# Utilizing Digital Library Infrastructure to Build Modern Research Collections

Mark Phillips
Wisconsin Association of Academic Librarians
April 24, 2013

# What is a digital library?

# After 15+ years surely we've figured it out.

# Right?

We have systems for some or all of the following

# Digitized content of all types

# Books

# Photographs

# Letters

# Maps

# Newspapers

# Yearbooks

# Audio

# Video

# Articles

# Slidedecks

# Grey literature

# Electronic Theses and Dissertations

# Datasets

# We are harvesting the web

All of this content
I consider part of the digital library

# We purchase resources from vendors

# We subscribe to database

# We provision access to closed access journals

# We buy ebooks

# But we don't really manage that content

# We pay other people to do that

# But this isn't what I want to talk about today

# Instead I want to talk about the opportunities

# And some of the challenges

# When we think of building collections

# Digitally

In many cases from the Web

# Story #1

When we depend on pointing instead of collecting

*Anyone* can **point** to a web site or document, but we have a special name for those that select, acquire, organize, and preserve information and provide access to and services for that information: We call them Libraries.

James Jacobs (2013)

# NASA Technical Reports Server (NTRS)

# Hundreds of thousands of freely available technical reports created or contracted by NASA

On March 19<sup>th</sup> this is what the site looked like.

**Until further notice,**
**the NTRS system will be unavailable for public access.**
**We apologize for any inconvenience this may cause you and anticipate**
**that this site will return to service in the near future.**

We've built much of our infrastructure around linking to content that others maintain.

# How many catalog records do we have that point to an open access resource hosted somewhere else?

# worldcat.org has over 5,500 records pointing to NTRS

# Instead of just pointing to resources we should be collecting these resources

# Remember,  lots of copies keeps stuff safe

But many of these resources we are trusting to one host.  It is just a matter of time before something else disappears

So if we should be collecting this stuff and it is everywhere on the Web, do you want us to just start harvesting the Web?

# Yes!

# Story #2

# End of Term Web Harvests

# End of Term 2008 Presidential Web Archive

# Collaborative Web archiving project

# 5 Partners

Library of Congress
Internet Archive
California Digital Library
UNT Libraries
Government Printing Office

# Capture the transition of the executive branch and the changes in the federal Web during the process

Before the election

After the election

After the inauguration

# EOT-2008 Stats

# 16 TB of WARC and ARC file

160,211,356 URIs

| Largest TLDs | # URLS | # Subdomains |
| --- | --- | --- |
| gov | 137,847,822 | 14,339 |
| com | 7,809,711 | 57,873 |
| org | 5,108,645 | 29,798 |
| mil | 3,555,425 | 1,677 |
| edu | 3,552,509 | 13,856 |

| Largest Mime-types | # Files |
| --- | --- |
| text/html | 105,590,929 |
| image/jpeg | 13,665,196 |
| image/gif | 13,031,046 |
| application/pdf | 10,320,163 |

| Largest Mime-types | # Files |
|---|---|
| text/html | 105,590,929 |
| image/jpeg | 13,665,196 |
| image/gif | 13,031,046 |
| application/pdf | 10,320,163 |

# What is that?

# We took a look

# After seven weeks of machine time we had 4.5 million unique pdf samples

# We learned a bunch of things

| Year | Number |
| --- | --- |
| 2009 | 456,974 |
| 2008 | 804,985 |
| 2007 | 469,928 |
| 2006 | 501,785 |
| 2005 | 408,882 |
| 2004 | 352,320 |
| 2003 | 363,917 |
| 2002 | 194,291 |
| 2001 | 229,658 |
| 2000 | 112,167 |
| 1999 | 90,909 |
| 1998 | 57,645 |
| 1997 | 35,708 |
| 1996 | 21,373 |
| 1995 | 12,829 |

| PDF Version | Number |
| --- | --- |
| 0.0 | 12 |
| 1.0 | 14,693 |
| 1.1 | 69,503 |
| 1.2 | 807,300 |
| 1.3 | 1,127,399 |
| 1.4 | 1,449,508 |
| 1.5 | 525,647 |
| 1.6 | 400,174 |
| 1.7 | 9,812 |

# PDF Optimization



47%  ■ yes

53%  ■ no
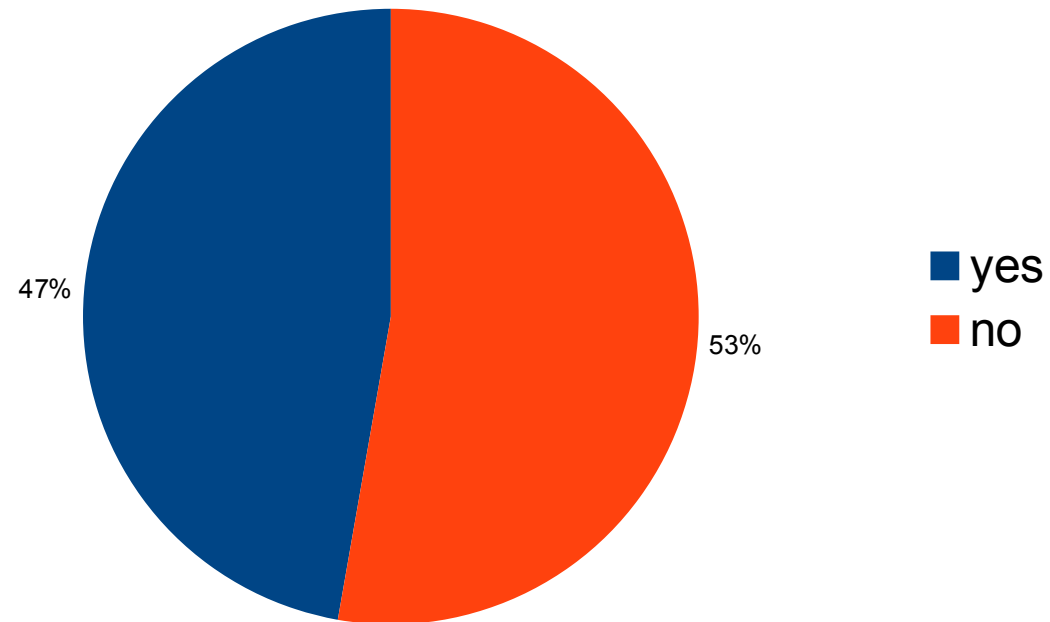
# How many pages per PDF

# Shortest Document = 1 page

# (1,477,612 PDFs)

# Longest Document = 17,584 pages

# (1 PDF)

# 60,874,402 pages in PDFs

# Average PDF Length = 13.8 pages

# Wait back up.... 17,584 pages?

# Really?

PDOGORBL

Lease Number: ALL
Unit Agreement Number: ALL
Start Date: 1990/01
End Date: 1995/12

