



Thursday, July 23

Great Story Maps and How to Emulate Them

Allen Carroll, Esri

Emily Wilson, University of Connecticut

Twyla McDermott, City of Charlotte

Chris Ingram, Santa Clara County Fire Department

Earl Eutsler, Urban Forestry Administration, Washington DC

1

**What Is
a Story
Map?**

2

**Four
Great
Story
Maps**

3

**Brief
Wrapup**

4

**Questions
and
Discussion**



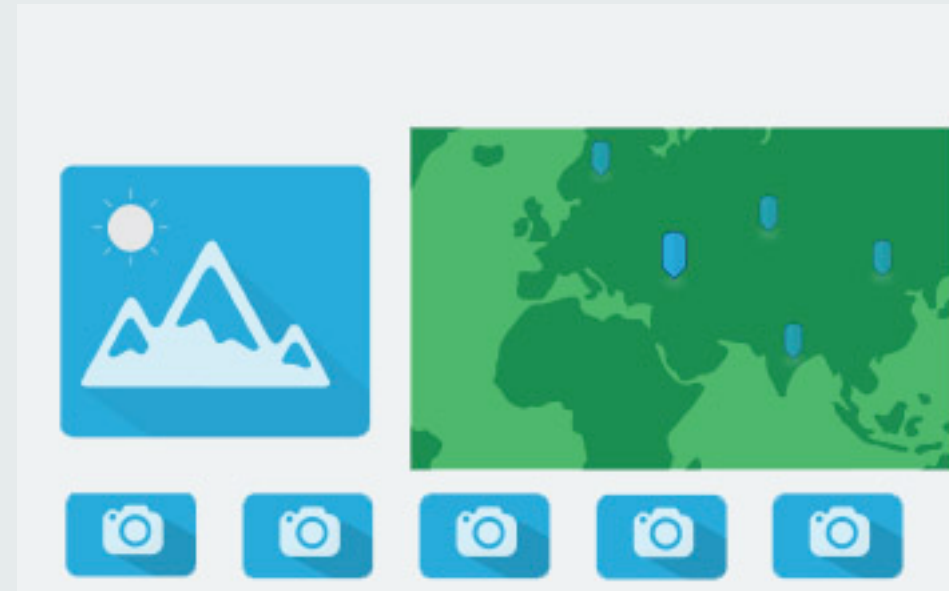
What is a Story Map?



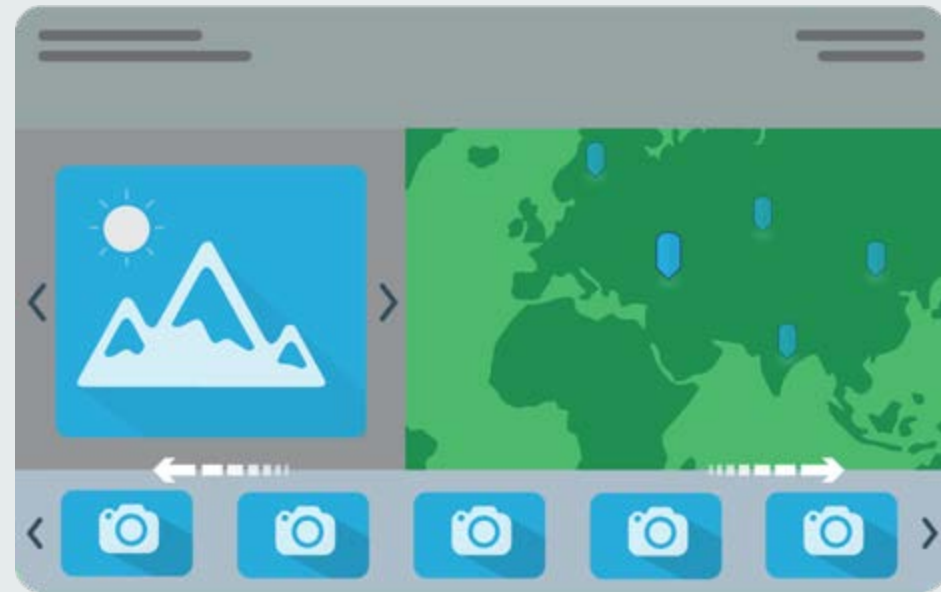
Story Maps are simple web apps that combine interactive maps,



Story Maps are simple web apps that combine interactive maps, multimedia content,



Story Maps are simple web apps that combine interactive maps, multimedia content, and user experiences



Story Maps are simple web apps that combine interactive maps, multimedia content, and user experiences to tell stories about the world.



Most **Story Maps** are hosted by Esri
in the cloud. (But you can opt to
host them yourself.)



Most **Story Maps** incorporate builder functions that enable you to build a sophisticated story with no GIS or web development skills.



Most **Story Maps** work equally well on PCs, laptops, tablets, and smartphones.



Story Maps are open source.
You're free to download and
customize them.



Story Maps include an array of apps that provide different ways of interacting with maps.



