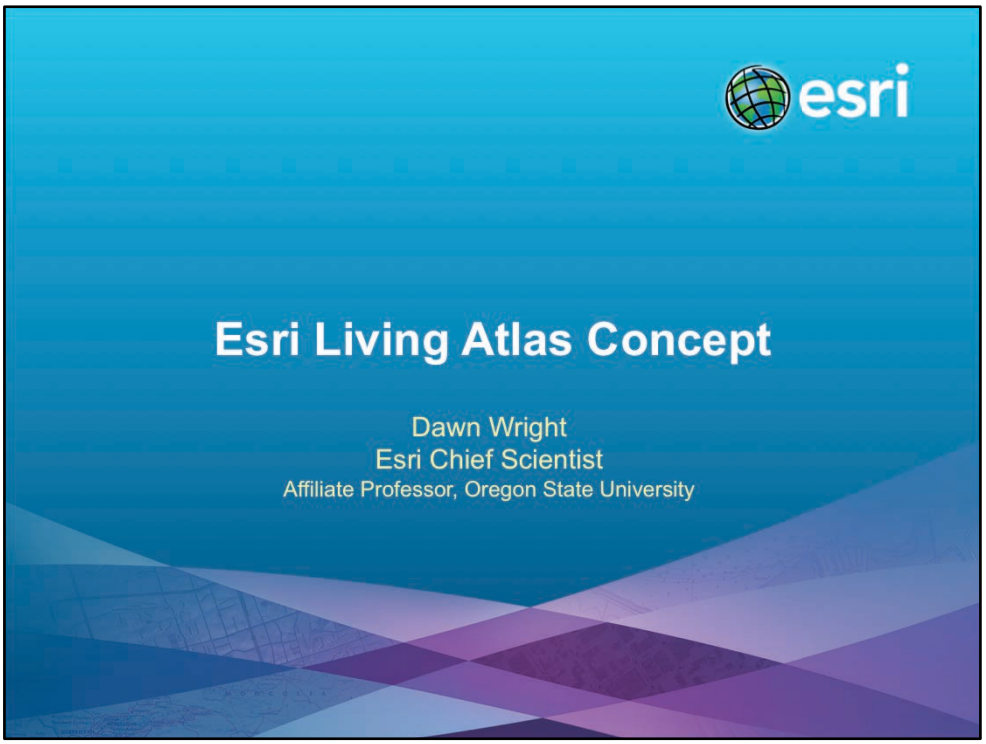
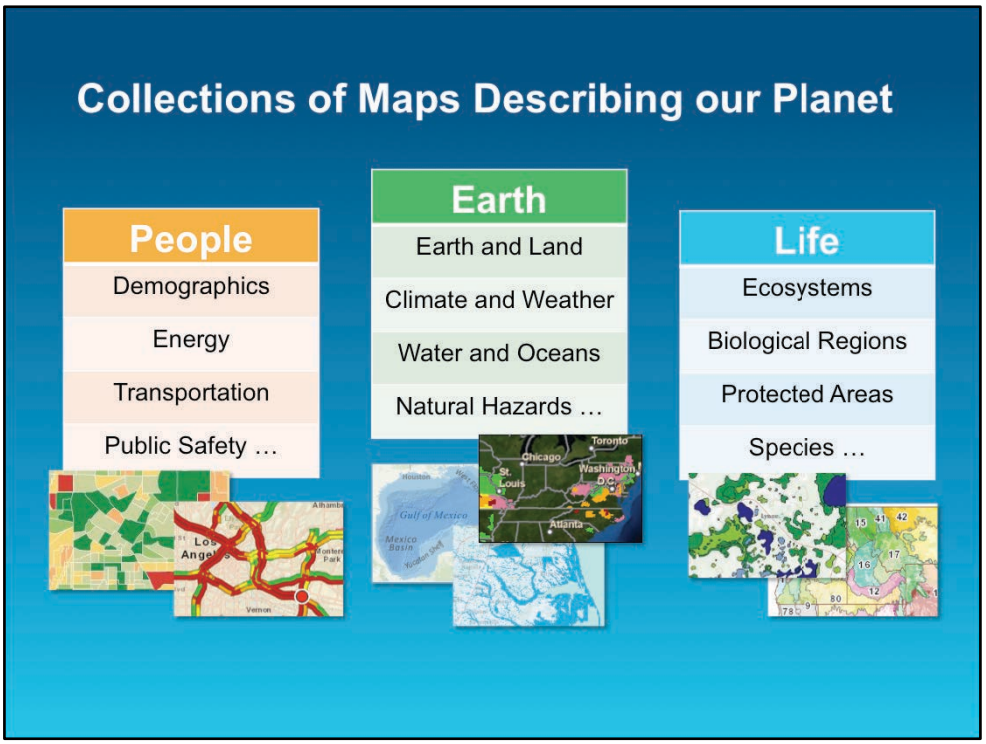
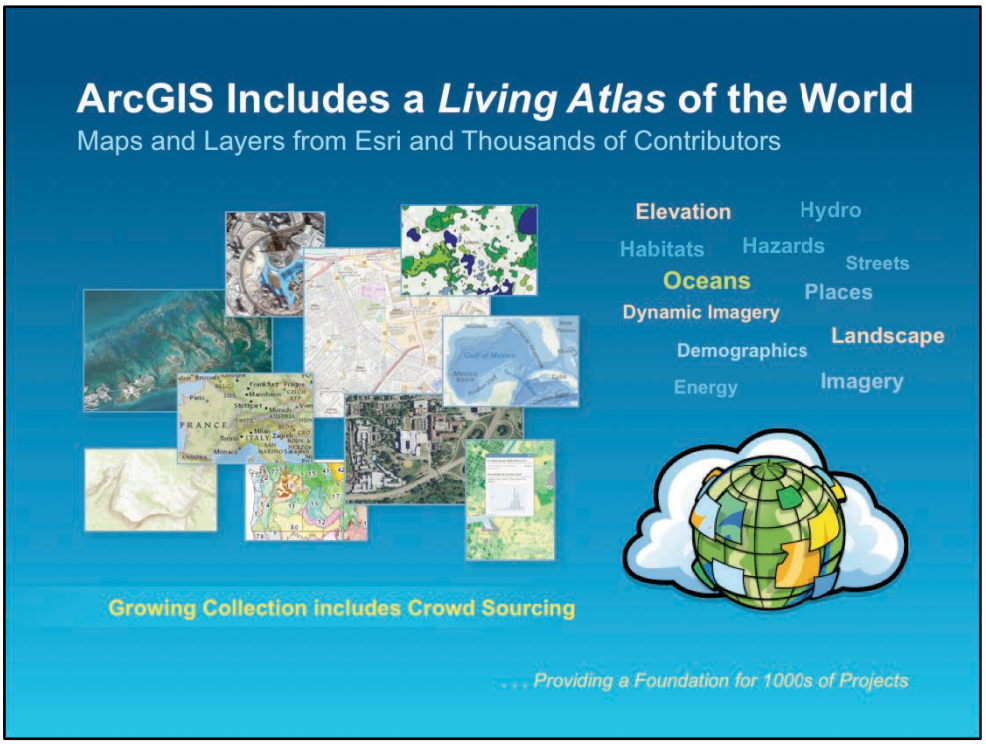


