



**IHO Stakeholders Forum**  
Session 4: GIS and WMS applications  
for hydrographic data

**Taunton, UK. Sep. 27, 2012**

# Hydrographic Data Beyond Charting

Rafael Ponce

Director Maritime Business Development



# An interconnected world



# Sharing

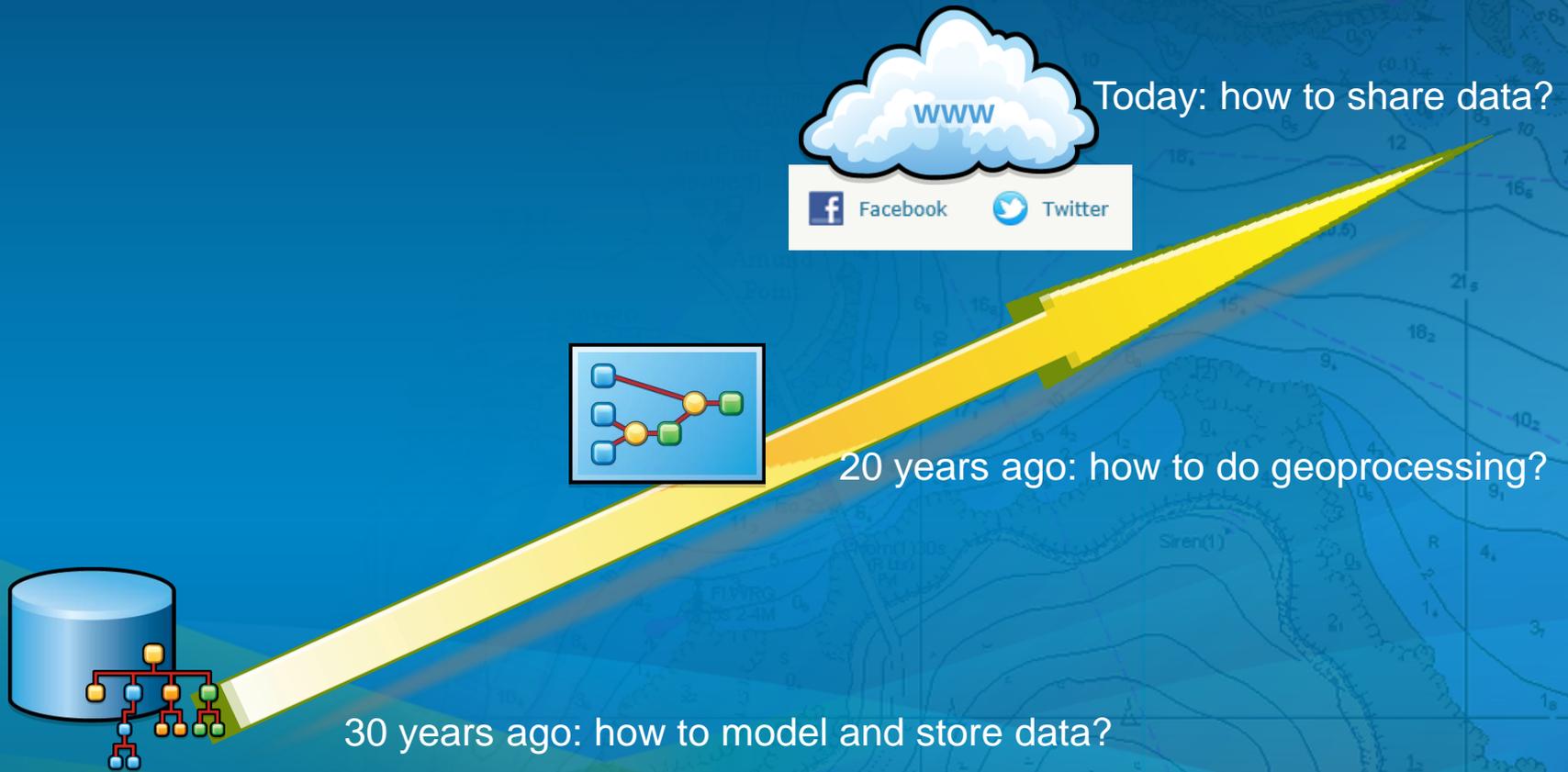
# The end of an era...