Storymaps.
arcgis.com

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[Sign In](#) [English ▾](#)

Story Maps

Everyone has a story to tell
Harness the power of maps to tell yours

Engage and Inspire Your Audience

My Stories


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Story's stories

📖 284 stories


Storytelling is the most powerful way to put ideas into the world today.
— Robert McKee

Search your stories... Sort by : Date modified > CHECK STORIES



Team Expedition to San Jacinto

Map Tour | Public | Modified 7/14/2015
93 views



Outing to a Veterans Day Concert

Map Tour | Public | Modified 7/14/2015
58 views

Storytelling Contest Winners

esri.com/landing-pages/story-maps/contest-winners

The image shows a screenshot of the Esri website's landing page for the 'Storytelling with Maps Contest' winners. The page features a green background with a topographic map pattern. At the top, the Esri logo is on the left, and navigation links for 'Industries', 'Products', 'Support & Services', 'About', and 'Community' are in the center. A search bar with a magnifying glass icon is on the right, with a 'Sign In' link above it. The main content area has the title 'Esri Storytelling with Maps Contest' in white and blue text. Below the title, it says 'Meet the winners!' followed by the text '(BIG thanks to all. Keep on sharing your Story Maps with us!)'. The page is decorated with several yellow circular callouts containing images: a city skyline, a bird, a hiker, and a volcano. At the bottom, there is a blue trophy icon next to the text 'Grand Prize'.

esri

Industries ▾ Products ▾ Support & Services ▾ About ▾ Community ▾

Sign In

Esri Storytelling
with Maps Contest

Meet the winners!
(BIG thanks to all. Keep on sharing your Story Maps with us!)

Grand Prize

Great Story Maps



1

Connecticut's Changing Landscape Emily Wilson University of Connecticut

First Place,
Science/Technology/Education

Connecticut's Changing Landscape
a study of land cover change in Connecticut, 1985-2010

UCONN UNIVERSITY OF CONNECTICUT CLEAR

Tracking Land Cover Change in Connecticut

How is Connecticut's landscape changing? Where? How fast? Come explore the information and maps that answer those questions.

Connecticut's Changing Landscape is a project at the University of Connecticut Center for Land Use Education and Research that uses remotely sensed imagery to track changes over the 25 year period from 1985-2010.

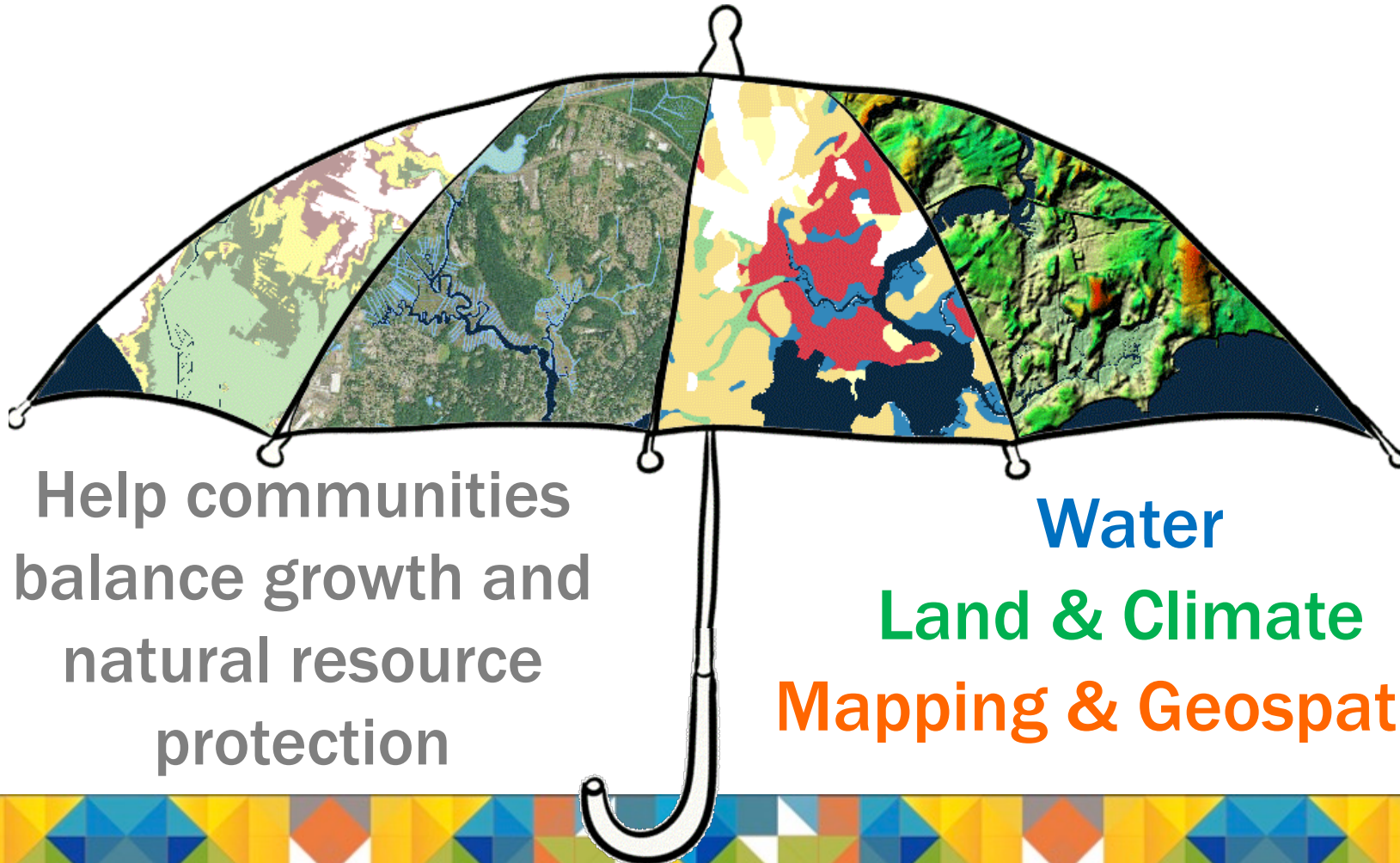
Connecticut is **4968 mi²**
of a mix of landscapes which change over time.

