Story Map for Stormwater Management Projects at the University of Maryland

User Guide

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Using ArcGIS

What is ArcGIS StoryMap?
ArcGIS StoryMap is a web-based application on the ArcGIS platform that allows sharing maps as narrative text and other multimedia content. StoryMap can:

- include maps, narrative text, lists, images, videos, embedded items, and other media
- be published and shared; each published story has its own URL, which can be used to share stories within an organization, to specific groups, or with the public
- be used to create collections that include stories and ArcGIS web apps bundled for easy sharing and presenting.

More information regarding story maps can be found here.

Our Story Map

Project Context
Our group was tasked by Dr. Frank J. Coale, the Professor and Acting Assistant Dean for the College of Agriculture and Natural Sciences (AGNR) with creating a story map for AGNR that would "stimulate conversations around sustainable ecosystems by informing University and external communities on the impact of cutting edge technologies, innovative approaches, and research projects addressing stormwater management across our College Park campus."

Simply put, information about on-campus efforts to become more sustainable and eco-friendly were unconsolidated, difficult to access, and hard to find. Dr. Coale wanted a platform that would showcase these different efforts. Creating a story map on stormwater management is the best way to showcase UMD's efforts as well as create a template for other projects. In addition, the story map will serve as an informational resource that can be accessed by anyone who might want to learn more about stormwater management at the University. The story map will be refreshed with new projects and facilities as they are complete to ensure up-to-date information.

The Purpose of the Story Map
AGNR envisions UMD becoming a greener campus, taking advantage of all the resources on campus as well as pushing for more projects that use all campus green space in a functional way. This platform supports that goal, enabling the AGNR to inform others about stormwater management, and showcasing work on the UMD campus. It will be a way to create a standard template for future AGNR AgroEcology projects and a way to document AGNR's past and future projects. This story map will focus discussion on environmental issues and projects, expanding the conversation about AGNR's projects and initiatives.

AgroEcology Corridor
The AgroEcology Corridor is a major initiative created by AGNR to educate individuals

about the technologies, projects, and innovations in environmental projects on campus. The ultimate goal of the initiative is to transform every green space on campus into a project that demonstrates a positive ecological impact. The story map is intended as a template and a showcase for potential investors. The impact of their investment and their contribution to the AgroEcology Corridor would be documented, and hopefully, lead to increased interest in and funding for the AgroEcology Corridor.

Story Map Breakdown (Cascade Design)

Our story map is a cascading style web-application that moves through the details on stormwater management on the UMD campus.

The story map is divided into five major sections:
- Overview
- UMD Campus Projects
- Stormwater Management Tour Map
- Plans for the Future
- The UMD AgroEcology Corridor.

Scrolling leads the user through the story map sections, revealing relevant information. Some parts, such as the Stormwater Management Tour Map, are interactive, and allow user experience with participation. A blue progress bar at the top indicates the user's progress through the story map.

Overview

The overview gives a brief breakdown of what stormwater management is and why it's important on the UMD campus. Because the story map's audience has a wide range of knowledge, the overview begins by setting the stage and explaining basic information needed to understand the rest of the story map.
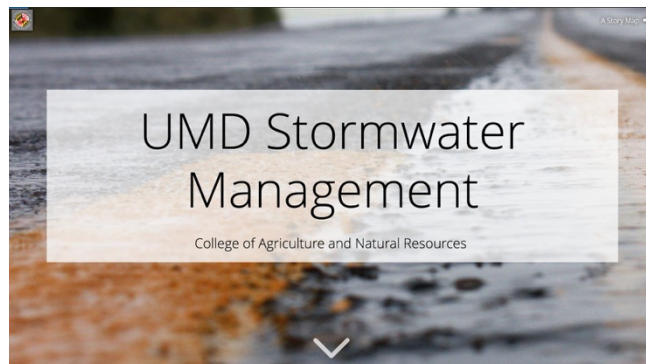
UMD Campus Projects

This section starts with a brief description of the information about to come by introducing the types of recent UMD projects. The story map continues by listing seven stormwater management projects: Campus Creek Restoration, Reckord Armory, Clark Hall, Community Learning Garden, Edward St. John, UMD Golf Course, and the Physical Complex Building.

All the projects are illustrated with images and information that explain project details and showcase the UMD campus.

Stormwater Management Tour Map
The Tour Map is the interactive part of the story map that allows users to follow a path of different points on the UMD campus that are significant in campus stormwater management efforts. Each blue marker can be clicked to reveal more information about each point.

Plans for the Future
This project is designed to expand to accommodate additional resources. This story map can be expanded to a larger scale. Due to unforeseen circumstances, some of the planned content could not be included. But this project can be continued by building on what currently exists. An updated story map would include all the stormwater projects on campus, a timeline of projects, seasonal pictures of each site showing the plants and facilities year-round, and more detailed descriptions. As UMD builds more projects on its campus, they would be added to create a holistic picture of the campus's sustainable, eco-friendly efforts.

The UMD AgroEcology Corridor
This section educates users about the AGNR AgroEcology Corridor. As a new initiative, not yet fully in place, it may not be common knowledge, making this section very informative. Because the story map is part of the initiatives's communication strategy, it should include what the AgroEcology Corridor is and its purpose.

Future Changes
Future plans for this story map are:
- Expanding to a larger scale
  - Due to unforeseen circumstances, not all planned content was included. The continuation of this project would build on what currently exists.
  - An updated story map would include all on-campus stormwater projects
  - As more projects are built on campus, they should be added to the story map, creating a holistic picture of UMD's sustainable, eco-friendly efforts.
- A Timeline
  - This feature would show when each project was completed. (instructions for adding the timeline are included in this manual.)
- Seasonal Pictures
  - Plant materials and facilities should be illustrated with s year-round images and more detailed descriptions. (Instructions for adding pictures and data points are included in this manual.)

Cascade Design

How to Edit the Story Map
The UMD Stormwater Management Story Map can be accessed using [this](#) link.

