

Customizing Off-the-Shelf Data Management Systems:

A Data Stewardship Team's Lessons Learned

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Presented By:

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Why Customize?

- Growing importance of data!
- Data management solutions need to:
 - Manage business risks
 - Better handle non-standard data
 - Ensure data quality
 - Provide secure data access
 - Improve data collection and reporting processes
- No system is perfect



Data Manager vs. Data Steward:

- Manager
 - Just manages and loads data
 - Coordinates data management
 - Considers short term goals
- Steward
 - Takes care of the data
 - Considers long term goals
 - Considers all elements of a robust system

Identify Needs/Assess Current State:

- *Total* workflow
- Project team and associated roles
- Inherited issues
- Gap identification (data and workflow)
- Non-standard data
- Historical data
- Long term project needs (source traceability, reporting, field data collection, etc.)

Consider Workflow Efficiencies:

- Field collection
 - User base skill set
 - Dynamic versus static forms
- Data loading
 - Loading multiple data types at once
- Data reporting
 - Final printable report may not be the best solution

Communication:



Communication Continued:

- Documentation, documentation, documentation
 - Document each phase of implementation
 - Evergreen documents
 - Remember you may not always be the data steward!
- Training and support
 - Teaching a team to fish
 - Refresher trainings!
 - Be accessible to the team

Communication Continued:

- Two way street!!
 - Encourage team communication
 - Bad news is good news
- Utilize subject matter expert (SME) support outside of environmental data management team!
 - Ensures buy-in and success

Utilize Your Team:

- SMEs, field crew, project managers, IT, etc.
 - Identify project needs and data utilization
 - Avoids overdeveloped solutions
 - Ensures adherence to regulatory requirements
 - Creates user buy-in
 - Think **long-term**: will processes change
 - No such thing as too much communication
 - Engage team in testing

Customization:

- The difference between being your best friend or your worst nightmare
 - Extending schemas to better fit your data needs
 - Create data relationships to existing schema (where appropriate)
 - Clearly document additions to schema - consider entire team (offshore support, IT support, and user base)
 - Take advantage of your resources (use your SMEs!)
- Utilize SME support outside of environmental data management team!

Customized Field Form (Demo):

EXAMPLE FIELD FORM															Page <u>1</u> of <u>1</u>														
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COC IDs MUST BE UNIQUE															Print Date & Time: 7/21/16 11:31														
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Use of Custom Fields:

- Every system has custom fields
- Use caution
 - Avoid overuse
 - Avoid mixed usage within one field
- Always document
 - Data management plans
 - Within the database
 - Remember you will not always be the data steward!

Lessons Learned:

- Communication, communication, communication
- Documentation, documentation, documentation
- Budget time and energy towards robust testing
- Be strategic in your customizations

Lessons Learned Continued:

- Consider long term goals and desired outcomes
- Be strategic and keep people involved
 - It is good to revisit tasks after completion
- Bad news is good news
- Don't be afraid to be successful!

Questions/Discussion