Introduction to the Connecticut Changing Landscape Story Map

Center for Land Use Education & Research

University of Connecticut

College of Agriculture, Health and Natural Resources
Dept. of Extension, Dept of Natural Resources, Connecticut Sea Grant



Help communities
balance growth and
natural resource
protection

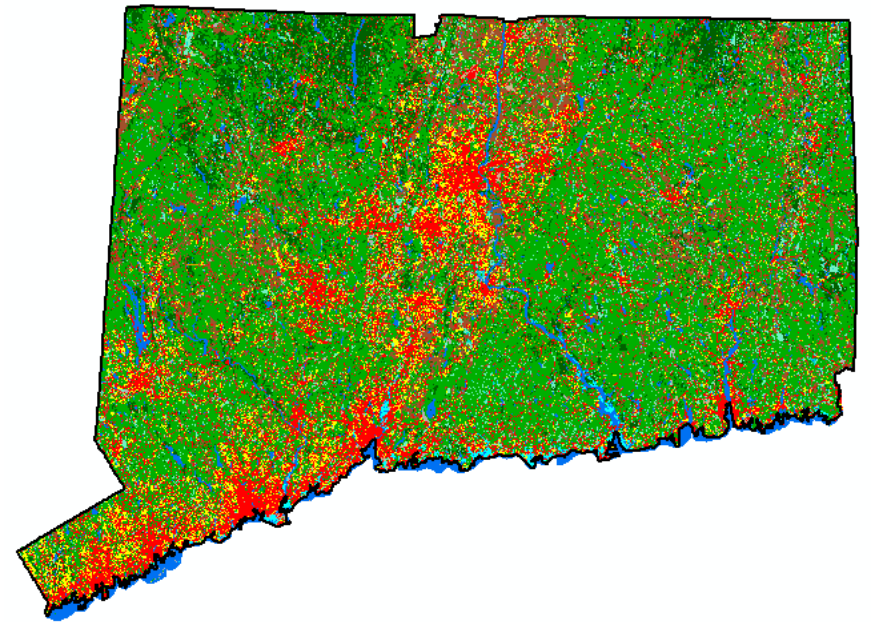
Water
Land & Climate
Mapping & Geospatial



Connecticut's Changing Landscape Project

- Time series of Landsat derived land cover
- 1985, 1990, 1995, 2002, 2006, 2010, 2015
- CHANGE!

- From the land cover
 - Forest fragmentation
 - Impevious surface
 - Riparian zone analysis
 - Land cover over agricultural soils



“All that geography is and should be - land use, climate change, agriculture, urban planning, and so forth. It is more than knowing where something is on a map, it is about context.” Gary Knell, National Geographic, Esri User Conference 2015





Maps

Data: rich in information

Story

The land cover has many stories to tell

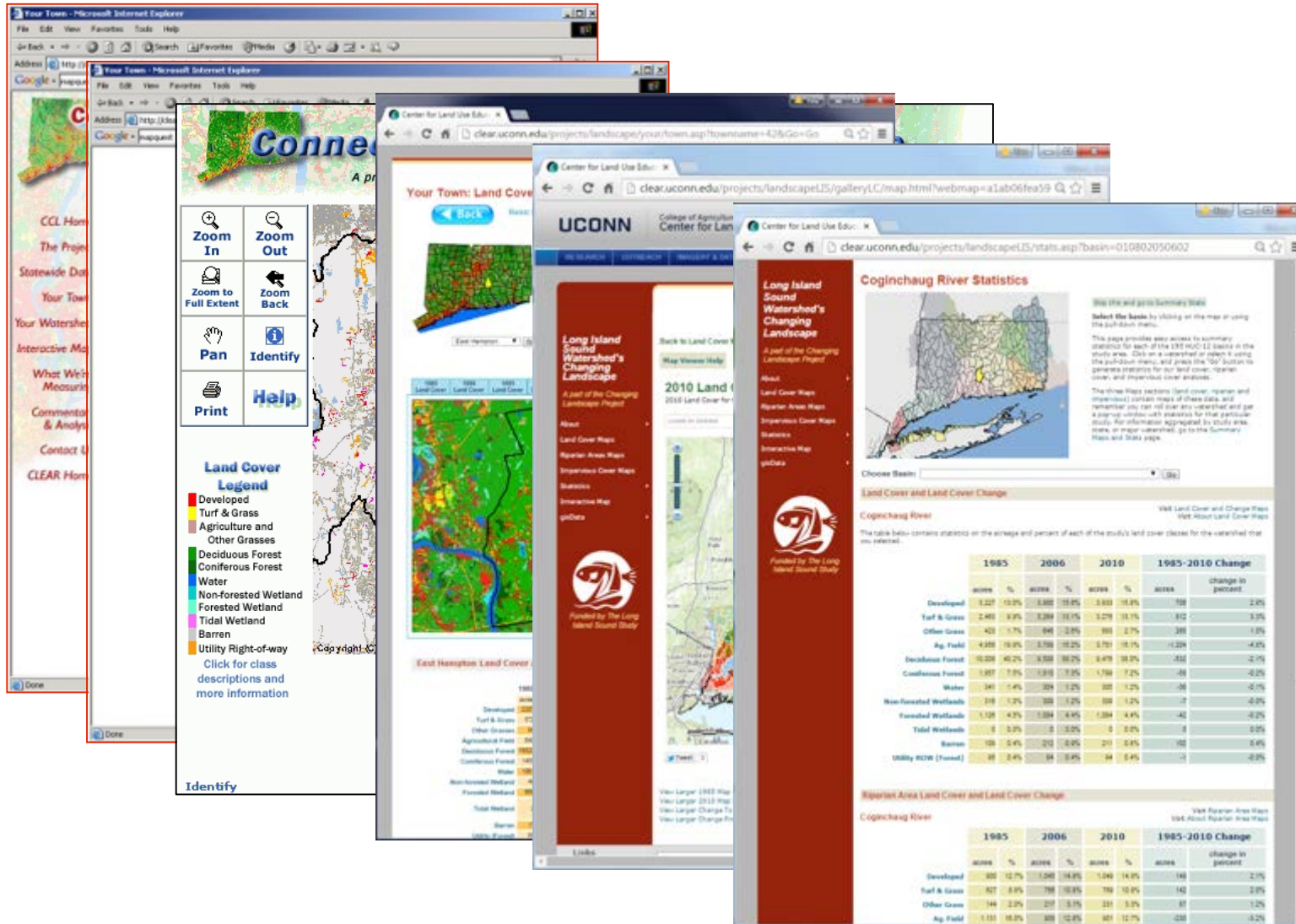
Audience

Professionals in something other than maps

Story Map



Long History of Land Cover and Making it Accessible



- Innovative and unique at the time
- Too many clicks
- Too easy to get lost
- Stats disconnected from maps