To edit, you must have edit access. Contact Taylor Keen (tkeen@umd.edu) to learn more about this and to request edit access.
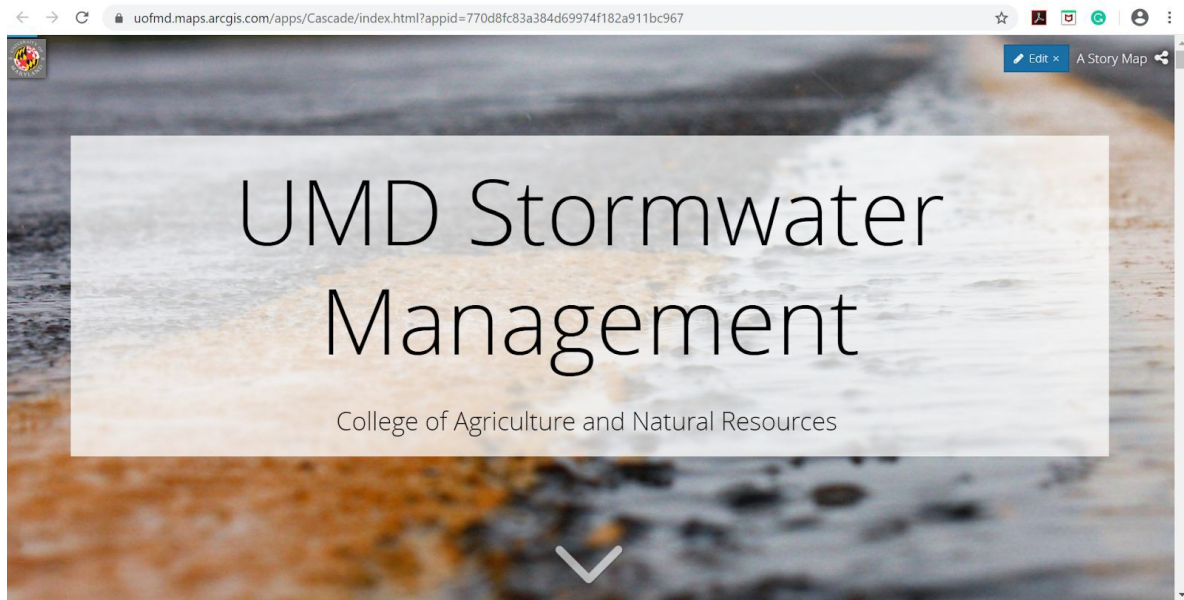
To edit, navigate to the story map via the link above and click the blue 'edit' button in the top right corner. From there the edit screen, in this case the cascade builder, will be revealed and every part of the story map will be editable.
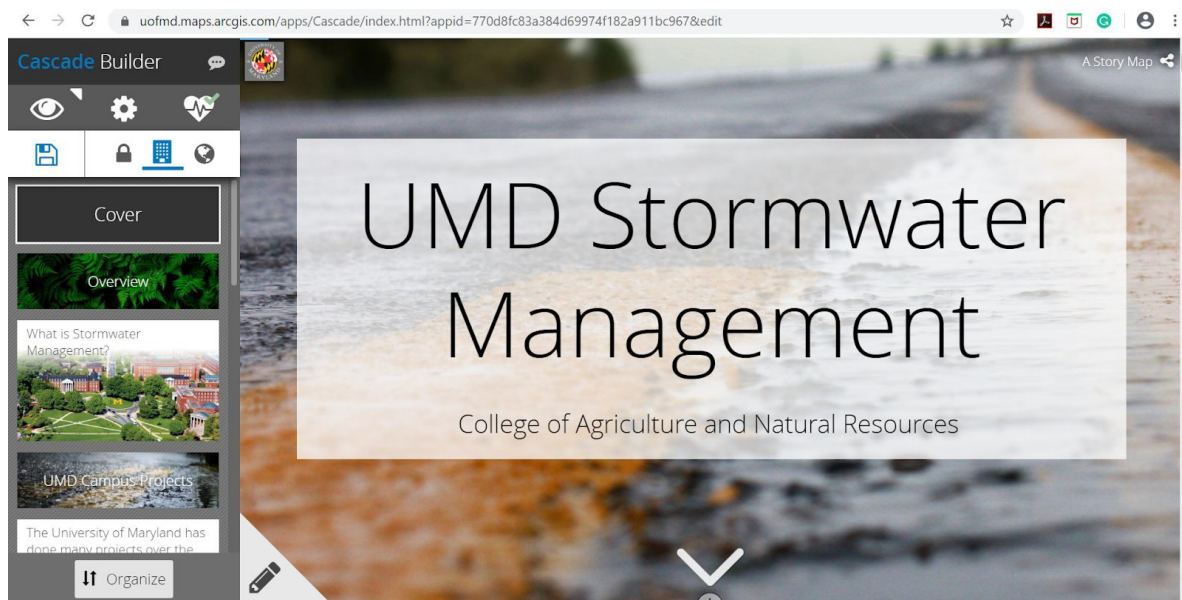

The next screen will show options to edit each part of the story map. Scrolling down allows each part of the story map to be edited.

How to change media and add text
To change a picture and add a map or video, click on the pencil icon in the lower left-hand corner of any section.
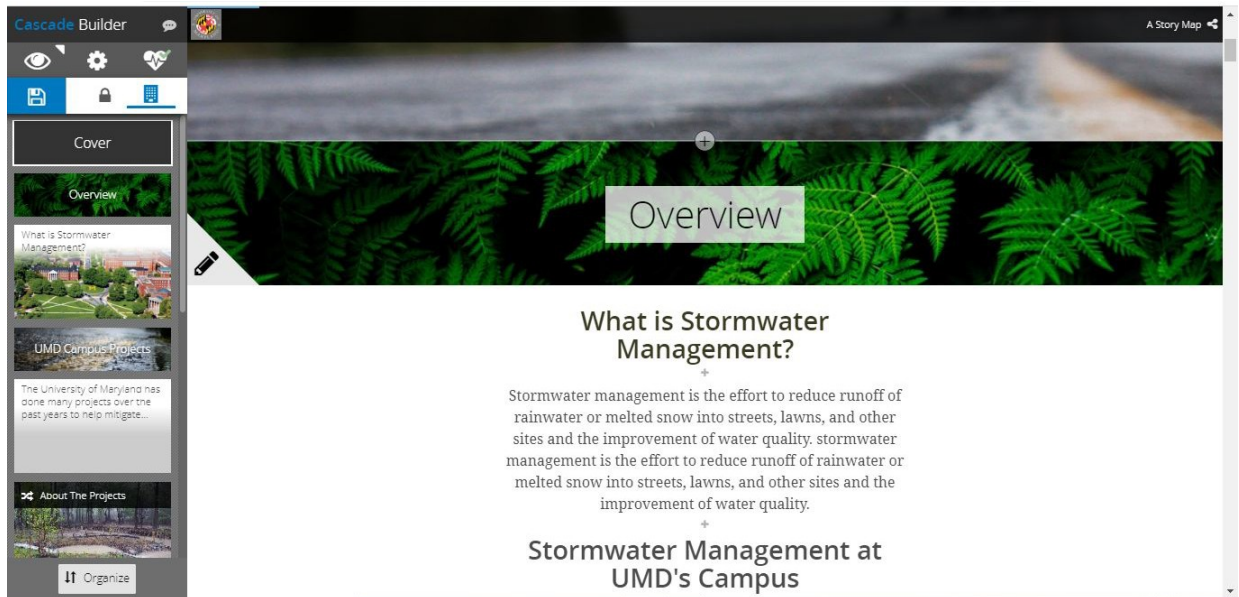
Clicking the pencil reveals options for the section being worked on—the "Appearance," "Background," and "Manage" sections for each StoryMap page. Appearance changes cosmetic details on the foreground, such as the font theme. The design below shows a translucent white box with black letters.
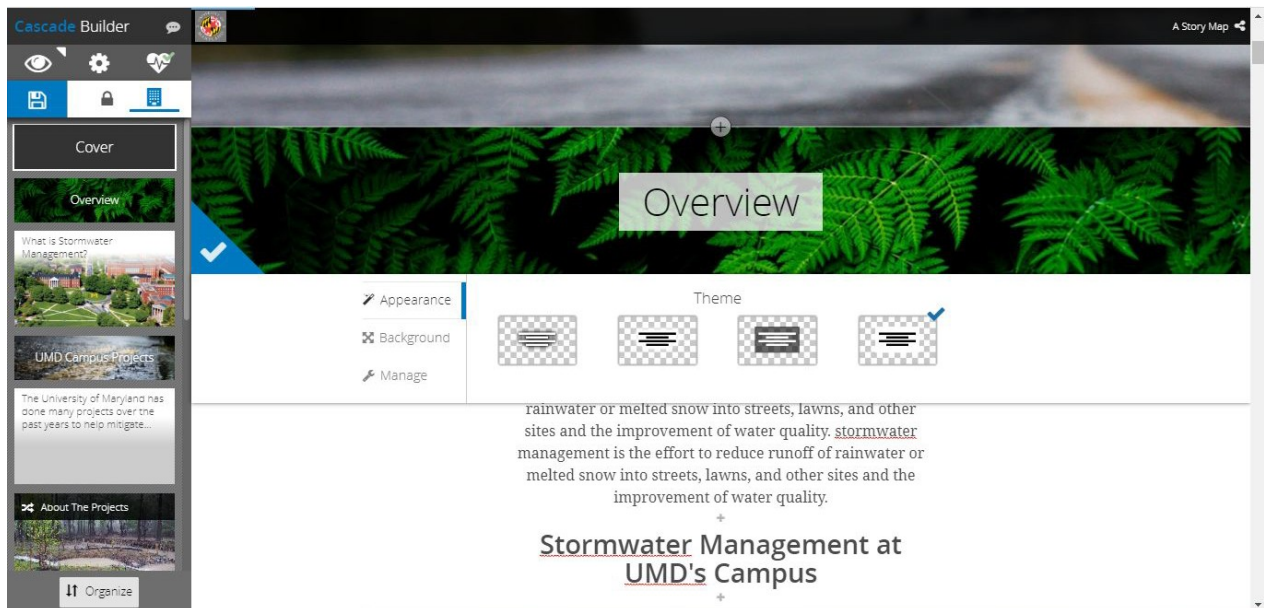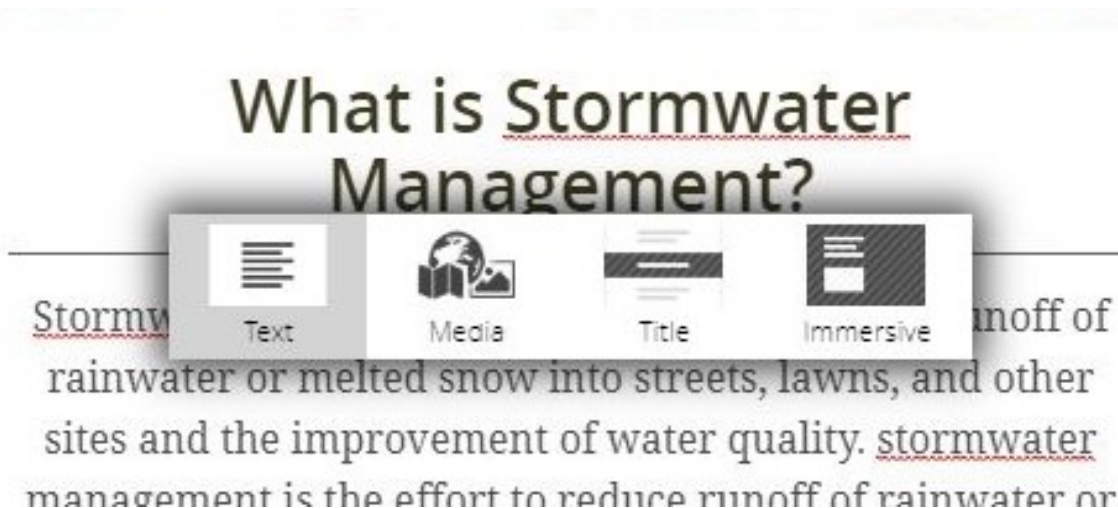
"Background" changes the background image of that section and includes an image description for the visually impaired.

