

Building an Information Quality Management Program in the US Forest Service

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16 July 2014

ESRI User Conference 2014, San Diego, CA

Presentation UC232



Topics

- What is important about Information Quality?
 - (Take your pick! But not answered here)
- Organizational realities
 - (or “My Day Collaborating”)
- Your opinion matters
 - (and so does that of 21,000 co-workers on 150 Units)
- Data Quality Act, Open Data EO
 - (“Yes, we are compliant ;) “)
- Components that work
 - (or seem to on paper)

Your participation in this discussion today is encouraged.

Information Quality Importance

Some Background

GREAT IDEAS:

- Awareness of Federal Policies
- Reference Policies in Directives
- Awareness of Need and Value
- Implementation Initiatives
- Have Info Quality Officer position

*Chasm of coordinated
Program abyss*

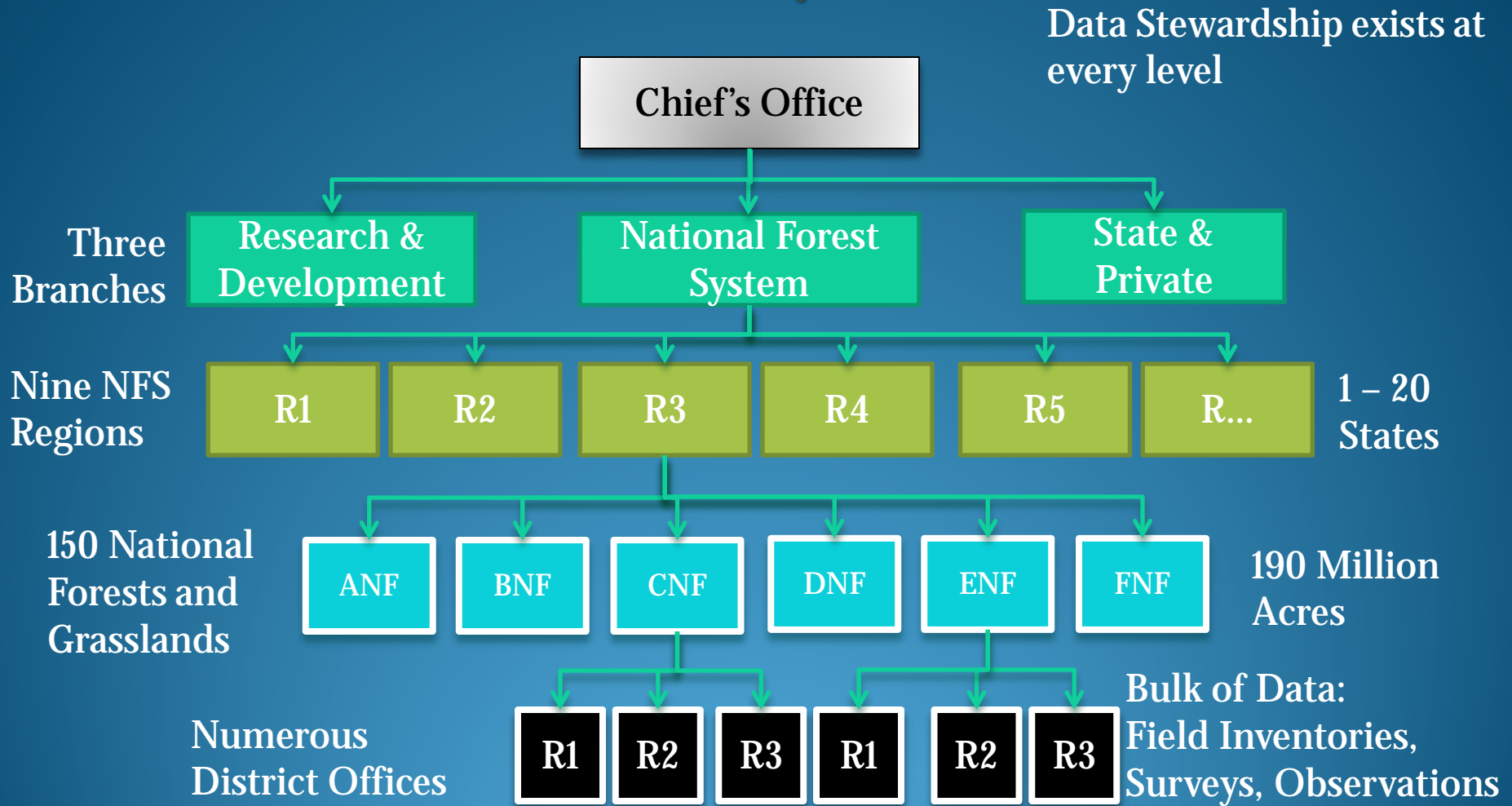
- Motivation
- Local and Regional Efforts
- Expertise in Quality Assessments
 - Tools at Enterprise