Story Map

- ..is visually appealing and catchy
- ..is easy to understand AND information rich
- ..guides the user while allowing for exploration
- ..is a multimedia, interesting experience

“Not only did I think it was very well done, I learned so much!” My Mom



Steps in the Creating the Story Map: Data

Brainstorm and Mockup



Assemble data, geoprocessing, analysis



Map Documents



Map Services

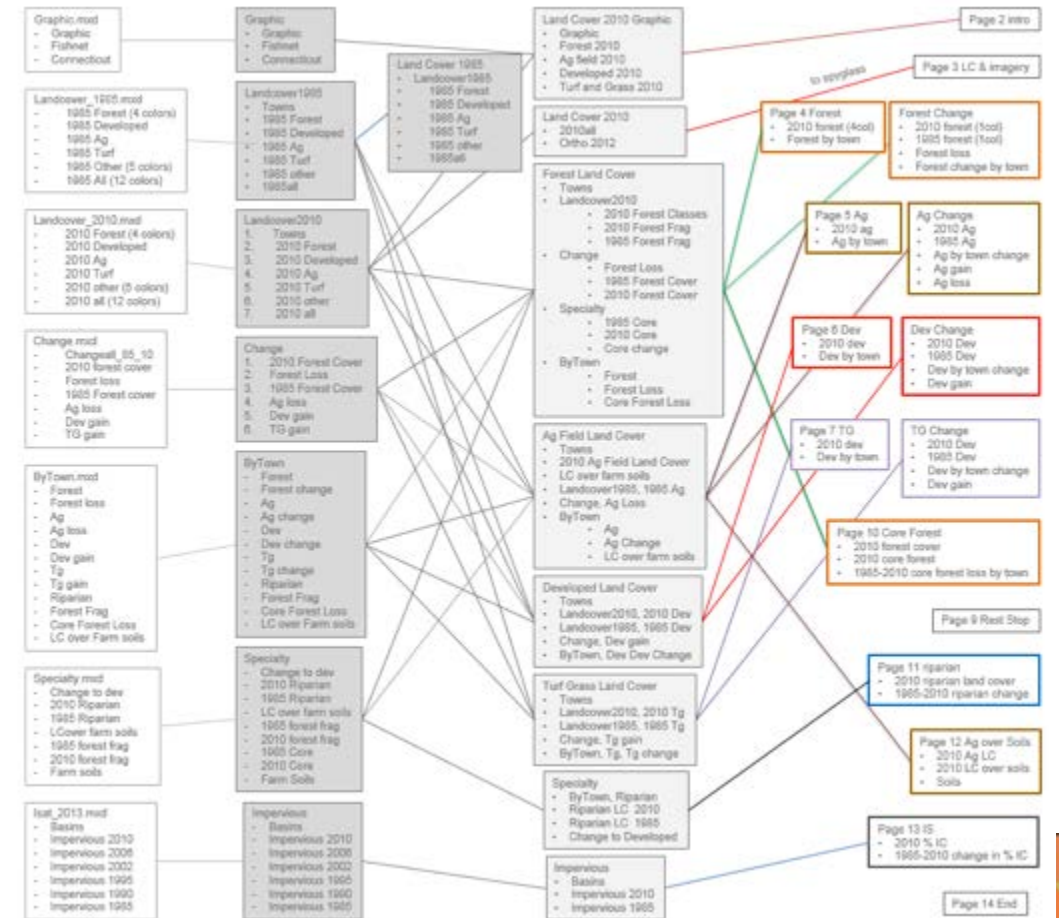


ArcGIS Online Maps



Story Map

Tip: to maintain zoom extent within a story map page, the layers need to be part of the same AGOL map.



Steps in the Creating the Story Map: Multimedia

- Create map journal story map in AGOL
- Add maps, text, graphics, photos, links, etc.
- Download map journal code from github
- Explore code, make edits to *index.htm* and *css*
- Review, edit, review, edit, review ... publish!

