

SEAD Virtual Archive :: A Thin Layer for Scientific Discovery and Long-Term Preservation

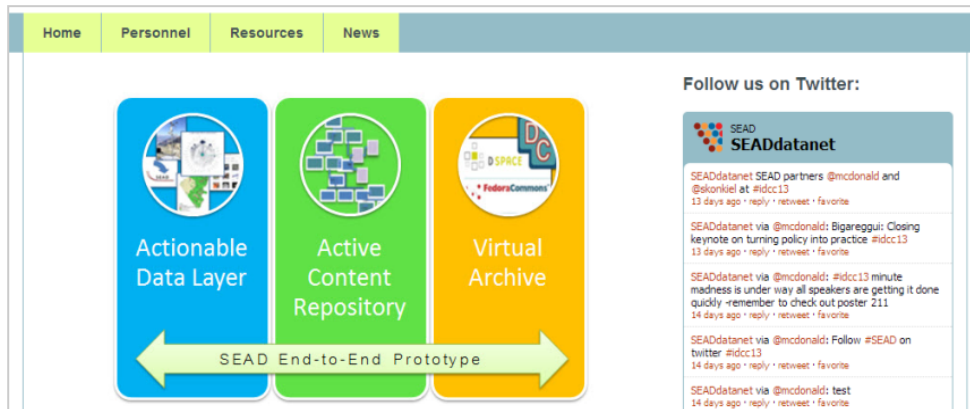
Inna Kouper
April 17, 2013

@inkouper
@SEADdatanet
#dlbbspring2013

SEAD DataNet Project



Welcome to SEAD! Where you can:



Approach:

- Website with 4 categories
- Landing areas addressing different activities
- Common look-and-feel for components
- Cross-links to support activities

