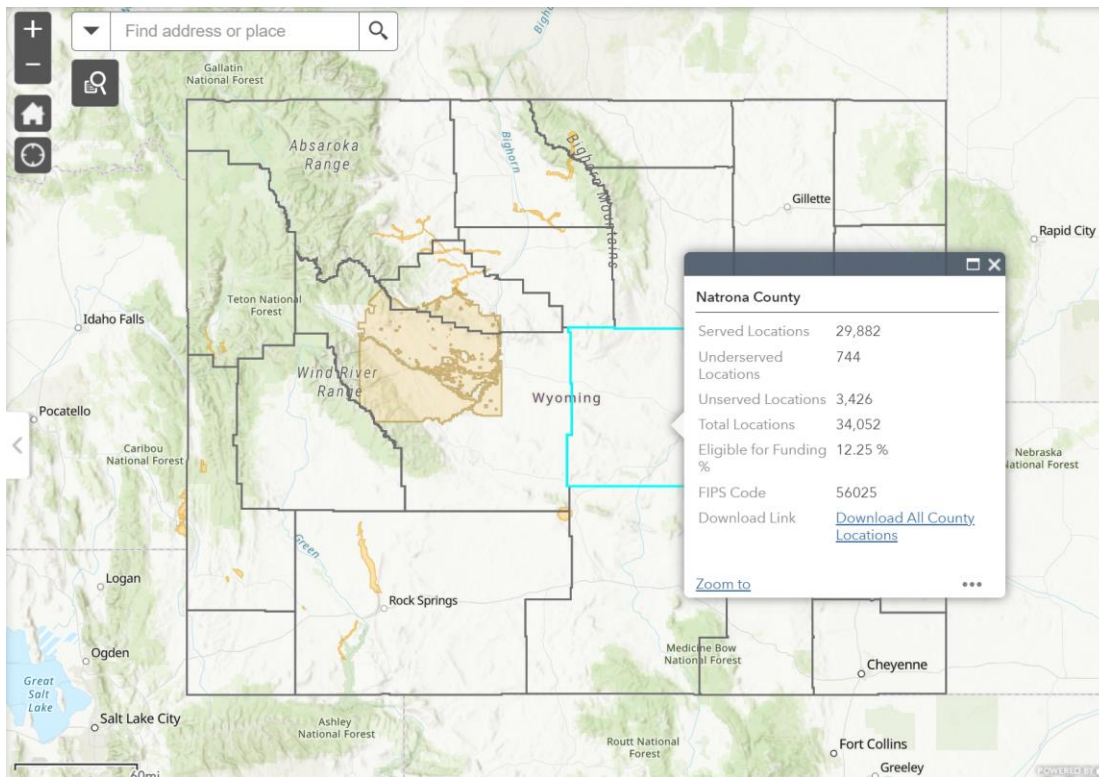
- From any Zoom level click on a county of interest

Fremont County

Served Locations	9,504
Underserved Locations	662
Unserved Locations	7,324
Total Locations	17,490
Eligible for Funding %	45.66 %
FIPS Code	56013
Download Link	Download All County Locations

