## DMS: Biological Data

**Environmental Disasters Data Management Workshop (EDDM)** 

National Conservation Training Center (NCTC) USFWS, Shepherdstown, WV 16-17 September 2014

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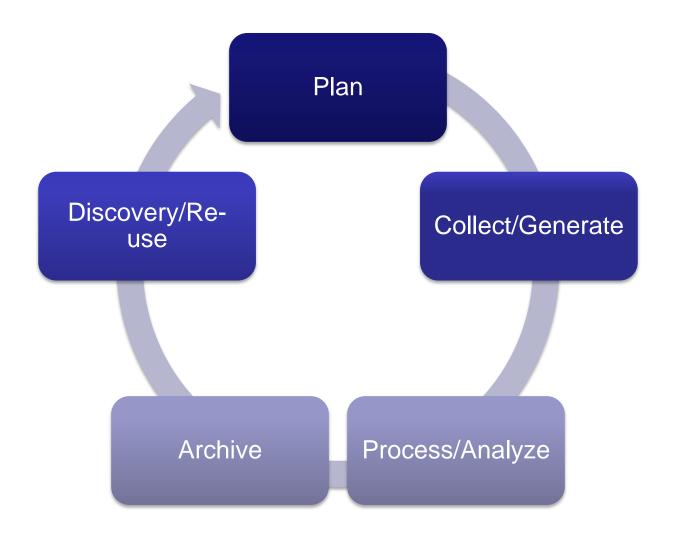
"...to quickly reach a science-based consensus about the defining characteristics and regulating processes of an ecosystem to address environmental disaster due to natural or anthropogenic causes using best available technology and data."







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Data Aggregation/Collection/Archive Centers: Biological Data

Type 1: Desktop/Stand-alone

Data is stored on off-line services

Type 2: Short-term funded projects

Objective-based; data encoded offline and sometime served over the Internet

Type 3: Institutional and Long-term initiatives

BCO-DMO; GRIIDC; DataONE; eBIRD Academic/Research Institutes; LTER;

IEDA; ACADIS; fishbase.org; ecosystemresearch.org

Type 4: Federal, regional and state programs

NOAA's NODC/NGDC/NCDC/Fisheries/ESI/DIVERS;

USDA; NIH NCBI; IOOS; GCOOS TOAST; Dept. of

Ecology, WA; <a href="http://www.ecy.wa.gov/database.html">http://www.ecy.wa.gov/database.html</a>

Type 5: Multi-national programs

GBIF/Pangaea/CGIAR/UN Data/ World Bank

**Environmental Data** 







### Processes: Most Common

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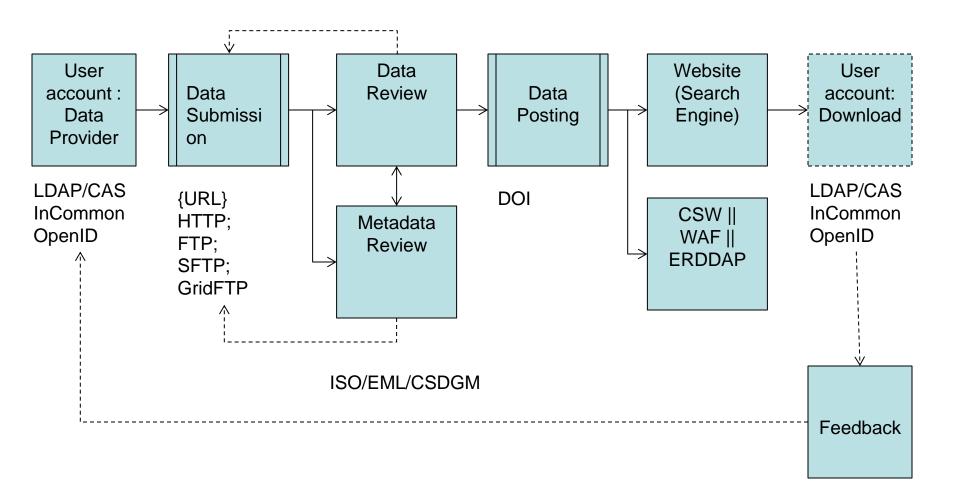
**Planning Collection/Generat Processing Archiving/Storing Distribution/Discovery** ion Desktop Dataset **CDL** Objective-**DMPTools** Raw data Institutional Online || based (DataONE) **Templates** (Forms) **Programs Processed** Objective-(BCO-DMO, data based GRIIDC) Federal Metadata (NOAA, USDA, (ISO/EML/ EPA, etc.) CSDGM) Multi-national **Publications** (fishabse.org; GBIF; WB; FAO)







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# Prevailing Issues

- Insufficient information to establish data provenance (metadata) and data review (quality control)
- Failed to establish a common standard (collection, vocabulary, ontology and structure) throughout inhibiting the re-use/re-purposing of the datasets
- Insufficient interoperability and network capabilities
- Temporal and spatial limited (highly heterogeneous; goal setting)







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#### Thank you!

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