

# Requirements to setup the UtiliView template for Esri's ArcGIS Online:

1. One of the following Esri licenses
  - Creator
  - Professional
  - Professional Plus
2. Access to the following:
  - ArcGIS Pro & Online
  - Ability to create API keys



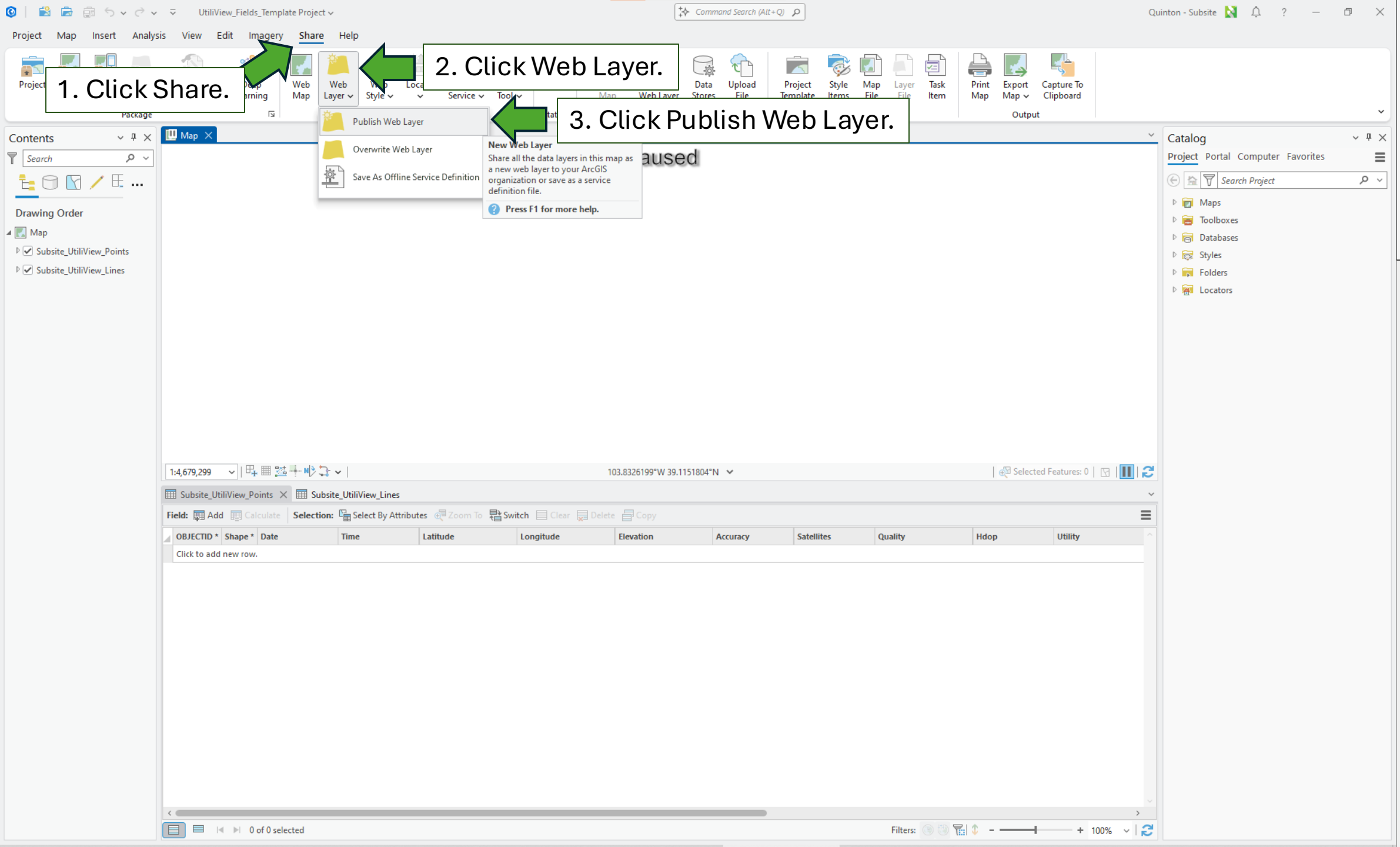
# Download and open a Subsite Schema Template file

<https://www.subsite.com/software/software-updates/#utiliguard>



The version 2 schema template is recommended for new setups.





Share As Web Layer ? v □ ×

Sharing Map As A Web Layer

General Configuration Content

▼ Item Details

Name

Summary

Tags

Categories

▼ Layer Type ⓘ

Feature  
 Tile  
 Vector Tile  
 Feature ⓘ

▼ Location

Folder

▼ Sharing Level

Owner  
Owner of the item(s) has access

All members of your organization have access

Finish Sharing

1. Name it.



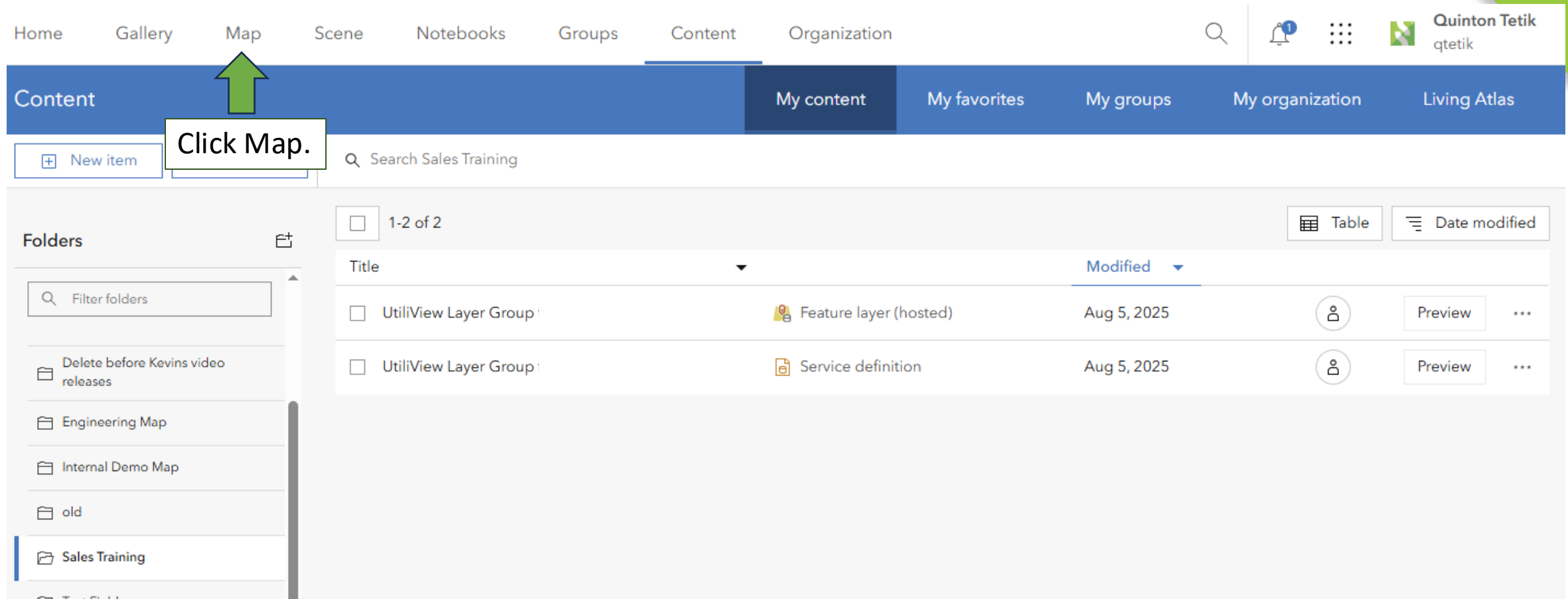
2. Optional: create a folder.



3. Click Publish.



# Now open ArcGIS Online



The screenshot shows the ArcGIS Online user interface. At the top, there is a navigation bar with the following items: Home, Gallery, Map, Scene, Notebooks, Groups, Content, and Organization. A green arrow points to the 'Map' item, which is highlighted with a callout box containing the text 'Click Map.'. To the right of the navigation bar are search, notification, and user profile icons. Below the navigation bar is a secondary menu with 'Content' (selected), 'My content', 'My favorites', 'My groups', 'My organization', and 'Living Atlas'. A search bar contains the text 'Search Sales Training'. On the left side, there is a 'Folders' panel with a search box and a list of folders: 'Delete before Kevins video releases', 'Engineering Map', 'Internal Demo Map', 'old', and 'Sales Training'. The main content area displays a list of items with columns for 'Title', 'Type', 'Modified', and 'Actions'. The items listed are:

<input type="checkbox"/>	Title	Type	Modified	Actions
<input type="checkbox"/>	1-2 of 2			Table Date modified
<input type="checkbox"/>	UtiliView Layer Group	Feature layer (hosted)	Aug 5, 2025	Preview ...
<input type="checkbox"/>	UtiliView Layer Group	Service definition	Aug 5, 2025	Preview ...