UNITED STATES DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE
GULF OF MEXICO REGION
*OGOR-B List- Product Disposition*

PRODUCTION
25-SEP-2001
PAGE:      1

| Report Date | Lease/Unit Number | Operator | Disp Code | FMP Number | Gas Plant FMP Number | Prod Qlty | Disposed Oil (bbls) | Disposed Gas (mcf) | Disposed Water (bbls) |
|---|---|---|---|---|---|---|---|---|---|
| 199001 | 00016 | 00001 | 10 |  |  | 0 | 860 | 0 | 0 |
|  |  |  | 11 | 3017719E007 | 0217087E000 | 0 | 0 | 101 | 0 |
|  |  |  | 15 |  |  | 0 | 0 | 42 | 0 |
|  |  |  | 20 |  |  | 0 | 0 | 862 | 0 |
|  |  |  | 21 |  |  | 0 | 0 | 104 | 0 |
|  |  |  | 27 |  |  | 0 | 0 | 0 | 2786 |
|  |  | 00276 | 01 | 20177193900 |  | 33.5 | 44887 | 0 | 0 |
|  |  |  | 10 |  |  | 0 | 43930 | 0 | 0 |
|  |  |  | 11 | 3017719E001 | 0217087E000 | 0 | 0 | 156929 | 0 |
|  |  |  | 14 |  |  | 0 | 0 | 22083 | 0 |
|  |  |  | 17 |  |  | 0 | 0 | 0 | 56868 |
|  |  |  | 20 |  |  | 0 | 0 | 10451 | 0 |
|  |  |  | 21 |  |  | 0 | 0 | 6032 | 0 |
|  |  | 00689 | 01 | 20177193900 |  | 31.9 | 9379 | 0 | 0 |
|  |  |  | 11 | 3017719E002 | 0217087E000 | 0 | 0 | 261 | 0 |
|  |  |  | 20 |  |  | 0 | 0 | 1492 | 0 |
|  |  |  | 21 |  |  | 0 | 0 | 9 | 0 |
|  |  |  | 26 |  |  | 0 | 0 | 0 | 40363 |
|  |  |  | 42 |  |  | 0 | -1 | 0 | 0 |
|  |  |  |  |  |  |  | 99055 | 198366 | 100017 |
| 199001 | 00026 | 00276 | 10 |  |  | 0 | 90103 | 0 | 0 |
|  |  |  | 11 | 3017719E001 | 0217087E000 | 0 | 0 | 21848 | 0 |
|  |  |  | 17 |  |  | 0 | 0 | 0 | 341449 |
|  |  |  | 20 |  |  | 0 | 0 | 25193 | 0 |
|  |  |  | 21 |  |  | 0 | 0 | 2852 | 0 |
|  |  |  |  |  |  |  | 90103 | 49893 | 341449 |
| 199001 | 00032 | 00276 | 10 |  |  | 0 | 5849 | 0 | 0 |
|  |  |  | 11 | 3017051N001 | 0217051N000 | 0 | 0 | 28 | 0 |
|  |  |  | 11 | 3017717N007 | 0217051N000 | 0 | 0 | 4012 | 0 |
|  |  |  | 17 |  |  | 0 | 0 | 0 | 70 |
|  |  |  | 20 |  |  | 0 | 0 | 209 | 0 |
|  |  |  |  |  |  |  | 5849 | 4249 | 70 |
| 199001 | 00033 | 00276 | 10 |  |  | 0 | 8962 | 0 | 0 |
|  |  |  | 11 | 3017051N001 | 0217051N000 | 0 | 0 | 43 | 0 |
|  |  |  | 11 | 3017717N007 | 0217051N000 | 0 | 0 | 11189 | 0 |
|  |  |  | 17 |  |  | 0 | 0 | 0 | 1958 |
|  |  |  | 20 |  |  | 0 | 0 | 780 | 0 |
|  |  |  | 21 |  |  | 0 | 0 | 60 | 0 |

# Page Distribution (1-10 pages per PDF)

| Pages | Number |
|-------|--------|
| 1 | 1,477,612 |
| 2 | 793,958 |
| 3 | 319,009 |
| 4 | 262,563 |
| 5 | 162,197 |
| 6 | 136,250 |
| 7 | 101,520 |
| 8 | 103,803 |
| 9 | 68,790 |
| 10 | 65,945 |

# Page distribution by range

| Range | Number |
|---|---|
| 1 | 1,477,612 |
| 2-14 | 2,203,216 |
| 15-100 | 616,552 |
| 101-1,000 | 104,766 |
| 1,001+ | 1,902 |

