



**Case Study:
GIS Analysts Earn Web
Development Chops**



CAPE COD
COMMISSION

Chase Gruber & Shawn Goulet

**Esri Developer Summit |
February 2015**



What is the situation?

The **traditional solutions** for wastewater treatment (sewer treatment systems) are **EXPENSIVE** and funding them often polarizes groups.

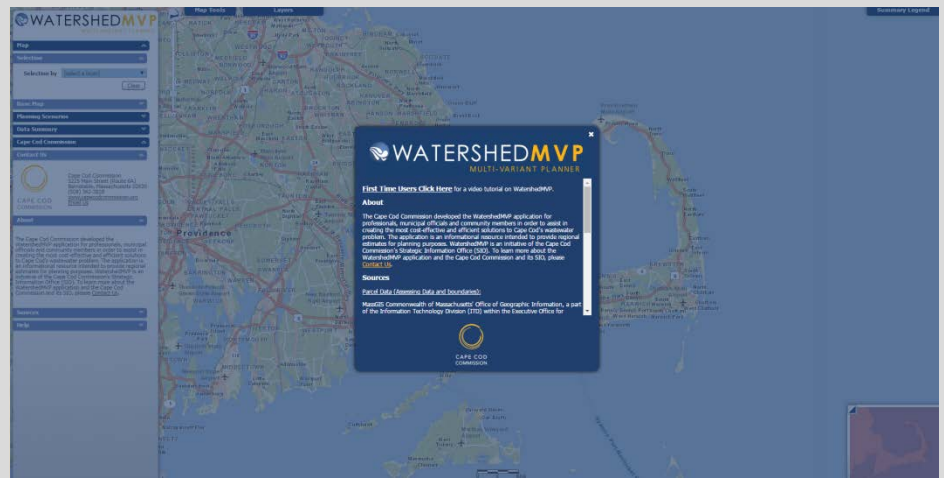
Stemming from Conservation Law Foundation (CLF) lawsuits filed in 2010 and 2011, a settlement was reached in 2014 for more stringent monitoring of Barnstable County's Area-wide Water Quality Plan per Clean Water Act **§ 208 Plan**.

Under the settlement, the EPA and the Commonwealth of Massachusetts have worked with the Cape Cod Commission to **update the Area-wide Plan** by September 2015.

The Cape Cod Commission is committed to produce an **effective, affordable and implementable updated 208 Plan** to address the problem of nitrogen loading to Barnstable County's embayments.

208 Tools

The arrangement of **DATA** and development of **INNOVATIVE WEB TOOLS** to analyze water quality and wastewater technologies, creating the framework for designing responsible watershed plans.