Esri is introducing the concept of a living atlas, which I wanted to take the time to share with ICAN, given that “atlas” is in the name and concept. This is actually something that will not compete with ICAN, but rather is something ICAN can participate in to either leverage their atlas holdings to a much broader audience. Or if an ICAN member does not yet have a fully functioning atlas, this might be considered as an infrastructure that they can use to quickly and effectively create an atlas.



Over the last few years, Esri and our users have been actively assembling and sharing a rich collection of geospatial content and is publishing this through our cloud platform—ArcGIS Online. Today, this represents one million items of geospatial data, including imagery, basemaps, and map layers on hundreds of topics such as demographics, boundaries, elevation, soils, and climate. This content is organized under 3 major these for describing the planet: People, Earth, and Life. These maps and layers are published by Esri itself and thousands of other organizations around the world. Increasingly, the information published in these maps is dynamic, with many of our users now sharing their transactional information as live maps (e.g., parcel updates are being made available as web map services). In addition, a new class of real-time services, including traffic, weather, earthquakes, stream flows, and others are being made available by both our users and partners. -



Conceptually, this collection of maps and layers represent a large and growing atlas of the world, which is being actively compiled and curated by Esri and countless other GIS professionals. Like a traditional atlas, this online collection includes both reference maps and thematic maps on many topics. Unlike a traditional atlas, this collection of maps and layers is continually growing and evolving as new maps are added and existing maps are updated every day. These maps and layers are "ready-to-use" in a wide variety of GIS applications as well as apps of all kinds. This geospatial content as well as many GIS tools are readily available for developers to use in building apps easily. As a result, this online platform is now serving billions of maps per month and rapidly growing in the variety of maps that are available and applications that use them. Esri intends to continue building and curating the maps in this “living atlas of the world” and invites our users and partners to work with us on this community effort.