# Encrypted PDFs

206,627

4,197,422

■ No
■ Yes
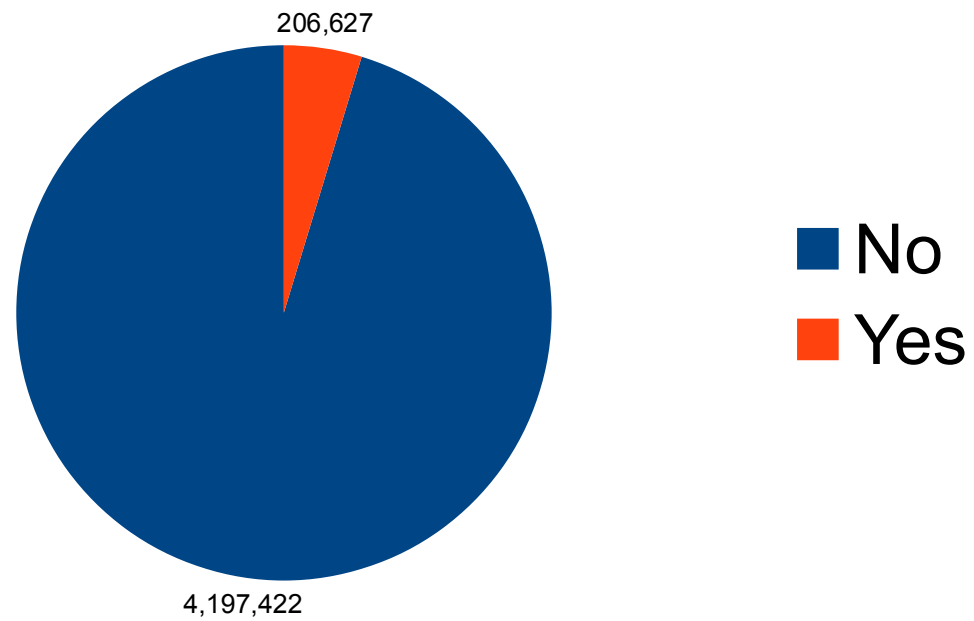
| Encryption Type | Number |
| --- | --- |
| yes (print:yes copy:yes change:no addNotes:yes) | 101148 |
| yes (print:yes copy:yes change:no addNotes:no) | 56266 |
| yes (print:yes copy:no change:no addNotes:no) | 30387 |
| yes (print:yes copy:yes change:yes addNotes:yes) | 12515 |
| yes (print:yes copy:no change:no addNotes:yes) | 3292 |
| yes (print:yes copy:no change:yes addNotes:yes) | 1107 |
| yes (print:no copy:no change:no addNotes:no) | 797 |
| yes (print:yes copy:yes change:yes addNotes:no) | 553 |
| yes (print:yes copy:no change:yes addNotes:no) | 457 |
| yes (print:no copy:yes change:no addNotes:no) | 58 |
| yes (print:no copy:yes change:yes addNotes:yes) | 22 |
| yes (print:no copy:no change:yes addNotes:yes) | 8 |
| yes (print:no copy:no change:no addNotes:yes) | 7 |
| yes (print:no copy:yes change:no addNotes:yes) | 7 |
| yes (print:no copy:no change:yes addNotes:no) | 2 |

# What domains have the most PDFs?

# gpo.gov with 1,082,735 PDFs

# Followed by:

usda.gov
house.gov
army.mil
bea.gov
census.gov

# With PDFs over 1 page?

gpo.gov = 594,430

usda.gov
house.gov
uscis.gov
uscourts.gov
army.mil
tres.gov
noaa.gov

# What about 20+ pages

gpo.gov
gao.gov
epa.gov
usda.gov
army.mil
noaa.gov

# The list starts to change

We indexed the "size" of the items.

# Inches square of the first page

# Area over 500 inches square finds us this stuff

P.L. 94-171 COUNTY BLOCK MAP (CENSUS 2000)

GEOGRAPHIC AREAS LEGEND

SYMBOL — NAME STYLE
INTERNATIONAL
AIR (FEDERAL)
Trust Land
TDSA
STATE
COUNTY
CENSUS COUNTY DIV.
Incorporated Place
Census Designated Place
Corporate Offset Boundary
Voting District
Census Tract

552005

552005

552005

SAMISH
TDSA (87501)
WVBOUN

ORCAS CCD 92432    9601

552005

552005 552005

TOWNSHIP 5  SOUTH RANGE 71  EAST OF THE MOUNT DIABLO MERIDIAN, NEVADA

LINCOLN COUNTY
ELY GR DIST

STATUS OF PUBLIC DOMAIN
LAND AND MINERAL TITLES

## MT PLAT

INDEX TO SEGREGATED TRACTS

| RESURVEY | | | | ORIGINAL SURVEY |
|---|---|---|---|---|
| TRACT NO | T | R | SEC | SUBDIVISION |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

FOR ORDERS EFFECTING DISPOSAL OR USE OF
UNIDENTIFIED LANDS WITHDRAWN FOR CLASSIFICATION,
MINERALS, WATER AND/OR OTHER PUBLIC PURPOSES,
REFER TO INDEX OF MISCELLANEOUS DOCUMENTS.
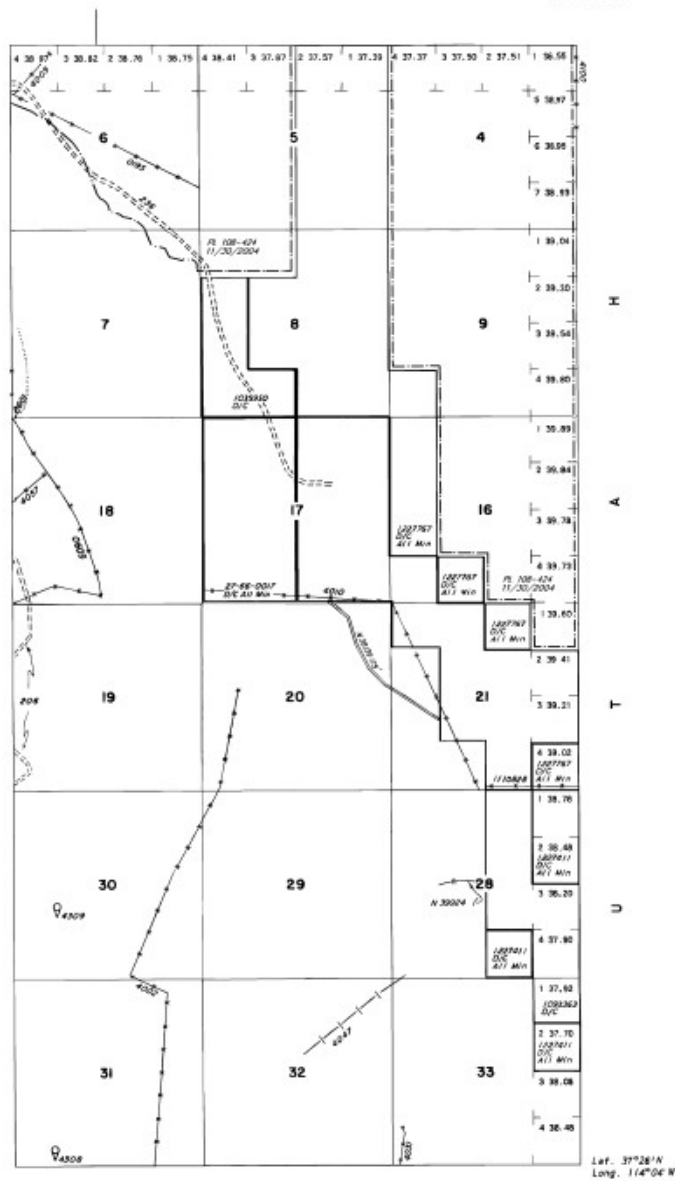
| CURRENT TO | BY | CURRENT TO | BY |
|---|---|---|---|

