Collection Development for an Environmental Science Digital Library

Nathan Hall
University of North Texas Libraries
Environmental Science Digital Library Coordinator
nathan.hall@unt.edu

Introduction

UNT Libraries' strategies for

creating digital collections and services from datasets and born digital objects

serving users outside of formal education and research

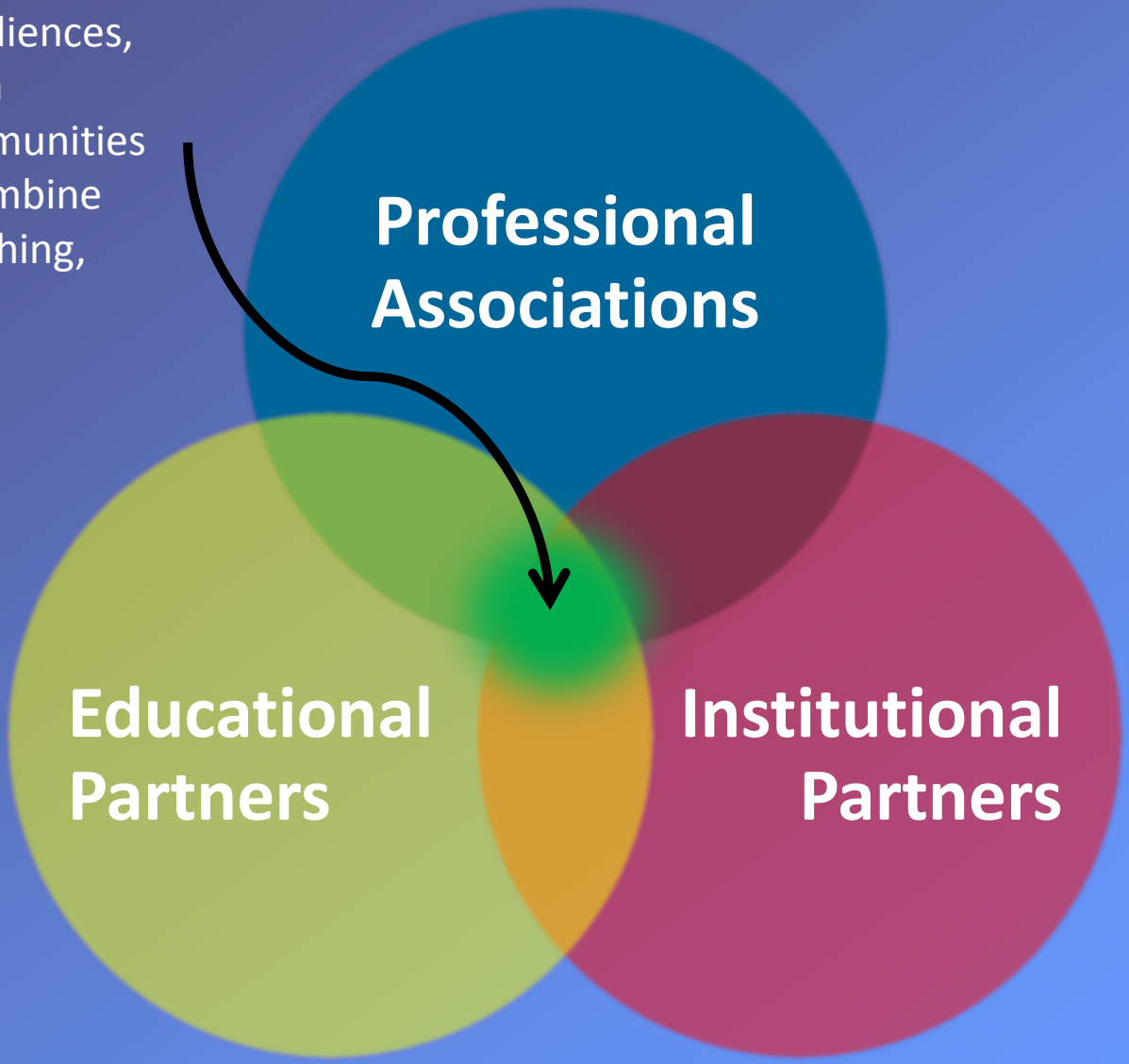
Creating digital library services for a broad range of users