Zoom to
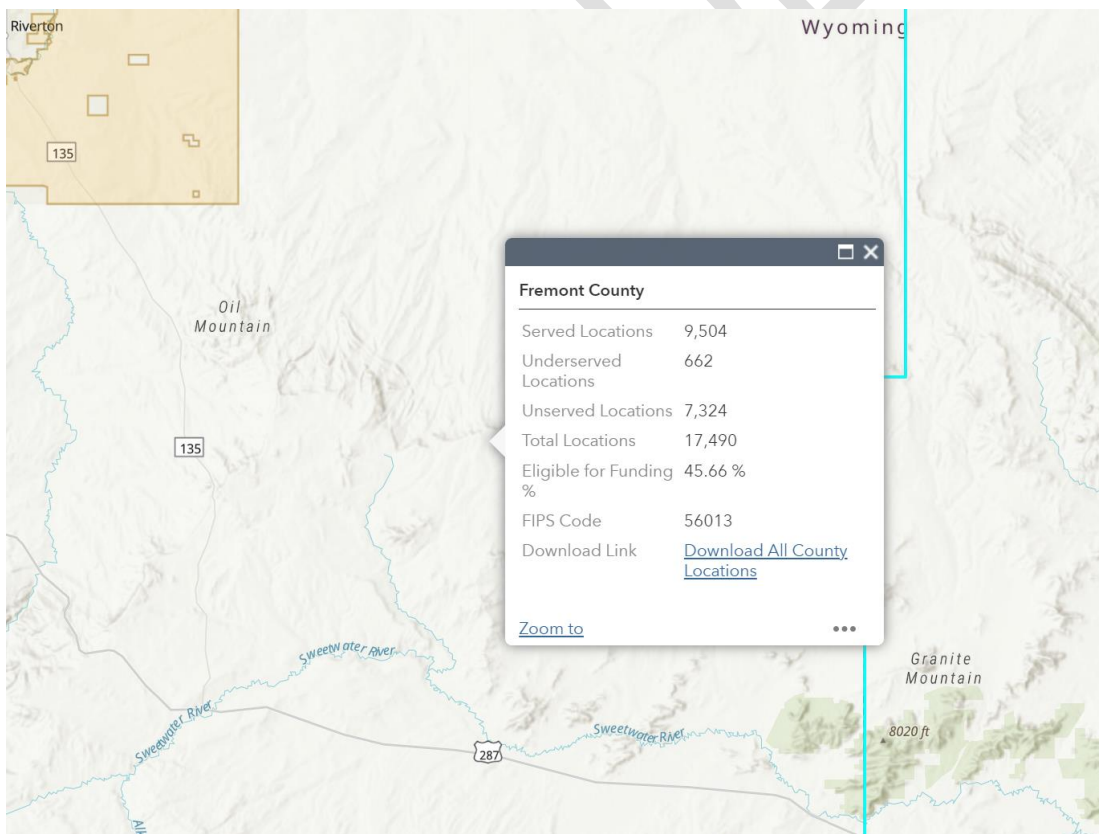
- If locations are available for that county a link will be present at the bottom of the Pop-up card

Fremont County

Served Locations	9,504
Underserved Locations	662
Unserved Locations	7,324
Total Locations	17,490
Eligible for Funding %	45.66 %
FIPS Code	56013
Download Link	Download All County Locations

Zoom to
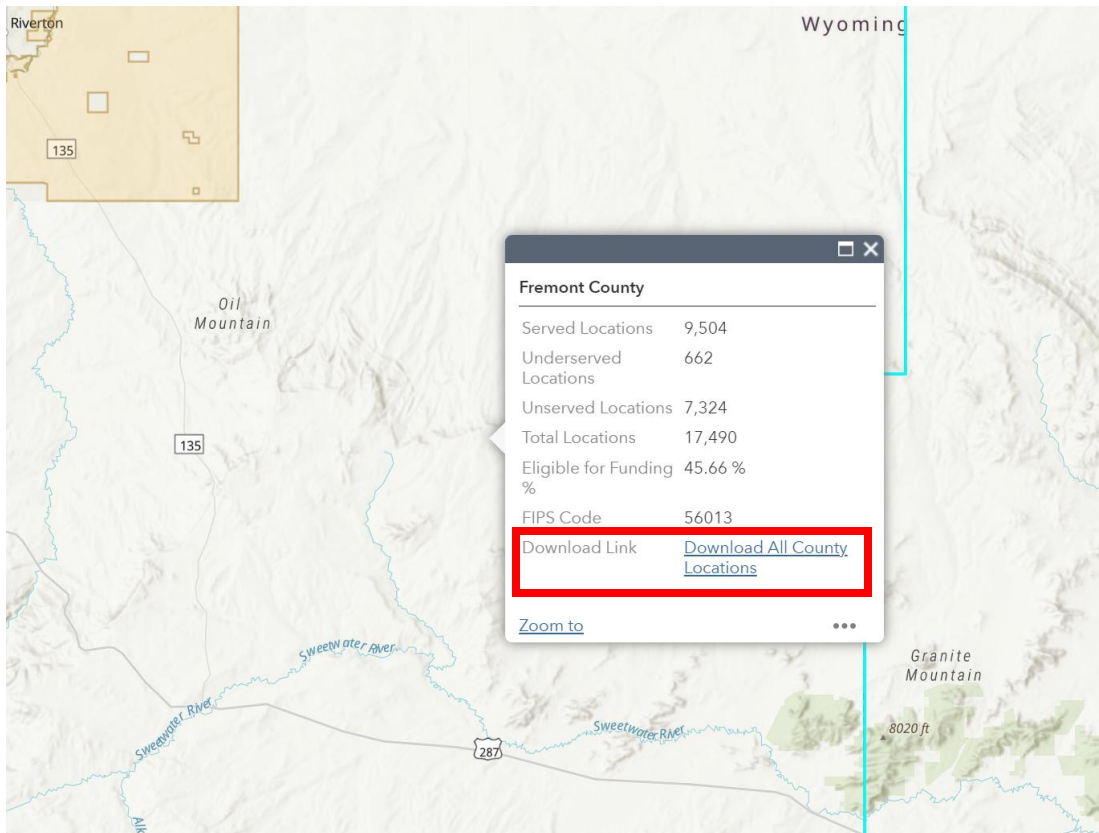
- Selecting the link will launch a new page where the CSV of locations for that county can be downloaded

Eligible_Locations_48303   Overview

Download

A brief summary of the item is not available.