# Maps, Posters, Charts

There are 121,490 of these in the archive

The goal is to better understand the content "hidden" in the Web archive

Surface this content and establish it as "first order" content in a digital library

# We wanted to build usable collections out of this content.

# Find the needles in the haystack

# Here is a concrete example

# In the 2008 EOT Crawls

# We captured brac.gov

# Defense Base Closure and Realignment Commission

# Defense Base Closure and Realignment Commission

Home
About
Process
Final Report
Media
Libraries
Contact Us

**2005 Defense Base Closure and Realignment Commission Report**

Welcome to the 2005 Defense Base Closure and Realignment (BRAC) Commission's official website. Our goal is to assist the American public, including interested stakeholders, to fully understand the open and transparent process through which our work is conducted. The website will also serve as a means by which you may share your thoughts, concerns, or suggestions with the Commissioners. Your input is appreciated.

The Congress established the 2005 BRAC Commission to ensure the integrity of the base closure and realignment process. As directed by law, the Commission will provide an objective, non-partisan, and independent review and analysis of the list of military installation recommendations issued by the Department of Defense (DoD) on May 13, 2005. The recommendations provided by DoD are extremely complex and interrelated and will require in-depth analysis and careful attention to detail. The Commission will follow a fair, open, and equitable process, as set forth by statute. The Commission's mission is to assess whether the DoD recommendations substantially deviated from the Congressional criteria used to evaluate each military base. While giving priority to the criteria of military value, the Commission will also take into account the human impact of the base closures and will consider the possible economic, environmental, and other effects on the surrounding communities.

## 2005 Commission Activities

**September 8, 2005**
BRAC Commission Final Report Submitted to the President

Commission Schedule

Hearing transcripts and additional information

Other opportunities for public input

Click Here to Contact the BRAC Commission

## Links

- DoD List
- Public Law
- Procedural Rules of the Commission
- Charter
- Commissioners
- Selection Criteria
- Force Structure
- Department of Defense Base Structure Report FY 2005
- DoD BRAC website

## Final Deliberations and Decisions

*Click **HERE** to view material related to the commission's final deliberations and decisions.*

*Motion voting results are now available.*

## Major Steps After the Final 2005 BRAC Commission Report was Submitted to the President on September 8, 2005

September 15, 2005 letter from President Bush to Chairman Principi approving the Commission's recommendations

Final Vote Results of the House of Representatives

The site contained over 14,000 documents

# Over a million pages of documentation

# Only 260 results in google

## site:brac.gov

UNIVERSITY OF NORTH TEXAS

# UNT DIGITAL LIBRARY

Home    Search    **Explore**    About    Help

**About this Collection**    Explore this Collection    Explore all Collections

## Defense Base Closure and Realignment Commission

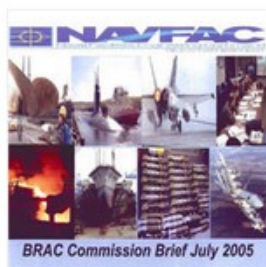Everything | Text | Image | Sound | Thesis or Dissertation    **More** ▾

[ ]    [ fulltext ⇕ ]    [ Submit ]

■ Advanced Search
■ Search Help

➕ Share  🔲 Feed  ✖ Stats  ‹› API

**Latest Additions**    Contributors

### What's Inside this Collection.

### About the Defense Base Closure and Realignment Commission

The 2005 Defense Base Closure and Realignment Commission was a 9-member independent commission appointed by President Bush with the advice and consent of the Senate. Its purpose was to provide "an objective, non-partisan, and independent review and analysis of the list of military installation recommendations issued by the Department of Defense." Recommendations were evaluated against a list of specific criteria which emphasized military value, but also considered costs and savings, economic impact on communities near military installations, community infrastructure, and environmental impact. The Commission undertook public hearings, site visits, and other information-gathering activities before presenting its findings in a report to the President on September 8, 2005.