1. Click Basemap.

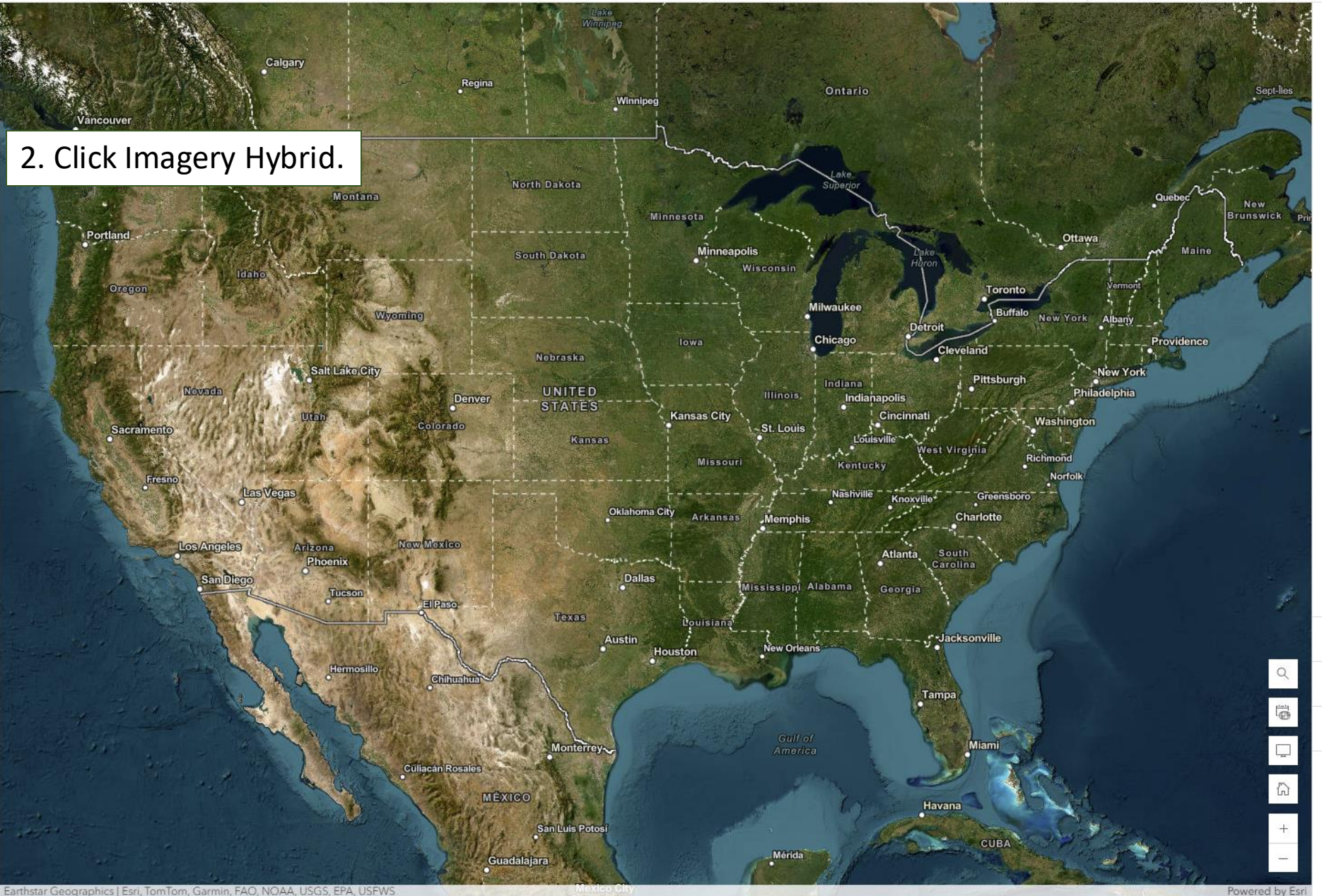


Current basemap  
Imagery Hybrid

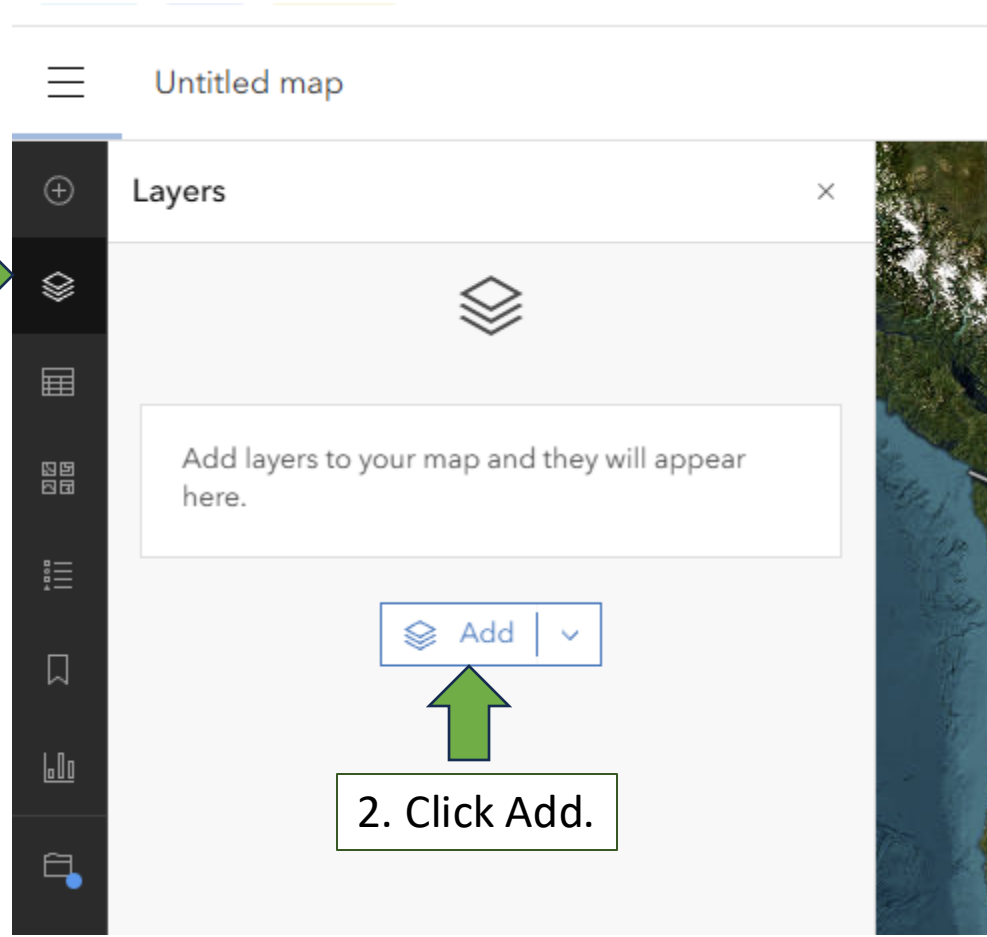
Imagery	Imagery Hybrid
Streets	Topographic
Navigation	Streets (Night)
Terrain with Labels	Light Gray Canvas
Dark Gray Canvas	Outdoor



