

# DMS: Biological Data

**Environmental Disasters Data Management Workshop (EDDM)**  
National Conservation Training Center (NCTC) USFWS, Shepherdstown, WV  
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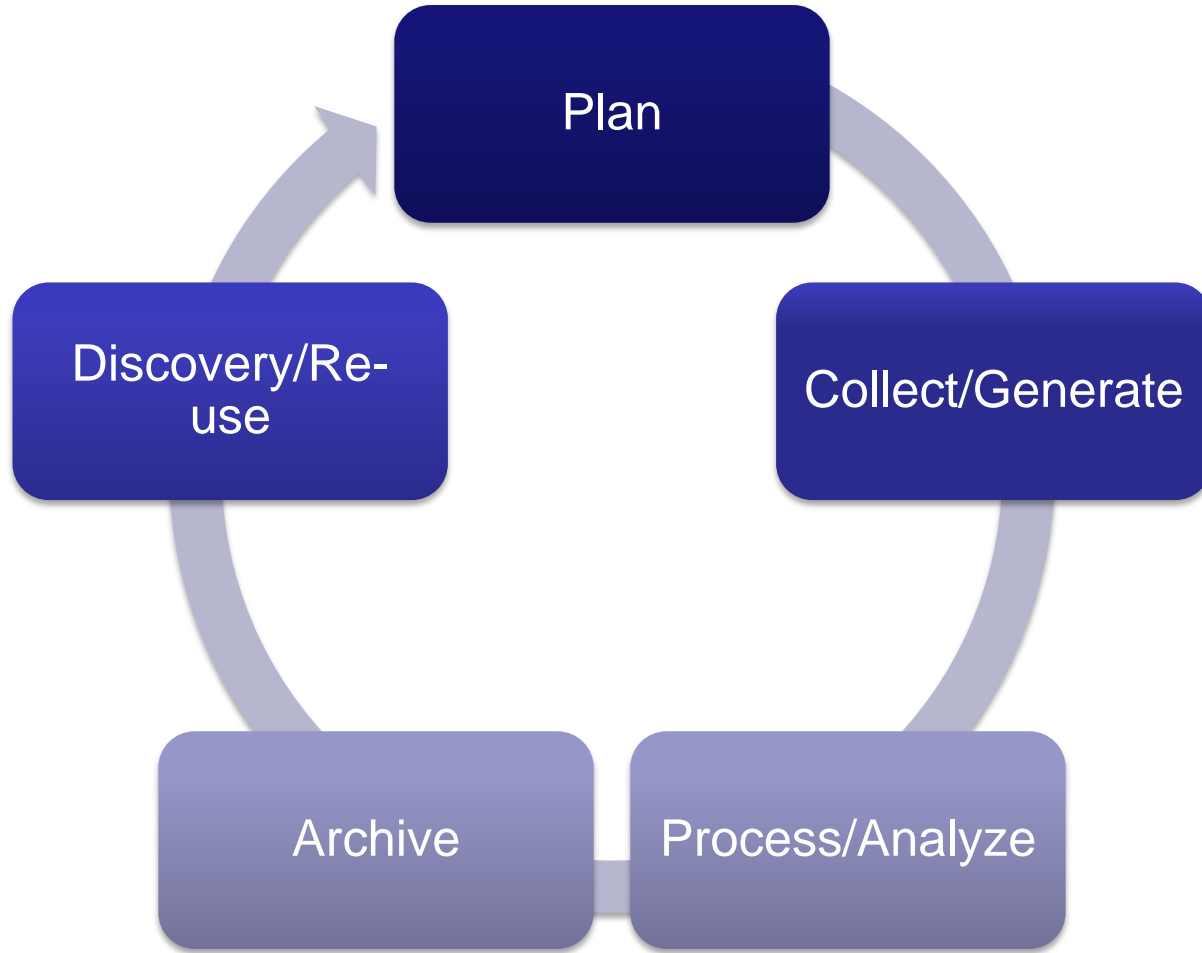
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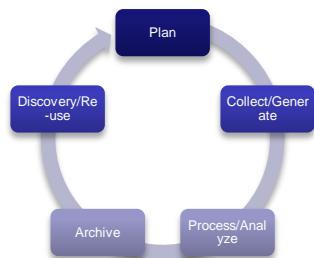
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“...to quickly reach a science-based consensus about the defining characteristics and regulating processes of an ecosystem to address environmental disaster due to natural or anthropogenic causes using best available technology and data.”