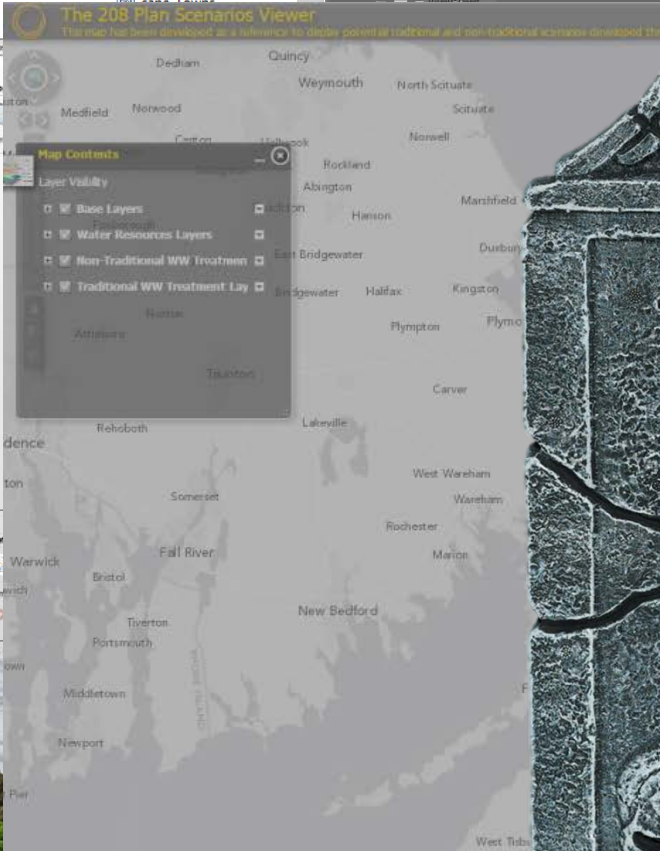
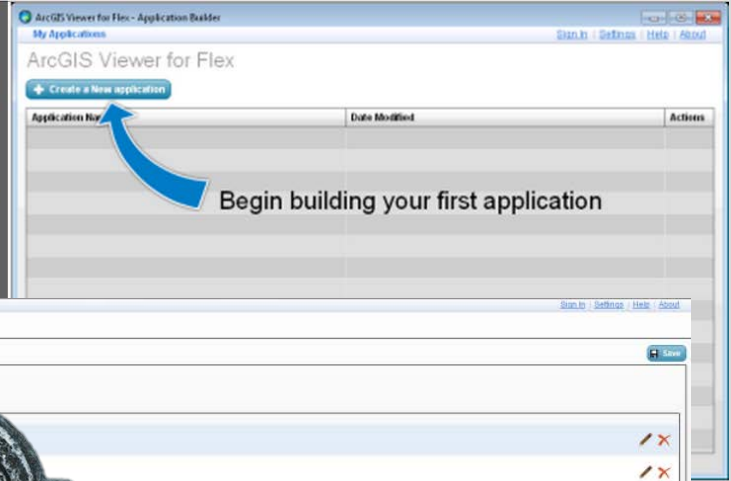
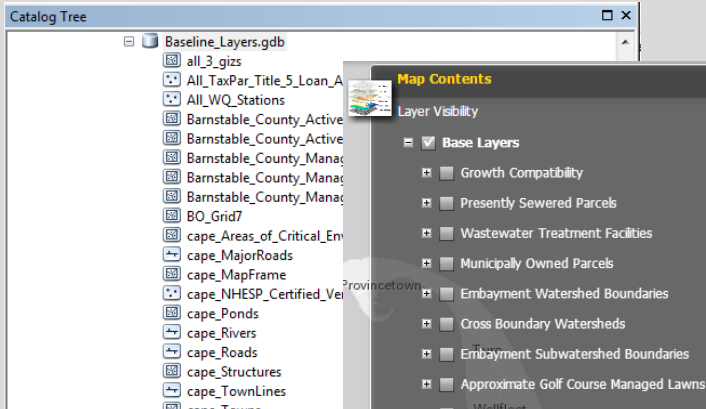
Geospatial approach to encourage regional solutions to a regional problem



208 Viewer v1

Application Builder

The application builder makes it easy to create web mapping



**THIS IS COOL & ALL, BUT
WHAT'S COOLER THAN
BEING COOL?**

ICE COLD



208 Viewer v2

DRAFT 208 MAP VIEWER

ABOUT US

Cape Cod Commission
3225 Main Street (Route 6A)
Barnstable, Massachusetts 02630
(508) 362-3000
www.cape-cod.commission.org
Contact Us

Overview Map

Search by Address

Cape-wide Datalayers

Embayment Watershed(s)

Switch Basemap

Atlantic Ocean

Brockton

Plymouth

Taunton

Fall River

New Bedford

Falmouth

Barnstable

Nantucket

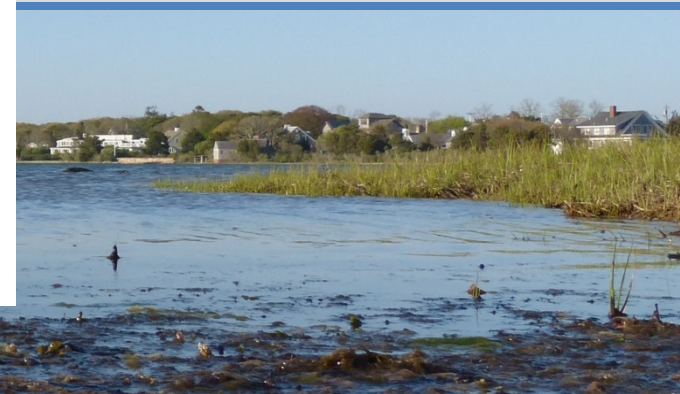
Esri



208 Viewer v3

The page at 208.capecodcommission.org says:
You cannot view more than three scenarios.
OK

```
var x = $(this).find("x").text();  
var y = $(this).find("y").text();  
  
xList.push(x);  
yList.push(y);  
  
var point = [parseInt(x), parseInt(y)];  
nodes.push(point);  
});  
rings.push(nodes);  
var geo = { rings: rings, spatialReference: sr };  
  
if (treatmentType == "CentralizedFacilityOutside") { //navy  
    var popupVal = "Centralized Sewer Facility (outside watershed)";
```



208 Viewer vCurrent

LIVE DEMO
(208.CCC)



208 Viewer vFuture

- Migrate code to a PHP enabled server
- Using PHP to connect the application to SQL databases (removing need of XML document creation)
- Integration of the WIN Model within the Viewer
- Continue to learn how to code!





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flickr/marcdiluzio