CSV by lbx_texas

Item created: Jan 25, 2023   Item updated: Jan 25, 2023   Number of downloads: 0

☆ Add to Favorites

Description

An in-depth description of the item is not available.

Terms of Use

No special restrictions or limitations on using the item's content have been provided.

Details

Size: 6.384 MB

☆☆☆☆☆

Share

🔒

Owner

RW lbx_texas

Tags

lbx, tx, broadband, TX2022-Q3SF-Q4Rev, 20230111

Credits (Attribution)

No acknowledgements.

|	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	Cou
1	OBJECTID	Full Addre	Serviceabi	Version ID	Location L	Address LI	Address N	Prefix Dire	Prefix Typ	Street Nar	Suffix Typ	Suffix Dire	Address	Unit	Building	City	State	Zipcode	County	Cou
2	13	2632 LANI	Served	2022Q4	070000CJ5	0603J6B6(	2632			LANNER	ST		2632 LANNER ST			CASPER	WY	82601-518	Natrona	US
3	14	2702 LANI	Served	2022Q4	070000CJ5	060719J31	2702			LANNER	ST		2702 LANNER ST			CASPER	WY	82601-518	Natrona	US
4	15	1925 S FAI	Served	2022Q4	070000DB	06046XDV	1925	S		FAIRDALE	AVE		1925 S FAIRDALE AVE			CASPER	WY	82601-496	Natrona	US
5	25	925 S JACH	Served	2022Q4	070000U4	0607JGDJ[	925	S		JACKSON	ST		925 S JACKSON ST			CASPER	WY	82601-343	Natrona	US
6	41	638 S BEE(	Served	2022Q4	070001NH	060052B8	638	S		BEECH	ST		638 S BEECH ST			CASPER	WY	82601-318	Natrona	US
7	48	1750 ELK /	Served	2022Q4	070001XL:	06075B3L!	1750			ELK	AVE		1750 ELK AVE			CASPER	WY	82601-493	Natrona	US
8	101	2855 E 8TI	Served	2022Q4	070003E2-	0603E6J9F	2855	E		8TH	ST		2855 E 8TH ST			CASPER	WY	82609-26(	Natrona	US
9	105	800 ANTLI	Served	2022Q4	0700031411	0602HV3P	800			ANTLER	DR		800 ANTLER DR			CASPER	WY	82601-171	Natrona	US
10	154	842 E A ST	Served	2022Q4	0700054F(	0602P77C'	842	E		A	ST		842 E A ST			CASPER	WY	82601	Natrona	US
11	177	1601 E 26'	Served	2022Q4	070005NH	06069V2G	1601	E		26TH	ST		1601 E 26TH ST			CASPER	WY	82601-509	Natrona	US
12	228	1446 S ME	Served	2022Q4	070006UG	0606YN5C	1446	S		MELROSE	ST		1446 S MELROSE ST			CASPER	WY	82601-397	Natrona	US
13	239	1877 SHA1	Served	2022Q4	07000741€	0604R1KH	1877			SHATTUCK	AVE		1877 SHATTUCK AVE			CASPER	WY	82601-50(	Natrona	US
14	275	1315 S BO	Served	2022Q4	070008F9I	060479DD	1315	S		BOXELDEF	ST		1315 S BO APT 1			CASPER	WY	82604-333	Natrona	US
15	276	1315 S BO	Served	2022Q4	070008F9I	06071NRL	1315	S		BOXELDEF	ST		1315 S BO APT 2			CASPER	WY	82604-333	Natrona	US
16	277	1315 S BO	Served	2022Q4	070008F9I	06073TX1'	1315	S		BOXELDEF	ST		1315 S BOXELDER ST			CASPER	WY	82604-333	Natrona	US
17	297	1764 S CO	Served	2022Q4	0700098Z'	0605GVIG	1764	S		CONWELL	ST		1764 S CONWELL ST			CASPER	WY	82601-483	Natrona	US
18	440	1420 S W/	Served	2022Q4	07000A91	0604V8M!	1420	S		WASHING	ST		1420 S WASHINGTON ST			CASPER	WY	82601-397	Natrona	US
19	443	911 CY AV	Served	2022Q4	07000ADX	060758LFI	911			CY	AVE		911 CY AVE			CASPER	WY	82601-416	Natrona	US
20	468	230 E 10TI	Served	2022Q4	07000B48	0602Q94Y	230	E		10TH	ST		230 E 10TH ST			CASPER	WY	82601-374	Natrona	US