# Data Life Cycle



# Data Life Cycle



## 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

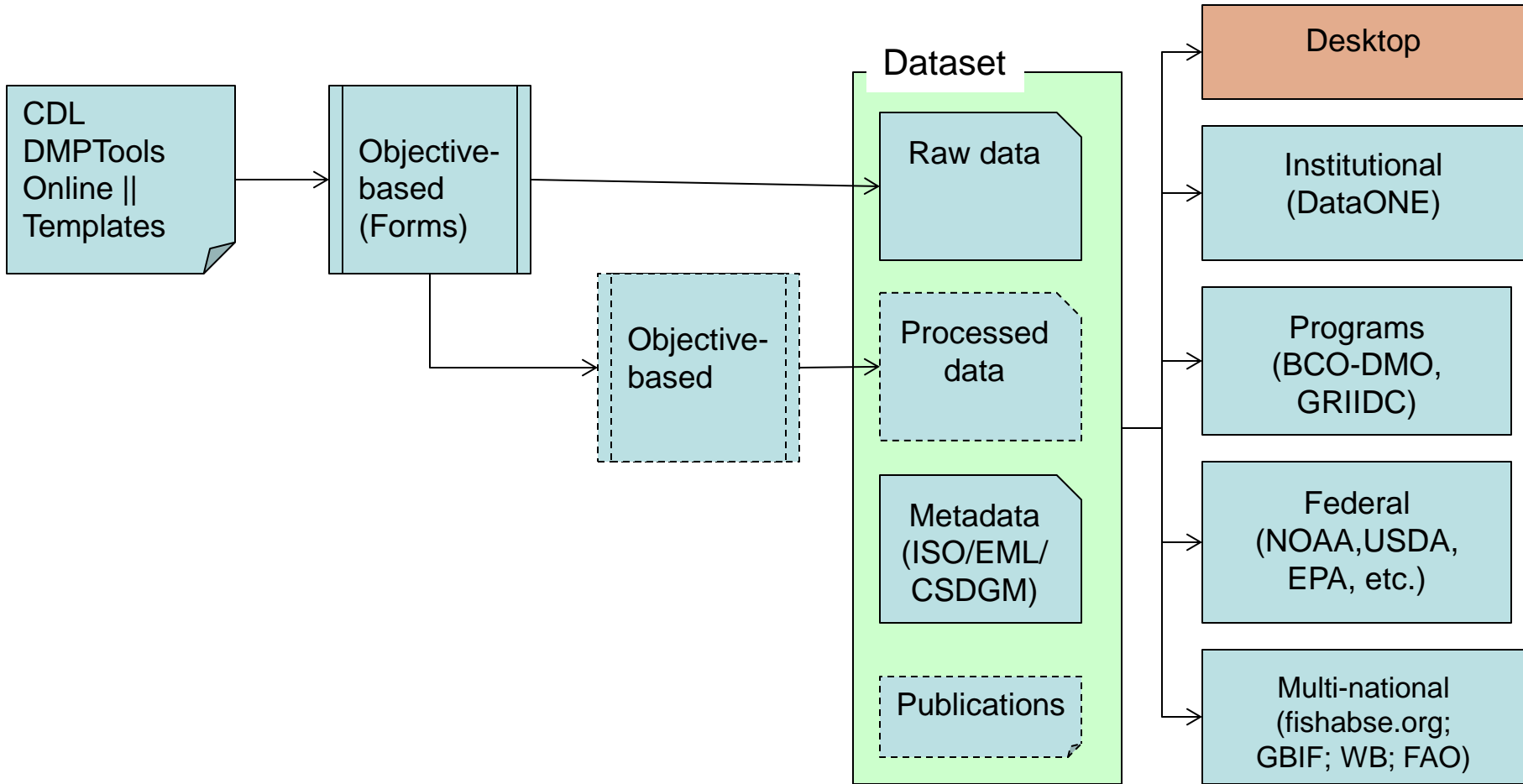
### *Type 4: Federal, regional and state programs*

NOAA's NODC/NGDC/NCDC/Fisheries/ESI/DIVERS;  
USDA; NIH NCBI; IOOS; GCOOS TOAST; Dept. of  
Ecology, WA; <http://www.ecy.wa.gov/database.html>

### *Type 5: Multi-national programs*

GBIF/Pangaea/CGIAR/UN Data/ World Bank  
Environmental Data

# Processes: Most Common





# 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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# Processes: Data Loss