...And the beginning of another

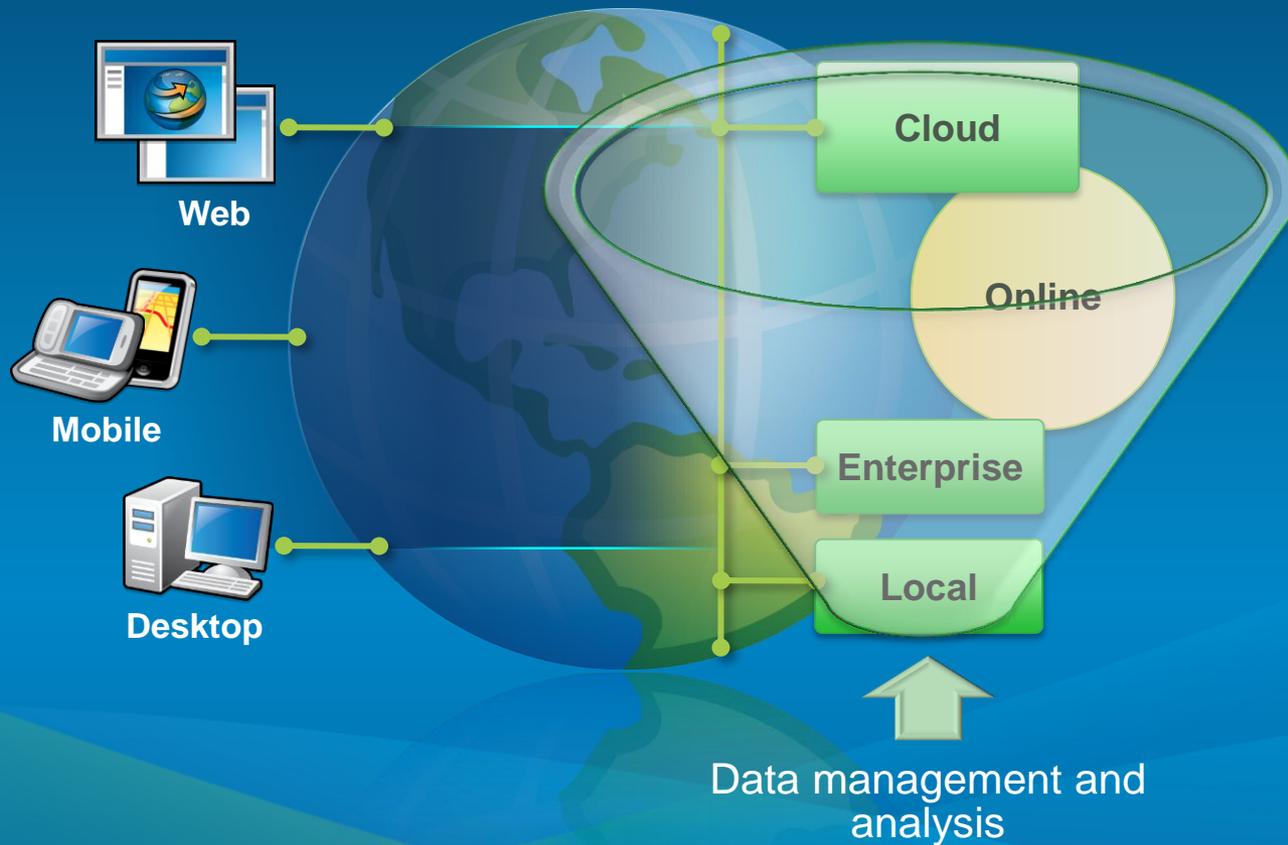


# GIS and its relevance



# GIS and its relevance

- Three main levels in a