Manage changes the media. Here it would just be the background image but at the Tour Map you could change the map. We recommend changing any media through the Background section and only using Manage to add text for visually impaired readers.

To add additional images, text, titles, another map or immersive section, click on one of the plus signs throughout the StoryMap page, such as the one highlighted after "What is Stormwater Management?"
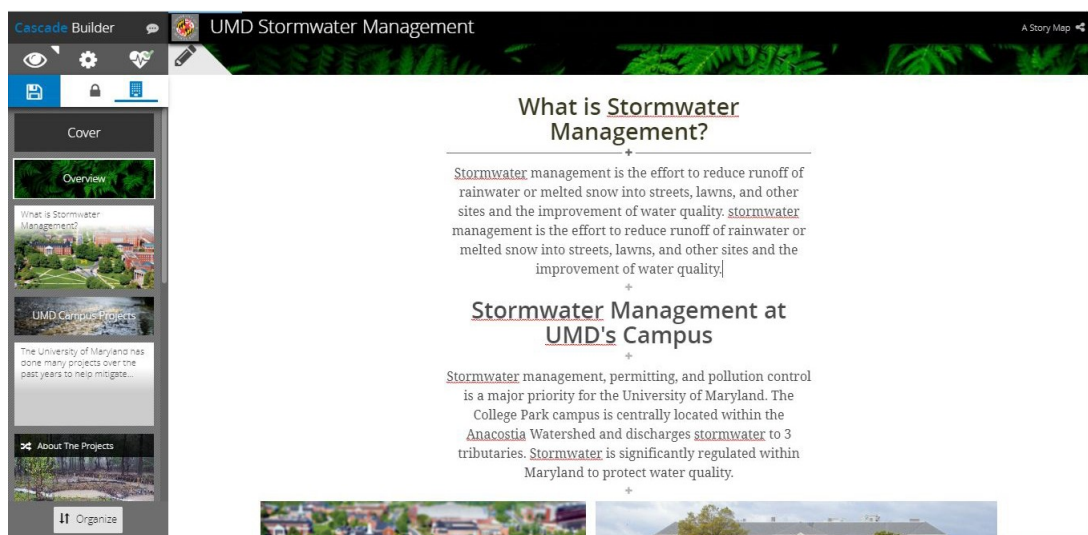
Clicking will show the options described above. Note: if the page is an "immersive page" not all options may appear in the columns. Immersive pages are discussed below.