2. Click Imagery Hybrid.



1. Click Layers.



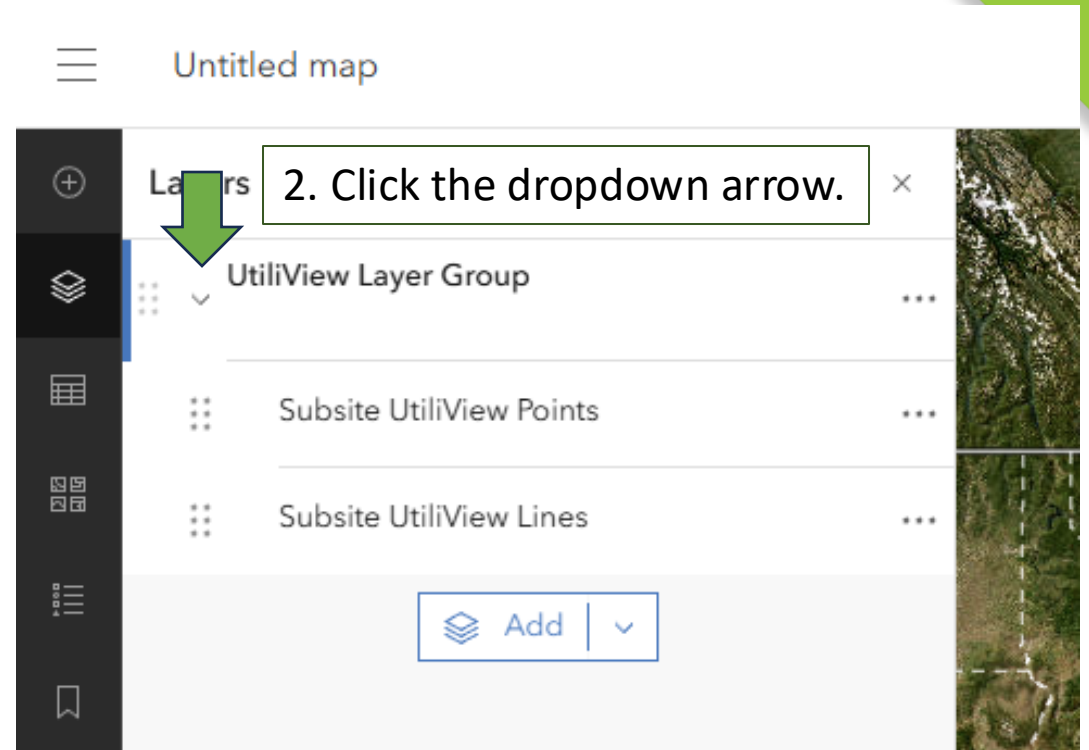
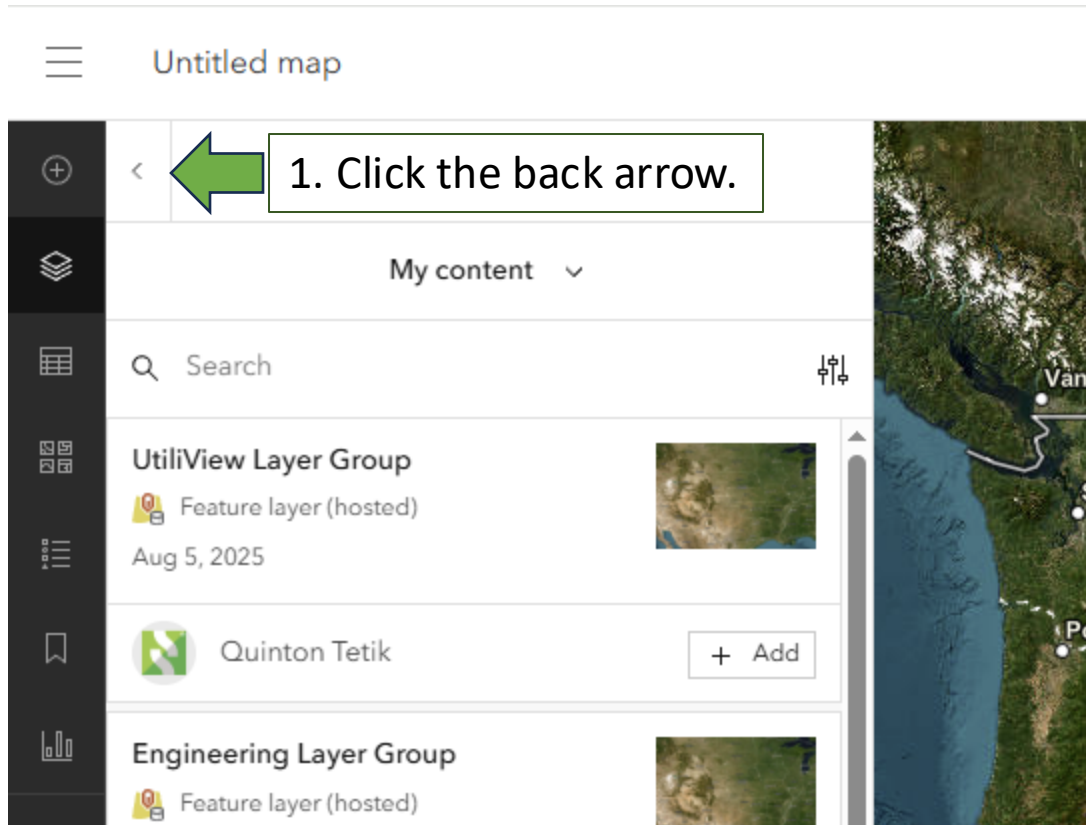
2. Click Add.

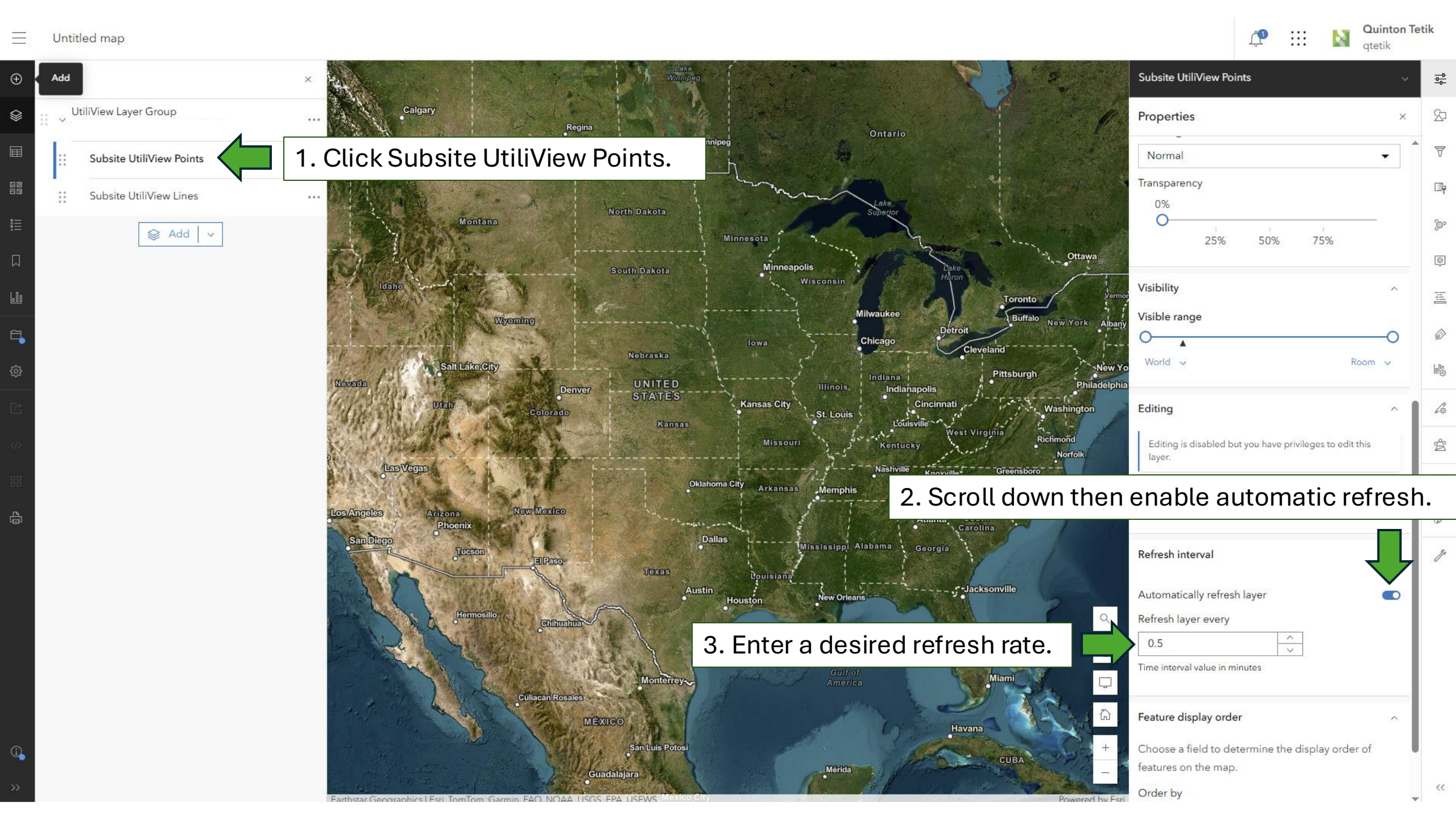


Find the feature layer (hosted) that was just uploaded

The screenshot shows the 'Add layer' interface in ArcGIS. The title bar reads 'Untitled map'. Below the title bar, there is a navigation bar with a back arrow and the text 'Add layer'. The main content area is titled 'My content' and contains a search bar and a list of layers. The first layer is 'UtiliView Layer Group', which is a 'Feature layer (hosted)' uploaded on 'Aug 5, 2025'. The second layer is 'Quinton Tetik', which is also a 'Feature layer (hosted)'. A green arrow points to the '+ Add' button next to the 'Quinton Tetik' layer. The background of the interface shows a satellite map of a river and surrounding land.







**Add**

UtiliView Layer Group

- Subsite UtiliView Points
- Subsite UtiliView Lines

Add

1. Click Subsite UtiliView Points.

Subsite UtiliView Points

Properties

Normal

Transparency

0% 25% 50% 75%

Visibility

Visible range

World Room

Editing

Editing is disabled but you have privileges to edit this layer.

2. Scroll down then enable automatic refresh.

3. Enter a desired refresh rate.

Refresh interval

Automatically refresh layer

Refresh layer every

0.5

Time interval value in minutes

Feature display order

Choose a field to determine the display order of features on the map.