Citizens

Policy makers

Voters

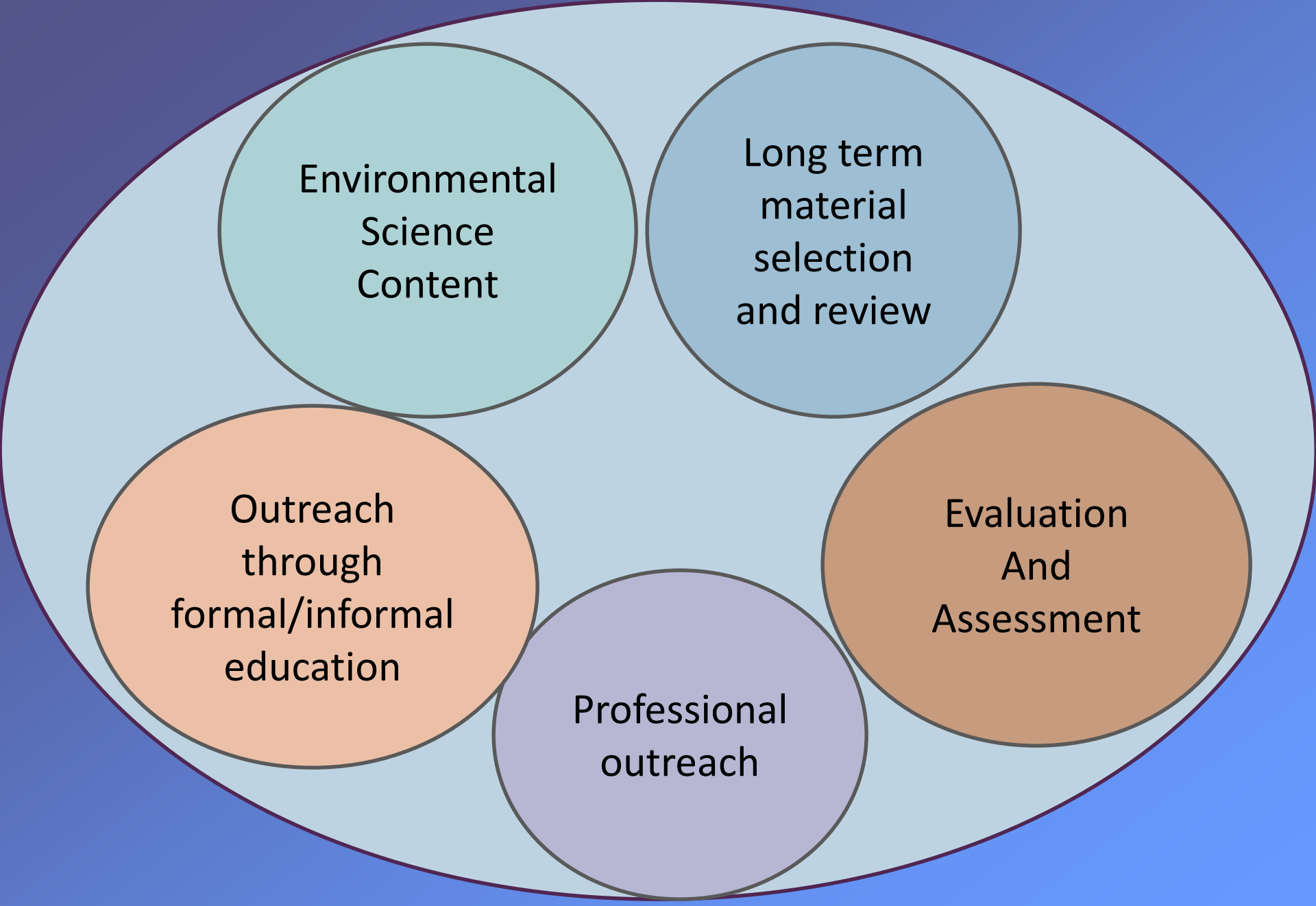
UNT Libraries will bring together resources, audiences, and skills from different communities in order to combine research, teaching, and practice.



The Environmental Science Digital Library (ESDL) will host content contributed from institutional partners.

- Text (books, articles, html, pdf)
- Images
- Video
- Simulations
- Applications
- Datasets

Much of the ESDL content will be born digital.


