This story was made with Esri's Story Map Cascade. Read it on the web at http://arcg.is/1DSDeS.





Story Maps



Cascades are one of the most popular story maps PADEP currently uses, but that's not all esri offers. Check out others below:

Story Maps

- Apps
- Gallery
- Resources
- <u>Blog</u>
- My Stories

Story Maps

ArcGIS Online

The mapping platform for your organization

ArcGIS Desktop

A complete professional GIS

ArcGIS Enterprise

GIS in your enterprise

ArcGIS for Developers

Close

Website: https://arcg.is/15GiGT

I added an immersive link above.

Or, just add a link (link: https://storymaps.arcgis.com/en/) in text.



Lets walk through creating a cascade story map!

Basics



Let's talk basics for creating an immersive section (used most frequently).

"Title" and "Narrative" are the other types of sections.

You can add entire story maps into story maps.





Looking Below the Surface

PA DEP's macroinvertebrate dataset for stream assessments

Website: http://arcg.is/1C9GiD



Notice how the picture changed location slightly? That's because this frame was edited after it was duplicated.

Decide how you want your background to look, and then duplicate slides.



Not many options here for text size and font styles.

Adding pictures the way you want can be a challenge. So, edit pictures in other software before adding them to the story map.

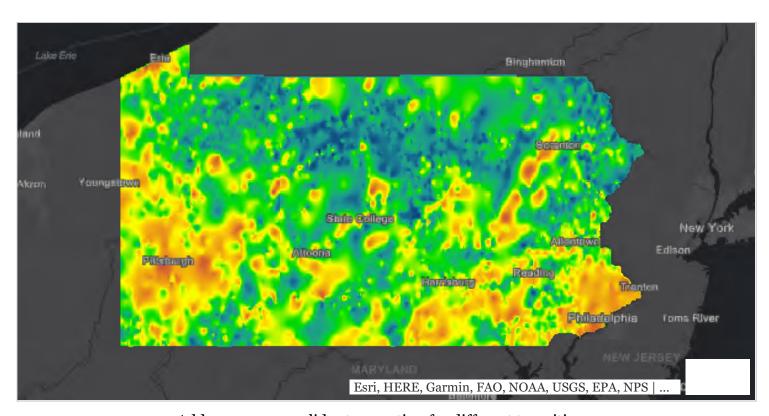


Tips and Tricks



Notice how the picture swiped up instead of just the text?

That's because I created a new section.

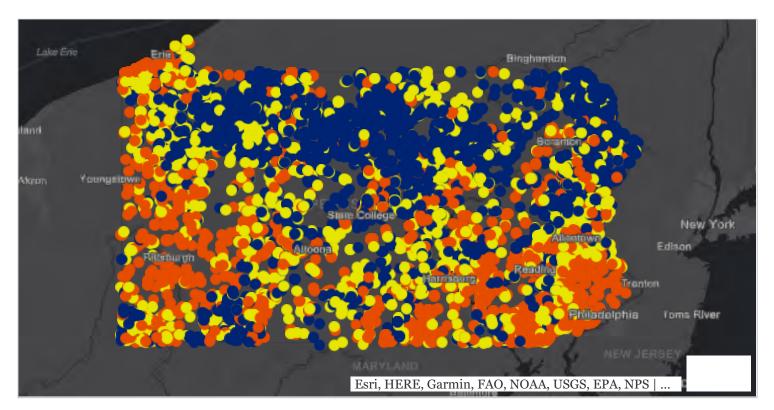


Add maps as new slides to a section for different transitions.

Notice how the map faded in?

You can't do that if you create a new section.

Let's get into some map interaction options....



Change the extent of maps and how pop-ups show information in the web map, not the story map.

Add a viewer with more functionality for better user experience! Try to add the viewer in a new link, because embedding can be an issue with story maps.

Try to add the viewer in a new link, because embedding can be an issue with story maps. Here's a viewer. (link: https://www.depgis.state.pa.us/macroviewer/index.html)



Use YouTube to load video

put "rel=o" at the end of the link to keep YouTube collages from popping up at the end of the video. See example below:

 $www.youtube.com/embed/9UjSQhdURR8?wmode = opaque\&rel = 0 \ (link: http://www.youtube.com/embed/9UjSQhdURR8?wmode = opaque\&rel = 0)$

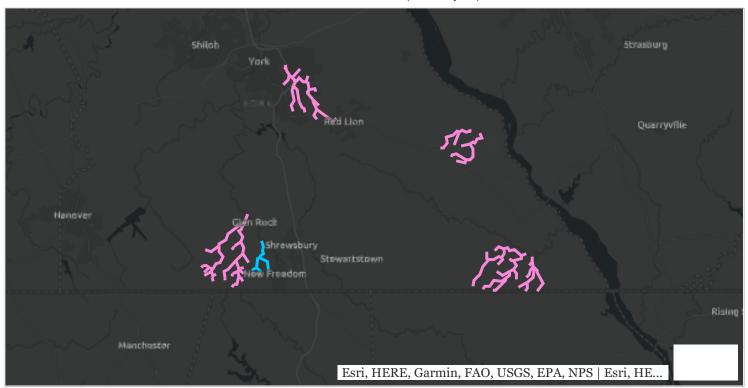


You can run the show for the audience.

