RECLAMATION
Managing Water in the West

Enterprise Geospatial Activities in the Bureau of Reclamation Mid-Pacific Region

Toward an Organizational Nervous System??

Lorri Peltz-Lewis, Regional Geospatial Database Administrator
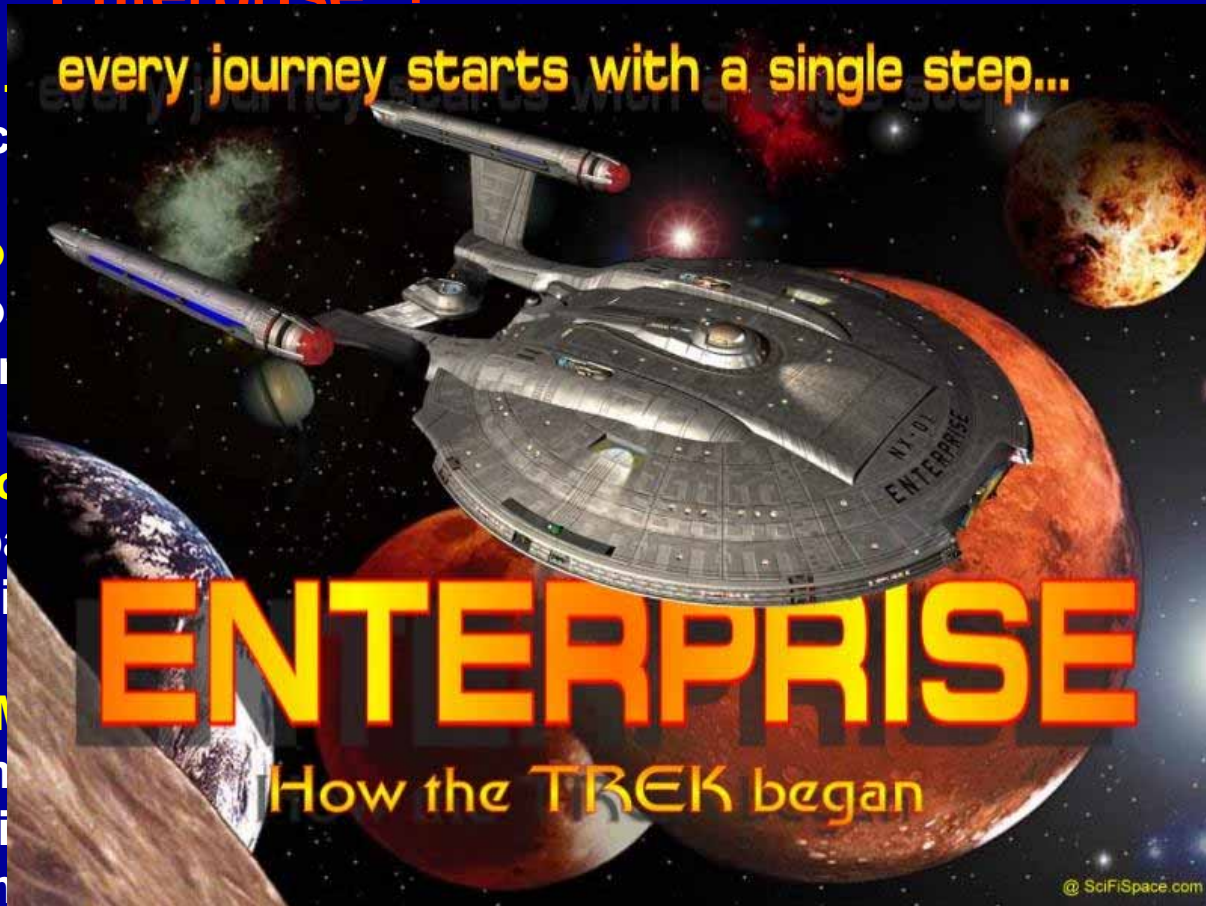
and Dave Hansen, GIS Specialist

U.S. Department of the Interior
Bureau of Reclamation

What is "Enterprise"?