Mapping



Erdas Imagine: image classification



ArcMap: data preparation and analysis



ArcGIS Server: serve maps, imagery



ArcGIS Online: maps, presentation, pop-ups

Design



Adobe Photoshop: photos and graphics



Adobe Illustrator: graphics



Adobe Dreamweaver: explore code, edit

Other



Microsoft Excel: numeric analysis, charts



Google Chrome



Mozilla Firefox

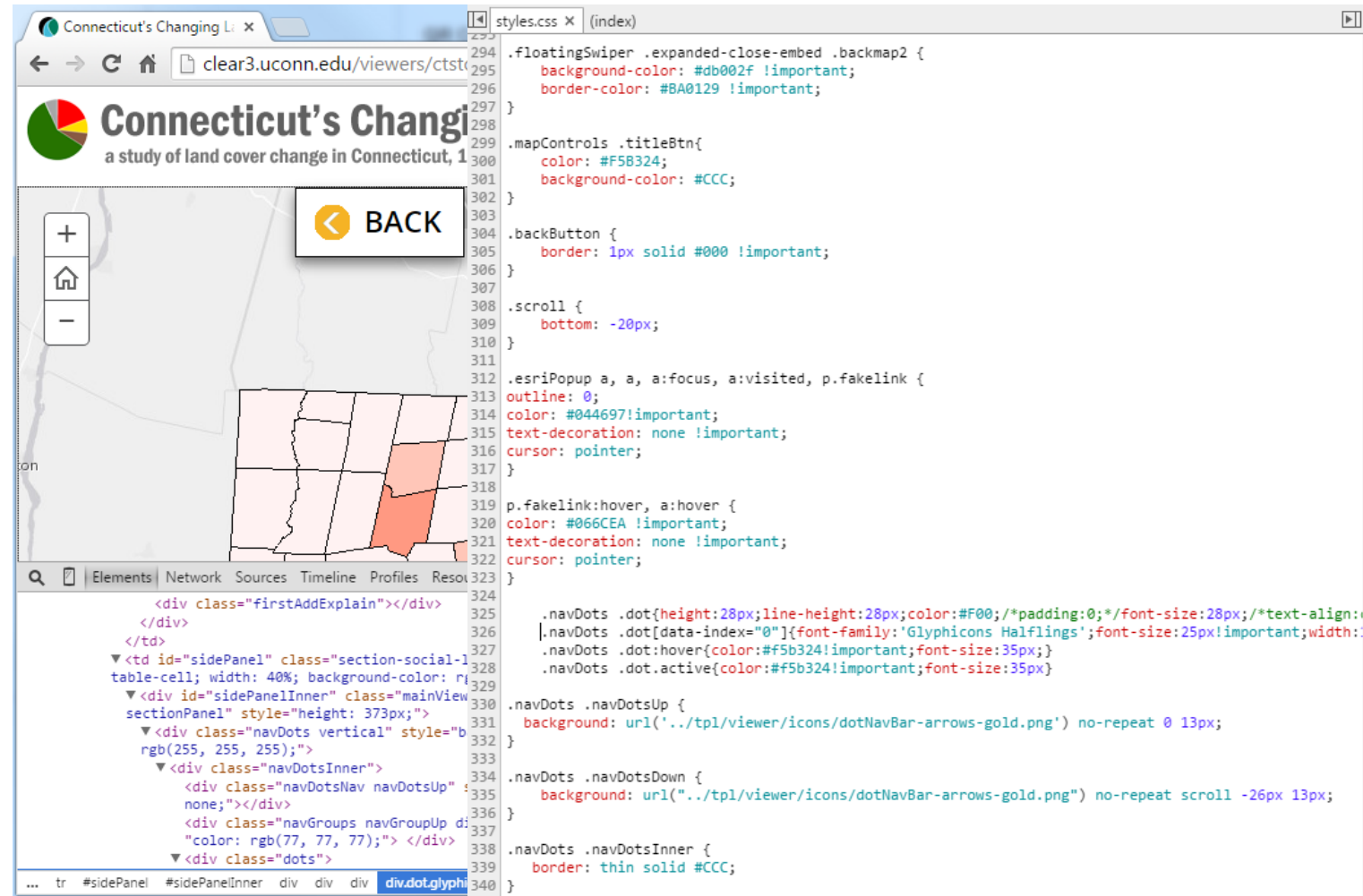


Screenflow: create movies



Notes on customizing

- Use “inspect element”
- Change css
- Locate graphics on server
- Change/edit



```
<link rel="stylesheet" type="text/css" href="resources/custom/styles.css" />
```



Where "Cool story map, bro!" is a compliment.

Let's Take a Tour

Connecticut's Changing Landscape
Emily Wilson
University of Connecticut

The screenshot shows the top section of a web-based story map. On the left is a large aerial photograph of a suburban area with houses and green spaces. The top right corner features the logos for UCONN and CLEAR. The main title is 'Connecticut's Changing Landscape' with a subtitle 'a study of land cover change in Connecticut, 1985-2010'. Below the title is a sub-header 'Tracking Land Cover Change in Connecticut'. The main text asks 'How is Connecticut's landscape changing? Where? How fast? Come explore the information and maps that answer those questions.' A small paragraph below describes the project as a study using remote sensing imagery from 1985-2010. A large number '4968 mi²' is displayed next to a small pie chart, with the text 'of a mix of landscapes which change over time.' below it. A vertical navigation bar on the right side contains a home icon at the top, a series of dots, and a downward arrow at the bottom.

Connecticut's Changing Landscape
a study of land cover change in Connecticut, 1985-2010

UCONN CLEAR

Tracking Land Cover Change in Connecticut

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of a mix of landscapes which change over time.

2

Charlotte Green Tour Twyla McDermott City of Charlotte

POWER2
CHARLOTTE

Charlotte Green Tour

Welcome to Charlotte! We're so glad you're here and interested in learning ALL about the green and sustainable initiatives happening in the city. This tour will show you many green projects and will provide opportunities to get involved and learn more. If you're on foot, you can also take a [walking tour of uptown](#) and learn more about specific projects. Click [HERE!](#)

Charlotte's goal is to be an environmental leader, and we hope while you're here, you learn some of the way we are accomplishing that goal.

As you scroll through this map, don't forget to click on the green [hyperlinks](#) for more information and the purple [map links](#), as they will change the view of your overall map or photo. Let's get started!

Getting into the City

There are many great, and environmentally-friendly ways to get from where you live to Charlotte. Whether you land at the [Charlotte Douglas International Airport \(CLT\)](#), drive your own electric vehicle or take public transit, getting to Charlotte's Center City is easy. If you arrive at the CLT Airport, make sure you check



Hello!



CHARLOTTE.

City of Charlotte Green Tour

Twyla McDermott
Esri User Conference * July 2015

Story of the Story: it's easy being green!