- The CSV file will contain fields required for submitting records for the following Wyoming workflows:

  o Challenge submission
    - *NOTE: The fields at the end of the table named Challenge * need to be retained and populated before submitting to the Wyoming Business Council*

  o Grant Application submission
    - *NOTE: The fields at the end of the table named Challenge * can be removed before submitting to the Wyoming Business Council*

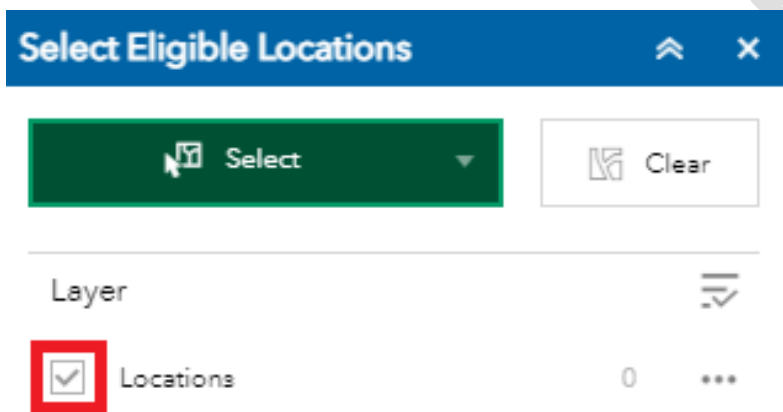## 3.4 DOWNLOAD LOCATIONS BY SELECTION

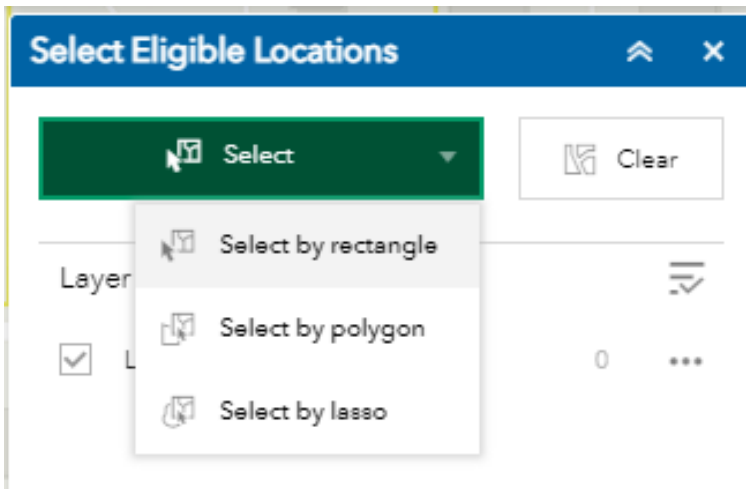Example area (*651 CASA QUINTA AVE GILLETTE WY 82716-2164*)
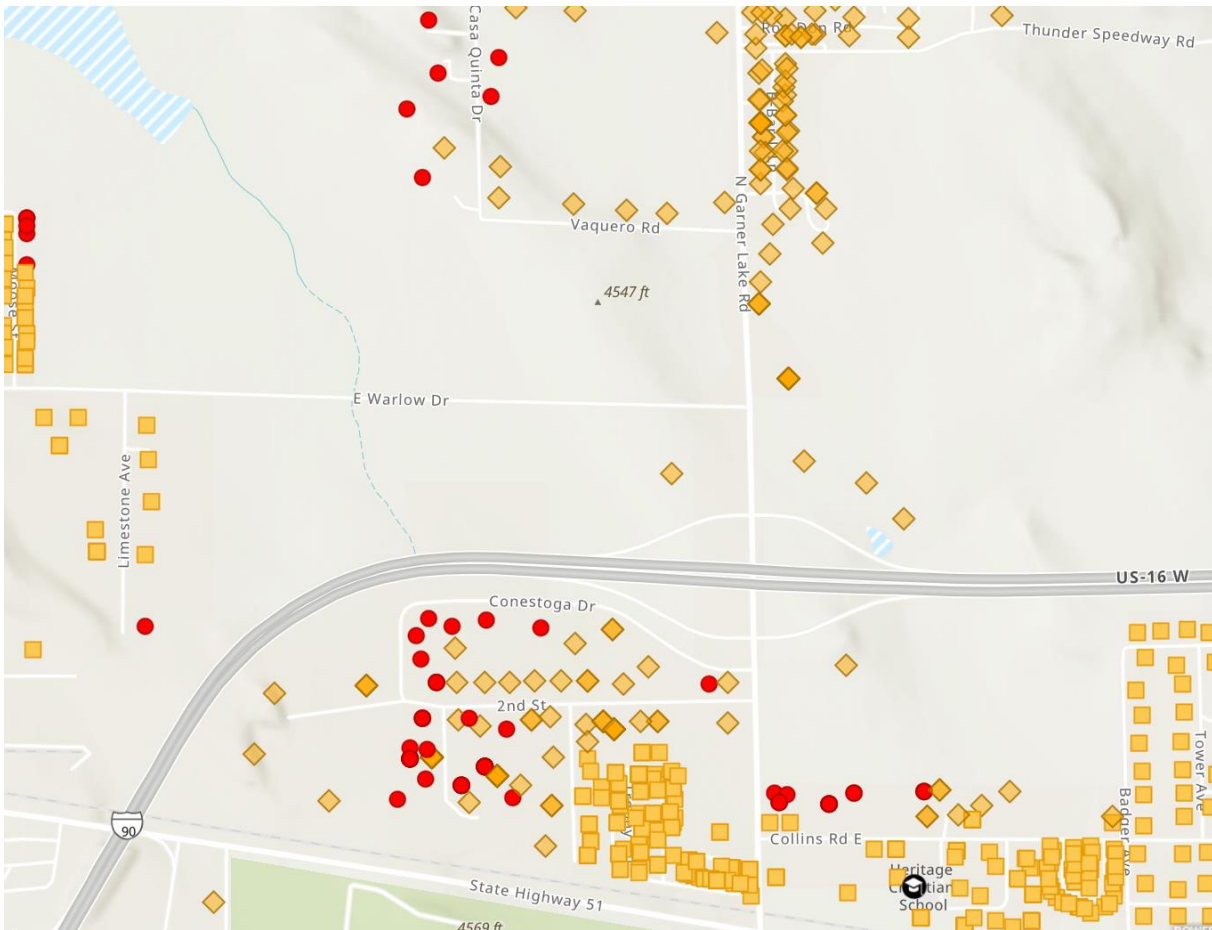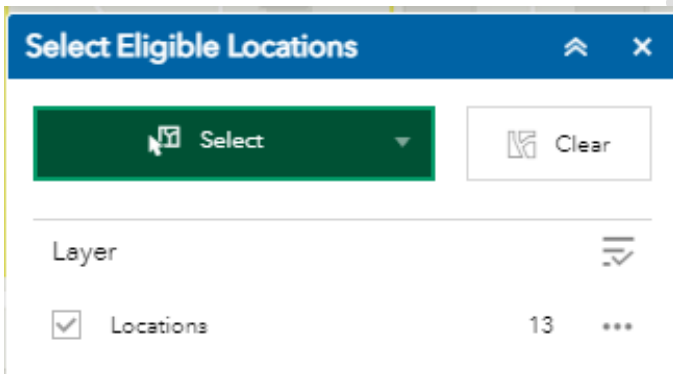
- Use Select Eligible Locations tool
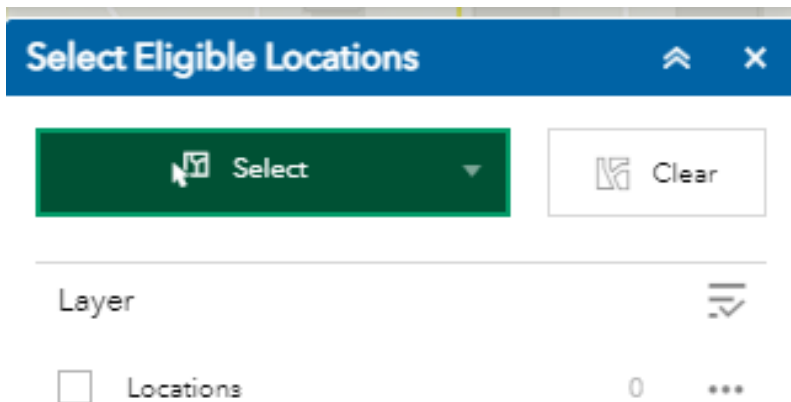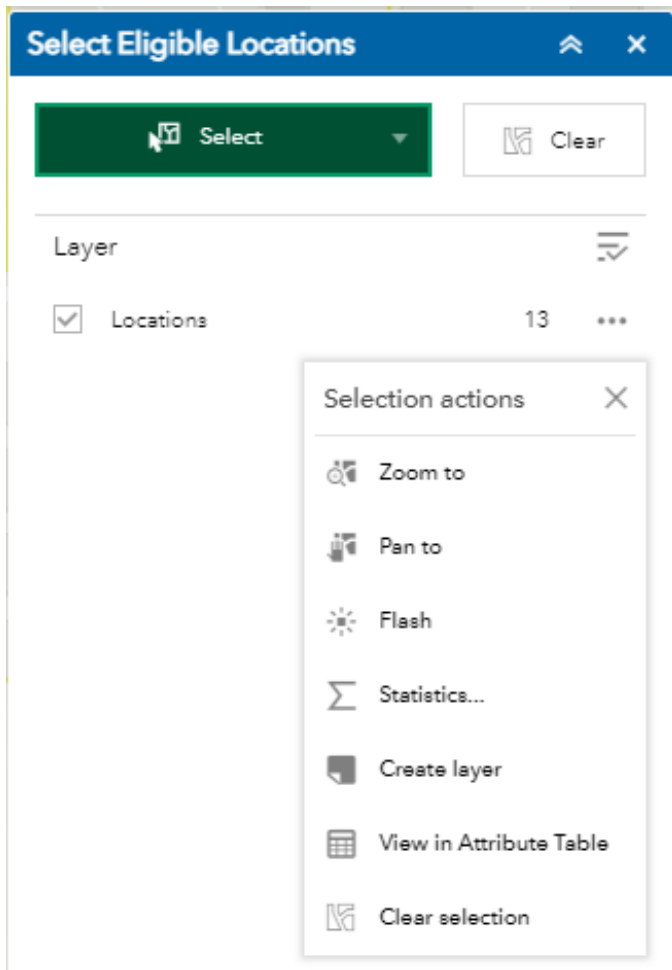