- **OraFAQ.** Collec... ...oducts

- **Princeto**
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- **Aticorp.o**
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- **PE&RS**
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Enterprise Geospatial Activities
Organizational Hierarchies

- **Project-Centric Workgroups** –
    Central Valley Project, Folsom Project, Sediment Project,
    Fish Habitat Project, Rehabilitation Project, Construction Project, etc
- **Office Workgroups** – Office Enterprise Efforts   ←PROJECTS
    Regional Offices – Engineering, Resources, Planning
    Environmental, Archaeologic, etc.
    Area/Field Offices – project and needs
    Office-based Projects
- **Bureau/Regional Workgroups** – Bureau Enterprise Efforts   ←PROJECTS
    Mid-Pacific Region, Pacific Northwest, Lower Colorado, Upper
    Colorado, Great Plains, Technical Service Center
    Bureau/Regional Projects – NDSI, BORGIS, etc.
- **Department Workgroups** – example Department of Interior   ←PROJECTS
    BIA, BOR, FWS, NPS, USGS, etc
    Enterprise Geographic Information Management (EGIM)
    Geospatial Blueprint Project/Geospatial Lines of Business (GeoLOBs)
    Enterprise Architecture Project
- **Agency Workgroups**   ←PROJECTS
    FGDC, DOI, EPA, USDA, etc
    Geospatial Lines of Business (GeoLOBs)

Enterprise Geospatial Activities
Funding, Coordination, Activities, Deliverables

- <u>**Project-Centric Workgroups**</u> –

Funding	=	DIRECT
Coordination & Communication	=	SIMPLE
Activity for Project	=	DIRECT
Deliverables	=	SPECIFIC

COMMON ELEMENTS PROMOTED

- <u>**Office Workgroups**</u> – Office Enterprise Efforts

Funding	=	SEMI-DIRECT
Coordination & Communication	=	MORE COMPLEX
Activity to Office/Project	=	SEMI-DIRECT
Deliverables	=	BROAD

COMMON ELEMENTS PROMOTED

- <u>**Bureau/Regional Workgroups**</u> – Bureau Enterprise Efforts

Funding	=	VARIOUS, INDIRECT, INCONSISTENT
Coordination & Communication	=	COMPLEX, MORE MANAGERS
Activity	=	BROAD, SCOPING, CRISIS
Deliverables	=	QUESTIONABLE

COMMON ELEMENTS PROMOTED

- <u>**Department Workgroups**</u> – example Department of Interior

Funding	=	INDIRECT, UNFUNDED MANDATES
Coordination & Communication	=	COMPLEX, TOO MANY MANAGERS
Activity	=	BROAD, FOCUS?/DISTRACTIONS
Deliverables	=	MARGINAL