How to edit immersive pages
Immersive pages contain pictures and information highlighting the major projects.
Clicking on the pencil icon changes the position of the text and size of the text box, as
well as the theme and the background.
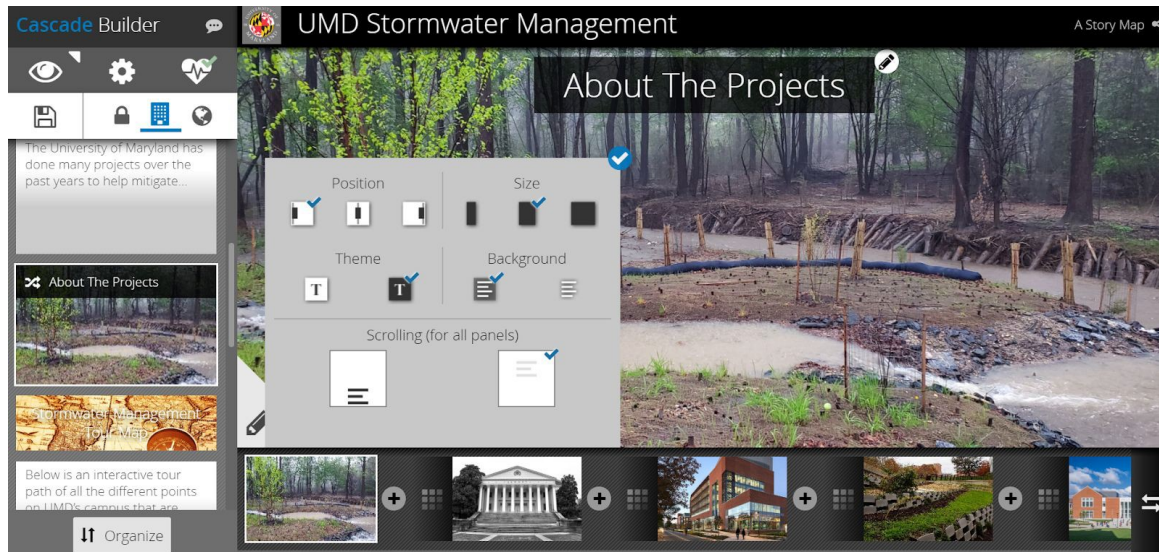
Clicking the '+' in the immersive section of the story map gives the option to add text or
media. To add more pictures, click on 'media' and upload the picture to add.
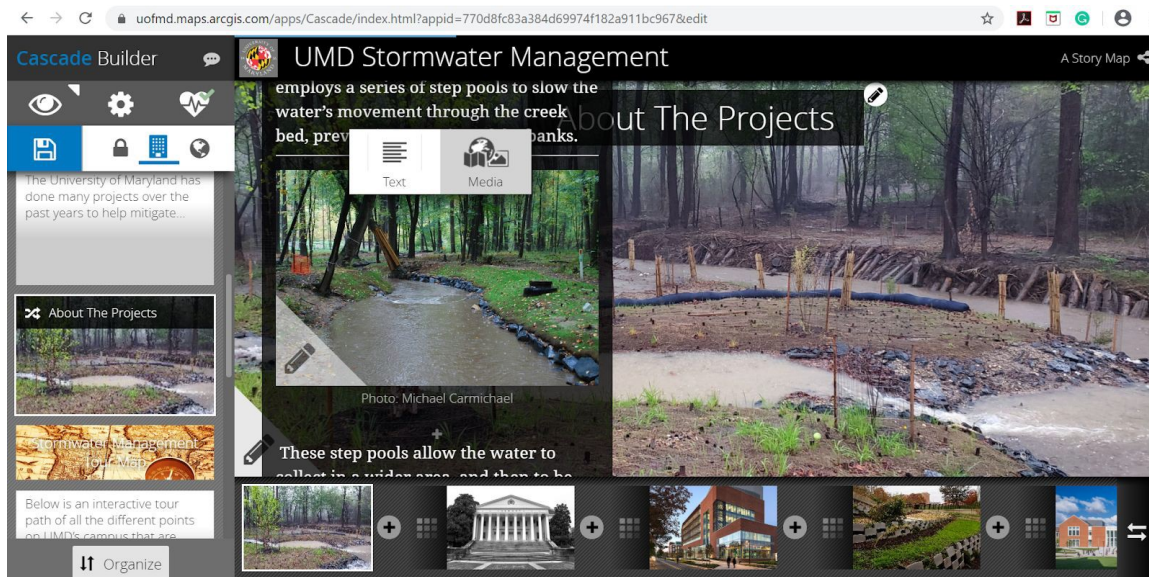
At the bottom of the immersive section, use the '+' to add more pages into the section. Previous pages can be duplicated and transition options applied. To change or add background pictures, maps, or video, use 'add media.'

Editing the tour map
The tour map in this story map was created separately and uploaded using the immersive feature. Changing the map itself and uploading a new map are described below.
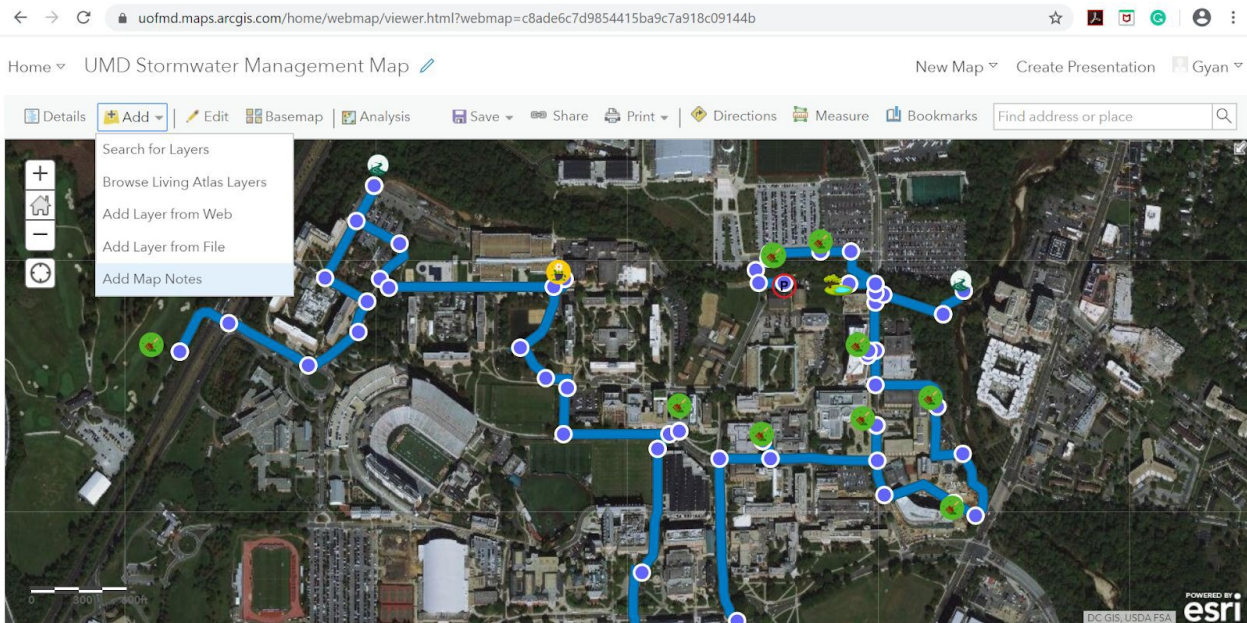