- Turn on Locations layer

- Select the option that you wish to use by going to the drop-down arrow on the Select button
  - Select by rectangle
  - Select by polygon
  - Select by lasso

- Example: Select by lasso (select the points on the screen)
  - NOTE: The # of locations is reported beside Locations layer (e.g., 13)

- Select ellipsis (…) to see menu

- Select "View in Attribute Table"

- Selected data will appear in the table at the bottom of the screen (NOTE: notice how count 13 is the same as 13 features reported by table)
  - *NOTE: If the number of records in the Select Eligible Locations does not match the number of selected records in the attribute table (bottom) – zoom backwards one zoom level to get the numbers to match so that these are extracted to the CSV file*

- Select Export selected to CSV

13 features   13 selected

- The following message should appear:

Export to CSV   ✕

Export data to CSV file?

OK   Cancel

- CSV file will download

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
1	OBJECTID	Full Addre	Serviceabi	Version ID	Location L	Address LI	Address N	Prefix Dire	Prefix Typ	Street Nar	Suffix Typ	Suffix Dire	Address	Unit	Building	City	State	Zipcode	County	Cou
2	13	2632 LANI	Served	2022Q4	070000CJ!	0603J6B6(	2632			LANNER	ST		2632 LANNER ST			CASPER	WY	82601-518	Natrona	US
3	14	2702 LANI	Served	2022Q4	070000CJ!	060719J31	2702			LANNER	ST		2702 LANNER ST			CASPER	WY	82601-518	Natrona	US
4	15	1925 S FAI	Served	2022Q4	070000DB	06046XDV	1925	S		FAIRDALE	AVE		1925 S FAIRDALE AVE			CASPER	WY	82601-496	Natrona	US
5	25	925 S JACI	Served	2022Q4	070000U4	0607JGDJI	925	S		JACKSON	ST		925 S JACKSON ST			CASPER	WY	82601-343	Natrona	US
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11	177	1601 E 26	Served	2022Q4	070005NH	06069V2G	1601	E		26TH	ST		1601 E 26TH ST			CASPER	WY	82601-509	Natrona	US
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13	239	1877 SHAT	Served	2022Q4	0700074I(	0604R1KH	1877			SHATTUCI	AVE		1877 SHATTUCK AVE			CASPER	WY	82601-500	Natrona	US
14	275	1315 S BO	Served	2022Q4	070008F9I	060479DD	1315	S		BOXELDEF	ST		1315 S BO APT 1			CASPER	WY	82604-333	Natrona	US
15	276	1315 S BO	Served	2022Q4	070008F9I	06071NRL	1315	S		BOXELDEF	ST		1315 S BO APT 2			CASPER	WY	82604-333	Natrona	US
16	277	1315 S BO	Served	2022Q4	070008F9I	06073TX1'	1315	S		BOXELDEF	ST		1315 S BOXELDER ST			CASPER	WY	82604-333	Natrona	US
17	297	1764 S CO	Served	2022Q4	0700098Z'	0605GVIG	1764	S		CONWELL	ST		1764 S CONWELL ST			CASPER	WY	82601-483	Natrona	US
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20	468	230 E 10TI	Served	2022Q4	07000B48	0602Q94Y	230	E		10TH	ST		230 E 10TH ST			CASPER	WY	82601-374	Natrona	US