Environmental Science Content
Long term material selection and review
Outreach through formal/informal education
Evaluation And Assessment
Professional outreach

End of Term Web Harvest

Joint web harvest of government domain

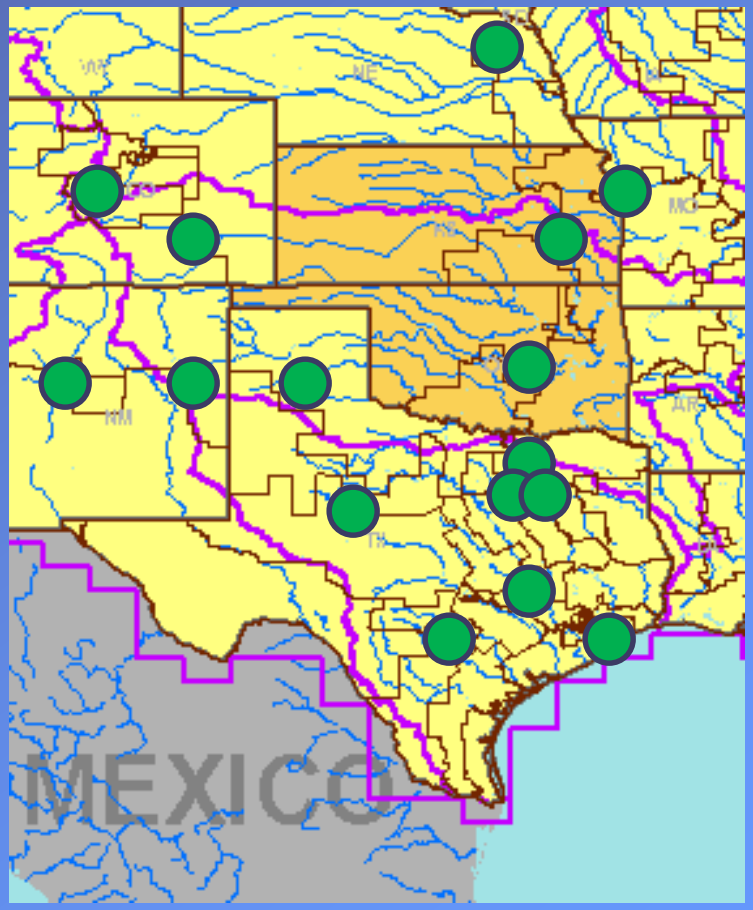
- California Digital Library
- NARA
- Internet Archive
- University of North Texas

Linking digital libraries to other data sources

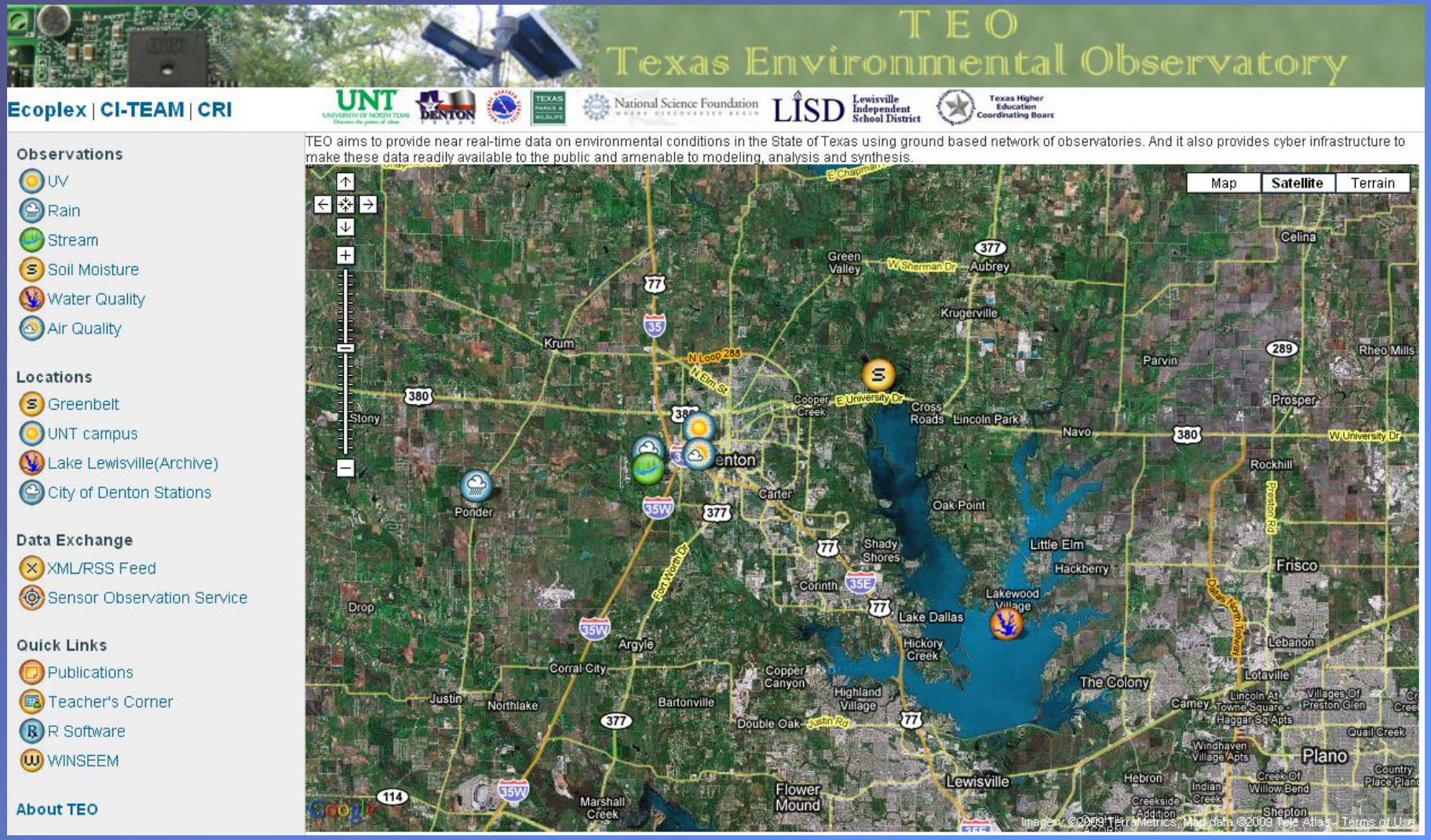
EPA EnviroMapper for Water application shows areas with advisories regarding mercury and other toxins in fish.