ArcGIS as a living atlas features a well-organized collection of maps, data, apps freely accessible through ArcGIS.com ArcGIS.com with premium content and web-based analytical functions available by subscription.

ArcGIS as a Living Atlas:

Best available maps from authoritative sources.

ArcGIS as a Living Atlas:

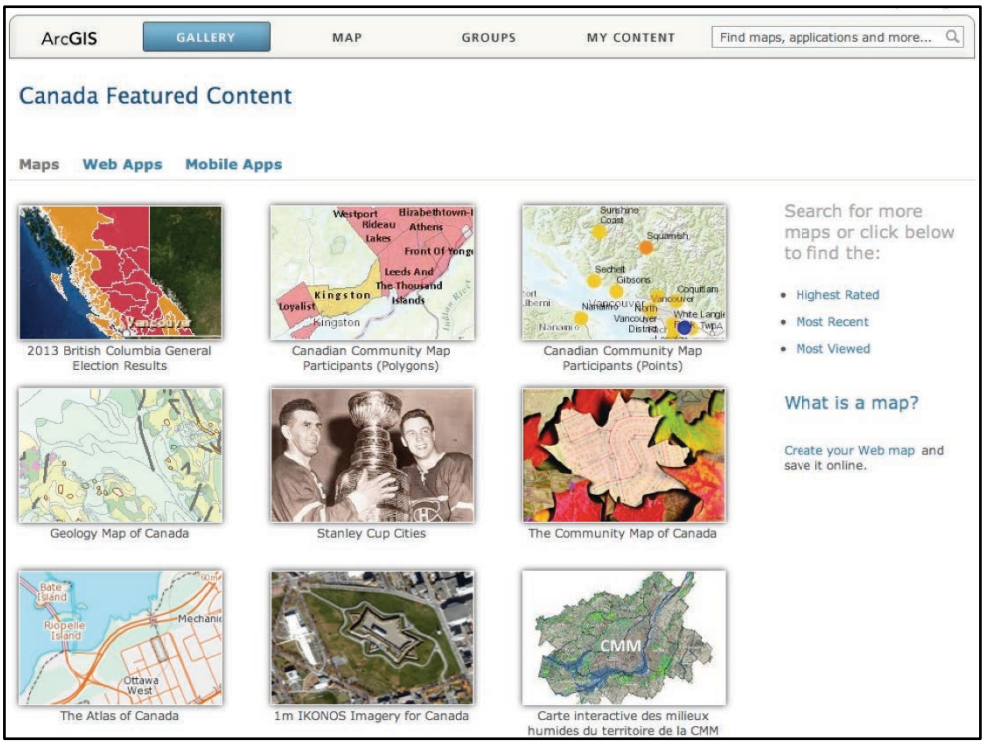
Curated by Esri and a global community of participants.

ArcGIS as a Living Atlas:

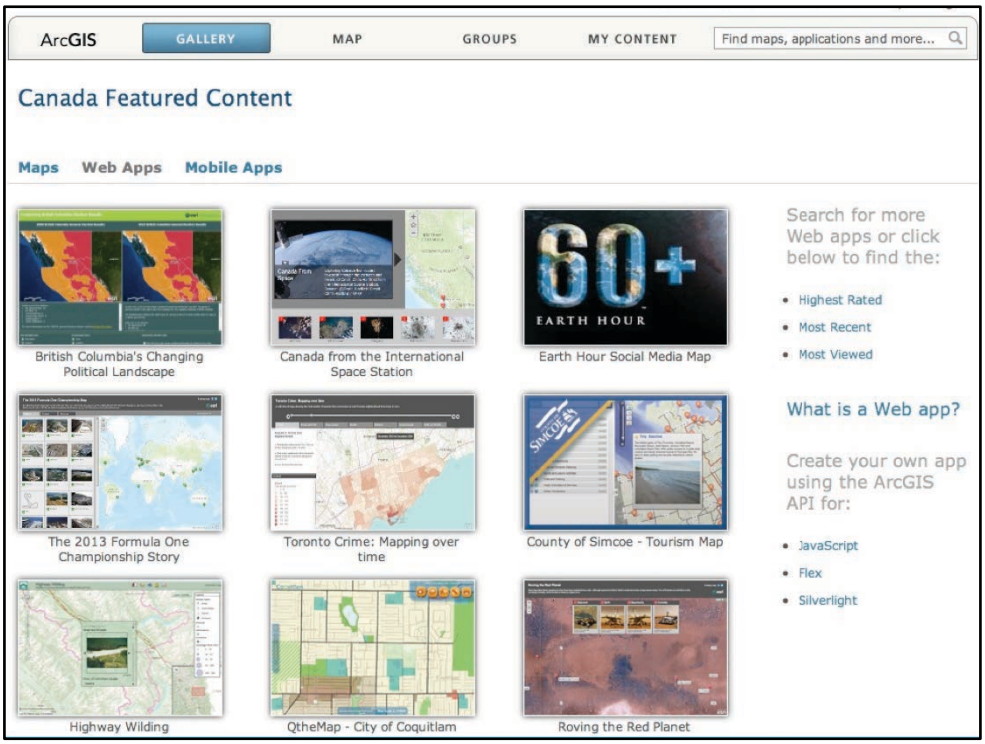
Continuously growing, evolving, and updating.