System for Geographic Information



# Geospatial data usage



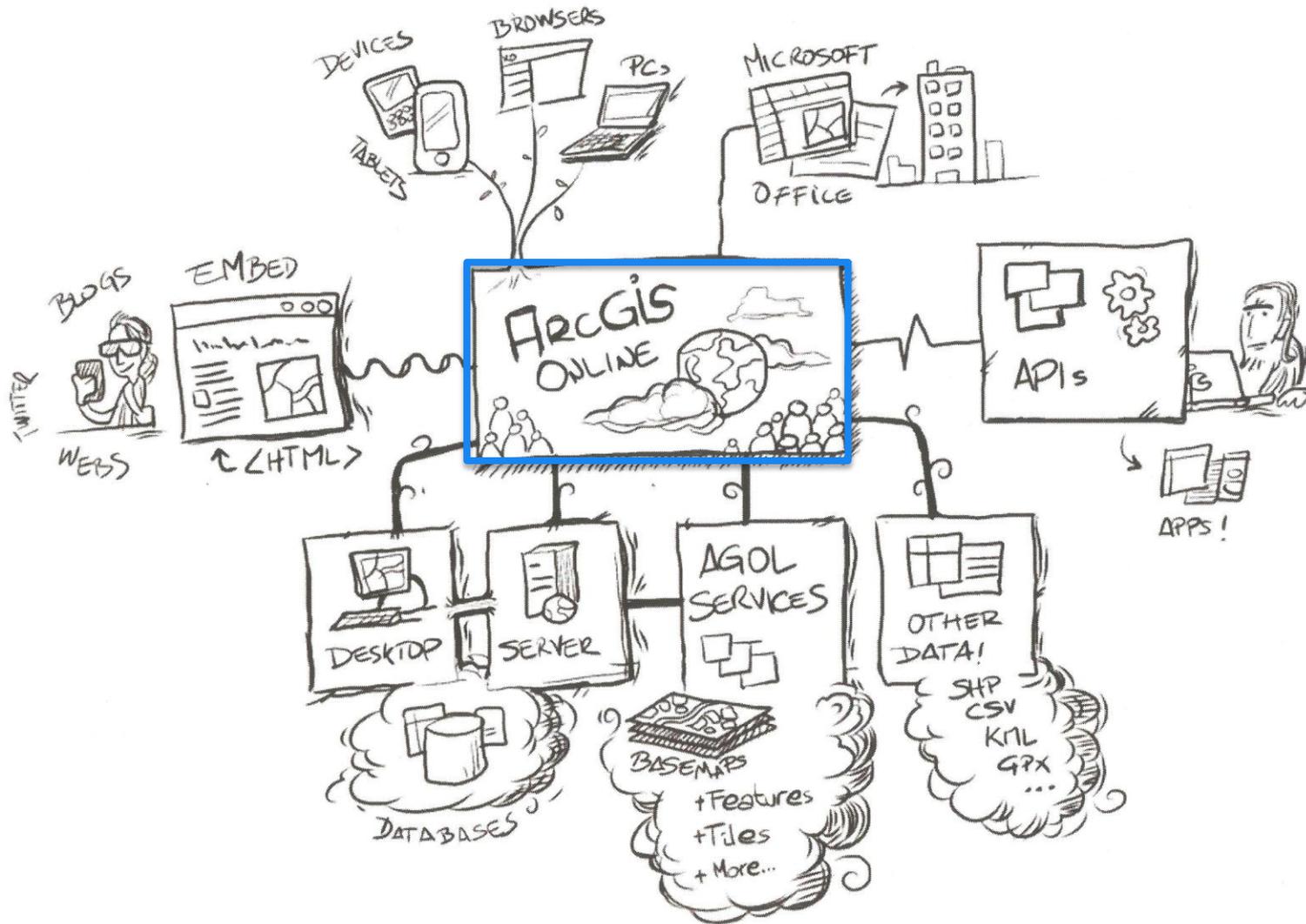
*...Make accessible information to everybody.*