Upload a map into the story map
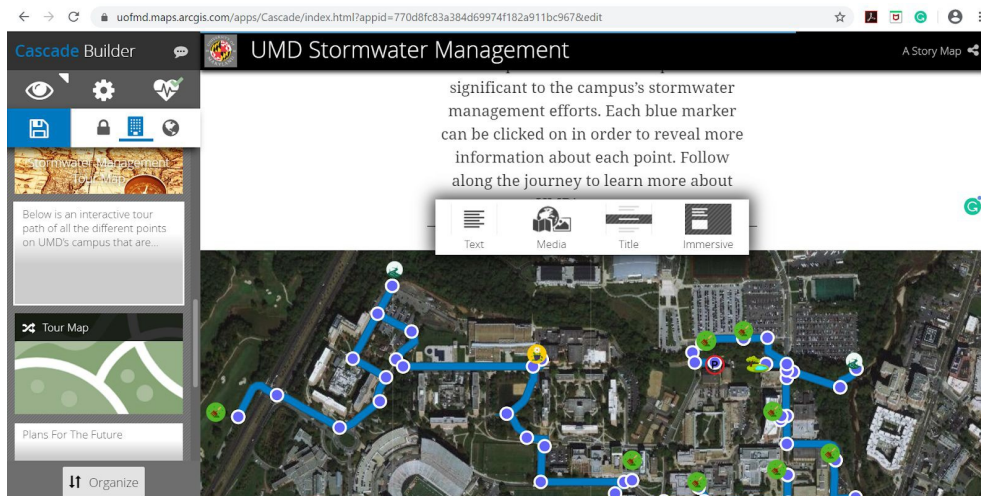
Click '+' for a prompt of text, media, title, or immersive. Click on 'immersive' for the option to add media and add the created map to the story map.
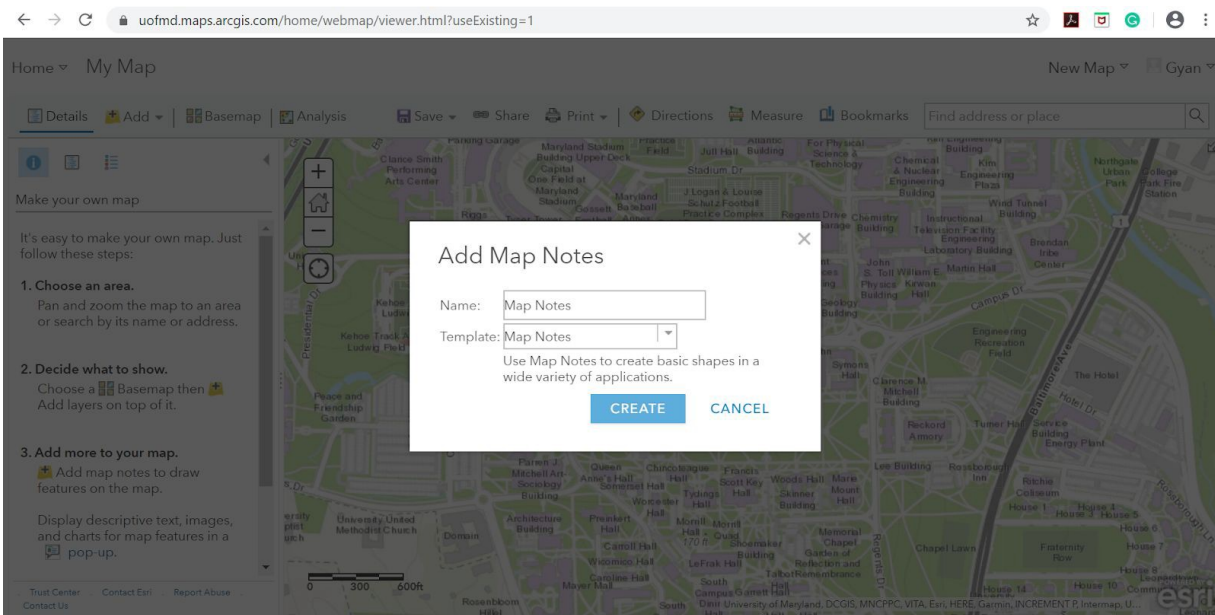
Changing a map or creating a new map
Use this link to create a new map:
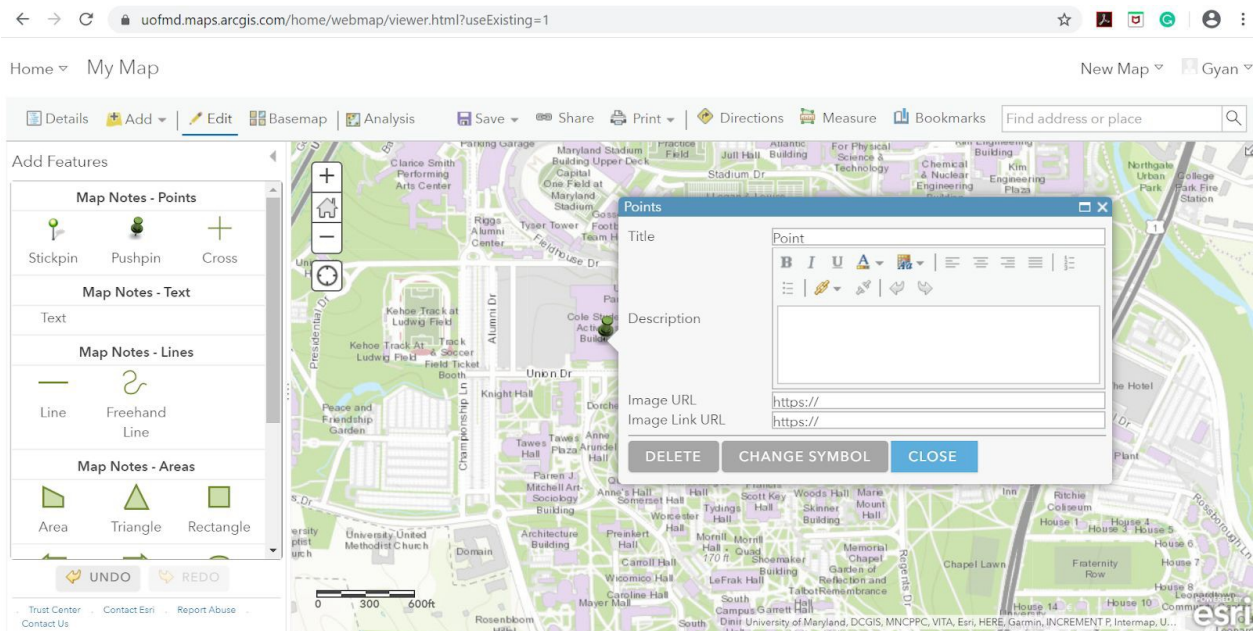h ttps://uofmd.maps.arcgis.com/home/webmap/viewer.html?useExisting=1

To add new points to the map, click on 'add,' then on 'add map notes,' which will allow plot points added to the map.

Clicking on 'add map notes' reveals a window asking for the name of the map notes and the template to use. Name the map notes, pick a template option, and click 'create.'

Click one of the map notes points and drag the cursor to the map to plot that point. A dialogue box will appear to include information about that point such as its title and description. Include an image of the point with a link in image URL. Repeat for as many points as desired.

Adding to an existing point
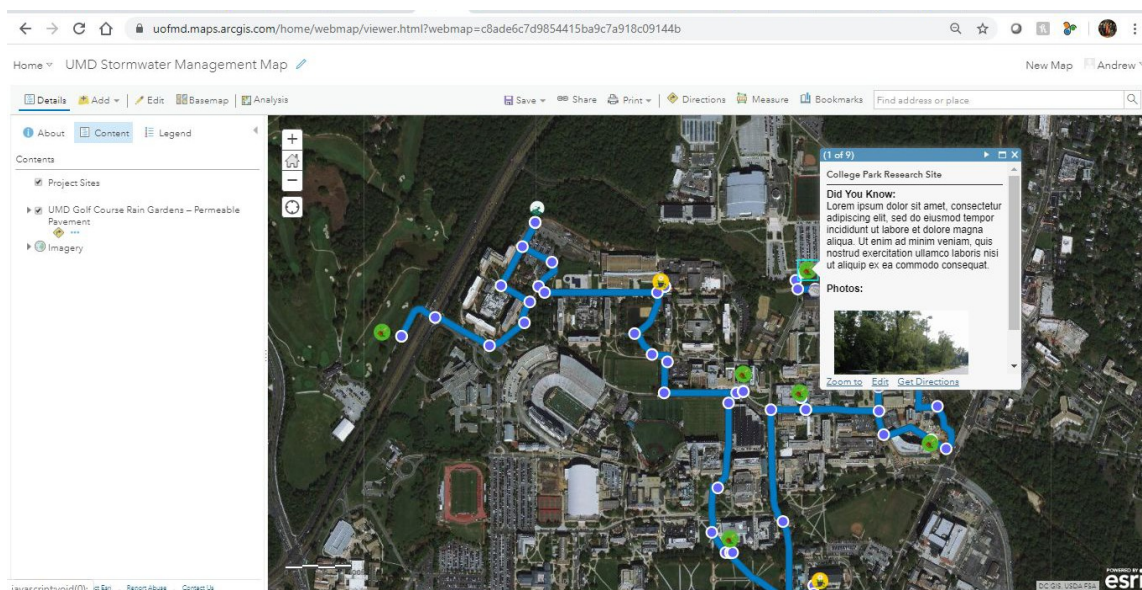
This link connects to the map on the story map page:
https://uofmd.maps.arcgis.com/home/item.html?id=c8ade6c7d9854415ba9c7a918c09144b