ArcGIS as a Living Atlas:

Freely accessible at ArcGIS.com + more content available by subscription.



Examples of maps, web applications (i.e., web sites with analytical functions or advanced cartographic functions), and mobile apps that can be downloaded to your phone or tablet.

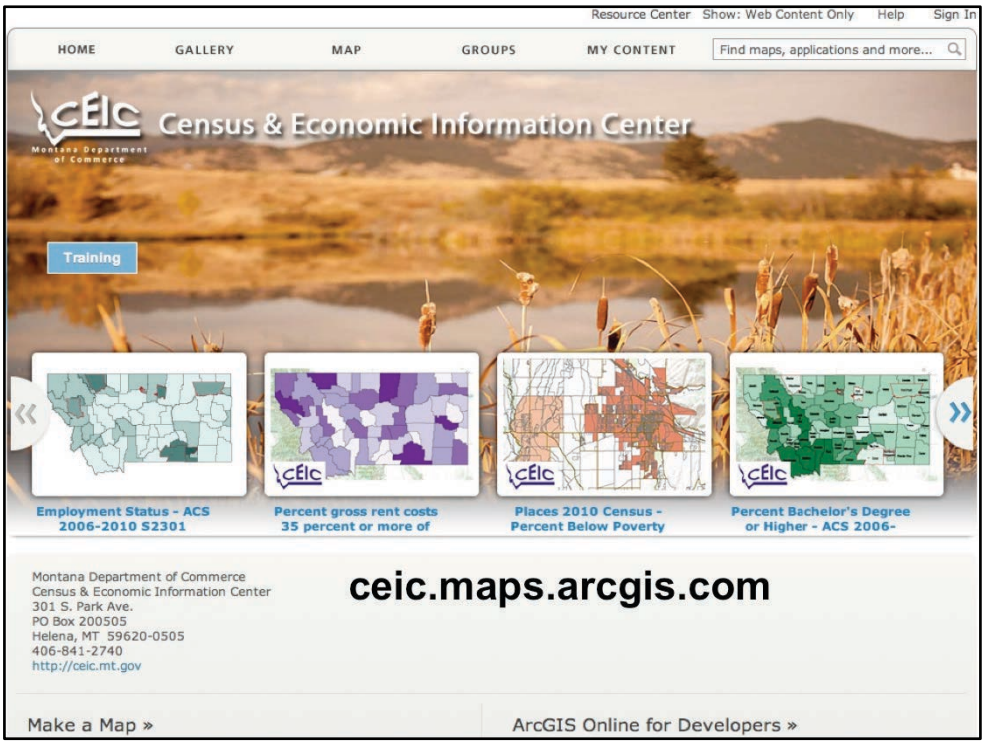

ArcGIS
GALLERY
MAP
GROUPS
MY CONTENT
Find maps, applications and more...
Canada Featured Content
Maps
Web Apps
Mobile Apps
British Columbia's Changing Political Landscape
Canada from the International Space Station
60+
EARTH HOUR
Earth Hour Social Media Map
Search for more Web apps or click below to find the:
Highest Rated
Most Recent
Most Viewed
The 2013 Formula One Championship Story
Toronto Crime: Mapping over time
County of Simcoe - Tourism Map
What is a Web app?
Create your own app using the ArcGIS API for:
JavaScript
Flex
Silverlight
Highway Wilding
QtheMap - City of Coquitlam
Roving the Red Planet

ArcGIS
GALLERY
MAP
GROUPS
MY CONTENT
Find maps, applications and more...
Canada Featured Content
Maps
Web Apps
Mobile Apps
QuakeFeed iOS App
GeoMobile for ArcGIS
Banff Pothole Reporter
Search for more mobile apps or click below to find the:
Highest Rated
Most Recent
Most Viewed
REGINA
City of Regina CityApp
ArcGIS for iOS Application
ArcGIS for Windows Phone
What is a mobile app?
Create your own mobile app using the ArcGIS SDK for:
iOS
Mobile
Windows Phone
Android
BAO for iOS
ArcGIS for Android App
APOS Location Intelligence Playbook

