This story was made with Esri’s Story Map Cascade.
Read it on the web at http://arcg.is/1DSeS.
Cascades are one of the most popular story maps PADEP currently uses, but that’s not all Esri offers. Check out others below:
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!
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

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?

http://padep-1.maps.arcgis.com/apps/Cascade/index.html?appid=62b7b012f3f2492c81b4a153feb87636&print
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=0" 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 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.
You can get that code for free on Github


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.
It starts with learning the code.

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

Which produces this interactive map.
What's Needed to Develop These Products?

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
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?

Dustin Shull: dushull@pa.gov
Carrie Tropasso: ctropasso@pa.gov