State boundaries
Congressional districts
USGS compiled hydrological units.

We envision layering this data with environmental policy data to show correlations between environmental policy and environmental quality.



Hypothetical points of municipal battery recycling



http://www.teo.unt.edu/

Taxonomies

Mongillo, John and Zierdt-Warshaw. (2000)
Encyclopedia of Environmental Science

- Agriculture, Crop Production, and Pest Control
- Atmosphere and Air Pollution
- Deserts, Forests, Grasslands, and other Biomes
- Ecology and Ecosystems
- Endangered and Threatened Plant and Wildlife Species
- Energy and Mineral Resources
- Environmental Laws, Regulations, and Ethics
- Oceans
- Nonhazardous and Hazardous Wastes
- Water Resources and Water Pollution
- Wetlands

Taxonomies

The Environment Encyclopedia and Directory (2005)

Environmental Organizations indexed by these fields of activity:

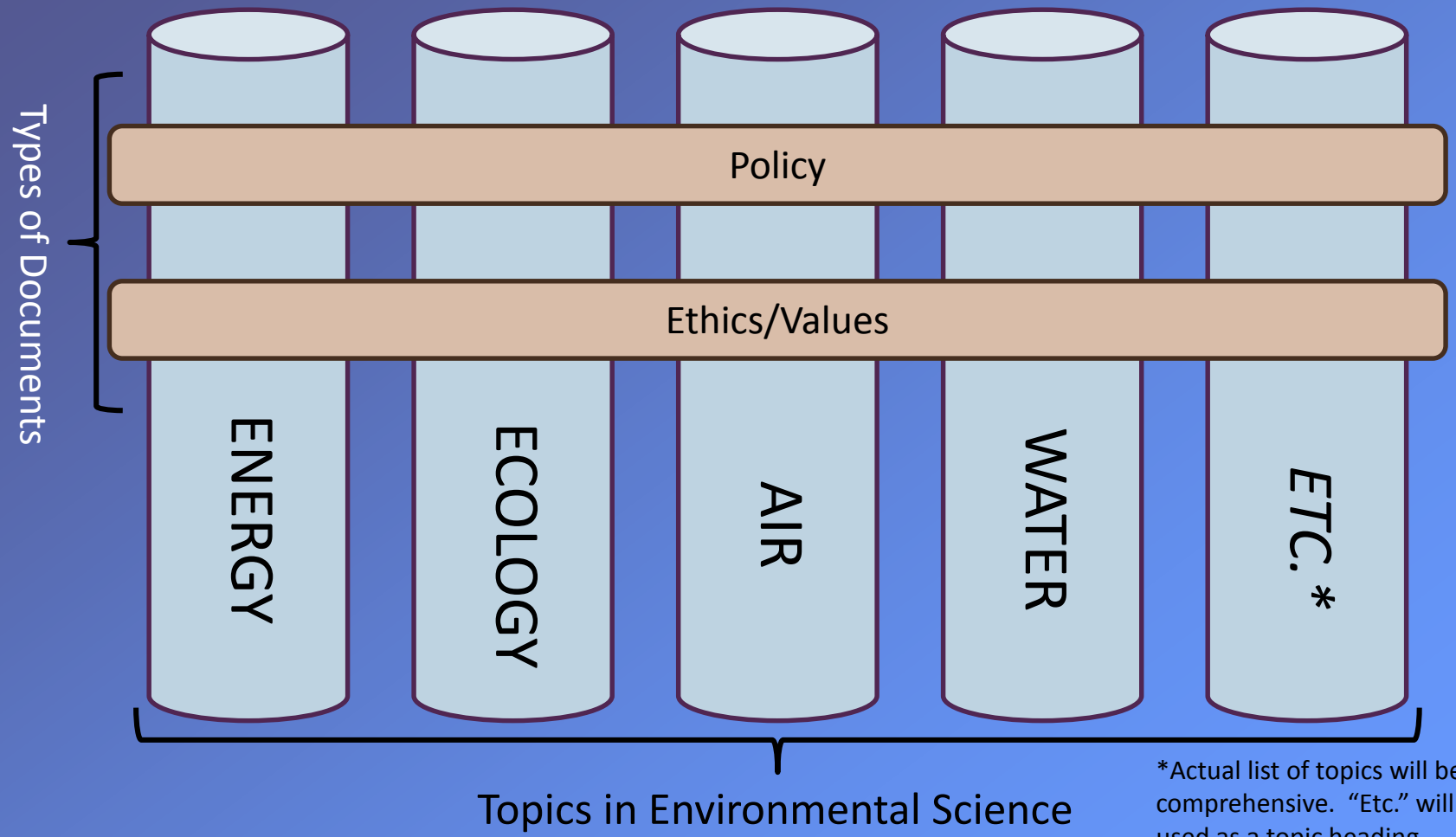
- Air Quality
- Climate Change
- Conservation of Plant and Animal Species
- Energy
- Forests
- Management of Natural Resources/Sustainable Development
- Protected Areas and Natural Habitats
- Soils and Desertification
- Transport
- Waste Management
- Water Resources and Water Quality

Taxonomies

Allin, Craig W. (2000)
Encyclopedia of Environmental Issues

Agriculture and Food
Animals and Endangered Species
Atmosphere and Air Pollution
Biotechnology and Genetic Engineering