To edit or add to an existing point, click on the existing point on the map's viewer section to bring up the information tab. (This is a "behind the scenes" view of the story map. Changing and saving anything from the map appears in the Tour Map.) Click in the information tab to reveal information for that point and click 'edit' at the bottom of that link to change the information.
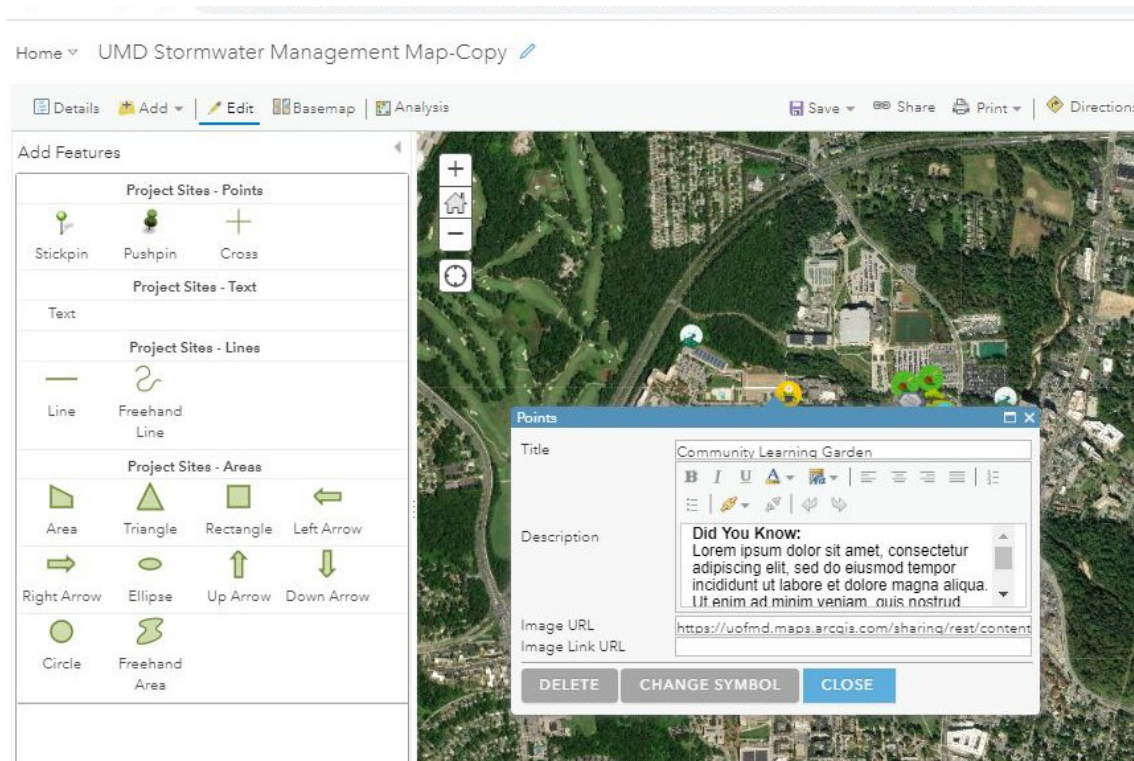
On this display, edit the point's title, description, and add an image URL. Clicking 'change symbol' will change the point used to mark the geolocation on the map. You can use a custom image or one of the preset markers. Clicking 'delete' will delete the point; clicking 'close' will exit with all changes made.

Note: Before closing the map viewer, save changes by clicking 'save' on the top bar of the viewer at right half of the screen.

Adding a map route
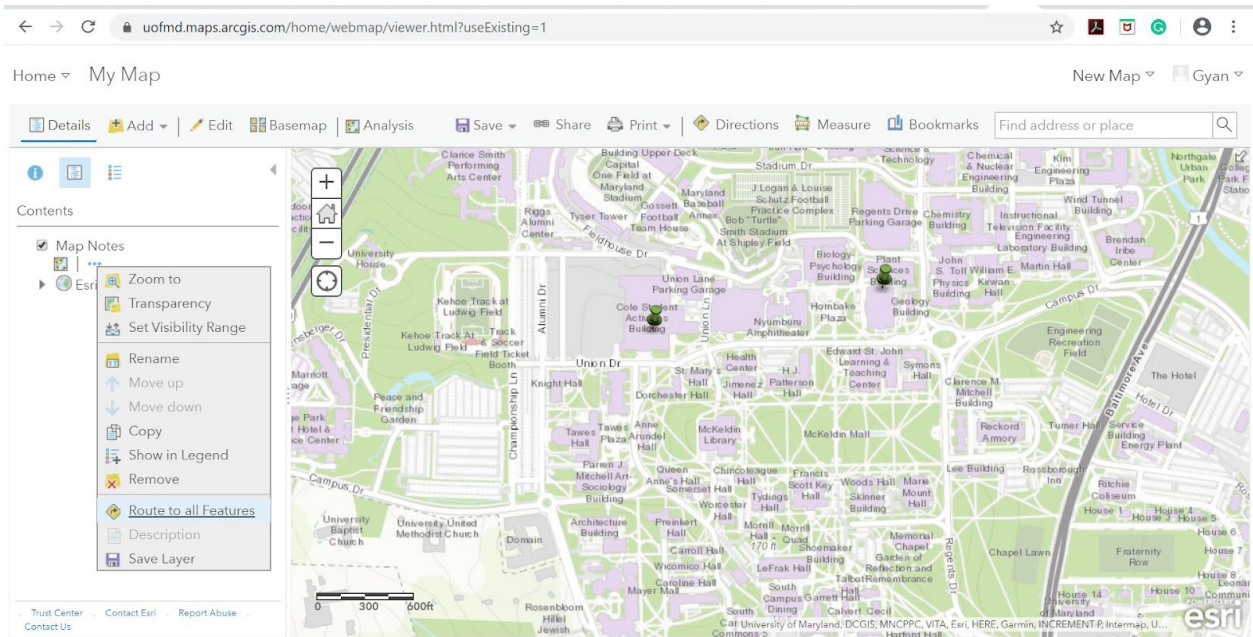
To add routes to points on the map, click 'details,' then click 'show content of map,' the middle icon below details. This will reveal the map created earlier. Click on the three dots, which will prompt with options. Click on 'route to all features' to plot a route between all the points on the map.