COMMON ELEMENTS PROMOTED

- <u>**Agency Workgroups**</u>

Let's not go here now…

Enterprise Geospatial Activities
Services, Mission Goals, Lines of Business

- **Project-Centric Workgroups** –
  - **Services are Direct - Best on-the-ground activities**
  - **Mission goals specific to the project on the ground**
  - **Lines of Business are directed to the project**
- **Office Workgroups** – **Office Enterprise Efforts**
  - **Services are support Based**
  - **Mission goals effectively administered**
  - **Lines of Business determined here**
- **Bureau/Regional Workgroups** – **Bureau Enterprise Efforts**
  - **Services between Bureaus/Regions Effective and to Office/Projects Supportive**
  - **Mission goals meet Bureau/Regional needs**
  - **Lines of Business simplified**
- **Department Workgroups** – **example Department of Interior**
  - **Support indirect**
  - **Mission goals take on global elements**
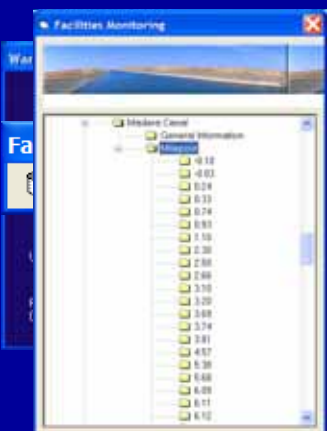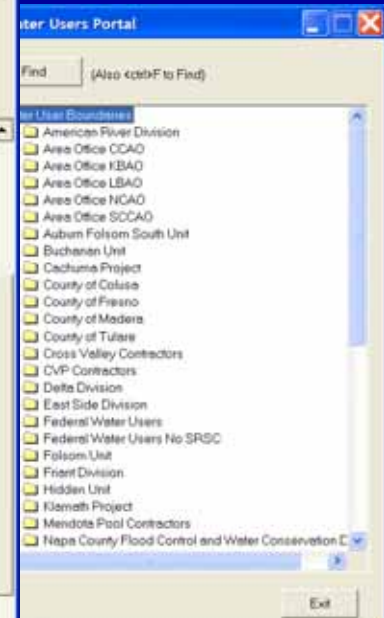 - **Lines of Business over simplified, ineffective to staff on the ground**
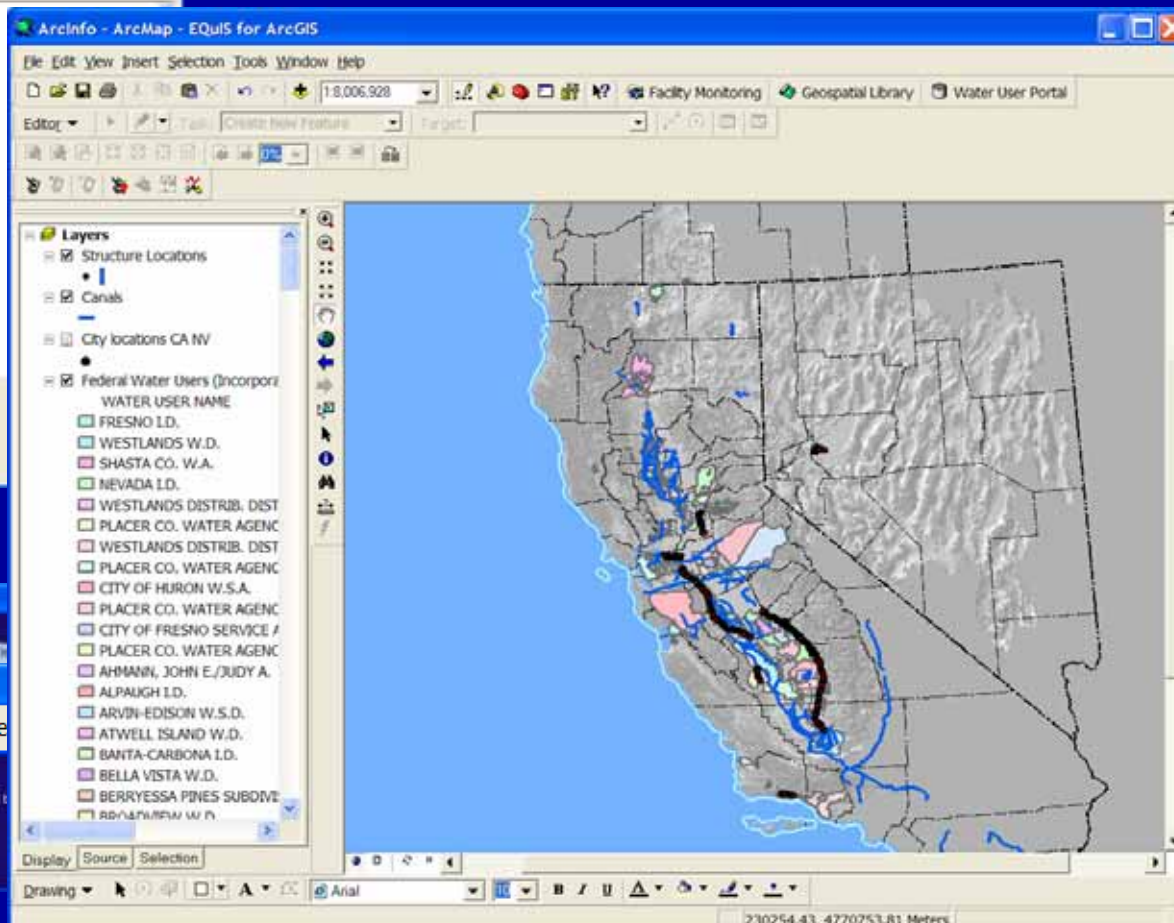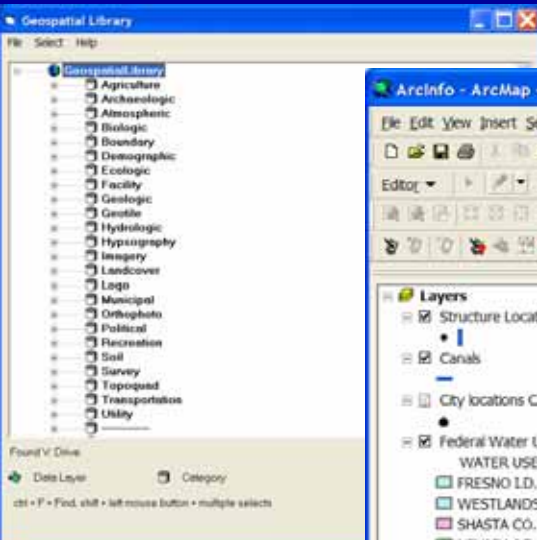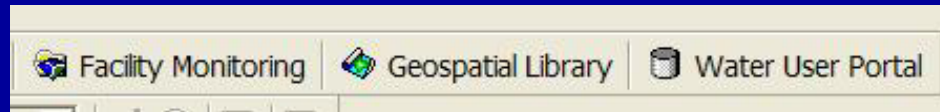- **Agency Workgroups**
  - **Again, let's not go here…**