// intro

// background: business drivers

// old + new

// actors + process

// demo

// wrap



City of Charlotte Green Tour

What's so Green about Charlotte? Take the tour, either virtually or on foot, of our environmental and energy features to see for yourself why Charlotte is a national leader in environmental and energy sustainability. The tour can be seen from the comfort of your desktop or on your smartphone or tablet as you walk around the Queen City.



- Green Star
- Energy
- Water
- Solid Waste
- Air & Transportat...
- Parks/Green Sp...
- Envision Charlotte

Solid Waste Green Tour



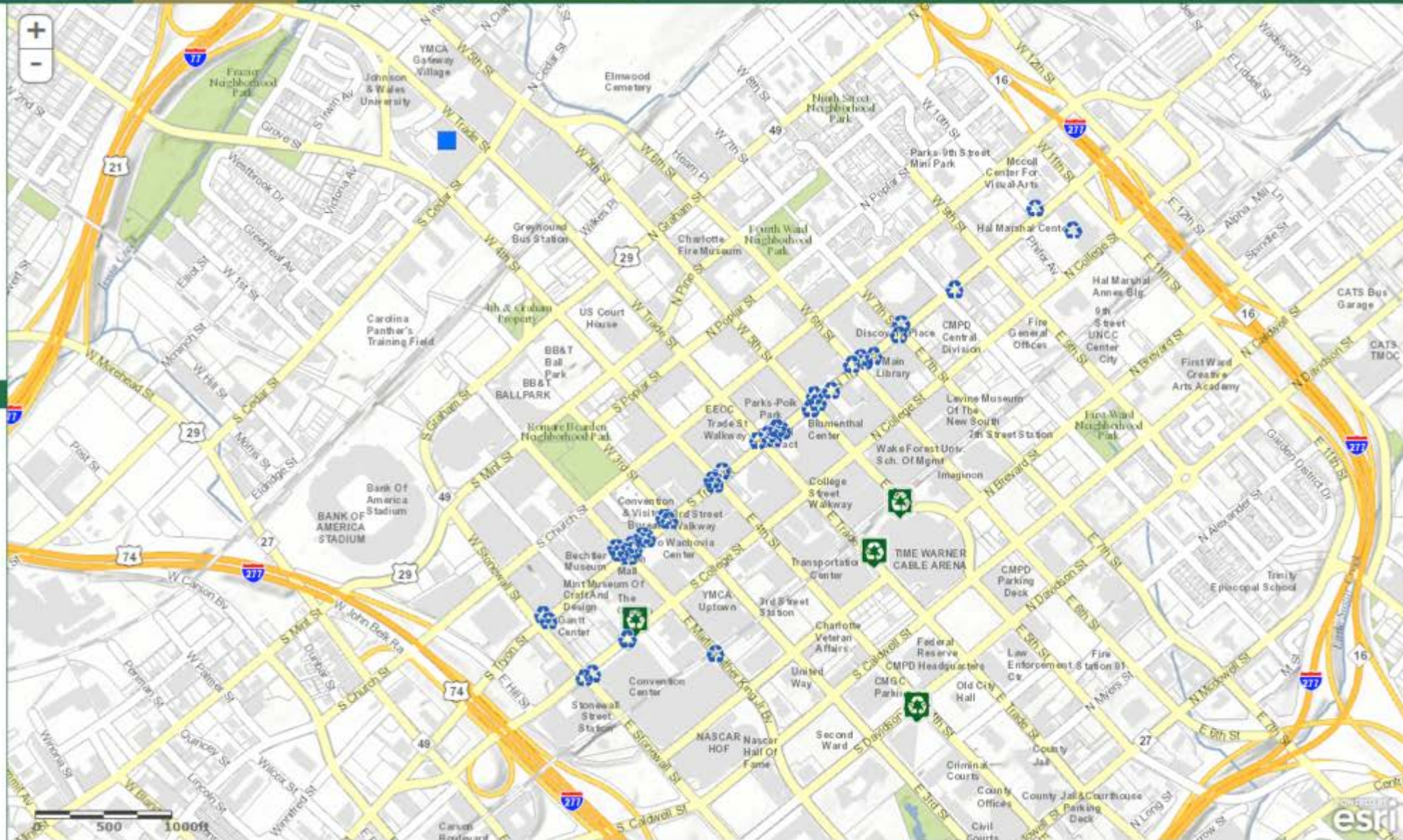
Cities across the country are working to dramatically reduce the waste they are sending to landfills. Charlotte is no exception. View Uptown's new center city recycling program, which consists of decorative recycling bins in center city to Big Belly solar compactors around the City. If you are lucky, you may see our all electric recycling vehicle making its rounds.

LEGEND

Locations

Green Tour

- Big Belly Station
- Center City on Street Recycling
- Recycle/Kiosk



it's a new day!