First, disable the map interaction.

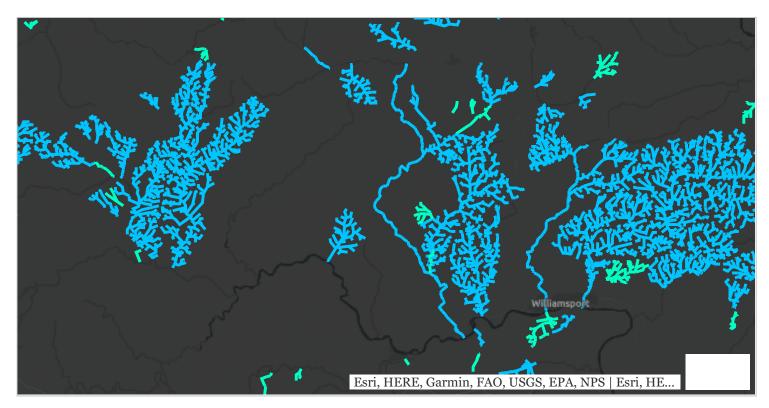
Duplicate the map.

Move around to key locations to tell a more detailed story.



The stream segments highlighted in pink show new Cold Water Fishes designations.

The stream segment in blue shows a new Exceptional Value designation.



As you can see, the north-central part of the state is home to the highest number of newly designated Exceptional Value streams.



There are also a several new High Quality streams shown in green.



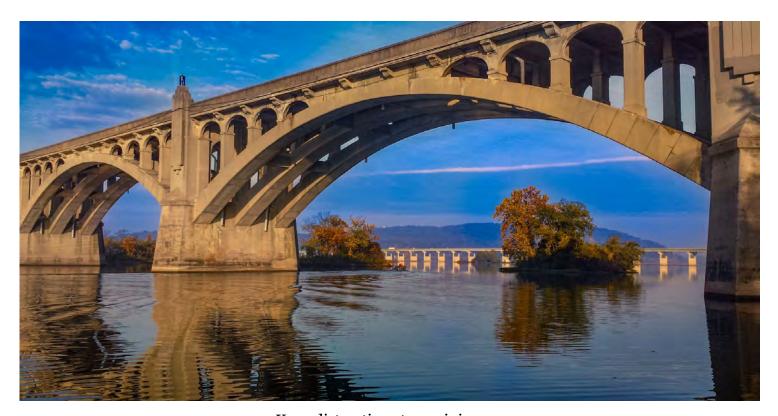
This could be a creative way to eliminate the need for a legend on the map. But, just in case....



Overall Points



Story maps should tell a story, not overwhelm the audience with data.



Keep distractions to a minimum.



Stay focused on a few core topics.

Turn tangents into new story maps if needed.

Content takes the longest to develop.

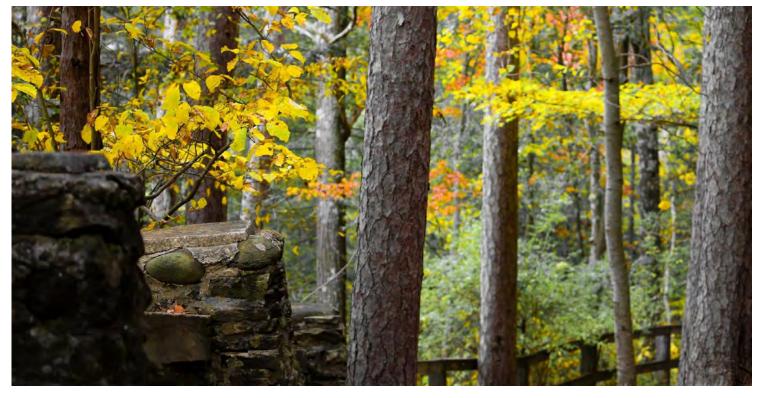
Good pictures and video are important.

Focus time and effort on organization of content and messaging first.

Content can be created in Word or PowerPoint.

The story map is not the only tool you should be thinking about!

Web Reports



EPA has created web reports using code, which is free to download.

OUR NATION'S AIR

Website: https://gispub.epa.gov/air/trendsreport/2017/

You can get that code for free on Github

https://github.com/USEPA/Air-Trends-Report (link: https://github.com/USEPA/Air-Trends-Report)

Here's another example of a web report.