Examples of ArcGIS Online for Organization sites, where users have taken customized ArcGIS Online to meet their needs of their own government agency, organization, institute, or university. The user has complete control and can store data, maps, and apps on Esri's cloud (where Esri provides all admin, backups, and security), or their own private clouds. **AGOL for Organizations essentially represents an "Atlas in a Box" because everything that is needed is there in a package for the user already. Just add data and stir.**

wadnr.maps.arcgis.com

coagis.maps.arcgis.com

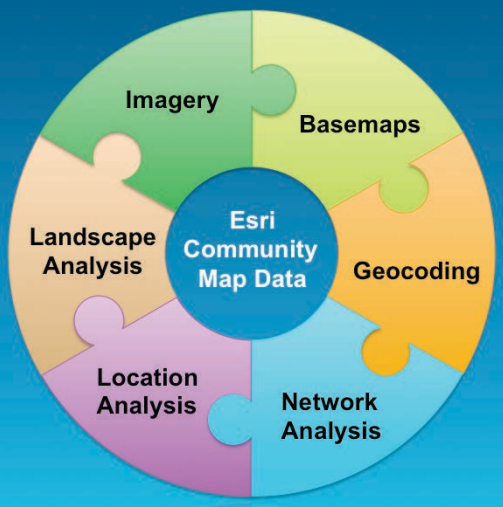


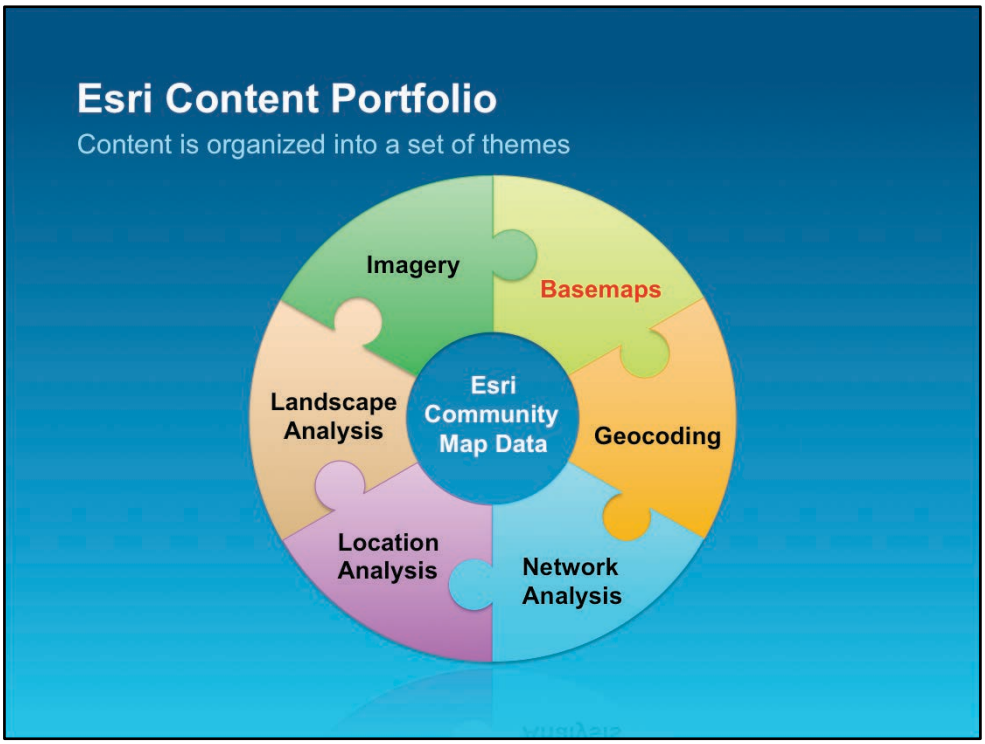
Ceic.maps.arcgis.com

The content available in the ArcGIS system is provided by Esri (with support from its partners) and the ArcGIS user community.