Informally known as "BRAC" (Base Realignment and Closure) the process has been through five rounds. The 1988 Commission was authorized by Public Law 100-526. Subsequent Commissions in 1991, 1993, 1995, and 2005 were

BRAC Commission Brief July 2005

2005 Defense Base Closure and Realignment Commission Report: Volume One
Added: 02/08/2013

2005 Defense Base Closure and Realignment Commission Report: Volume Two
Added: 02/08/2013

Create an Integrated Weapons and Armaments Speciality for Guns and Ammunition.
Added: 10/06/2010

TEXT

Search Inside the Defense Base Closure and Realignment Commission

**Everything** | Text | Image | Sound | Thesis or Dissertation    More ⌄

[                    ]  [fulltext ⬍]  [Submit]    ■ Advanced Search
                                                  ■ Search Help

🔍  **You limited your search to:**

✅  **Collection:** Defense Base Closure and Realignment Commission

**Resource Type:**

✦ Text (7,170)
✦ Letter (4,309)
✦ Book (1,659)
✦ Dataset (605)
✦ Legal Document (425)
✦ More...

**Country:**

✦ United States (14,126)
✦ Puerto Rico (23)
✦ Guam (18)

**Decade:**

✦ 2000-2009 (12,738)

**Serial/Series Title:**

✦ 2005 BRAC Commission (12,740)
✦ 1995 BRAC Commission (1,430)

**Results 1 - 10 of 14,170**    ▤ | ▦ | ☰    Sort by: Title ⌄    🖨 📡

## 2 Letters from concerned citizens in response to the recommendation regarding the Defense Office of Hearings and Appeals in Fort Meade

**Date:** July 30, 2005
**Creator:** unknown
**Description:** Community Correspondence - 2 Letters from concerned citizens in response to the recommendation regarding the Defense Office of Hearings and Appeals in Fort Meade
**Contributing Partner:** UNT Libraries Government Documents Department

## 2 Questions pertaining to DON-0133 and the non-BRAC Scenario (Portsmouth Naval Shipyard)

**Date:** August 12, 2005
**Creator:** United States. Dept. of Defense.

**Decade:**

- 2000-2009 (1,355)

**Serial/Series Title:**

- 2005 BRAC Commission (1,355)
- 1995 BRAC Commission (662)

Fort Leavenworth, Kansas Presentation

Army-Huntsville, AL Presentation

Air Force Installations - Presentation

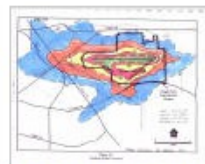Air Force Installations - Presentation

Adds Deliberations Presentation

City of Philadelphia Presentation

DoD Depot - Brief; Presentation
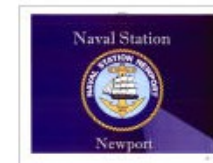
Naval Station Newport Presentation

Air Force Installations - Maps, Presentation, Inspection Report, Presentation

DFAS San Antonio Presentation to Commission

Niagara Falls Air Reserve Station BRAC Presentation

Team El Paso Presentation to BRAC Commissioners

Presentation Regarding Fort Bliss Pt. 3

Presentation Regarding Fort Lee Pt. 4

Presentation Regarding Fort Lee Pt. 2

Presentation From Anniston Army Depot

## Letters from Clovis elementry school children to the BRAC Commission



Sequence: 1    Sequence: 2    Sequence: 3    Sequence: 4    Sequence: 5

Sequence: 6    Sequence: 7    Sequence: 8    Sequence: 9    Sequence: 10
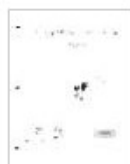
Sequence: 11    Sequence: 12    Sequence: 13    Sequence: 14    Sequence: 15

Sequence: 16    Sequence: 17    Sequence: 18    Sequence: 19    Sequence: 20

**Search Inside**

[              ]    Search

Citation

Metadata

Share

All Formats

**More Options**

All Pages

**Feedback:**

If you are having problems, need to report errors, or have questions or comments for the staff, please use our Feedback Form.

# Unique content that is now easily discoverable

# Which means stuff gets found

## Statistics for Defense Base Closure and Realignment Commission

**Item Usage** | More Data

**171,073** Total Uses / **14,183** Total Items (1,231,138 files) / **14,170** Visible / **13** Hidden



**Usage by Month/Year**

| Year | January | February | March | April | May | June | July | August | September | October | November | December | Total |
|------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|-------|
| 2013 | 11,935 | 11,987 | 14,764 | 10,299 | | | | | | | | | 48,985 |
| 2012 | 5,965 | 7,063 | 7,060 | 6,680 | 6,770 | 6,672 | 8,606 | 8,923 | 7,376 | 9,176 | 8,119 | 7,948 | 90,358 |
| 2011 | 618 | 870 | 1,224 | 1,914 | 1,784 | 2,325 | 2,187 | 2,236 | 2,778 | 3,379 | 3,899 | 4,148 | 27,362 |

April              14

# And people want to use it for research

# Creating a unique dataset for research

# How do you create subject based collections like this?

We gave it a shot

Environmental Policy Collection

# We developed a collection policy

Defined the scope and the boundaries

We knew where we were going to put it

## UNIVERSITY OF NORTH TEXAS

# UNT DIGITAL LIBRARY

### About the Digital Library

The UNT Digital Library is a centralized repository for the rich collections held by the libraries, colleges, schools, and departments at the University of North Texas.

Read More...

### Statistics

Currently we have a total of **73,981** unique items, comprising **4.9 million** files. Over the last **35 days**, we've logged **269,975** uses of these items by people like you.

More Info...

### Recent Additions

The Digital Library continues to grow as new partners contribute digital versions of their collections. See some of our latest materials here.

Recent Additions...

### Search within the UNT Digital Library

**Everything** | Text | Image | Sound | Thesis or Dissertation     **More** ▽

[                    ] [fulltext ▲▼] [Submit]     ■ Advanced Search
■ Search Help

## Featured Collections

THE FEDERAL ROLE IN THE FEDERAL SYSTEM: **THE DYNAMICS OF GROWTH**

An Agenda for American Federalism: Restoring Confidence and Competence
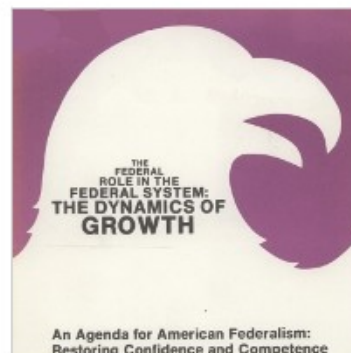
### Advisory Commission on Intergovernmental Relations

The Advisory Commission on Intergovernmental Relations (ACIR) was an independent, bipartisan intergovernmental agency established by Public Law 86-380 in 1959. The ACIR Collection is composed of the agency's publications that study the interactions between different levels of government.