- The CSV file will contain fields required for submitting records for the following Wyoming workflows:

  - Challenge submission
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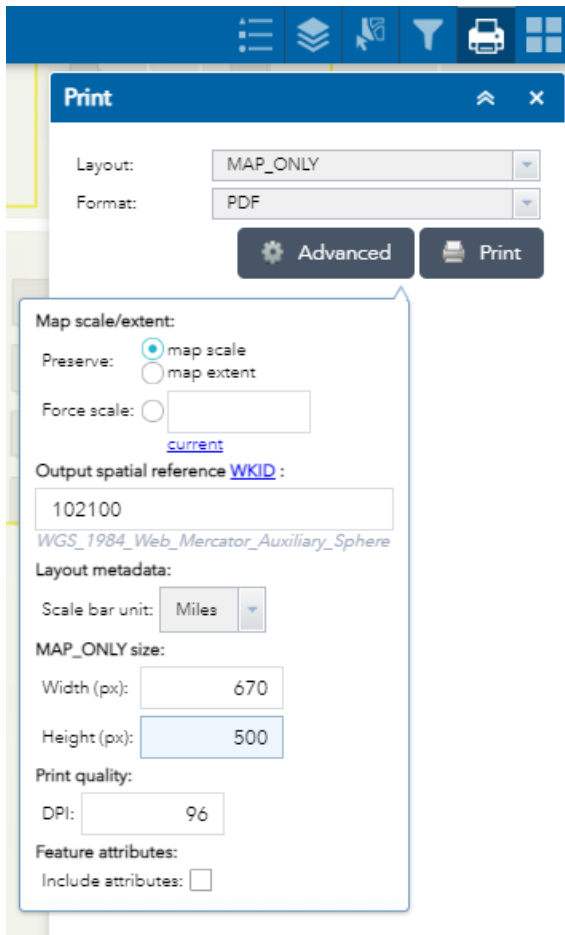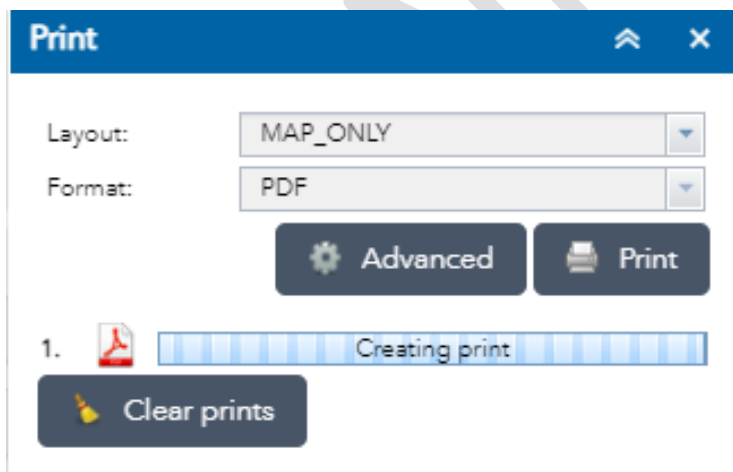
3.5 CREATE MAP PRINT