Order by

1. Click on the Aggregation tab.

2. Enable the Clustering aggregation.

Aggregation

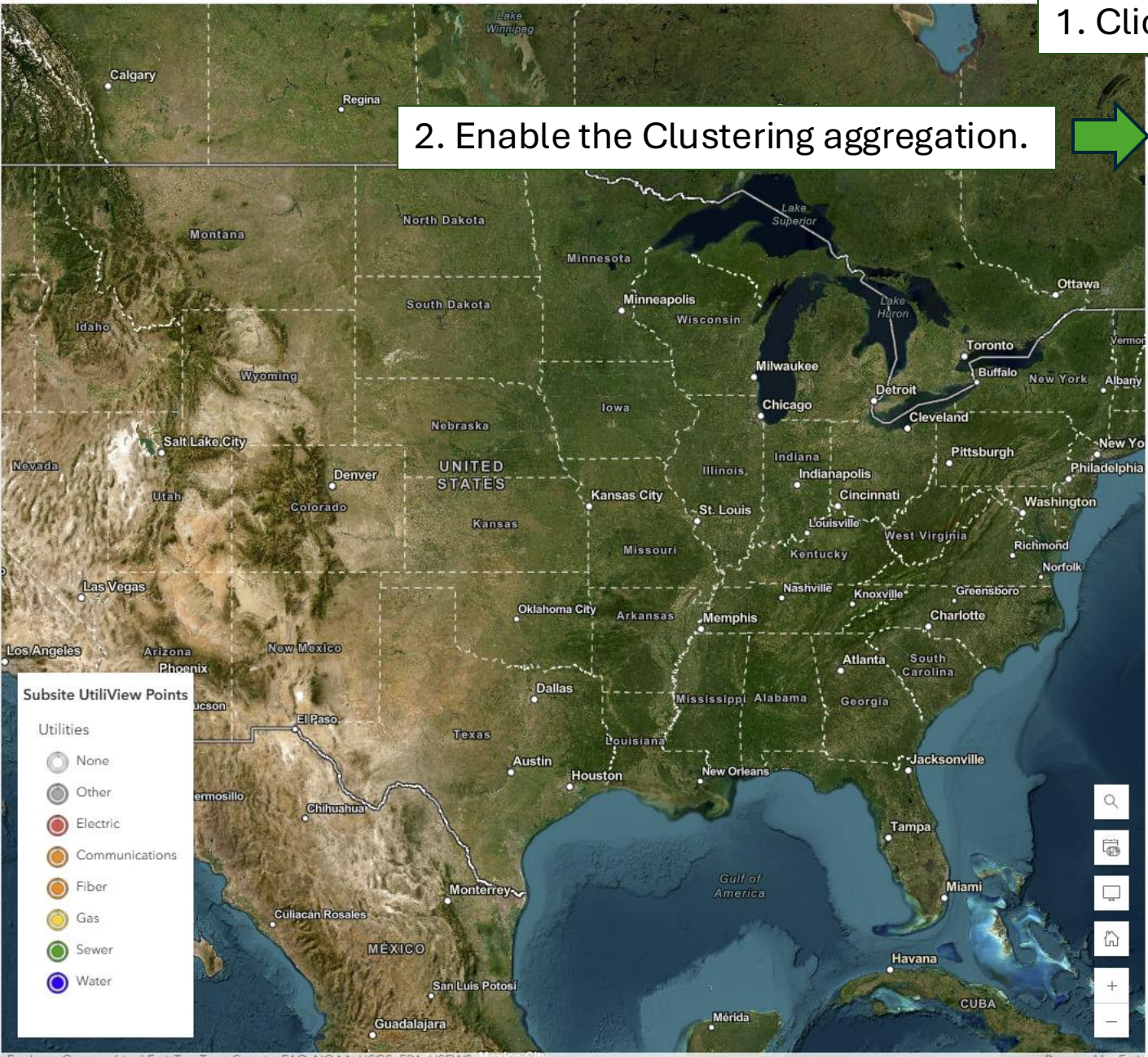
Enable aggregation

Clustering  Options

Clustering (chart)

115	285	132	123	253	155	320	255	119	
58	145	239	213	270	184	192	213	40	67
44	239	231	297	177	131	145	108	22	6
68	152	236	239	359	314	18	27	21	
39	106	192	232	233	36	47			

Binning



- Subsite UtiliView Points
- Utilities
- None
  - Other
  - Electric
  - Communications
  - Fiber
  - Gas
  - Sewer
  - Water

- Layers
- UtiliView Layer Group
  - Subsite UtiliView Points
  - Subsite UtiliView Lines
- Add

Layers

- UtiliView Layer Group
- Subsite UtiliView Points
- Subsite UtiliView Lines

1. Click Subsite UtiliView Lines.

Subsite UtiliView Lines

Properties

Normal

Transparency

0% 25% 50% 75%

Visibility

Visible range

World Room

Editing

Editing is disabled but you have privileges to edit this layer.

2. Scroll down then enable automatic refresh.

Refresh interval

Automatically refresh layer

Refresh layer every

0.5

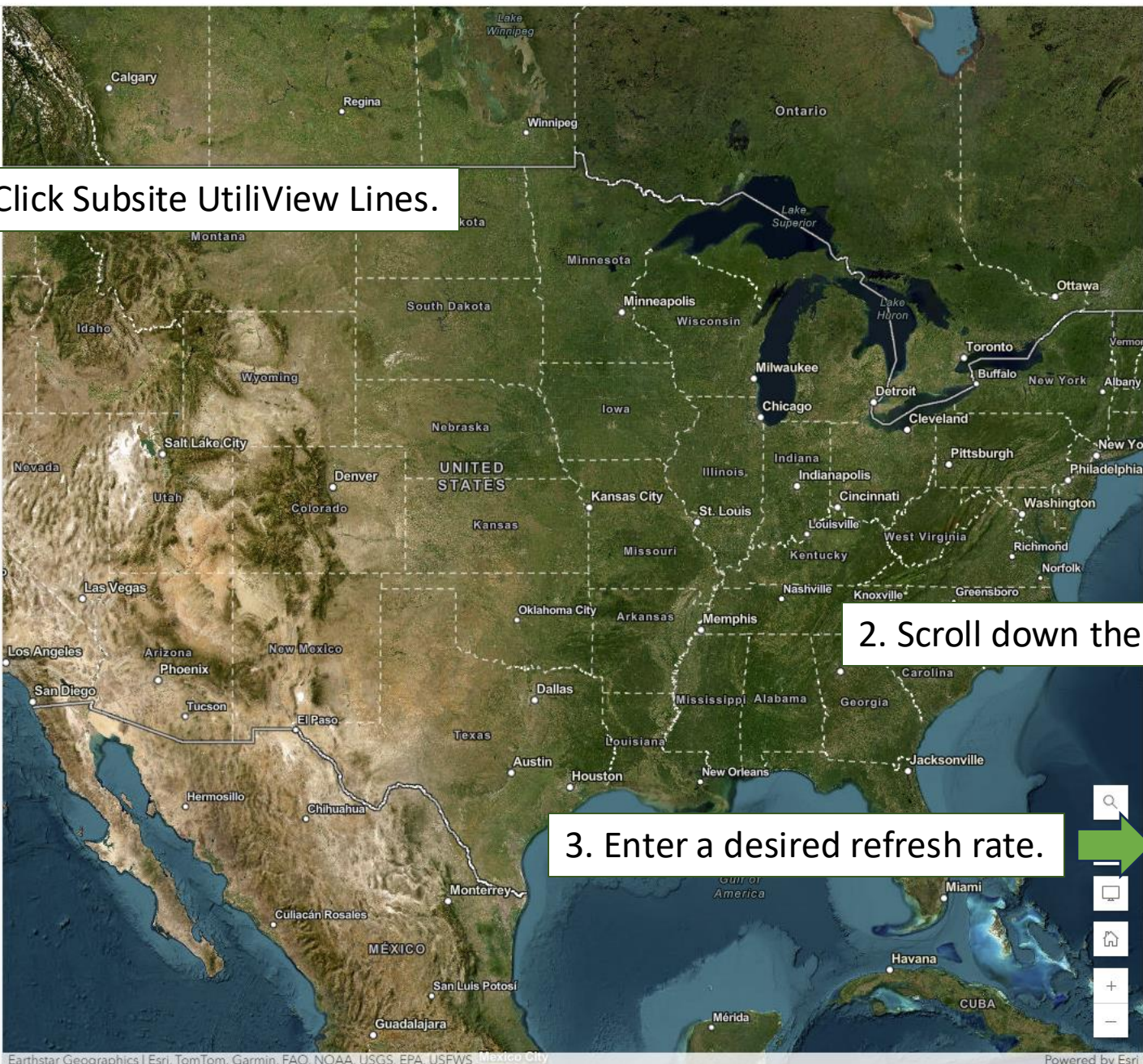
Time interval value in minutes

Feature display order

Choose a field to determine the display order of features on the map.