# Democratizing Geospatial information

- Making GIS Accessible to Everyone



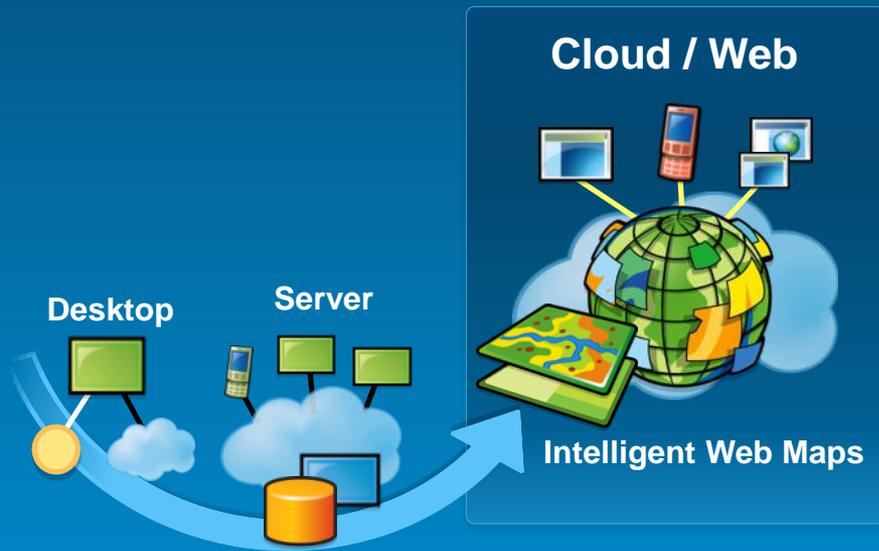
... Virtually Anywhere and on Any Device



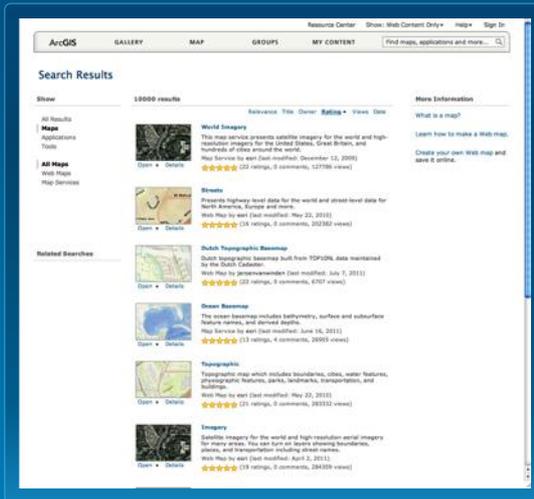
emphasizing the complete system - showing both geo-centric workflows and geo-enabled uses for everyone

# ArcGIS Online is a New GIS Pattern

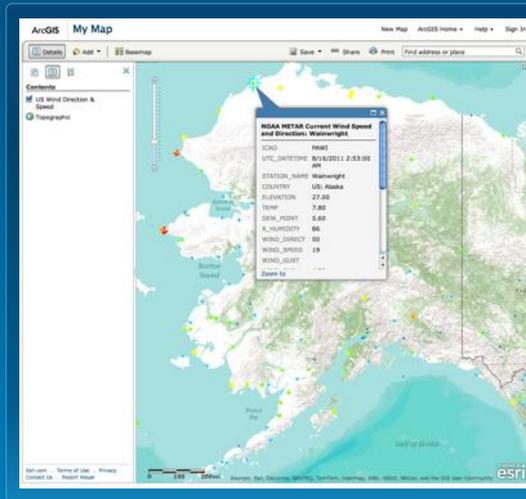
An open platform for maps and geographic information