Ecology and Ecosystems
Energy
Forests and Plants
Human Health and the Environment
Land and Land Use
Nuclear Power and Radiation
Philosophy and Ethics
Pollutants and Toxins
Population Issues
Preservation and Wilderness Issues
Resource and Resource Management
The Urban Environment
Waste and Waste Management
Water and Water Pollution
Weather and Climate

Environmental Science Digital Library Management Layer



*Actual list of topics will be more comprehensive. "Etc." will not be used as a topic heading.

Browse by Subject

Agriculture
Air
Atmosphere
Culture
Conservation
Ecology and Ecosystems
Energy
Land
Population
Sustainability
Technology
Transportation
Urban environments
Waste
Water
Weather and Climate

Challenges

Scope Creep

Interdisciplinarity

References

Allin, Craig W. (2000). The Encyclopedia of Environmental Issues. Pasadena: Salem Press.

Callicot, J. Baird. Frodeman, Robert. (2009). *Encyclopedia of environmental ethics and philosophy*. Farmington Hills, MI : Macmillan Reference USA/Gale Cengage Learning.

The Environment Encyclopedia and Directory, 4th Ed. 2005. New York: Routledge.

Mongillo, John and Zierdt-Warshaw. (2000). Encyclopedia of Environmental Science. Phoenix: Oryx Press.

Porteous, Andrew. (1996). Dictionary of Environmental Science and Technology. 2nd Edition. Chichester: John Wiley and Sons.

Texas Environmental Observatory. Accessed May 11, 2009. http://www.teo.unt.edu/