Order by

3. Enter a desired refresh rate.



Layers

UtiliView Layer Group

Subsite UtiliView Points

Subsite UtiliView Lines

Add

1. Click Save as.

2. Name it.
3. Optional:  
Put it in a folder.

Save map

Title

UtiliView Map

Folder

Sales Training

Tags

Add tags

Summary

Add a summary

0/2048

4. Save it

Save Cancel



1. Click Menu.



≡ UtiliView Map 

Home



Gallery



Scene



Notebooks



Groups



2. Click Content.



Content



Organization





New item Create app

Search Sales Training

Folders

Filter folders

Click the feature layer.

- Engineering Map
- Internal Demo Map
- old
- Sales Training
- Test Fields

1-3 of 3

Table Date modified

Title		Modified		
<input type="checkbox"/> UtiliView Map	Web map	Aug 5, 2025		Preview ...
<input type="checkbox"/> UtiliView Layer Group	Feature layer (hosted)	Aug 5, 2025		Preview ...
<input type="checkbox"/> UtiliView Layer Group	Service definition	Aug 5, 2025		Preview ...



Click Settings.



A brief summary of the item is not available.

Edit

[Add a summary](#)

Feature layer (hosted)

Item updated: Aug 5, 2025 ▼

▼ Description

Edit

Open in Map Viewer ▼

Open in Scene Viewer

Share

▼  
Show more

Owner Edit

Quinton Tetik qtetik



- General
- Feature layer (hosted)

### General

3. Click Content.



**Content status** ⓘ

Mark as **Authoritative** to recommend the use of this item.

Mark as **Deprecated** to discourage the use of this item.

---

**Deletion management**

Prevent this item from being accidentally deleted.

Delete item

---

**Public data collection**

If the public does not require editing on this layer, consider either disabling editing or creating a read-only view layer to share with the public. Disabling editing also improves performance, especially when sharing with the public.

Approve this layer to be shared with the public when editing is enabled.

Create view layer

---

**Extent**

Items with an extent can be found when searching for items by location.

Edit extent

### Feature layer (hosted)

Cancel Save

2. Click Save.



**Editing options**

Enable editing

1. Enable editing.



# 1. Click New item.

Scene

Notebooks

Groups

Content

Organization



Quinton Tetik  
qtetik

Content

My content

My favorites

My groups

My organization

Living Atlas

New item

Create app

Search Sales Training

Folders

Filter folders

Delete before Kevin's  
video releases

Engineering Map

Internal Demo Map

old

Sales Training

1-3 of 3

Title

UtiliView Layer Group

Featu

UtiliView Map

Web

UtiliView Layer Group

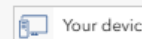
Servi

# 2. Click Developer credentials.

New item



Drag and drop your file or choose an option



Your device



Google Drive



Dropbox



OneDrive



Feature layer

Create an editable layer with fields copied from a template or feature layer.



URL

Link to an ArcGIS Server web service, CSV, OGC web service, KML, GeoJSON or a document.



Developer credentials

Create API key and OAuth 2.0 credentials to build custom applications.



Application

Link to an application on the web or create a new application.



Imagery layer

Create an imagery layer using images from your computer.



Tile layer

Create a fast drawing vector tile layer, 3D tiles layer, or raster tile layer.



Scene layer

Create a fast drawing scene layer using 3D content.



Locator

Find places and addresses using the ArcGIS Geocoding service or your own geocode service.



Data store

Add a connection to a data store you own.



Raster function template



Create a raster function template that can be used with imagery layers and in raster analysis.

## Create developer credentials

### Select credential type

Developer credentials are used to get an access token for custom applications. Access tokens are required to authenticate requests to secure items and services.

1. Click API key credentials.

<input type="radio"/>	 <b>OAuth 2.0 credentials</b>	<input checked="" type="radio"/>	 <b>API key credentials</b>
	For user authentication Use for applications that require your users to sign in with an ArcGIS account. <a href="#">Learn more</a>	For app authentication Use for public applications that do not require your users to sign in and generate access tokens server-side. <a href="#">Learn more</a>	For API key authentication Use for public applications that do not require your users to sign in or for personal scripting apps. <a href="#">Learn more</a>
<b>Billing</b>	Usage <a href="#">billed</a> to the <b>signed in user's</b> ArcGIS subscription	Usage <a href="#">billed</a> to <b>your</b> ArcGIS subscription	Usage <a href="#">billed</a> to <b>your</b> ArcGIS subscription
<b>Access token privileges</b>	Defined by the signed-in user's account	Defined as a property of the credentials item	Defined as a property of the credentials item
<b>Access token storage</b>	Dynamically created when a user signs in	Dynamically created and stored server-side or in a standalone console script	Embedded in application
<b>Access token duration</b>	Up to 2 weeks and can be refreshed	2 weeks	Up to one year and can be rotated

🔍 Not sure what type of credential to create? Go to [Types of authentication](#).

2. Click Next.

Back

Cancel

Next



## Create developer credentials




Where will you use these credentials?

1. Click Private application with selected privileges and access.


**Public application**  
Grant access to specific items and service privileges.



**Private application with selected privileges and access**  
Grant access to any set of your items and privileges. Embed in a private application or in a server-side component used by a public application.

 Safeguard these credentials as you would your password. Do not embed in a public application. Use exclusively in a secured environment.

**Private application that impersonates you**  
Grant all of your current privileges along with your access to the organization's content, members, and settings.

 Impersonates the owner of this item. Safeguard these credentials as you would your password. Do not embed in a public application. Use exclusively in a secured environment.

2. Click Next.



Back

Cancel

Next




## Create developer credentials

Credential type: API key > Private application

### Item access







- No item access  
No item access required.
- Grant item access using privileges  
Select privileges in the next step to grant broad access to items.
- Grant access to specific items  
Select items you own to grant access.

 You will be granting read access to items and data editing access to feature layers. Safeguard these credentials to protect sensitive or confidential data.

Search

Selected: 2 1-53 of 53

Date modified

Title	Modified	Owner	
<input checked="" type="checkbox"/> UtiliView Layer Group	 Feature layer	Aug 5, 2025	Quinton Tetik <a href="#">View details</a>
<input checked="" type="checkbox"/> UtiliView Map	 Web map	Aug 5, 2025	Quinton Tetik <a href="#">View details</a>
<input type="checkbox"/> UtiliView Layer Group	 Service definition	Aug 5, 2025	Quinton Tetik <a href="#">View details</a>
<input type="checkbox"/> Engineering Layer Group	 Feature layer	Jul 16, 2025	Quinton Tetik <a href="#">View details</a>
<input type="checkbox"/> Eng Map Points	 Feature layer	Jul 15, 2025	Quinton Tetik <a href="#">View details</a>
<input type="checkbox"/> Eng Map Points	 Shapefile	Jul 15, 2025	Quinton Tetik <a href="#">View details</a>

Back

Cancel

Next

1. Click Grant access to specific items.



2. Select the feature layer.



3. Select the web map.



4. Click Next.



## Create developer credentials



Credential type: API key > Private application > Item access

### Privileges

Grant privileges to allow your access token to perform specific operations.

Search privileges

#### Location services

Enabled: 1/4



#### Basemaps

Enabled: 1/1



#### Geocoding

Enabled: 0/1



#### Routing

Enabled: 0/1



#### Data enrichment

Enabled: 0/1



#### Spatial analysis

Enabled: 0/2



#### Feature analysis

Enabled: 0/1



#### Image analysis

Enabled: 0/1



#### General privileges

Enabled: 0/29

Personal



Back

Cancel

Next

Click Next.



## Create developer credentials



Credential type: API key > Private application > Item access > Privileges

### Settings

#### Expiration date (required)

Set expiration date for the first API key up to one year in the future.

Expiration date

8/5/2026



1. Set the date for up to 1 year in the future.

#### Referrer URLs

Allow access from specific HTTP/HTTPS domains using the HTTP referrer header. You can use \* as a wildcard for a subdomain. E.g. [https://\\*.your-app.com](https://*.your-app.com). See [Security and authentication](#) for more details.

https://your-app.com

+ Add

2. Click Next.



Back

Cancel

Next



## Create developer credentials



Credential type: API key > Private application > Item access > Privileges > Settings

### Item details

Title

API Key for UtiliView

Tags

Add tags

Summary

Add a summary

0/2048

1. Enter a name.



2. Click Next.



Back

Cancel

Next



## Create developer credentials



Credential type: API key > Private application > Item access > Privileges > Settings > Item details

### Summary

Review settings before generating credentials.

### Title

API Key for UtiliView

### Credential type

API key


### Application type

Private application

### Item access

Generated API key will have access to (2) items.

UtiliView Layer Group for Sales Training

 Feature layer (hosted)

UtiliView Map for Sales Training

 Web map

### Privileges

This app has been granted (1) general privileges and (0) admin privileges.

Location services  
Enabled: 1

Basemaps  
Enabled: 1

Basem:  
Allow application to access the basemap styles service. [Learn more](#)



Click Next.