Enterprise Geospatial Activities
Bureau of Reclamation Mid-Pacific Region
Office, Bureau/Regional Level Coordination

- **Geospatial Servers, Library, & Interface in every Area Office:**
  12 Servers throughout Region – from 1 to 12 in 6 years!
  Missing RDBMS & SDE…….File based system still….**Arrgh!**

- **Software Deployment & License Management Centralized:**
  GIS, GPS, Remote Sensing, Compression Utilities, Extensions, etc.

- **Stewardship Database Identification, Geodatabase Design, & Coordination:**
  Land Ownership, ROW, Easements, Water Districts (Service Areas, Boundaries, Spheres of Influence), Place of Use, Facilities & Infrastructure, Compliance & Monitoring, Facility Safety, Archaeological Data, etc.

- **Non-Stewardship Database Integration, Support, & Maintenance:**
  DOQQ, DRG, NHD, County Parcels, Landuse/Cover, NAIP, WBD, etc.

- **Training & Tool Development Directly Support Field Staff:**
  Geospatial Library, Water Users Portal, Facility Monitoring, etc.

- **Direct Project Support & Coordination** – **CAN CONSUME 100% TIME!**

Enterprise Geospatial Activities
Office, Bureau/Regional Level Coordination
Integrated Geospatial Tools

Enterprise Geospatial Activities
Bureau of Reclamation Mid-Pacific Region
Office, Bureau/Regional Level Coordination

- <u>Geospatial Servers, Library, & Interface in every Area Office</u>:

Utilization of GIS	in 2000 ~ 3%	in 2006 ~ 35%	Future – 80% +
Available Data	in 2000 ~ 80 MB	in 2006 ~ 1 TB	Future – Depends

- <u>Software Deployment & License Management Centralized</u>:

Integration with DOI Security Requirements, Centralized Deployment, etc.

E-Government Act – Federal Information Security Management Act **(FISMA)**

Certification & Accreditation **(C&A)**

Security Standards - National Institute of Standards & Technology **(NIST)**

- <u>Stewardship Database Identification, Geodatabase Design, & Coordination</u>:

Water Districts (Service Areas, Boundaries, Spheres of Influence) – **under way**

Place of Use – **under way**

Land Ownership – **under way**

Facilities & Infrastructure – **under way**

Compliance & Monitoring – **under way**

Facility Safety – **under way**

Archaeological Data – **under way in coordination with National Park Service**

Enterprise Geospatial Activities
Bureau of Reclamation Mid-Pacific Region
Department Level Coordination

- <u>Enterprise Geographic Information Management (EGIM)</u>:
  DOI Initiative, Strategic Leadership, Standardization, Implementation, Policy Direction, Programs, Funding, Organizational Needs, Integration of Geospatial Technologies, etc.
  http://www.nps.gov/gis/egim/

- <u>Geospatial Modernization Blueprint</u>:
  Spatially Enabling DOI Business
  Recommendations – NILS SLA's, Alignment of Data Acquisition, Designate Stewardship, Enterprise License Agreements, Governance, Federal Enterprise Architecture, etc.
  Shares many common elements with GeoLOB
  http://www.fgdc.gov/fgdc-news/mbt-final-charter-021306

Enterprise Geospatial Activities
Bureau of Reclamation Mid-Pacific Region
Agency Level Coordination

- **Geospatial Line of Business (GeoLOB) – Presidential Initiative:**

Data Call
OMB & GSA Launched GeoLOB in March 2006
Cost Effectiveness – utilization, reuse, and sharing technology & information
http://www.fgdc.gov/fgdc-news/geolob

Request for Information – commentary on the following:
Data theme questions – OMB A-16 list of data – geodetic control, ortho, elev/bathy, trans, govt units, etc.

Governance Models for coordination

Change management issues   Cultural impediments & training
NSDI cost/benefits
Top 3 factors for coordination/Top 3 risks in coordination
Key performance indicators
Competition vs. innovation and optimization

Enterprise Geospatial Activities

Questions?

Enterprise is in the eye of the beholder…

How is the nervous system in your organization?