# ArcGIS Online Provides the Capabilities to . . .



Organize and share authoritative content



Make it easy for anyone to make and use maps

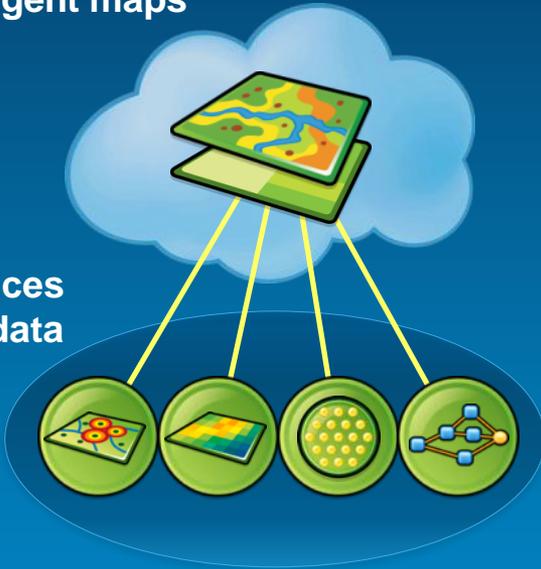


Leverage enterprise cloud computing (hosted & on-premises)

# Easy to Create and Share Intelligent Web Maps

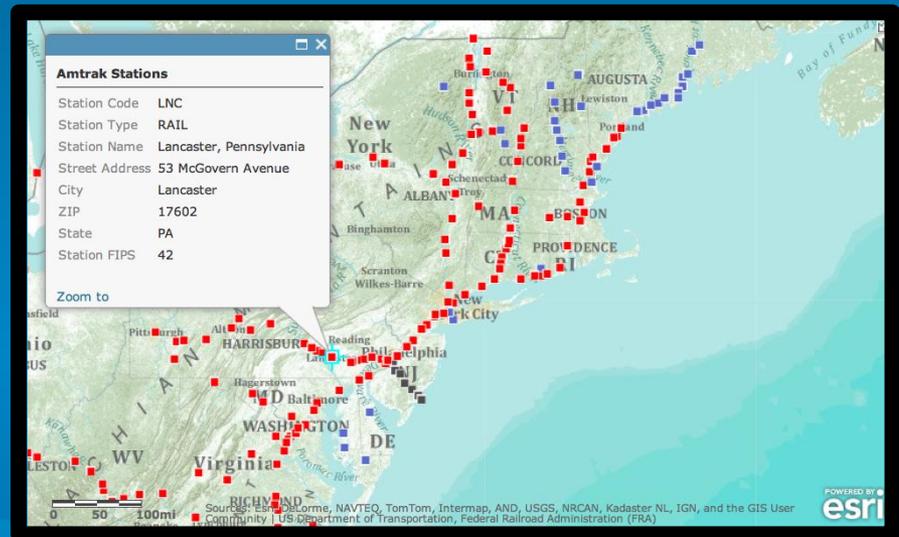
## Intelligent maps

Services  
and data



## Supporting

- Display
- Feature Editing
- Pop-ups
- Time