Back Cancel **Next**



## Create developer credentials



Credential type: API key > Private application > Item access > Privileges > Settings > Item details > Summary

### Generate API key

You are ready to generate an API key. You may generate the API key now or at a later time from the item page.

Once you generate an API key, you must copy it immediately.

- Generate the API key now. I am ready to copy and save the token.
- Go to item details page. I'll generate the API key later.

Click Next.



Back

Cancel

Next



1. Create a secure and sharable document that can be accessed on the device where UtiliView will be setup initially.



Map URL:

Point URL:

Line URL:

API Key:

AAPTxy8BH1VEsoebNVZXo8HurNQrrp84W3Nh2pqhzGkMZmEQHJ\_C6nESB218sfVExM6mUQzffif7-S5G9OB\_LLGA9Wolr4N2Cd0S\_khJYL-F0dkPsAYKlbyCNmFxbXgRq\_8RiCtzajG35-G8ltauUgO1kwyM6MAP5FpaJoICUTu\_B95q9MIBF9apVvdi96\_bTKTTofFezQa1Th7WYU4.AT1\_e7yNKgfS

3. Paste.



Generate API key

Copy your API key

Before closing this window make sure to copy your API key.

After this window closes you will no longer be able to retrieve your API key.

API key

AAPTxy8BH1VEsoebNVZXo8HurNQrrp84W3Nh2pqhzGkMZmEQHJ\_CRdrpTcO5NpoSp45z6nESB...

Close

2. Click Copy.



4. Click Close.



Click Content.



Home Gallery Map Scene Notebooks Groups **Content** Organization



Quinton Tetik  
qtetik

API Key for UtilView

Overview

Usage

Settings



A brief summary of the item is not available.

Edit

[Add a summary](#)

Application

API key credentials - Standard

Item updated: Aug 5, 2025

Description

Edit

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

[Add a description](#)

Share

View metadata

Add to favorites

Owner

Edit



Quinton Tetik  
qtetik

Details

View count

0

Size

0 B





Content

My content

My favorites

My groups

My organization

Living Atlas

New item

Create app

Search Sales Training

Folders

Filter folders

Delete before Kevins  
video releases

Internal Demo Map

old

Sales Training

Test Fields

1-4 of 4

Table

Date modified

Title

Modified

API Key for UtiliView

Application

Aug 5, 2025



Preview



UtiliView Layer Group

Feature layer (hosted)

Aug 5, 2025



Preview



UtiliView Map

Web map

Aug 5, 2025



Preview



UtiliView Layer Group

Service definition

Aug 5, 2025



Preview



Click on the web map.



UtiliView Map

Overview

Usage

Settings



A brief summary of the item is not available.

[Add a summary](#)

Web map

Item created: Aug 5, 2025 ▾

Click Open in Map Viewer.



Open in Map Viewer ▾

Open in Field Maps Designer

Share



Show more

Owner

Edit



Quinton Tetik  
qtetik

▾ Description

Edit

Details



1. Copy the URL.



<https://subsite.maps.arcgis.com/apps/mapviewer/index.html?webmap=1b5dcaad9f2c4128a6302ea76dceebb2>

2. Paste it into the document.



Map URL:

<https://subsite.maps.arcgis.com/apps/mapviewer/index.html?webmap=1b5dcaad9f2c4128a6302ea76dceebb2>

Point URL:

Line URL:


API Key:

AAPTxy8BH1VEsoebNVZXo8HurNQrrp84W3Nh2pqhzGkMZmEQHJ\_CRdrpTcO5NpoSp45z  
6nESB218sfVExM6mUQzfi7-S5G9OB\_LLGA9Wolr4N2Cd0S\_khJYL-FPO-  
0dkPsAYkIbyCNmFxbXgRq\_8RiCtzejG35-  
G8lawuUgO1kwyM6MAP5FpaJoICUTu\_B95q9MIBF9apVwidi96\_bTKTTouOYZVgf9-



1. Click Menu.



UtiliView Map 

- Home >
- Gallery >
- Scene >
- Notebooks >
- Groups >
- Content >
- Organization >

2. Click Content.







UtiliView Layer Group 



A brief summary of the item is not available.

[Add a summary](#)

 Feature layer (hosted)

Item updated: Aug 5, 2025 

 Edit

Description 

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


[Add a description](#)


Layers

 [Subsite UtiliView Points](#)  
Point layer 

 [Subsite UtiliView Lines](#)  
Line layer 

 **Click Subsite UtiliView Points.**


Terms of use 

Open in Map Viewer 

Open in Scene Viewer

Share




Owner [Show more](#) 

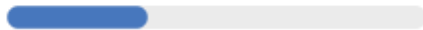
 **Quinton Tetik**  
qtetik

Details

View count  
5

Source  
[Feature service](#)

URL  
  

Item information   
  
Low High

 Top improvement

[Add a summary](#)



Subsite\_UtiliView Point layer

3. Click back.

A brief summary of the layer is not available.

Description

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

Acknowledgments

No source acknowledged.

Open in Map Viewer

Export data

Create view layer

Owner

Quinton Tetik

Details

Date updated August 5, 2025 at

Data last updated August 5, 2025 at

Schema updated August 5, 2025 at 11:19 AM

URL

<https://services8.arcgis.com/IG...>

Attachments

1. Click Copy.

2. Paste it into the document.

Sales Training Map

Map URL:  
<https://subsite.maps.arcgis.com/apps/mapviewer/index.html?webmap=1b5dcaad9f2c4128a6302ea76dceebb2>

Point URL:  
[https://services8.arcgis.com/IGcjpD0hgTg92ryj/arcgis/rest/services/UtiliView\\_Layer\\_Group\\_for\\_Sales\\_Training/FeatureServer/1](https://services8.arcgis.com/IGcjpD0hgTg92ryj/arcgis/rest/services/UtiliView_Layer_Group_for_Sales_Training/FeatureServer/1)

Line URL:

API Key:  
AAPTxy8BH1VEsoebNVZxo8HurNQrrp84W3Nh2pqhzGKMZmEQHJ\_CRdrpTco5NpoSp45z6nESB218sfVExM6mUQzfrf7-S5G9OB\_LLGA9Wolr4N2Cd0S\_khJYL-FPO-OdkPsAYkbyCNmFxbXgRq\_8RiCtzajG35-G8IawuUgO1kwyM6MAP5FpaJoICUTu\_B95q9MIBF9apVwdi96\_bTKTouOYZVG9-oFeezQa1Th7WYU4.AT1\_e7yNKgfs



# UtiliView Layer Group

## Overview

## Data

## Visualization

## Usage

## Settings



A brief summary of the item is not available.

[Add a summary](#)

Feature layer (hosted)

Item updated: Aug 5, 2025

Edit

### Description

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

[Add a description](#)

### Layers

Subsite UtiliView Points  
Point layer

Subsite UtiliView Lines  
Line layer



Click Subsite UtiliView Lines.

### Terms of use

Open in Map Viewer

Open in Scene Viewer

Share

Show more

Owner



Quinton Tetik  
qtetik

### Details

View count

5

Source

[Feature service](#)

URL

<https://services8.arcgis.co...>

### Item information

Low

High

Top improvement

[Add a summary](#)





Subsite\_UtilView\_Lines  
Line layer

Summary

A brief summary of the layer is not available.

Description

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

[Add a description](#)

Acknowledgments

No source acknowledged.

[Add acknowledgments](#)

Open in Map Viewer

Export data

Create view layer

Owner

Quinton Tetik  
qtetik

Details

Date updated

August 5, 2025 at

Data last update

August 5, 2025 at

Schema updated

August 5, 2025 at 11:19 AM

URL

<https://services8.arcgis.com/G...>

Attachments

1. Click Copy.



Sales Training Map

File Home Insert Layout References Review View Help

Map URL:  
<https://subsite.maps.arcgis.com/apps/mapviewer/index.html?webmap=1b5dcaad9f2c4128a6302ea76dceebb2>

Point URL:  
[https://services8.arcgis.com/GCjpD0hgTg92ryj/arcgis/rest/services/UtilView\\_Layer\\_Group\\_for\\_Sales\\_Training/FeatureServer/1](https://services8.arcgis.com/GCjpD0hgTg92ryj/arcgis/rest/services/UtilView_Layer_Group_for_Sales_Training/FeatureServer/1)

Line URL:  
[https://services8.arcgis.com/GCjpD0hgTg92ryj/arcgis/rest/services/UtilView\\_Layer\\_Group\\_for\\_Sales\\_Training/FeatureServer/2](https://services8.arcgis.com/GCjpD0hgTg92ryj/arcgis/rest/services/UtilView_Layer_Group_for_Sales_Training/FeatureServer/2)