GREAT SKILL:

Exploring the Chasm of National Program Abyss

- Who leads the Data and Information Quality agenda?
 - Chief Information Office
 - Information/Data Management Applications
 - Natural Resource Programs (Data Stewards, Research, Scientists)
- Maximize good work done at field or regional levels?
 - Local needs <-> Agency direction
 - More detail = more structure -> less flexibility?
- Need, requirements, compliance defined, but then what?
 - Who is checking? Who actually cares?
 - Support by Supervisors, Leadership?
- \$\$, Staffing, Priorities

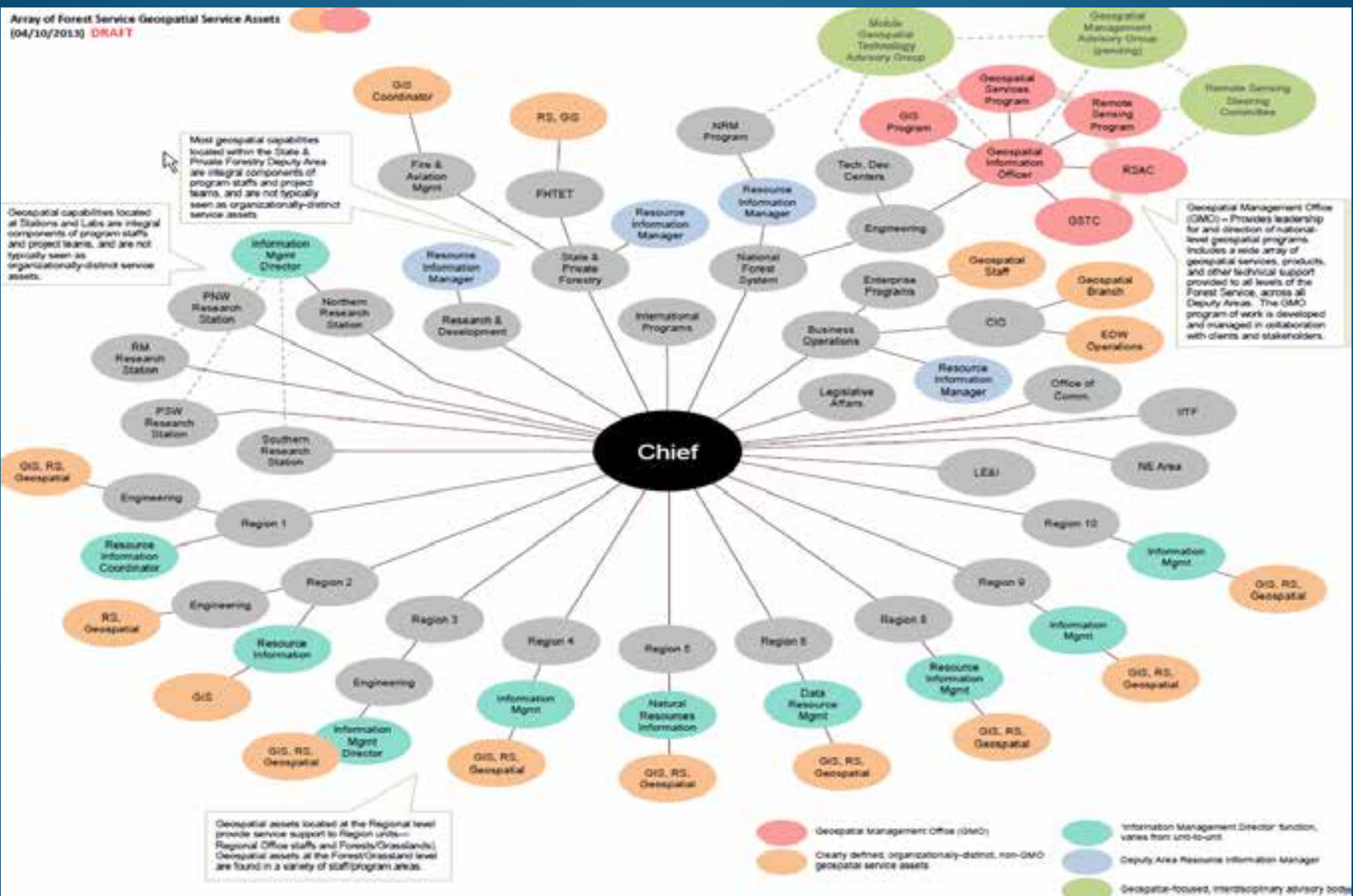
US Forest Service Hierarchy



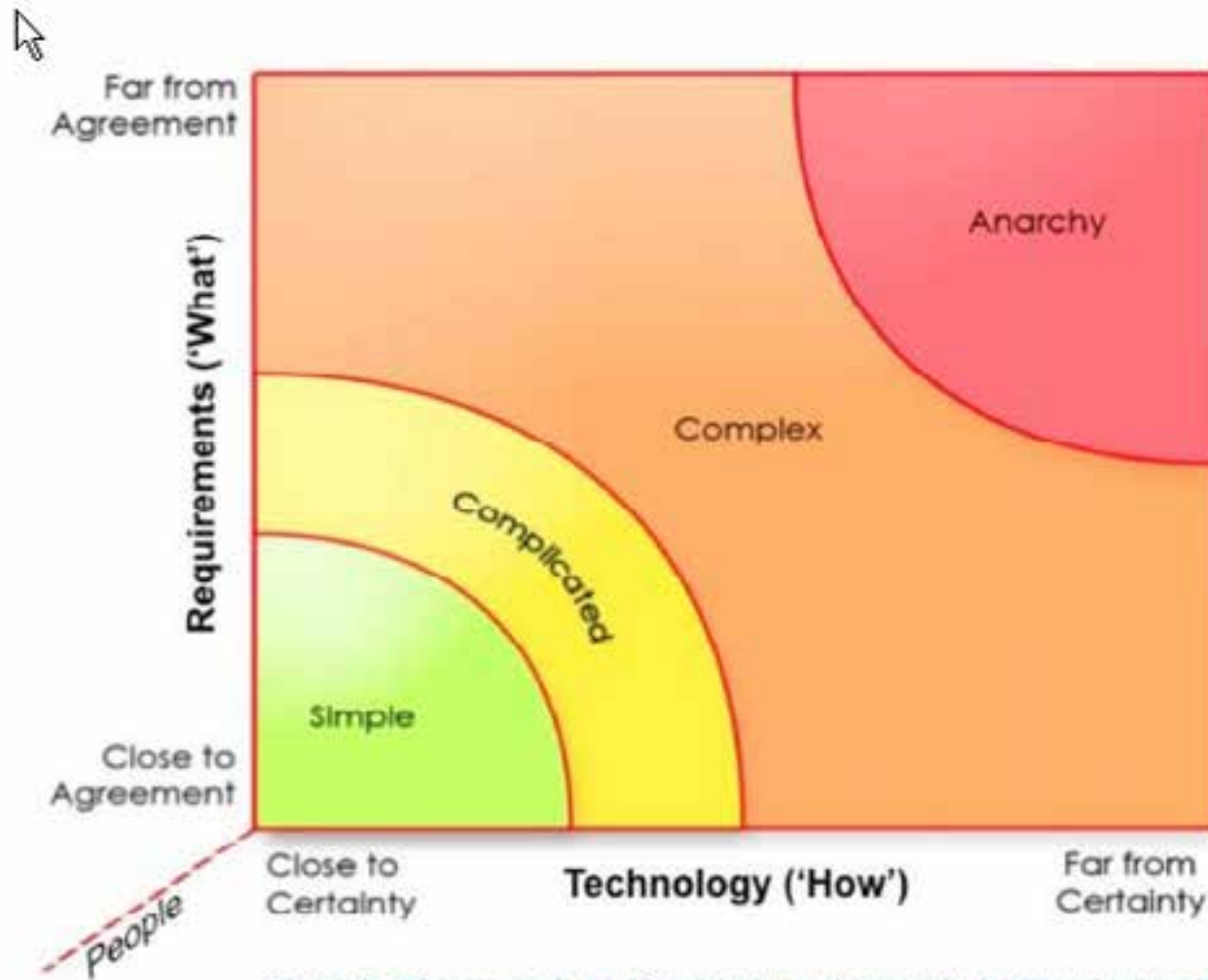
Forest Service Geospatial Resources.