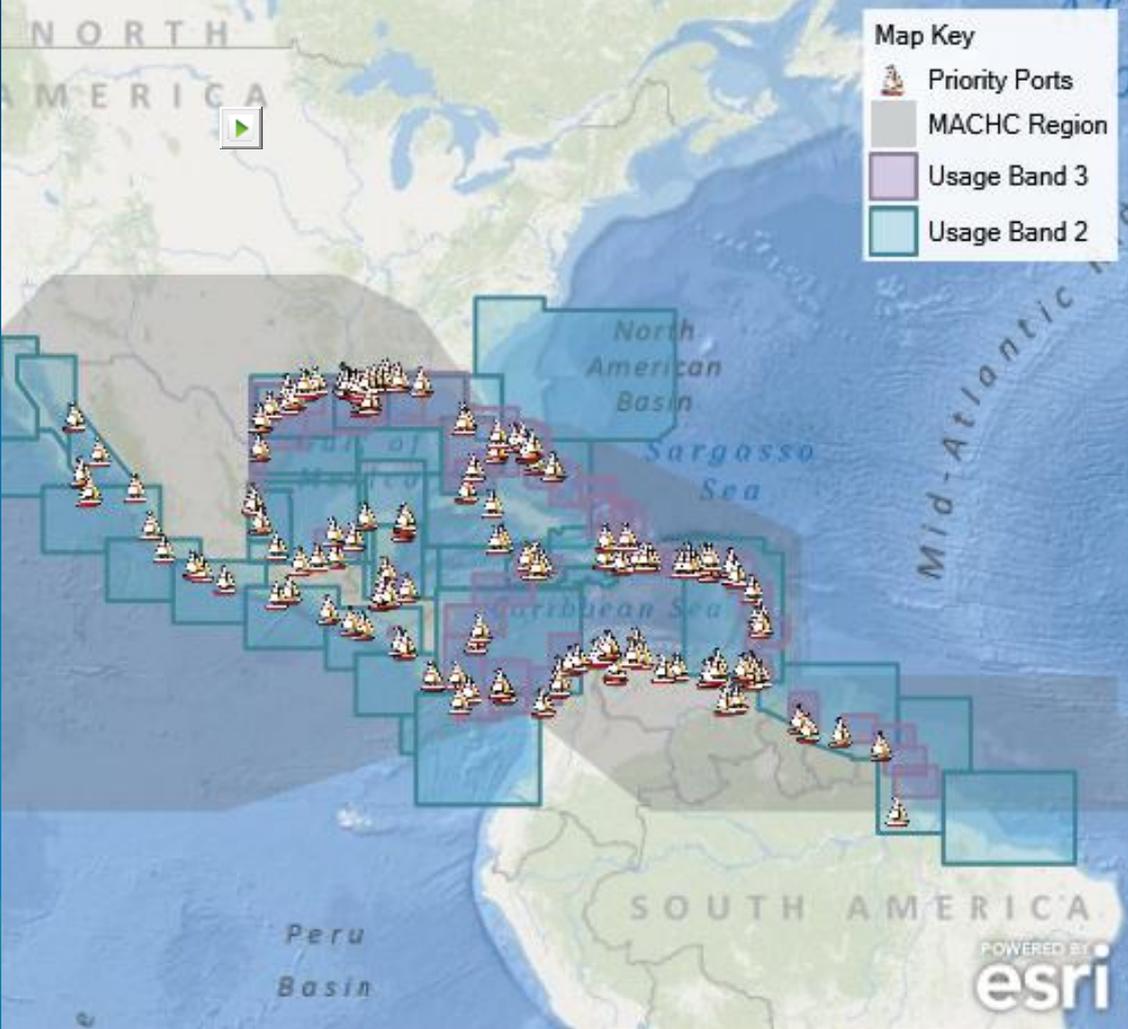


# Intelligent Web Maps Can Be Used Everywhere

Enhancing access and collaboration



# And everywhere



# ArcGIS Online Demo

Resource Center Show: All Content Help Sign In

ArcGIS GALLERY MAP GROUPS MY CONTENT Find maps, applications and more... Q

## ArcGIS Online

### Maps and Apps for Everyone

Easy online discovery, access, visualization, and dissemination of geospatial information.