Find Data

Work With Your Data

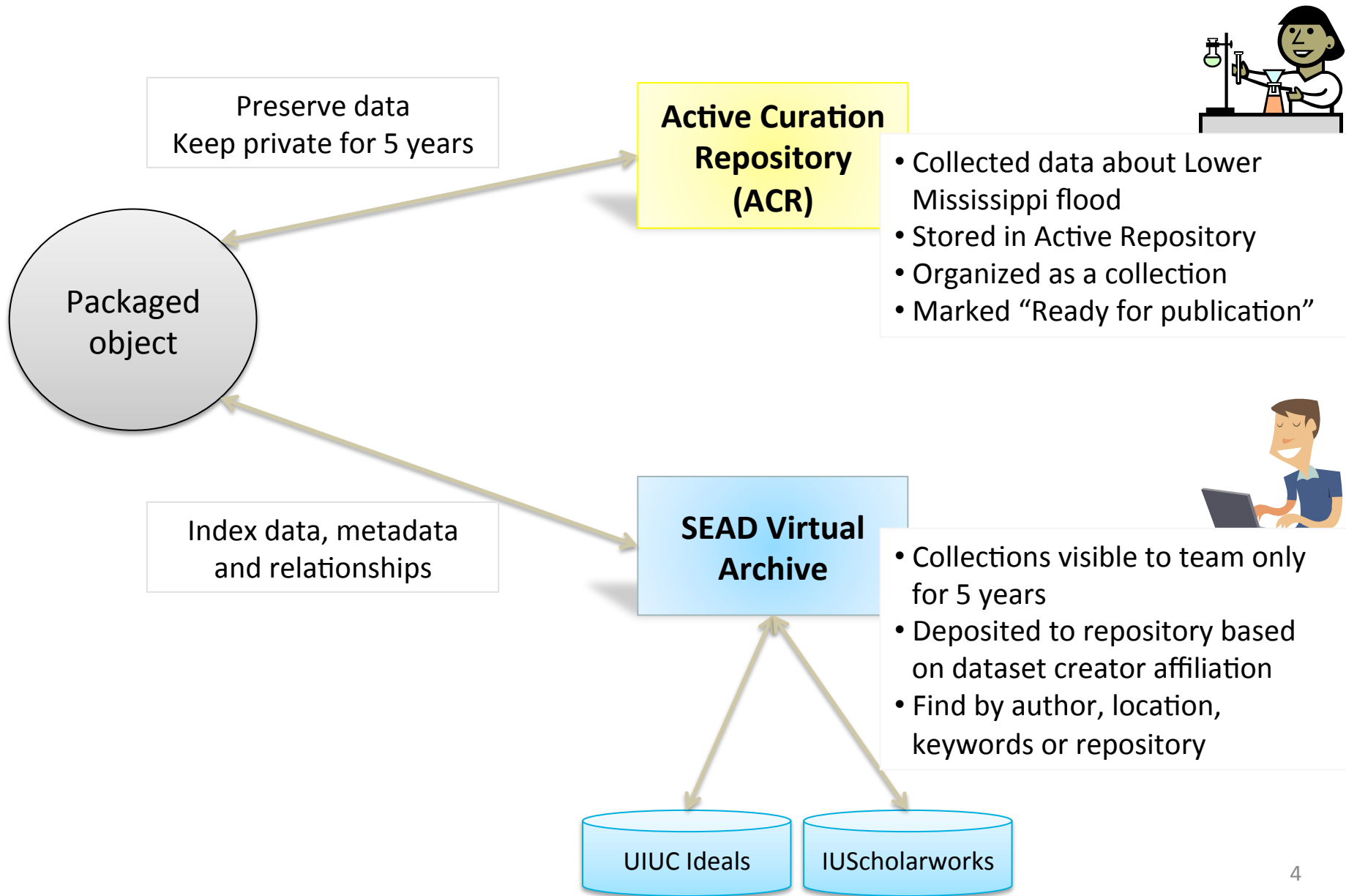
Curate and Preserve Data

Explore Sustainability Research

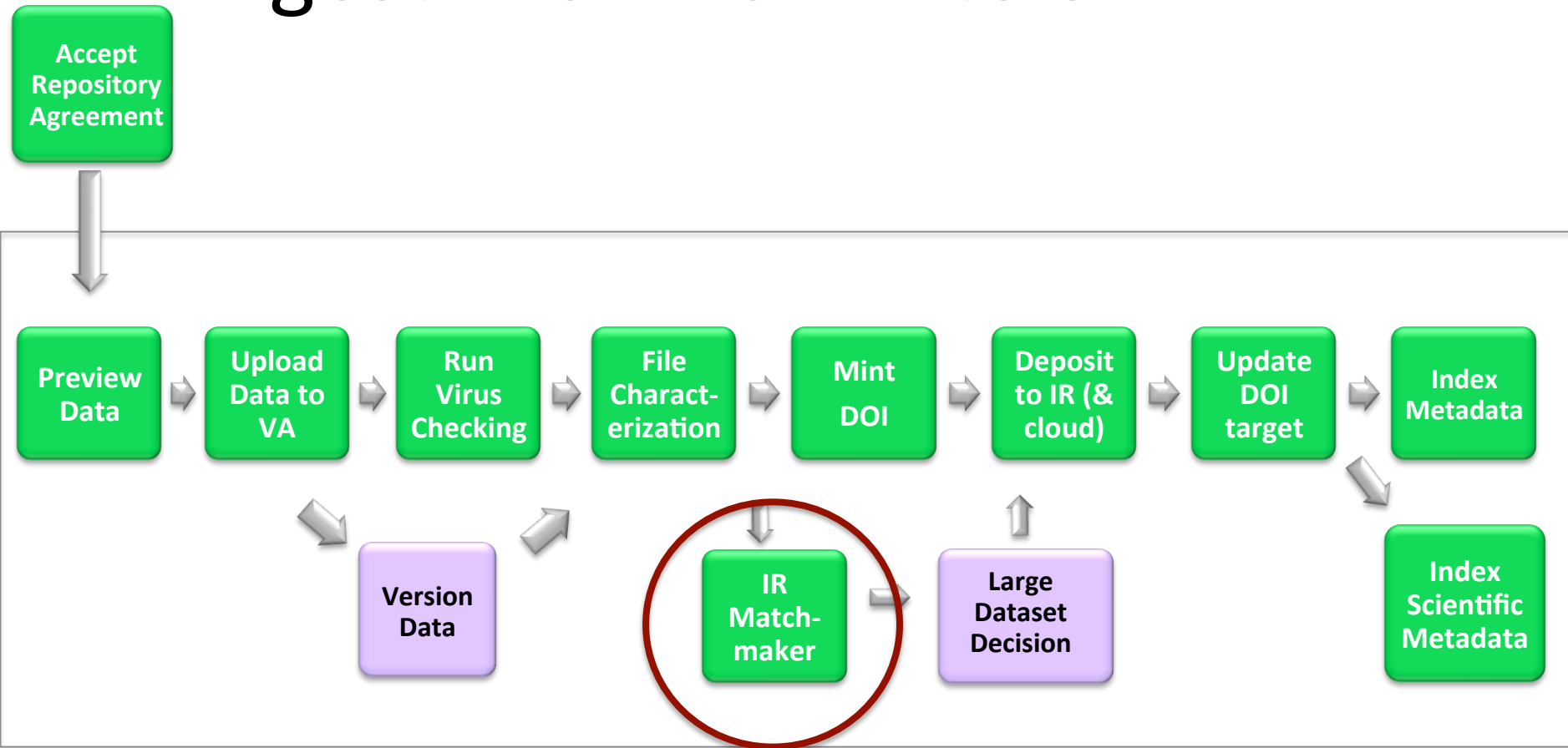
SEAD Virtual Archive

- Purpose: Long-term preservation and discovery
 - Thin virtualization layer on top of multiple university Institutional Repositories (IRs)
 - Enhances IRs by being sustainability science-aware
- Team: IU Libraries, UIUC Libraries, and Data To Insight Center at IU
- Starting point: Data Conservancy code (Johns Hopkins U.)
 - Extended for sustainability science long tail use cases

Making Data Sustainable: Use Case



Ingest Workflow into SEAD VA





SEAD

Sustainable Environment
Actionable Data

Discovery and Long-term Preservation of Scientific Data

[Logout](#)

Data Search

Geo-Spatial Search

Upload Data

Administration

Local Upload

Medici Upload

Datasets

[XES Archive](#)

[Church and rood dataset](#)



Converting to SEAD SIP

Datasets available for
publication are converted
to SEAD packages

Lower Mississippi River Basin Project ^
NCED Project

View Datasets to be archived

Ingest Dataset



Datasets

☒ Church and Rood Alluvial River
Channel Regime Data



Depositing to IDEALS as creator
belongs to University of Illinois

Close

atalogue.pdf

ataset.xls

Lower Mississippi River Basin Project

View Datasets to be published

Ingest Dataset

Stage 1 of Ingest



SEAD

Sustainable Environment
Actionable Data

Discovery and Long-term Preservation of Scientific Data

[Logout](#)

[Data Search](#)

[Geo-Spatial Search](#)

[Upload Data](#)

[Administration](#)

Local Upload

Medici Upload

Datasets



Church and Rood Alluvial River
Channel Regime Data



Archiving to Repository

Close

atalogue.pdf

ataset.xls

Lower Mississippi River Basin Project

View Datasets to be published

Ingest Dataset

Stage 2 of Ingest



SEAD

Sustainable Environment