Darcy Everett

Charlotte Green Tour

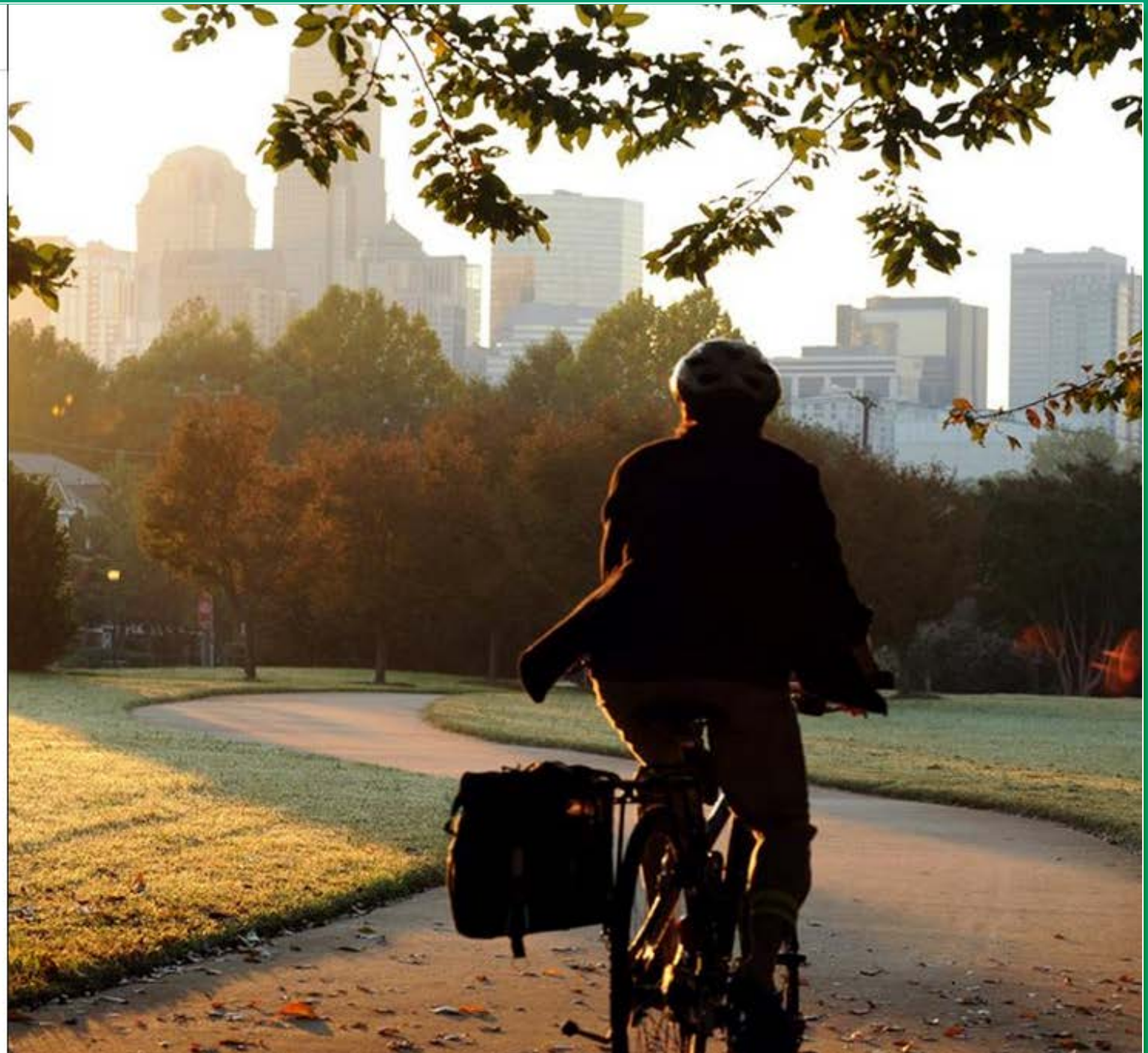
Welcome to Charlotte! We're so glad you're here and interested in learning ALL about the green and sustainable initiatives happening in the city. This tour will show you many green projects and will provide opportunities to get involved and learn more. If you're on foot, you can also take a [walking tour of uptown](#) and learn more about specific projects. Click [HERE!](#)

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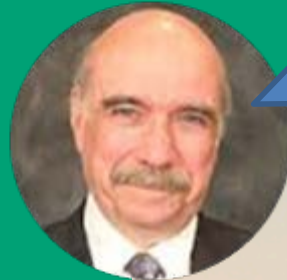
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// wrap

- + kiosks
- + open data
- + 3D
- + smart city



Mayor Dan Clodfelter
City of Charlotte, NC

“Charlotte is a leading green city in the southeast, and the Charlotte Green Tour showcases some of the great initiatives we have in place. We want our city to be a global environmental leader, and this tool provides a way to learn more about how we are accomplishing that goal.”



3

The San Francisco 1906 Earthquake & Fire Chris Ingram Santa Clara County Fire Department

First Place,
Culture/History/Events

The San Francisco 1906 Earthquake & Fire
According to the report written by S.F.F.D. Captain Henry Mitchell (Engine Co. #20)

A story map by Chris Ingram

SFFD Fire Station #20

GREEN 110 SHED
FIRE ENGINE NO. #20
25161
CORPOR B 57431
28 x 18
FLOPS
1742
H. MITCHELL

2919-21 2925 2927 2929 2931 2935
WEB

SFFD Fire Station #20 Captain Henry Mitchell was on duty working Engine Company #20 on April 18, 1906 when the earthquake struck at 0512 hrs. Henry and his crew worked for 3 days straight across the city rescuing victims and fighting fires.

- SFFD Fire Station #20
- San Francisco Gas House & United Railroads Power
- Bay & Kearney
- Sulphur Works
- Fepet Street
- Washington St. Dock
- Pacific & Sansome
- Pacific & Battery Mill & Liqueur Houses

Captain Henry B. Mitchell

San Francisco Fire Department



- Born July 17, 1866 in San Francisco
- Father organized the Ricon Hose Company
- Brother John R. Mitchell also SFFD
- Henry joined the SFFD on Oct. 15, 1892
- Promoted to Captain on Jan 31. 1900
- Captain on Engine 20 on Apr. 18, 1906 when earthquake hit
- Henry and his crew worked tirelessly for 3 days straight after the earthquake and fire