Esri Content Portfolio

Content is organized into a set of themes

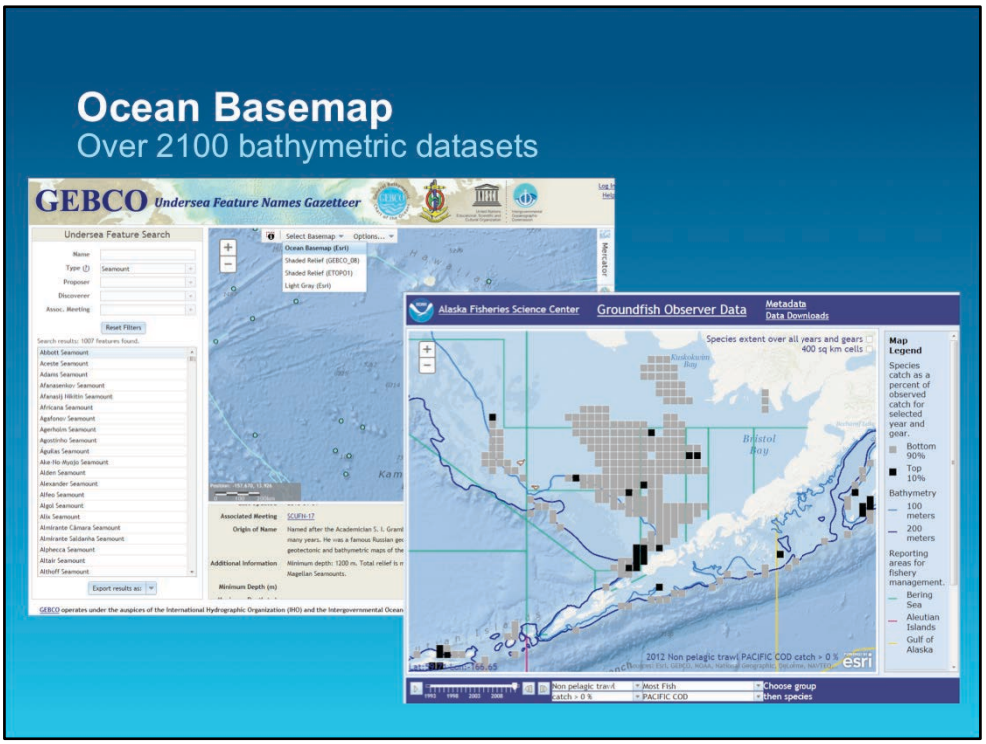



Esri Content Portfolio
Content is organized into a set of themes
Imagery
Basemaps
Landscape Analysis
Esri Community Map Data
Geocoding
Location Analysis
Network Analysis

Basemaps

Suite of basemaps to support web maps and applications

Reference and Foundation Maps for a Living Atlas



One of our biggest contributors to the Ocean Basemap is NOAA, which contributed bathymetric data as for all US coastal areas, as DEMs. This allows us to get zoom coverage down to 1:72K. They also contributed bathy data as bathymetric attributed grids (BAG), and for these select areas we are able to get zoom coverage down to 1:9K, but coverage is limited. We've included all of these data, and continue to update with NOAA data as more grids become available.

The basemap is used widely across the NOAA organization, as the basemap backdrop (lower right). The upper left example is a NOAA/GEBCO site that is responsible for the global gazetteer of undersea feature names. It's also a 'door opener' for the parts of the organization that are using open source.

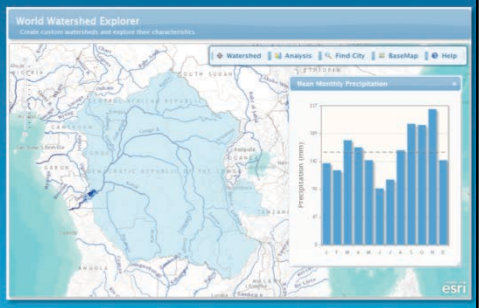
Here are some more examples of the Ocean Basemap in Use.

- NOS NCCOS Bio Geo program Story map on mapping coral reefs .. http://maps.coastalscience.noaa.gov/storymap/storymap.html?story=mappingsummaryreport
- NROC, Northeast Regional Data Portal http://northeastoceanviewer.org/
- NOAA / BOEM MarineCadastre.gov http://csc.noaa.gov/mmcviewer/
- NOS CSC ENOW (Economic Application) http://www.geoplatform.noaa.gov/home/webmap/viewer.html?webmap=89c9a6c716c04543935ee8097163901c

In the spirit of crowdsourcing/VGI of authoritative content from the community that Esri then hosts free in the cloud and for which you **retain ownership** and for which you are **acknowledged.**

