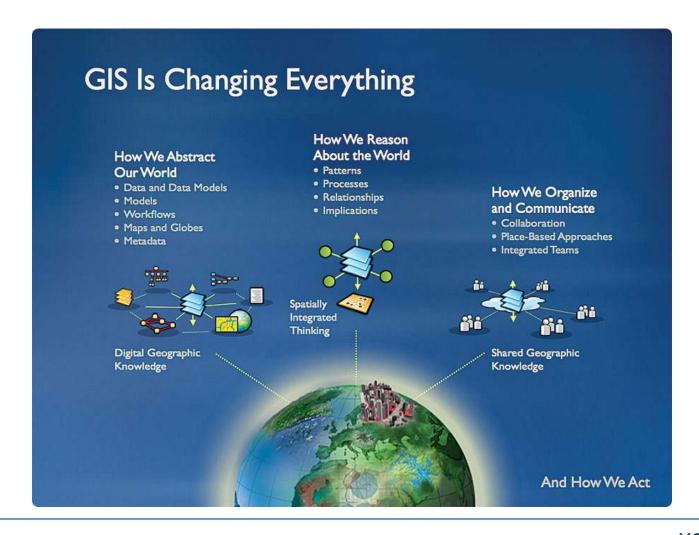


# GIS

Geospatial Information Science or Geographic Information Systems

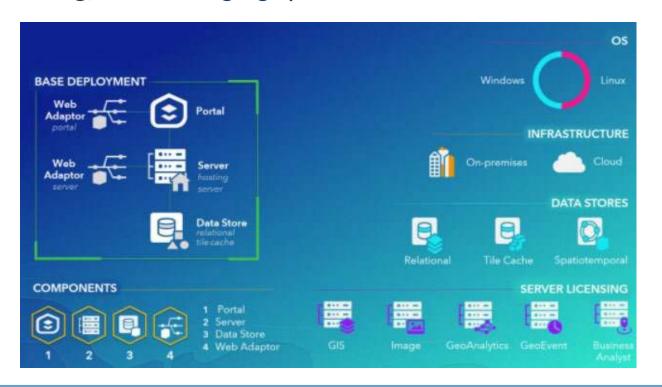
# WHAT IS GIS?





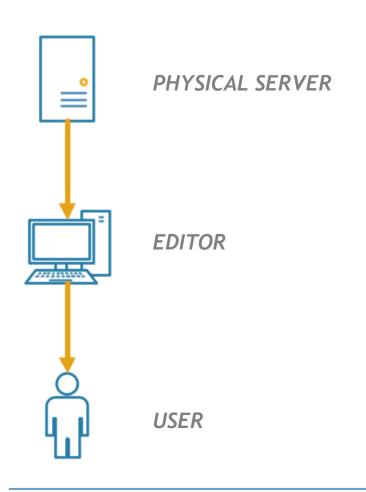
## WHAT IS GIS ENTERPRISE?

Is a complete software system developed by Environmental Systems Research Institute (ESRI) for all geospatial needs such as mapping and visualization, analyzing, discovering, processing, and managing spatial data.





## WHERE WE WERE



- Castaic Lake Water Agency
- Santa Clarita Water Division
- Newhall County Water
- Valencia Water Company