PA DEP's Oil and Gas Report:

http://www.depgis.state.pa.us/oilgasannualreport/index.html (link: http://www.depgis.state.pa.us/oilgasannualreport/index.html)

You'll need Visual Studio to work with the code.

```
index.html
                            </div>
                        </div>
   178
                    </section>
   179
                    <section class="secFP">
                        <div class="container-fluid">
   180
                             <div class="col-md-6 col-lg-4 col-lg-offset-1 wow fadeIn hover_img" data-wow-duration="2s" data-wow-delay=".2s">
   181
                                    <center><h3>PENNSYLVANIA WATER RESOURCES</h3></center>
   182
   183
                                     Pennsylvania is a water rich state with approximately 86,000 miles of streams and rivers connecting over 500,
                                      <div class="col-xs-6 col-md-6 col-lg-6">
   185
   186
                                        <div class="hovereffect thumbnail text-center">
   187
                                            <img src="./img/streams.png" alt="View Pennsylvania Streams and Rivers" class="img-responsive">
   188
                                            <div class="overlay";</pre>
                                                 <font color="black">
   189
   190
                                                    <button data-toggle="modal" data-target="#modal-1" style="margin-top:20px;">Click to View</button>
   192
                                             </div>
   193
                                            <a data-toggle="modal" href="#modal-1" style="color:white" class="caption">
   194
                                                View Pennsylvania Streams and Rivers
   195
                                             </a>
                                          </div>
   196
   197
                                    </div>
                                    <div class="col-xs-6 col-md-6 col-lg-6">
   198
   199
                                        <div class="hovereffect thumbnail text-center">
                                             <img src="./img/wetlakes.png" alt="View Pennsylvania Lakes, Bays, and Wetlands" class="img-responsive">
   200
   201
                                            <div class="overlay">
   202
                                                 <font color="black">
                                                    <button data-toggle="modal" data-target="#modal-15" style="margin-top:20px;">Click to View</button>
   203
                                                 </font>
   204
                                            </div>
   205
   206
                                            <a data-toggle="modal" href="#modal-15" style="color:white" class="caption">
                                                View Pennsylvania Lakes, Bays, and Wetlands
   208
```

It starts with learning the code.



Running that code produces this page

```
1221
               </div>
1222
           </section>-
            cl-- Modals -->
           <div class="modal fade" id="modal-1">
1224
1225
               <div class="modal-dialog modal-lg":
1226
                   <div class="modal-content">
                       <div class="modal-header">
1227
                            <button type="button" class="close" data-dismiss="modal" aria-label="Close"><span aria-hidden="true">&times;</span></button>
1229
                        c/div>
                       <div class="modal-body">
1230
                           <div class="embed-container"><iframe width="860" height="500" frameborder="0" scrolling="no" marginheight="0"</pre>
                            marginwidth="0" title="PA Streams" src="http://padep-1.maps.arcgis.com/apps/Minimalist/index.html?appid=14d856ebeld74bc7813bea39d4b37lb8"></iframe></d
                       </div>
1233
                            <button type="button" class="btn hvr-sweep-to-right" data-dismiss="modal" title="Click to close">Close</button>
1235
                       </div>
1236
                   </div>
1238
               </divs
           </div>
1239
```

This code is for a modal (interactive popup map, in this case).



Which produces this interactive map.



Story Maps



Infrastructure

- 1. ArcGIS Online Publisher Account
- 2. ArcGIS Desktop with advanced licences
- 3. Photo and video editing software
- 4. External ArcGIS server to host and serve products to the public (could use ArcGIS Online)
- 5. External facing web server
- 6. YouTube channel

Personnel

- 1. GIS
- 2. Business/Program
- 3. Communications
- 4. Education
- 5. Administration (Policy, Legal, etc.)
- 6. IT (web services)

Web Reports



Infrastructure

- 1. Microsoft Visual Studio
- 2. Graphics (Highcharts (link: https://www.highcharts.com/), Plotly (link: https://plot.ly/), D3 (link: https://d3js.org/))
- 3. ArcGIS products (probably)
- 4. Photo and video editing software
- 5. External Facing Web Server

Personnel

- 1. GIS
- 2. Business/Program
- 3. Communications
- 4. Education
- 5. Administration (Policy, Legal, etc.)
- 6. IT (web services)



Story Maps



Pros

Simple to create

Housed in the cloud

Easy to edit

Anyone has access

Easily reference pictures, ArcGIS elements, other media

Immersive technology

Templates available

No coding

Cons

Boxed into what Esri has available

Issues with mobile viewing

Https links only

Browser Issues

Unexpected behavior

Several ArcGIS products needed.

Titles and navigation can be clunky

Web Reports



Pros

100% customization

Elegant look and feel

Add unique elements, called modals (charts, accordions)

Better titles and navigation options

Mobile Friendly

Any Browser

Easier to navigate (subheading navigation)

More social media options

Cons

Third Party Elements

Coding and software required

Web server needed

Difficult to get certain elements to work

ArcGIS products may still be needed

Are there any questions?



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