API Key:  
AAPTxy8BH1VEsoebNVZxo8HurNQrrp84W3Nh2pqhzGkM2mEQHJ\_CRdrpTcO5NpoSp45z6nESB218stfVExM6mUQzff17-S5G9OB\_LLGA9Wolr4N2Cd0S\_khJYL-FPO-OdkPsAYkIbyCNmFxbXgRq\_8RiCtzaJG35-

2. Paste it into the document.



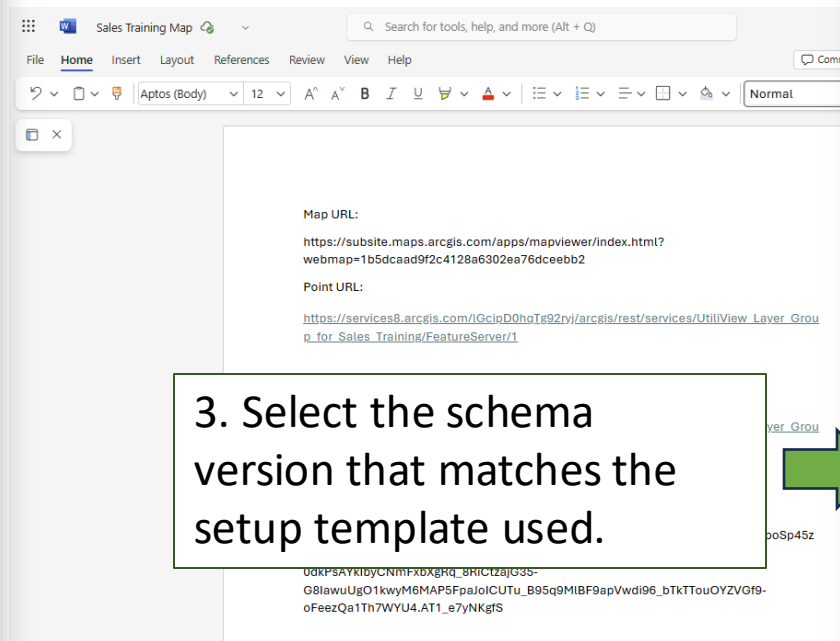


2. Tap New Map.



+ NEW MAP

1. Share the document with the mobile device where UtiliView will be setup initially.



3. Select the schema version that matches the setup template used.



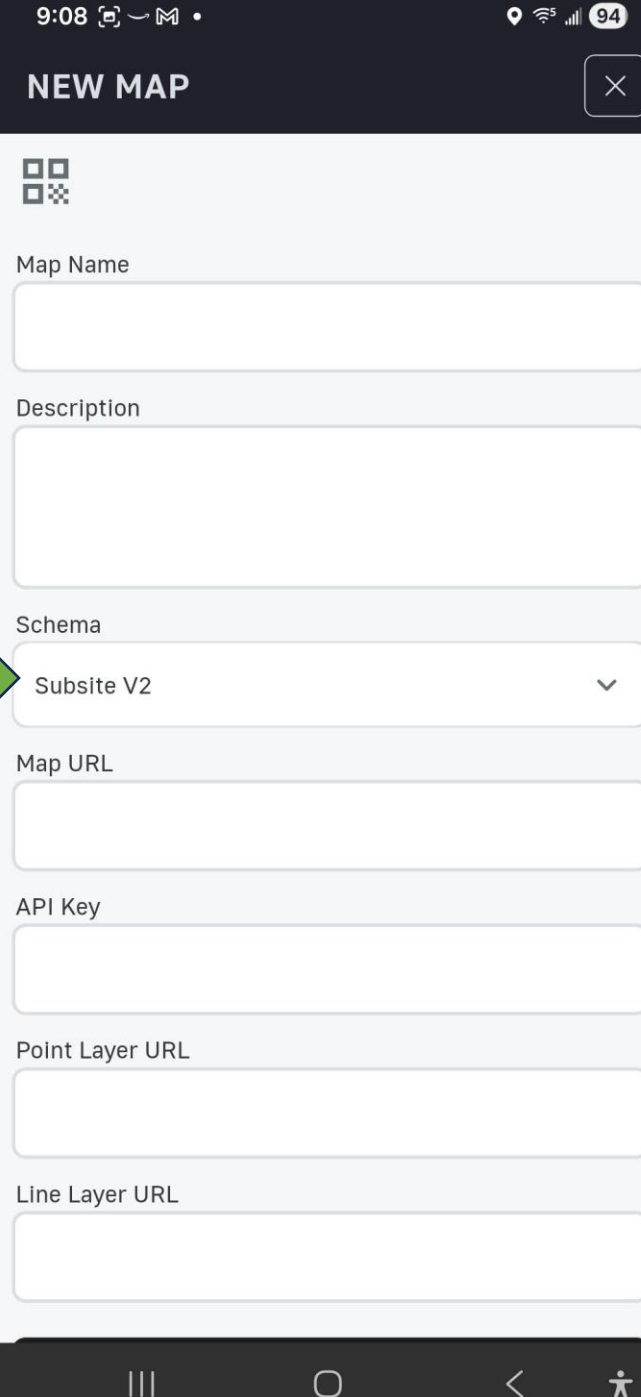
Schema dropdown menu showing 'Subsite V2' selected.

4. Copy and paste the data from the document here.

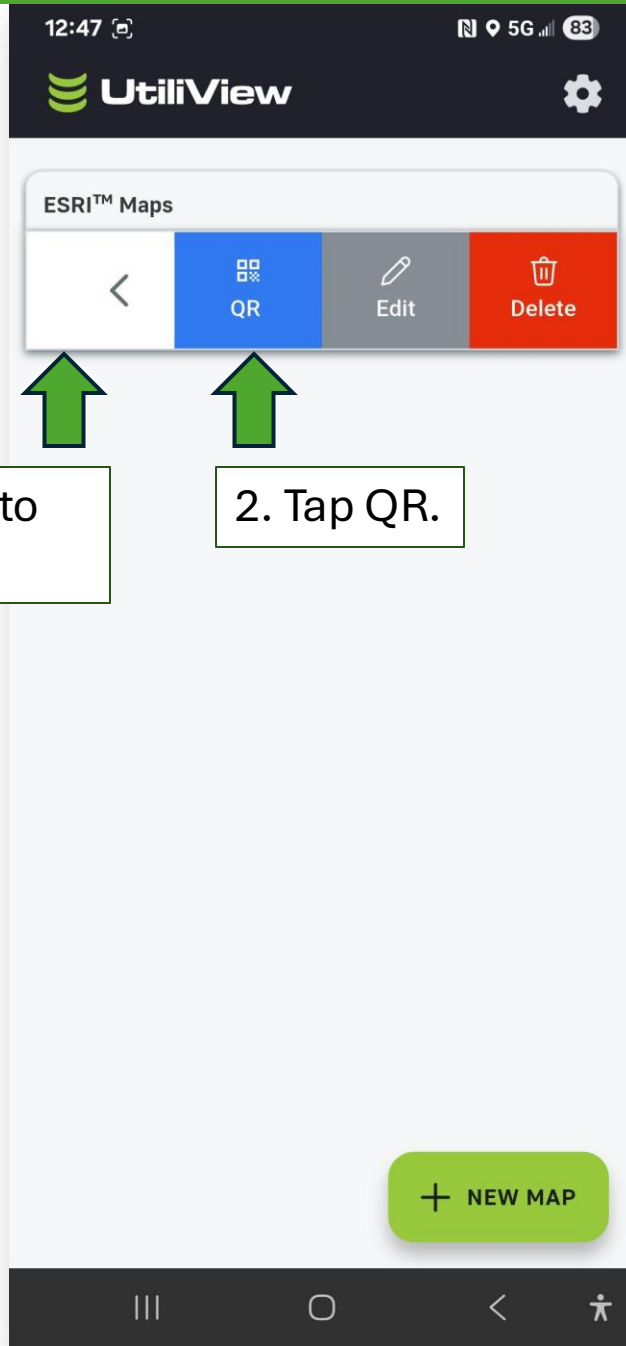


Form fields for Map URL, API Key, Point Layer URL, and Line Layer URL.