Community Maps Program - Analysis

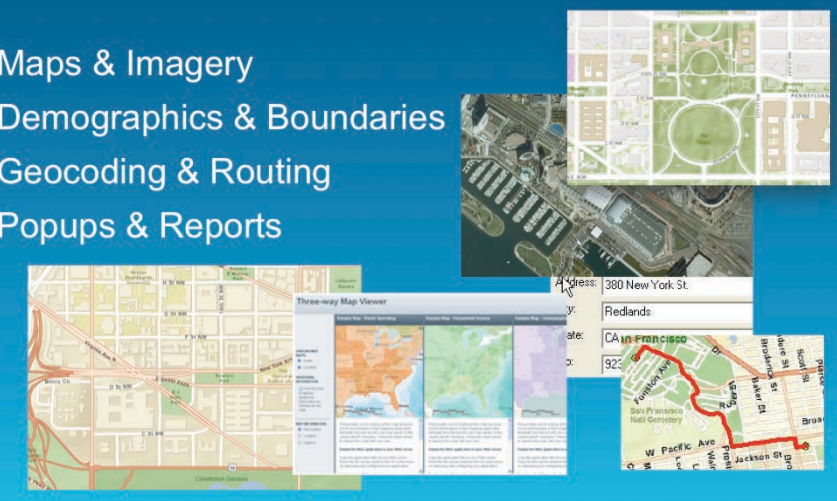
- Current analysis services
  - Geocoding
  - Routing
  - Service area
- *New analysis services*
  - Flow Direction
  - Flow Accumulation
  - Synthetic Steam Network
  - *Watershed Delineation*
  - *Upstream/Downstream Tracing*
  - *Descriptive Statistics*
  - *More …*

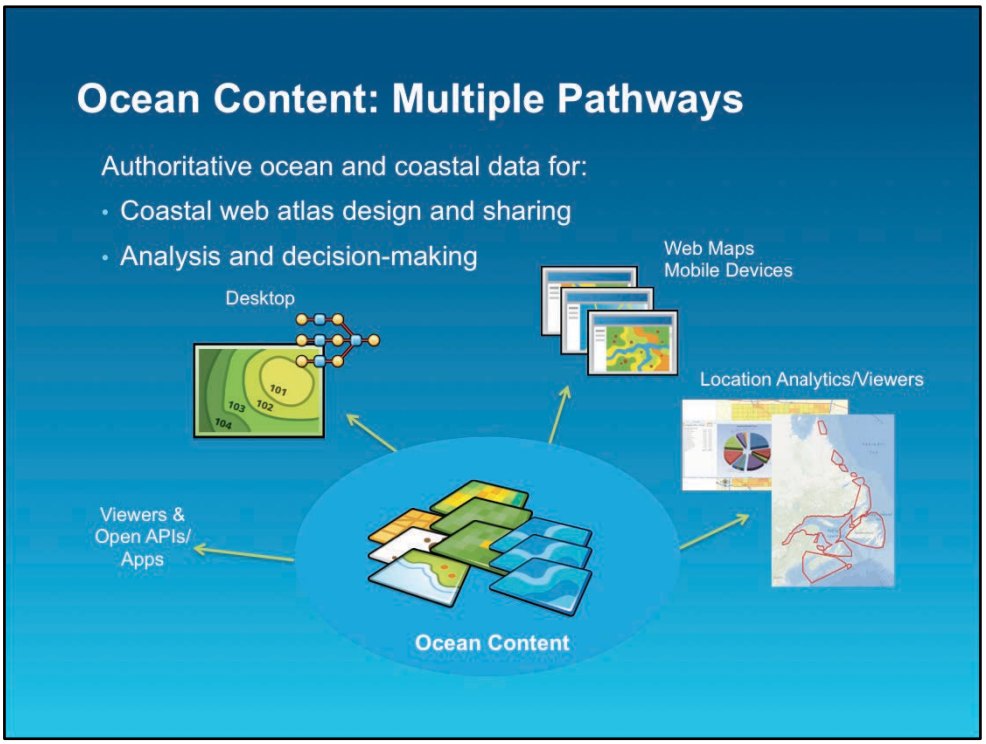


Broader Esri Content

A collection of ready-to-use maps, data layers, and tools

- Maps & Imagery
- Demographics & Boundaries
- Geocoding & Routing
- Popups & Reports

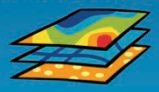




A modest proposal: With existing CWAs, with all the effort that has gone into them, leverage your most popular layers even FURTHER by mirroring or publishing in ArcGIS Online to expose your data and your atlas to a broader community of users. The idea is to drive new users from ArcGIS Online BACK to your site. Or for those just starting with CWA development, consider ArcGIS Online for Organizations (which may be available for free or extremely low cost if your university or agency already has an Esri site license.