1   2   3   4   5

More Collections...

## Featured Partner

### UNT Oral History Program

Affiliated with the UNT Department of History, the Oral History Program records, transcribes, and archives oral history interviews in order to preserve the history of the North Texas region. The program also trains UNT students in the theory and methods of oral history, conducts workshops for members of the larger community, and maintains partnerships with a variety of related institutions

# UNT DIGITAL LIBRARY

Overview    Locations    Dates    Types    Partners    **Collections**

## Help with Exploring

Collections group materials around specific themes. The scope may be narrow or very broad. Explore collections in the Digital Library by choosing from an alphabetic list or by selecting "all."

See all Exploring FAQs

See all Exploring Help Guides

## Stay updated

Receive updates when new collections are added to the Digital Library.

## Explore by Collections

a  b  c  d  e  f  g  h  i  j  k  l  m  n  o  p  q  r  s  t  u  v  w  x  y  z  all

### Environmental Policy Collection

The Environmental Policy Collection contains reports, policy documents, and media selected from local, statewide, national, and international organizations; government and private agencies; and scientific and research institutions. The collection also contains theses and dissertations relevant to environmental policy.

About  |  Browse  |  Statistics

## Contact Us

For questions regarding content on this site, contact us: feedback.

Hosted by The University of North Texas Libraries

## Technical problems?

For problems regarding this web site, contact us feedback.

## Rights Information

## Links

Disclaimer | AA/EOE/ADA | Privacy Statement | Web Accessibility Policy | State of Texas Online

Apr                                                                                  23

# We knew how we were going to capture and process the content

# UNT DIGITAL LIBRARY

**About this Collection**    **Explore this Collection**    **Explore all Collections**

## Environmental Policy Collection

**Everything** | Text | Image | Sound | Thesis or Dissertation    More ▾

[ fulltext ⬍ ]  Submit

■ Advanced Search
■ Search Help

➕ Share    📶 Feed    📊 Stats    ‹› API

**Latest Additions**    **Contributors**

### What's Inside this Collection.
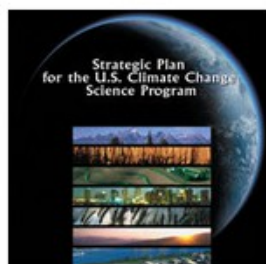
### About This Collection

The Environmental Policy Collection contains a variety of open access resources that provide a balanced view on environmental issues and their potential consequences. The current focus of the collection is climate change, and the documents come from such agencies and individuals as:

- United States Climate Change Science Program
- National Oceanic and Atmospheric Administration
- International Geosphere-Biosphere Programme
- Climate Change and Agriculture and Food Security
- Earth System Science Partnership
- Intergovernmental Panel on Climate Change
- United Nations Environment Programme
- World Meteorological Organization
- University of North Texas (UNT) graduate students

### About This Project

The UNT Libraries are working to identify, collect, organize, and manage digital resources relevant to environmental policy. For this endeavor, the Libraries will provide digital infrastructure and stewardship to ensure perpetual access to the resources

Deep Water: the Gulf Oil Disaster and the Future of Offshore Drilling
Added: 12/10/2012

Ultraviolet Radiation Tolerance in High Elevation Copepods from the Rocky Mountains of Colorado, USA
Added: 10/02/2012

Measuring Atmospheric Ozone and Nitrogen Dioxide Concentration by Differential Optical Absorption Spectroscopy
Added: 10/02/2012

# We just had to decide on what

# UNT DIGITAL LIBRARY

**About this Collection**    **Explore this Collection**    **Explore all Collections**

## Access:

- Public (690)
- Use restricted to UNT Community (1)

## Partner:

- UNT Libraries (618)
- UNT Libraries Government Documents Department (73)

## Department:

- Department of Biological Sciences (60)
- Department of Biology (5)
- Department of Philosophy and Religion Studies (5)
- Department of Geography (4)
- Institute of Applied Sciences (2)
- More...

## Resource Type:

- Text (504)
- Book (96)
- Thesis or Dissertation (80)
- Report (4)
- Map (2)

### Search Inside the Environmental Policy Collection

**Everything** | Text | Image | Sound | Thesis or Dissertation    More ▾

[ ] fulltext ▾ Submit    ■ Advanced Search    ■ Search Help

🔍 **You limited your search to:**

✔ **Collection:** Environmental Policy Collection

**Results 1 - 10 of 691**    Sort by: Title ▾

## 100% Renewable Energy - and Beyond - for Cities

**Date:** March 2010
**Creator:** Droege, Peter
**Description:** This booklet sketches out the options and the processes that have started to transform urban energy systems. The document promotes carbon neutrality for communities and cities and argues that even the largest cities can make this transition, drawing on renewable energy supplies from within their boundaries, as well as from farther away. In addition to assuring urban energy security, these developments can also stimulate the growth of a very large new green economy sector.
**Contributing Partner:** UNT Libraries

## 1996 protocol to Convention on Prevention of Marine Pollution by Dumping of Wastes : message from the President of the United States transmitting 1996 protocol to the Convention on the

**Collection:**

- Government Documents A to Z Digitization Project (44)
- Congressional Research Service Reports (24)
- USDA Farmers' Bulletins (18)
- Government Documents General Collection (3)
- CyberCemetery (2)
- More...