5. Save data.



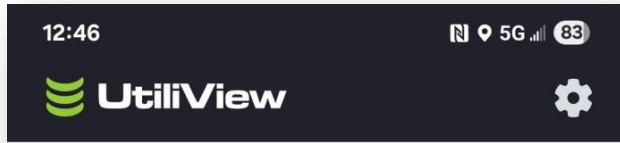
The following are steps are optional





1. Swipe on the map to be shared.

2. Tap QR.







1. Open UtiliView on another device where the map will be shared.

2. Tap New Map.  




3. Tap scan QR code. 





Map Name

Description

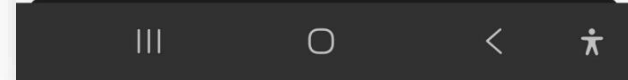
Schema  
Subsite V2 

Map URL


API Key

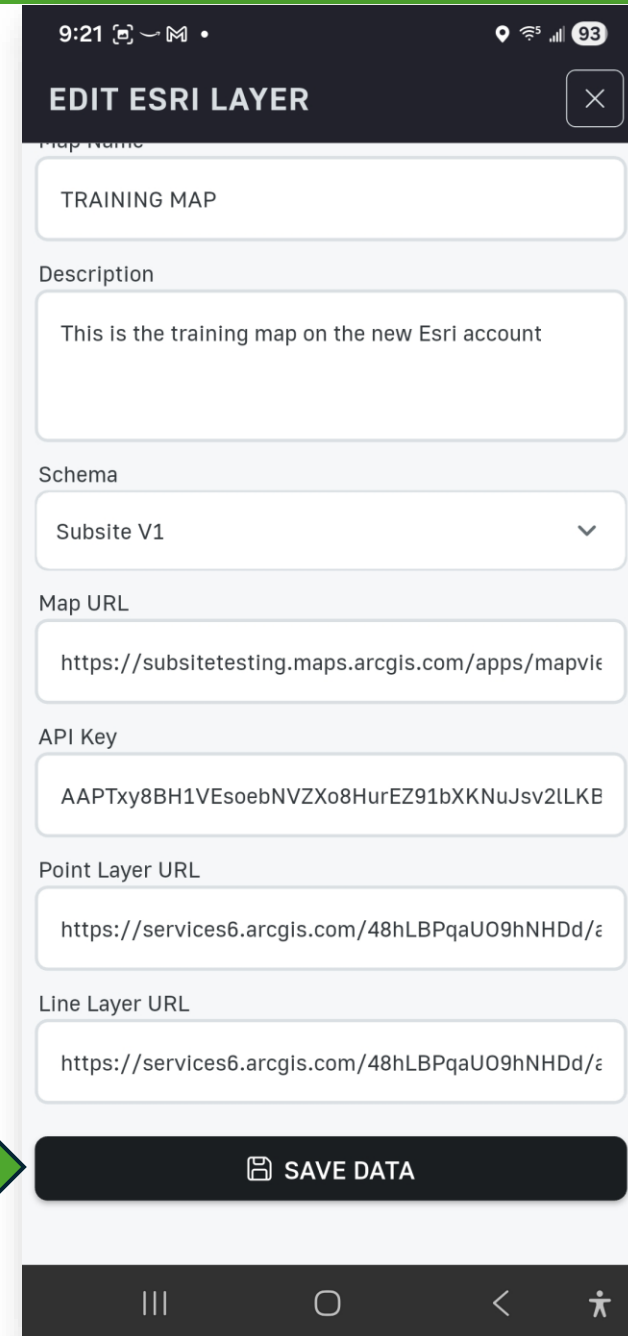
Point Layer URL

Line Layer URL





2. Save data. 



1. Open the desired map.

Layers

- Subsite V2 Schema Map
- Subsite UtilView Points
- Subsite UtilView Lines**

↑

2. Select the lines layer.

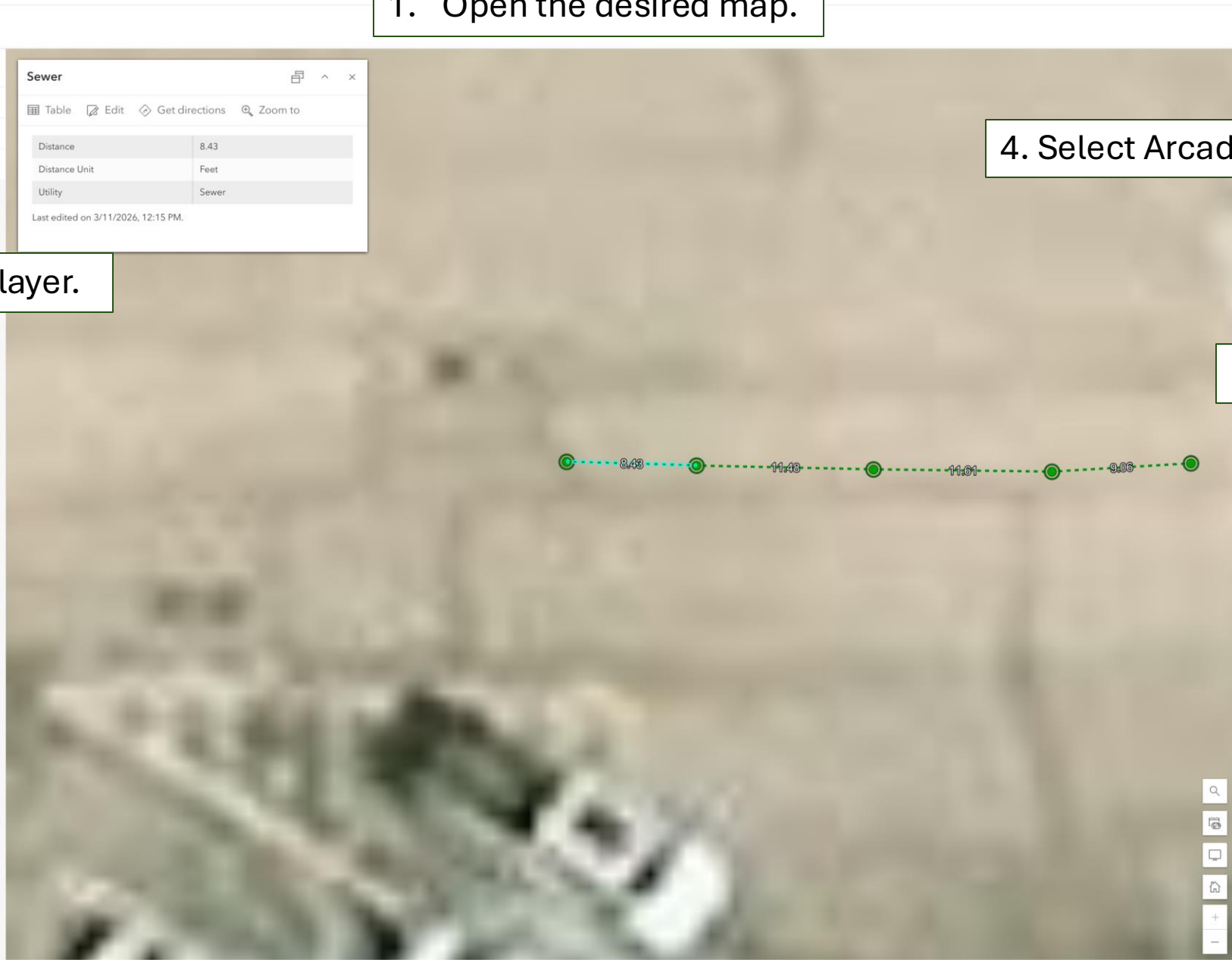
Sewer

Distance	8.43
Distance Unit	Feet
Utility	Sewer

Last edited on 3/11/2026, 12:15 PM.

4. Select Arcade Expressions.

3. Select Labels.



1. Delete the original text `$feature["locationDistance"]`.

3. Rename the expression if desired.

2. Copy the text below and paste it into this window.

4. Select Done.

5. Save the map.

```
1 // Distance and unit
2 var v = DefaultValue($feature["locationDistance"], null);
3 if (v == null) return "";
4
5 var d = Number(v);
6 if (d != d) return ""; // NaN guard
7
8 var unit = Upper(Trim(Text($feature["distanceUnit"])));
9
10 // Convert meters → feet only when needed
11 if (unit == "METERS") {
12   d = d * 3.28083989501312; // exact factor
13 } else if (unit != "FEET") {
14   return ""; // unexpected value (shouldn't happen per your data rule)
15 }
16
17 // Track sign and convert using absolute value
18 var sign = IIf(d < 0, "-", "");
19 var ad = Abs(d);
20
21 // Feet and inches (rounded to nearest inch)
22 var ft = Floor(ad);
23 var inches = Round((ad - ft) * 12, 0);
24
25 // Handle 12" rollover
26 if (inches == 12) {
27   ft += 1;
28   inches = 0;
29 }
30
31 // Format: e.g., 13' 4"
32 return sign + Text(ft) + "' " + Text(inches) + "\"";
```

```
// Distance and unit
var v = DefaultValue($feature["locationDistance"], null);
if (v == null) return "";

var d = Number(v);
if (d != d) return ""; // NaN guard

var unit = Upper(Trim(Text($feature["distanceUnit"])));

// Convert meters → feet only when needed
if (unit == "METERS") {
  d = d * 3.28083989501312; // exact factor
} else if (unit != "FEET") {
  return ""; // unexpected value (shouldn't happen per your data rule)
}

// Track sign and convert using absolute value
var sign = IIf(d < 0, "-", "");
var ad = Abs(d);

// Feet and inches (rounded to nearest inch)
var ft = Floor(ad);
var inches = Round((ad - ft) * 12, 0);

// Handle 12" rollover
if (inches == 12) {
  ft += 1;
  inches = 0;
}

// Format: e.g., 13' 4"
return sign + Text(ft) + "' " + Text(inches) + "\"";
```