Coordinating this...

Array of Forest Service Geospatial Service Assets
[04/10/2013] DRAFT



...can kind of lead to this...



(Ralph D. Stacey matrix for "Complexity and Creativity in Organizations")

Data Quality Management (DQM) opinions

Everybody says/Everyone agrees...

- Data quality needs to be a core value
- Data stewardship critical for good DQM
- Govern DQM collaboratively
- DQM is critical across data life cycle
- DQM is an important in enterprise data management
- Improving DQM = improving quality of information in performance measures, reports, data sharing and release

Forest Service Motto: Caring for the Land and Serving the People
Quality of Information = Quality of Service

What we all want (crystal balling):

- Data quality is integral
- I understand what 'my' roles and responsibilities
- Quality assessment, profiling, checking tools meet a wide range of data quality objectives, needs and requirements
- A unified approach to manage data quality
- Training and guidance are available
- User can easily assess fitness of a dataset for need
- 99% of publicly available information are to quality standard

Where do we want to be with Information and Data Quality as an Agency in 5-10 years?

What are we doing about it

- Exploring Data Quality Requirements
 - Performance Accountability Reporting to US Congress
- Providing metadata guidance and data quality reporting
- Improving General Awareness among collaborators
 - Engaging Branches of the Forest Service (NFS, R&D, S&PF)
 - Better understanding of federal policies
 - Exploring other agencies' policies
- Learning more about data and information quality management best practices
 - L. English, R. Wang, historic quality gurus

What we are actually doing about it:

- Defining real data and information needs, requirements
- Data Stewardship Training for Execs, Leaders and Field
- Database fixes for integrity constraints/controls
- Building manual QA/QC tools for data stewards
- Initial development of field and management tools for QA/QC and data quality planning

Thinking about the continuous improvement process of data quality management on our way to information management maturity....

Some of what we are learning:

- Quality of information to reports to Congress is a must
- Proactive about Open Data and information dissemination
- Focus on influential and critical data first
- Manual QA/QC tools engage data stewards
- Consistent Data Stewardship Training offers foundation

**Data Stuff (Management, Stewardship, Metadata, Standards)
need to evolve to Enterprise Data Management Systems**

Questions to you:

- What other aspects of data quality do we need to consider?
- Are there tangible benefits to being proactive about data quality?
- What have other government agencies learned?

Thank You for your time!

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