## Climate Change Legislation in the 109th Congress

**Date:** September 9, 2005
**Creator:** Yacobucci, Brent D
**Description:** Climate change and greenhouse gas (GHG) emissions are a continuing issue in the 109th Congress. Bills directly addressing climate change issues range from those focused primarily on climate change research to comprehensive emissions cap-and-trade programs. Additional bills focus on GHG reporting and registries, or on power plant emissions of carbon dioxide, as part of wider controls on pollutant emissions. The bills vary in their approaches to climate change issues. This report briefly discusses the basic concepts on which these bills are based and compares major provisions of the bills in each of the following categories: climate change research, technology deployment, GHG reporting and registries, and emissions reduction programs.
**Contributing Partner:** UNT Libraries Government Documents Department

## Climate Change Science Compendium 2009

**Date:** 2009
**Creator:** McMullen, Catherine P.
**Description:** This document was compiled as an annual snapshot of peer-reviewed research about climate change.
**Contributing Partner:** UNT Libraries

## Climate Change Science Program Overview and Management

**Date:** December 11, 2003
**Creator:** U.S. Climate Change Science Program
**Description:** This program identifies the following criteria of interest: scientific or technical quality; relevance to reducing uncertainties and improving decision support tools; track record of consistently good past performance and identified metrics for evaluating future progress; and cost and value.
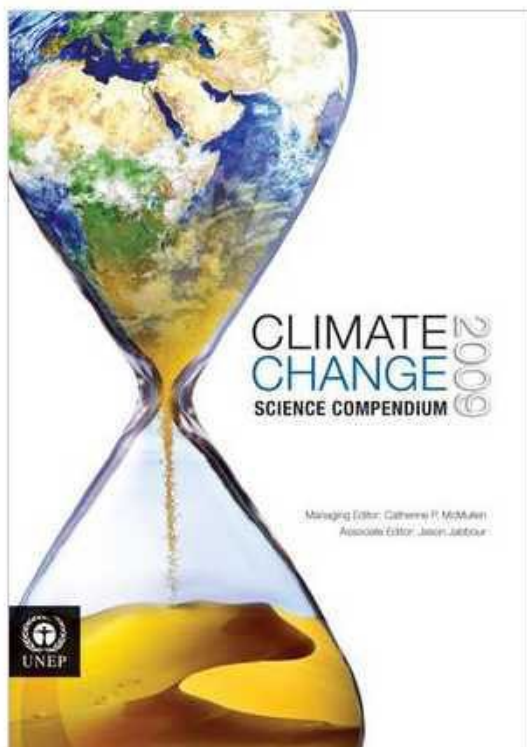**Contributing Partner:** UNT Libraries

## Climate Change Science Program Strategic Plan Executive Summary: Building a Course for Greater Climate Understanding

# We gave each publication a proper home on the Web

## Climate Change Science Compendium 2009

**Brief Record**     **Full Record**     **Statistics**

Search Inside

[                    ]     Search

| | |
|---|---|
| **Description:** | This document was compiled as an annual snapshot of peer-reviewed research about climate change. |
| **Creator(s):** | • McMullen, Catherine P. <br> • Jabbour, Jason |
| **Creation Date:** | 2009 ⓘ |
| **Partner(s):** | UNT Libraries <br> About \| Browse this Partner |
| **Collection(s):** | Environmental Policy Collection <br> About \| Browse this Collection |
| **Usage:** | *Total Uses:* 68 <br> *Past 30 days:* 1 <br> *Yesterday:* 0 |

⤺ Return to Search Results

▊ Citation

📄 Metadata

➕ Share

▯ All Formats

**More Options**

▦ All Pages

**Feedback:**

If you are having problems, need to report errors, or have questions or comments for the staff, please use our Feedback Form.

# Made it easy to cite

# Climate Change Science Compendium 2009

## Citation

McMullen, Catherine P.. *Climate Change Science Compendium 2009*. UNT Digital Library.
http://digital.library.unt.edu/ark:/67531/metadc28501/. Accessed April 23, 2013.

**Note:** Inconsistencies in capitalization and punctuation within the Digital Library may affect this citation.
Before using this citation in formal writing, please consult your preferred style manual. More information.

### Search Inside

[          ]  Search

↩  Return to Search Results

▌▌  **Citation**

▤  Metadata

➕  Share

▯  All Formats

**More Options**

▦  All Pages

**Feedback:**

If you are having problems, need to report
errors, or have questions or comments for
the staff, please use our Feedback Form.

# Made it easy to get the metadata for the item

# Climate Change Science Compendium 2009

## Metadata

Metadata describes a digital item, providing (if known) such information as creator, publisher, contents, size, relationship to other resources, and more. Metadata may also contain "preservation" components that help us to maintain the integrity of digital files over time.

Metadata for this item is available in various machine-readable formats:

### Dublin Core

- XML Format
- JSON Format
- Text Format
- RDF/XML Format

### UNTL

- XML Format

### METS

- XML Format

**Search Inside**

[                    ]  Search

↩  Return to Search Results

▌  Citation

▤  **Metadata**

✚  Share

▯  All Formats

**More Options**

▦  All Pages

**Feedback:**

If you are having problems, need to report errors, or have questions or comments for the staff, please use our Feedback Form.

# We surrounded it with similar content

# UNIVERSITY OF NORTH TEXAS
# UNT DIGITAL LIBRARY

**Home**    **Search**    **Explore**    **About**    **Help**

**Basic Search**    **Advanced Search**    **Search Results**

---

**Partner:**

✦ UNT Libraries (194)
✦ UNT Libraries Government Documents Department (2)
✦ UNT Honors College (2)

**Department:**

✦ Honors College (2)
✦ Dance and Theatre (1)
✦ International Studies (1)
✦ Political Science (1)

**Resource Type:**

✦ Text (171)
✦ Book (21)
✦ Poster (2)
✦ Website (2)
✦ Map (1)
✦ More...

**Country:**

✦ United States (55)
✦ China (19)
✦ Brazil (12)
✦ Canada (12)
✦ India (12)
✦ More...