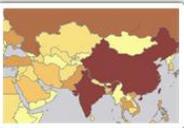
[VIEW NOW](#)



### Featured Maps



Seasonal Changes



Mobile Cell Subscriptions



Ocean Basemap

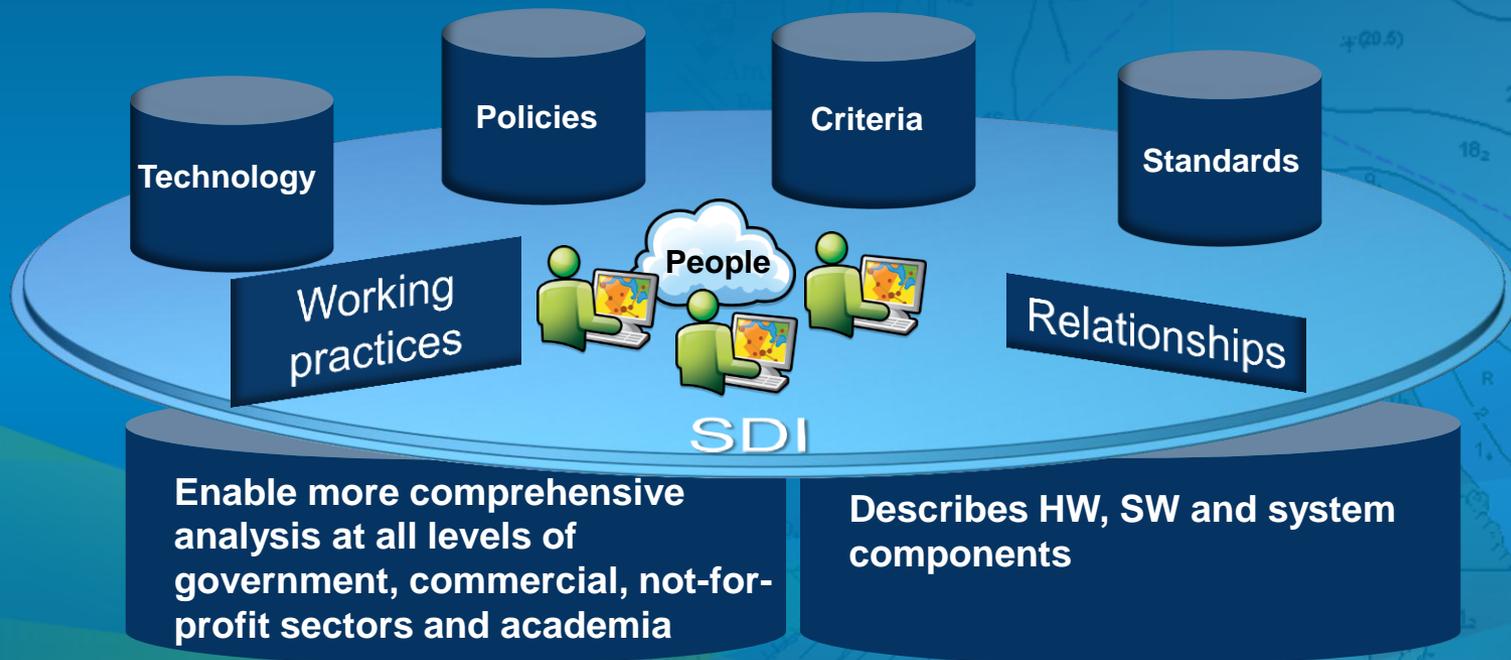


USA Federal Lands



# How to efficiently enable data sharing: SDI+Cloud

- SDI is “the relevant base collection of technologies, policies and institutional arrangements that facilitate the availability of and access to spatial data.” (Ref: Global Spatial Data Infrastructure Cookbook).



# Some challenges for the Hydrographic community

- **Data sharing**
  - Traditional navigational data being demanded by “non-traditional” users
  - Re-define what is an ENC and what would be just S-57 data
  - S-63 is a huge obstacle
- **Identifying user groups’ needs**
  - Prioritization from the bottom up
  - Supporting sustainable economic development
  - Thinking beyond navigation
- **Integrating into National and Regional SDIs**
  - Adapting to existing standards and exchange formats
  - OGC compliant



# esri

Thank you

[rponce@esri.com](mailto:rponce@esri.com)