#### **Contractors/Consultants**



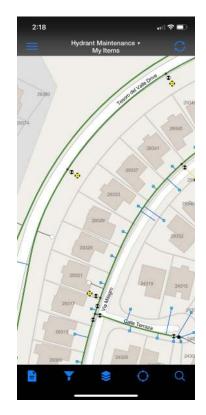


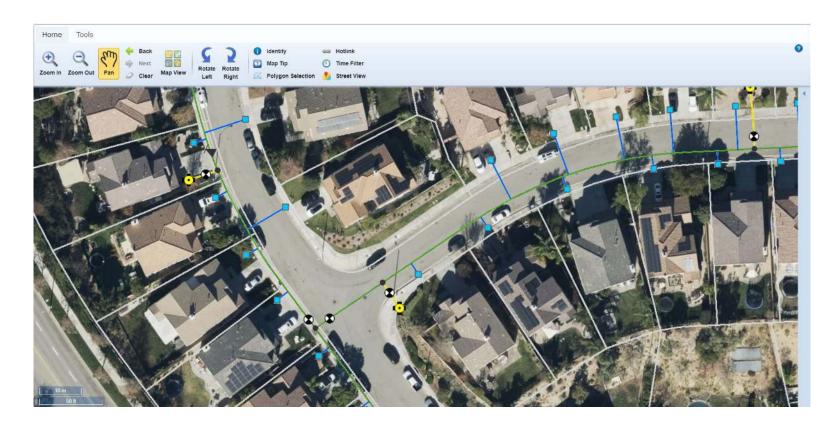




# WHERE WE ARE!









## WHERE WE ARE!



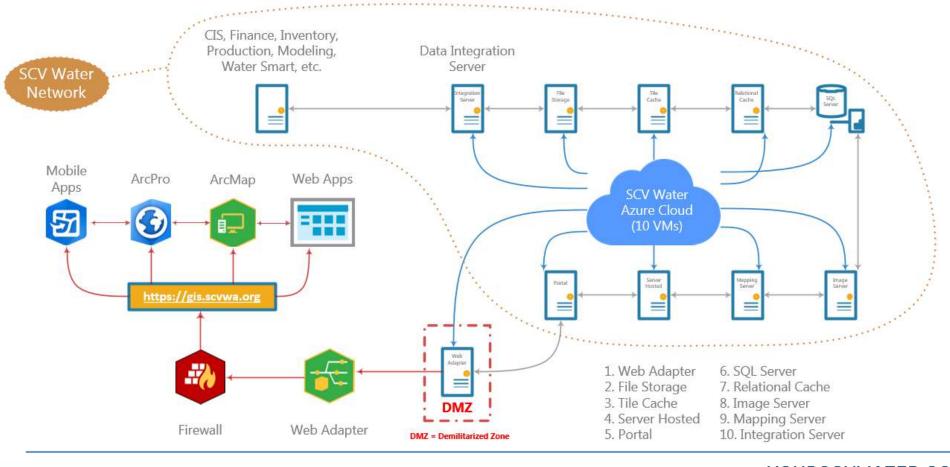
- 10 virtual machine (VM) servers
- VMs hosted inside Microsoft Azure Cloud
- Enterprise URL: <a href="https://gis.scvwa.org">https://gis.scvwa.org</a>
  - Internal Staff Maintained
- Advanced GIS Processing





# WHERE WE ARE!

## SCV Water GIS Enterprise Diagram



## BENEFITS OF ENTERPRISE

## **Desktop GIS**

- Communicates with Server and Online GIS through services via the Internet
- Data can be viewed created edited and maintained locally on hard drive or "as a service"

### Server GIS

- Communicates with Desktop, Mobile & Online GIS through services via the Internet
- Enables advanced data access & management workflows
- Integrates with Database Management Systems for curation, maintenance and archiving of data
- Cloud deployment enables
   elastic storage and consumption of data
- Field to Office to Product
- · Distributed Collaboration
- · Spatial Data Management
- Distributed Data Access
   Spatial Analysis
- Visualization & Cartography
  - Public Engagement

### **Enterprise GIS**

## Mobile GIS

- Communicates with Server,
   & Online GIS through services via the
  Internet to enable field data collection
- Data can be viewed created edited
   & stored for offline use
   "as a service" in the field

- Enhanced Security (part of the SCV Water Network)
- Data integration and communication
- System wide management
- Ease of data sharing between field and office via mobile devices
- Reduced Maintenance & Support Costs
- Internal Development & Support
- GPS/Survey record management

## **GIS Data**

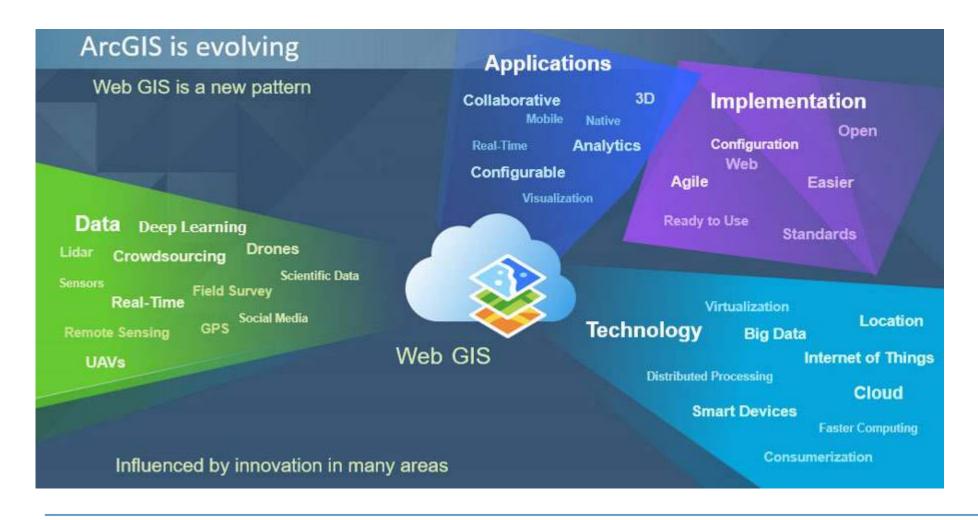
- Created and Utilized by Desktop, Mobile, Server and Online GIS via the Internet or locally (on device)
- Data Standards enable compatibility, collaboration and efficiency

## Online GIS

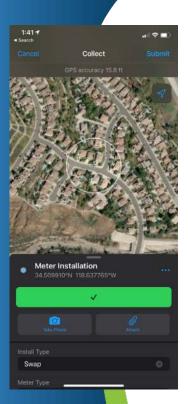
- Communicates with Server, Desktop & Mobile GIS through services via the Internet
- Provides access to data, services, web maps & web applications in the form of a web portal or website, enabled by the World Wide Web



## THE FUTURE AT SCV WATER







# THE FUTURE AT SCV WATER



## **Apps and Integrations**

- Foundation of Asset Management
- Inventory
- Water System Map (field and office)
- Customer Information System
- Hydraulic Modeling
- Asset Planner
- SCADA Reporting
- Remote Sensing
- Survey/Drone Technology
- Water Demand Forecasting
- workflow efficiencies









# **QUESTIONS?**