---

**Search within the UNT Digital Library**

**Everything** | Text | Image | Sound | Thesis or Dissertation    **More** ▾

"climate change"    `fulltext` ⬍    Submit

■ Advanced Search
■ Search Help

**Results 1 - 10 of 198**    ⊞  |  ⊞  | ☰          Sort by: Best Match ▾    🖨 📶

## Kyoto Protocol to the United Nations Framework Convention on Climate Change

**Date:** 1998
**Creator:** United Nations Framework Convention on Climate Change (Organization)
**Description:** The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing greenhouse gas emissions. Recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."
**Contributing Partner:** UNT Libraries

## Global Technology Project Report

**Date:** unknown
**Creator:** Great Britain. Office of Climate Change
**Description:** This report discusses the financial barriers to making reductions in carbon emissions, as well as policies for dealing with those barriers.
**Contributing Partner:** UNT Libraries

# Which allows for browsing and unexpected discovery of resources

## Department:

- Chemistry (1)
- College of Business Administration (1)
- Department of Higher Education (1)
- Department of Radio, Television and Film (1)

## Resource Type:

- Text (9)
- Thesis or Dissertation (4)
- Book (1)

## Country:

- United States (2)
- Burkina Faso (1)
- Cameroon (1)
- Ethiopia (1)
- Gabon (1)
- More...

## Decade:

- 2010-2019 (3)
- 2000-2009 (8)
- 1940-1949 (1)

**Search within the UNT Digital Library**

**Everything** | Text | Image | Sound | Thesis or Dissertation    **More** ▾

"adaptation"    fulltext ▾    Submit
- Advanced Search
- Search Help

**Results 1 - 10 of 14**    Sort by: Best Match ▾

### Towards New Scenarios for Analysis of Emissions, Climate Change, Impacts, and Response Strategies

**Date:** 2008
**Creator:** Intergovernmental Panel on Climate Change
**Description:** This report summarizes the findings and recommendations from the Expert Meeting on New Scenarios, which focuses on the policymaking perspective of climate change, and on climate modeling scenarios for near term and long term.
**Contributing Partner:** UNT Libraries

### Margaret Dale, Adapting the Stage to the Screen: Aesthetic, Appropriation, and Intimacy in Ballet Programming for Post-War BBC Television

**Date:** December 2010
**Creator:** Escue, Jessica Margaret
**Description:** This thesis examines the aesthetic of ballets adapted for BBC Television by producer Margaret Dale, beginning with her entrance to the BBC's training program in 1955 and culminating with her commissioned work Houseparty, which aired in 1964. A historical and organizational framework is discussed regarding the BBC's cultural mission and view of arts programming, as well as general developmental milestones in programming contextualizing Dale's working conditions. Particular focus is placed upon the appropriation of Romantic narrative ballets and their significance

# We added a number of APIs to the collection

# UNT DIGITAL LIBRARY

**About this Collection     Explore this Collection     Explore all Collections**

## On this Page

| Introduction

| The API

| OAI-PMH

| SRU

| OpenSearch

| Thumbnails

| Identifiers

## APIs for Environmental Policy Collection

### Introduction

The UNT Digital Library provides public access to number of application programming interfaces (APIs) to the collections within the system. Below are examples of APIs avaliable for Environmental Policy Collection that can be used openly by those interested in programatically accessing data from this system. You do not need to apply for a special key to use these APIs.

For additional information about these APIs or if you have general questions about machine interaction with the UNT Digital Library please contact Mark Phillips.

Note that all example URLs below use the same protocol and server name, http://digital.library.unt.edu/explore/collections/ESDC/. We only show the URL paths and parameters below to save space.

### The API

### OAI-PMH

The Open Archives Initiative's Protocol for Metadata Harvesting (OAI-PMH) allows programmatic access to this collection's metadata. Two metadata formats are currently supported, the standard oai_dc and the UNT Libraries native metadata format untl.

Below are example URLs which demonstrate some of the standard views of this OAI-PMH repository:
- oai/
  base URL for OAI-PMH repository
- oai/?verb=Identify
  Display information about this repository
- oai/?verb=ListMetadataFormats
  List avaliable metadata formats
- oai/?verb=ListSets
  List avaliabe sets
- oai/?verb=ListRecords&metadataPrefix=oai_dc
  Display records in the oai_dc metadata format
- oai/?verb=ListRecords&metadataPrefix=untl
  Display records in the untl metadata format

And people began to use it

## Statistics for Environmental Policy Collection

**Item Usage**    More Data

**95,675** Total Uses / **692** Total Items (46,602 files) / **691** Visible / **1** Hidden



### Usage by Month/Year

| Year | January | February | March | April | May | June | July | August | September | October | November | December | Total |
|------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|-------|
| 2013 | 3,789 | 3,897 | 5,272 | 2,915 | | | | | | | | | 15,873 |
| 2012 | 2,724 | 3,662 | 3,590 | 3,553 | 3,528 | 3,287 | 3,384 | 3,835 | 4,483 | 5,787 | 4,810 | 3,632 | 46,275 |
| 2011 | 1,922 | 1,660 | 1,666 | 1,904 | 2,271 | 1,858 | 1,654 | 1,812 | 2,093 | 2,722 | 2,636 | 2,287 | 24,485 |

# We should hit 100,000 item uses next month

600 items with 100,000 uses in three years

Not bad.

This work has surfaced more questions than answers

# Should we be doing this?

If a vendor offered this service we would probably subscribe to it.

To me it looks very similar to what libraries have always done.

# How do we scale this activity?

# How do we distribute the work and responsibility for building collections of born digital content?

# How do we build the infrastructure that supports this kind of digital library work?

How do we empower collection libraries, subject experts, liaisons to made selection decisions and contribute to an actively growing collection of resources?

# How do we make it efficient, scalable, and fun?

*Anyone* can **point** to a web site or document, but we have a special name for those that select, acquire, organize, and preserve information and provide access to and services for that information: We call them Libraries.

Mark.phillips@unt.edu

http://digital.library.unt.edu/

http://texashistory.unt.edu/