- Select [printer icon] button

- Following dialog should appear:
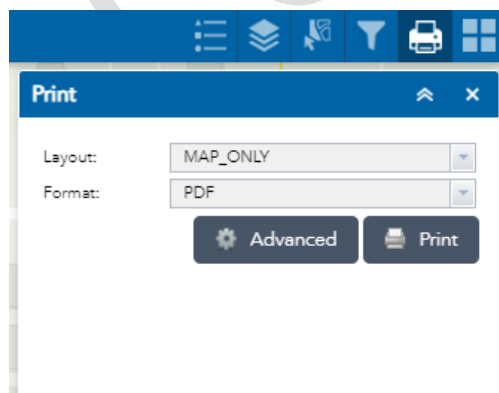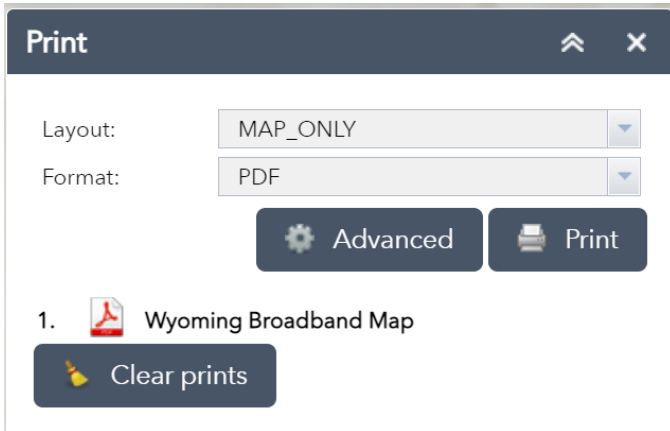
- Select Advanced
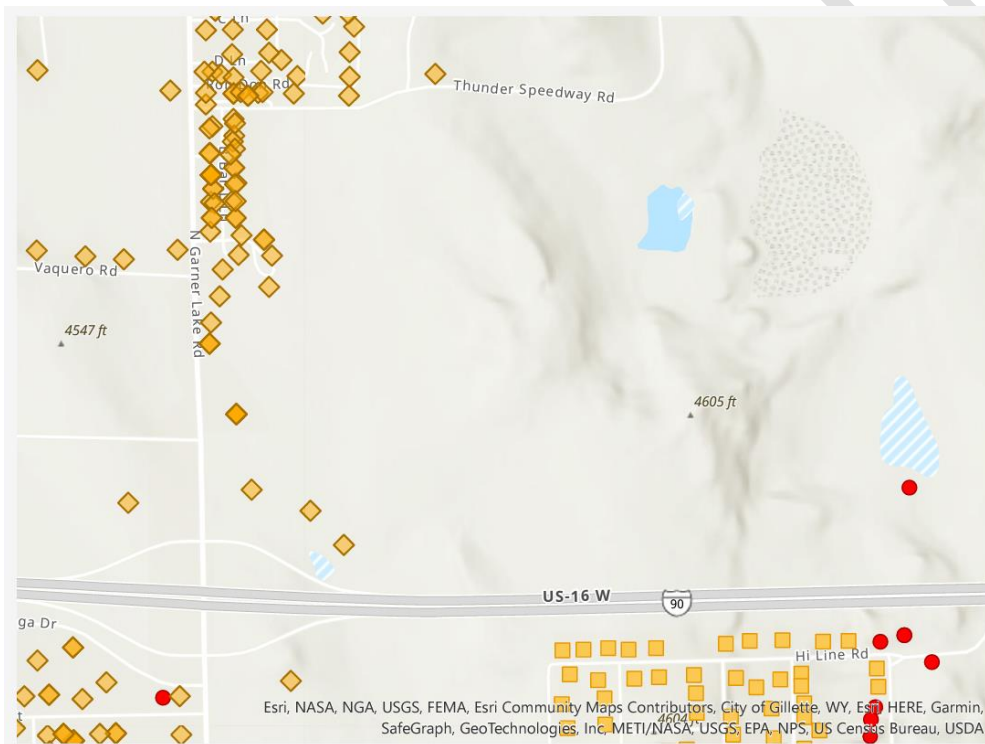

- Select Print button

- Status bar will say "Creating print'"

- Once completed:

- Select "1. Wyoming Broadband Map"

- New window will be opened and pdf will be displayed

- Use Clear Prints button if you wish to delete all files created (to date)

- NOTE: Other options can be utilized within the Print Map dialog such as:
  - Select different Layout options
  - Select different Formats (png, jpeg, etc)

4 SUPPORT

If you have any questions about how to use these maps, please contact LightBox Customer Success at:

- **WyomingISPCoordinator@lightboxre.com**

5 VERSION MANAGEMENT

Version	Edited By	Date	Notes
1.0	LightBox	3/28/23	Initial Document