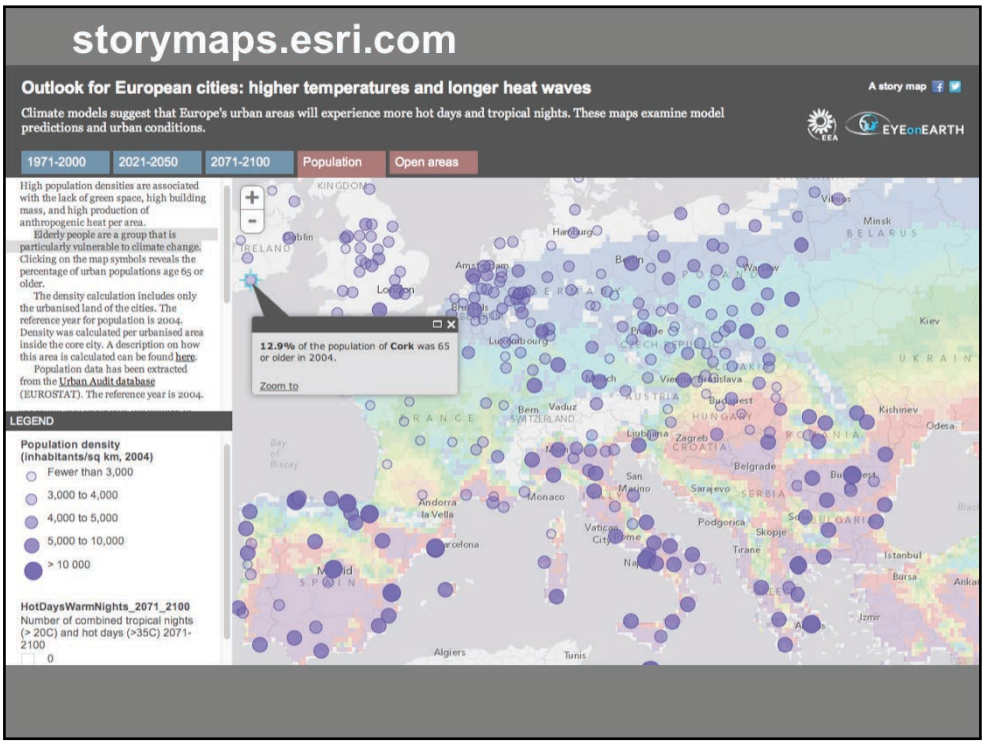
Example Themes and Layers

1. Physical Oceanography
   (currents, temp, weather and sea-state, etc.)
2. Biological
   (species, animal tracks, benthic habitat, marine protected areas)
3. Risk Assessment / Planning
   (resilience, vulnerability, coastal/ocean health index)



4. Political / Cultural
   (political boundaries and admin, historically important places)
5. Economic
   (navigation, transportation, fisheries, aquaculture, hazards, etc.)

Some in the coastal web atlas community are interested in leveraging open source code and solutions along with Esri technology, so these resources should be of great help.



Story maps are open-source apps that combine coastal web atlas content with multimedia content to tell geography-based stories about coastal issues. Story map apps provide a framework and user experience that accommodate various forms of storytelling. For instance, the “Swipe” app enables users to easily compare two related thematic maps or images by moving a swipe tool back and forth across the screen. The “Map Tour” app presents a series of geo-tagged photographs together with an interactive map, facilitating place-based narratives such as walking tours.

Esri publishes a continuing series of story maps on a variety of topics at storymaps.esri.com. Some of these stories provide examples of how storytelling apps can be used; other, custom-produced stories serve as test beds that often lead to development of new apps. The site includes a gallery of storytelling apps or templates, and a showcase for story maps produced by a rapidly-growing community of storytellers. Perusing this gallery is a great way to get ideas about how to use and adapt storytelling apps for a variety of uses.

Story map apps are also available via the storymaps.esri.com template gallery and GitHub. This site offers a repository of source code for the story map templates. Users can download an app and host it on their own server or that of a third-party provider. At the moment, the

One can go from a story map to a story ATLAS, to accommodate much more content than can be contained in a single web page or series of web pages. One can also publish an e-book (the reverse of going from a hardcopy atlas to a coastal web atlas: going from a coastal web-atlas to an e-book, or back to hardcopy if desired). One example is an iBook.

What is an iBook ?
iBook is an iOS (iPhone and iPad) application that can be used to view interactive books published using the iBook Author (A Mac only application that can be downloaded for free on the Mac App store). iBooks can have interactive elements like gallery of images, videos, reviews, 3D models and any kind of HTML5 widget embedded.

Why did we use an iBook for this particular atlas of Mexico as an example?
We had this amazing data about Mexico along with lots of photos and information. Anything thats linear in the workflow like a impress or a presentation would have dampened the knowledge and hence we created an Atlas where people could move back and forth between the contents very easily. iBooks author was simple to use and had a lot of options to customize the way we wanted to show the data.

Thank You
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Twitter: @deepseadawn