ArcGIS Story Map Design

How to Edit the Story Map
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To edit the story map, navigate to the story map via the link above and click the blue 'edit story' button in the top right corner. From there the edit screen, in this case the cascade builder, will reveal and every part of the story map will be editable.
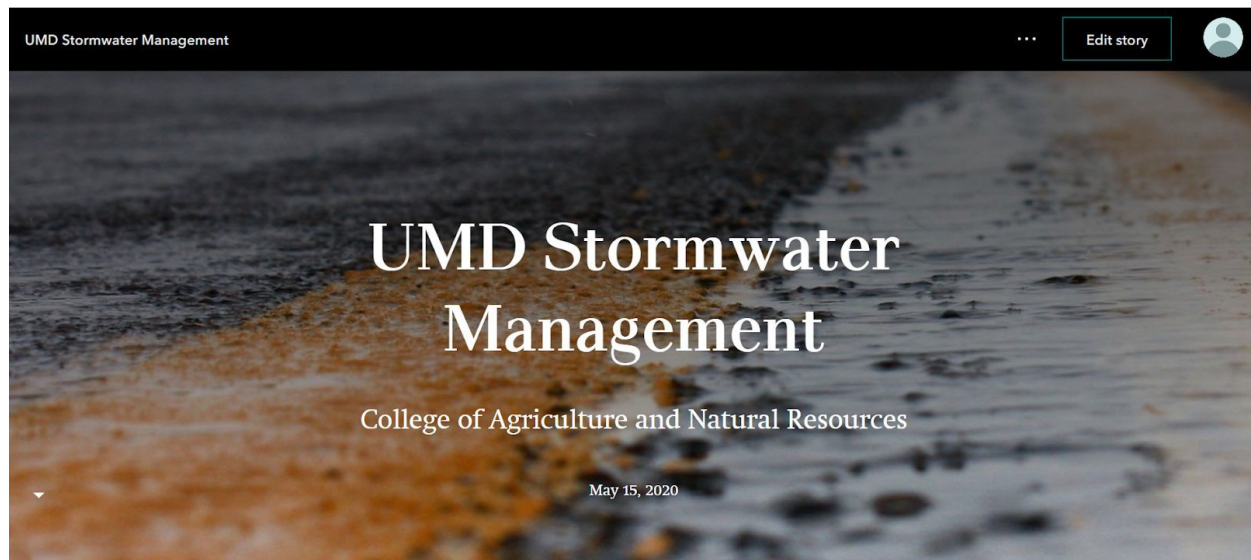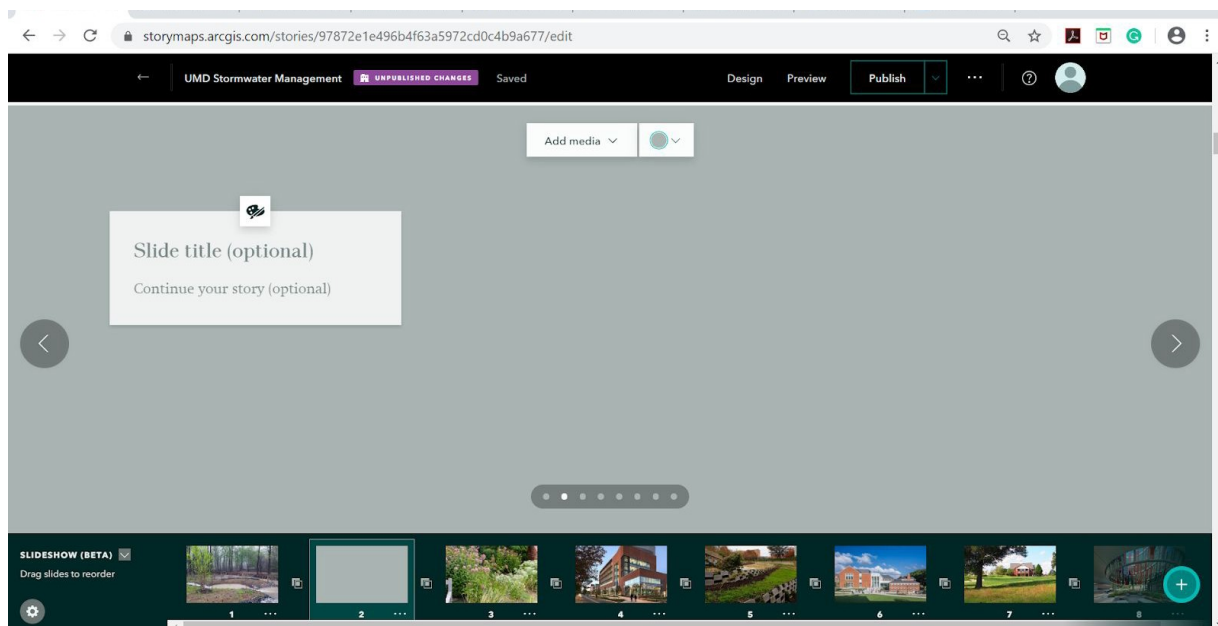
Scrolling down on this screen will allow editing of individual parts of the story map.
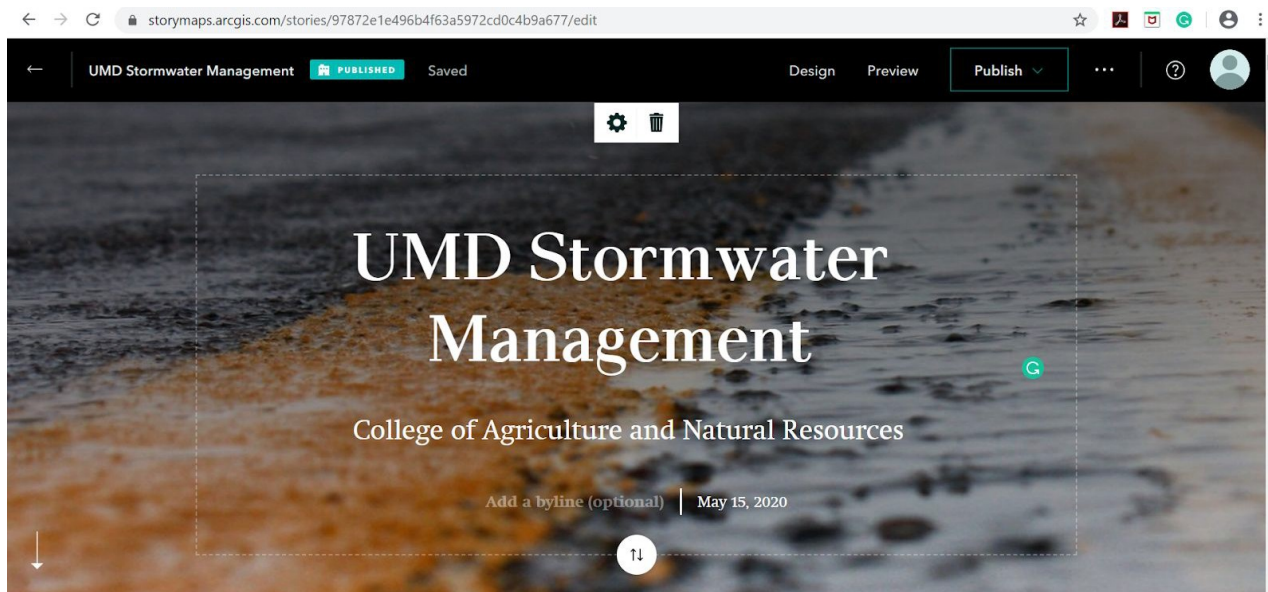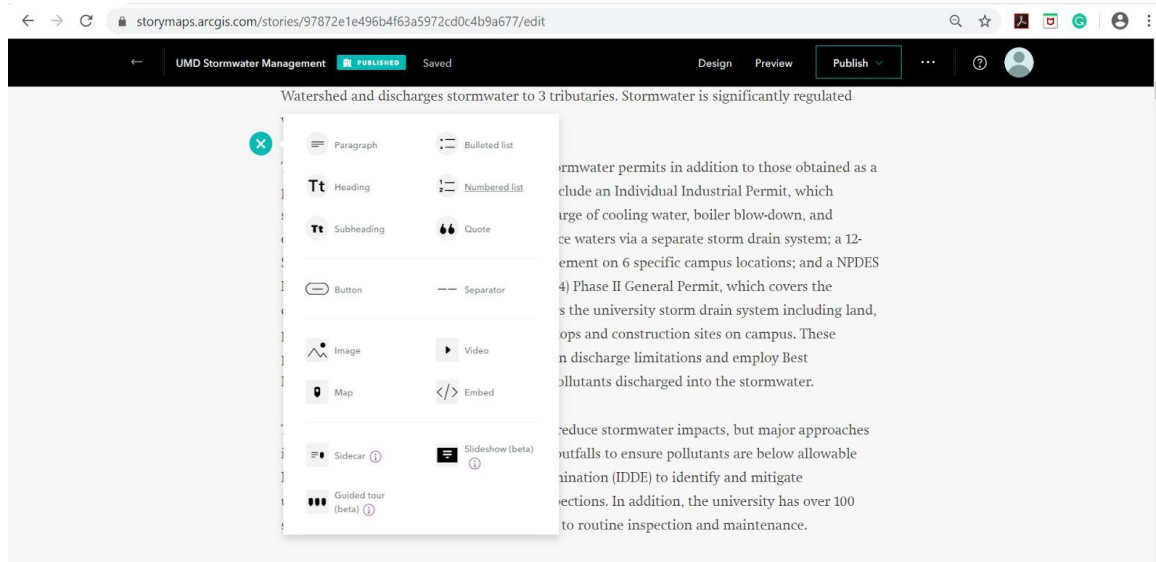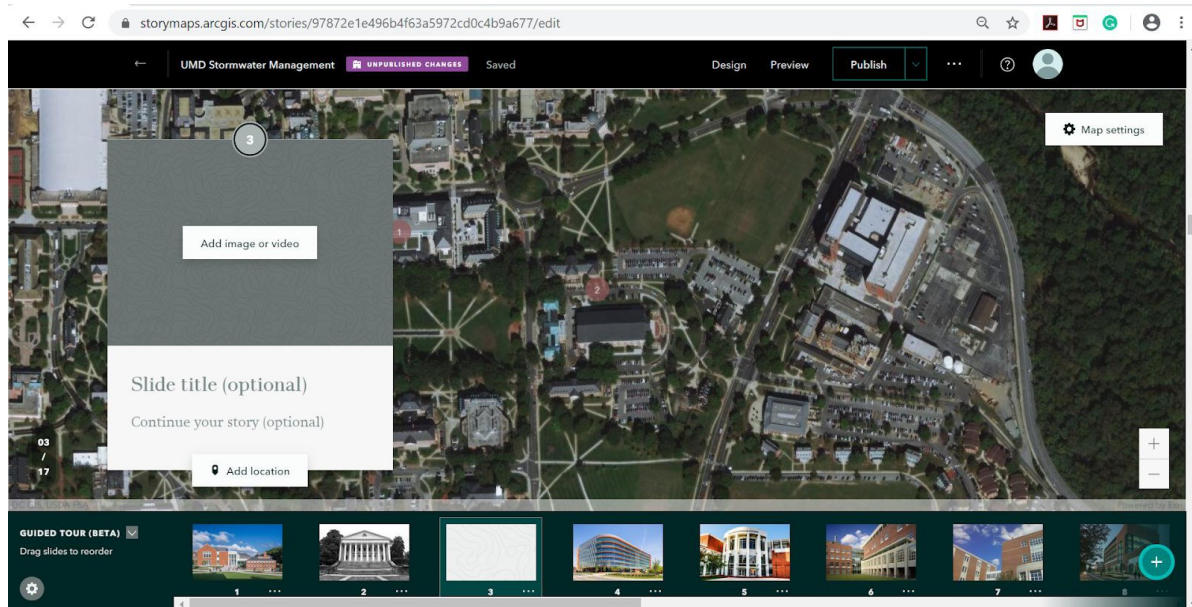
Clicking '+' in the story map will prompt with a menu that allows you to add text, heading, subheading, images, map, video, Sidecar, slideshow and guided tour. Choose the desired option.
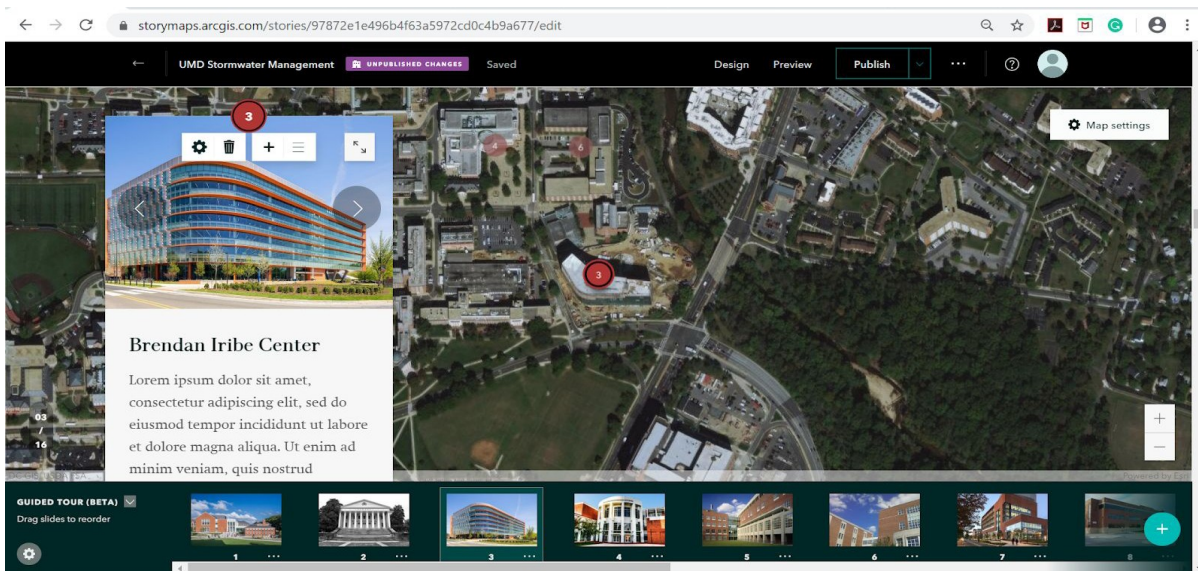
How to edit slideshow

Click the green '+' at the bottom right corner to add a new slide. Click 'add media' to add pictures and use the side panel to add text.

How to edit TourGuide

Click the green '+' button at the bottom right corner of the story map to add a new point to the map. Click 'add images or video' to add media. Click 'add location' to add a point to a specific location on the map.

To add pictures to the side panel click '+' next to the trash icon on the side panel and drag the picture to the panel.

More detailed tutorials can be found here:
h ttps://storymaps.arcgis.com/stories/cea22a609a1d4cccb8d54c650b595bc4

Adding a Timeline
Use this link to learn how to add a timeline feature to the story map:
h ttp://storymaps-classic.arcgis.com/en/app-list/map-tour/tutorial/

Tutorials
ArcGIS offers a variety of tutorials in concepts that may need clarification or on extra features, which can be here: https://www.esri.com/training/

Contact Info

Please contact any member of the group for further explanation of the decisions or for guidance in changing the story map.

Data Gatherers/Cleaners: Ryan McCarthy, Amber Dietrich
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