PHOTO TAKEN JUNE 28, 1902

The Report

The Story of Engine 20



1
S. F. FIRE DEPARTMENT
Engine CO. No. 20
San Francisco, May 14th 1906

Battalion Chief,
Sir

Respectfully submit my report of the working of Eng. Co. 20 on the morning of the earthquake the 18th of April until April 21st. On being out the window the morning of the earthquake discovered the Gas house and the Power house of the United R. R. in ruin, responded at once and reported to fireman of both places and was told there was nobody in ruins. Returned to engine, and received information by messenger on horse back that there was a fire at Bay & Henry St. responded and on arriving at Sulphur House, received word from hydrant man Wm. Cameron that they needed all the companies in town, responded along Battery Front and Davis and could not get any water went to Washington St. dock and took suction from bay

2
S. F. FIRE DEPARTMENT
Eng. CO. No. 20
San Francisco, 1906

run two lines from Eng. and two lines from Steamers at docks, worked for five hrs. got order to go to Pacific and Sansome St. to Cistern, went to work on Mill at Pacific & Battery and on Engineer house on Battery above Pacific while working in liquor house ~~there was~~ ^{explosion} occurred, in rear of Bldg. and walls caved in injuring C. Woods fireman also had second line down Sansome to Eng. Co. 24 of Oakland Dept. which was playing stream around Appraiser Bldg. and up Washington St. Water gave out about 4th P.M. Batt. Chief Wm. Clancy gave order to go to Washington & Dupont and take Cistern. lead line down Washington to Eng. 5 of the Oakland Dept. and played stream on fire around Keall of Justice and on Montgomery Block Bldg. at Montgomery and Washington, about 1st A.M. on the morning of the 19th the Oakland Eng. broke down and was replaced by Eng. Co. 31 of S.F.D. About 3 A.M. run second line from Eng. south on Dupont St. but later was

3
S. F. FIRE DEPARTMENT
Eng. CO. No. 20
San Francisco, 1906

driven out by fire. About 9th A.M. on the morning of the 19th Act. Chief Dougherty gave order to go Van Ness Ave. on arriving at Kearny and Port, and finding the fire had not crossed to Kearnyworth St. connected Eng. to hydrant at Port and Kearnyworth and drew plenty water. lead off two streams and worked for some time when we ordered to Van Ness Ave and Port St. on the account of dynamiting at Sutter near Pacific Dock hydrant at Port and Van Ness Ave and lead line down Port St. below Tube and worked until water gave out. and the boiler became full too Eng. to Gough & Park and washed out boiler. later took position at Green and Franklin and received water from Eng. Co. 3 at Gough and Green St. and worked from that position from the night of 19th until the evening of 20th along Van Ness Ave from Broadway to Filbert at 5th P.M. on the evening of the 20th the water gave out.

4
S. F. FIRE DEPARTMENT
Eng. CO. No. 20
San Francisco, 1906

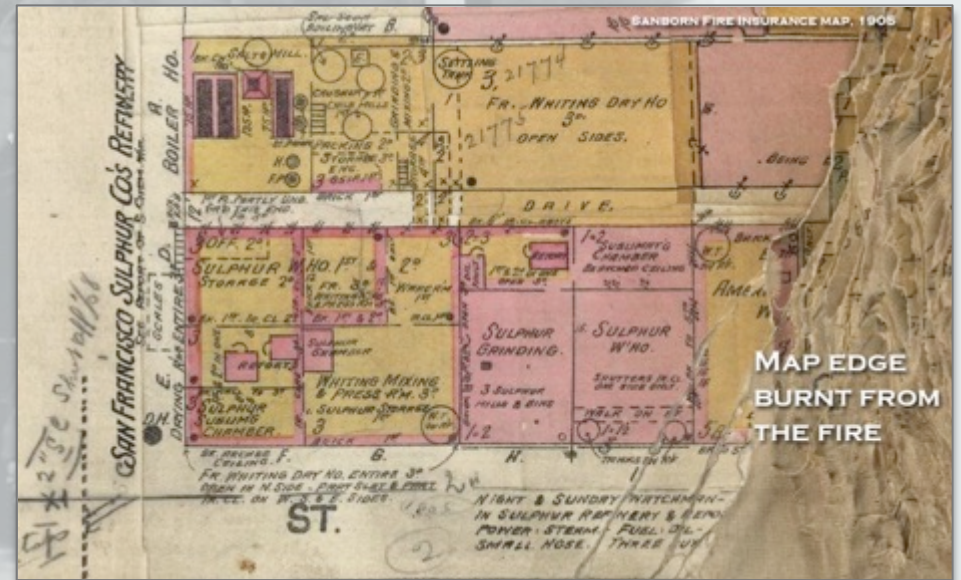
Received orders to go to Port & Mason and connect line to Government tug and worked until the morning of the 21st ^{having the fire engine get on} returned to quarters at 12 P.M. on the 21st of April.

Respectfully Submitted
J.C. Mitchell Capt.
Eng. Co. 20

Creating the Story Map

Sources & Credits

- Gayle A. Simons – Aunt, Genealogist
- Kenneth R. Lajole – Genealogist
- David Rumsey Map Collection
 - The Chevalier Map
 - Sanborn-Perris Fire Insurance Maps
- The Bancroft Library
 - 1906 SF Earthquake & Fire Digital Collection
- Guardians of the City



4

Urban Tree Canopy in the Nation's Capital Earl Eutsler, Urban Forestry Institute, Washington DC



<http://dcgis.maps.arcgis.com/apps/MapJournal/index.html?appid=0336fad670cb42ba8b894d57a827ecc3&webmap=c11b41d656894147a35e059a9d0774ff>



Wrapup



My quick reactions

**Tell
YOUR
Story!**



Questions and Discussion



Thank You!

Thank You!

- Please fill out the session survey in your mobile app
- Select [enter session title here] in the Mobile App
 - Use the Search Feature to quickly find this title
- Click “Technical Workshop Survey”
- Answer a few short questions and enter any comments