Actionable Data

Discovery and Long-term Preservation of Scientific Data

[Logout](#)

Data Search

Geo-Spatial Search

Upload Data

Administration

Local Upload

Medici Upload

Datasets



Church and Rood Alluvial River
Channel Regime Data



Indexed and Published Successfully

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atalogue.pdf

ataset.xls

Lower Mississippi River Basin Project

View Datasets to be published

Ingest Dataset

Final Stage of Ingest



SEAD

Sustainable Environment
Actionable Data

Discovery and Long-term Preservation of Scientific Data

[Sign In/ Register](#)

Data Search

Geo-Spatial Search

Upload Data

in

Entity

Core metadata

Title: [\[+\]](#) Church and Rood Alluvial River Channel Regime Data

Creators:

Contact: Nguyen, Charles

Subjects:

Type:

Rights:

Publication Date: 2007-01-01

Abstract: Data compiled from various sources on 284 streams and rivers: river morphology, river process, discharge, hydraulic geometry and grain size.

Site: Eel River

Entity type: Collection

Parents:

Collections:

Former refs

Metadata refs:

Surrogate: Unknown

Alternate Ids: <http://dx.doi.org/10.5967/M0TB14V4>

Location: <http://chih-chiangfyu-ya.granger.uiuc.edu:5988/handle/123456789/103> 

ACR Location: [Church and Rood Alluvial River Channel Regime Data](#)

Dataset is published
into IDEALS and indexed
by SEAD VA



Browse

IDEALS

[Titles](#)
[Authors](#)
[Subjects](#)
[Date](#)
[Communities](#)

This Community

[Titles](#)
[Authors](#)
[Subjects](#)
[Date](#)



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Access Key

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Closed Access
 Limited Access:
U. of I. Users Only

[IDEALS Home](#) ▶ [Data Sets](#) ▶ [SEAD](#) ▶ [Church and Rood Alluvial River Channel Regime Data](#)

Church and Rood Alluvial River Channel Regime Data

Data compiled from various sources on 284 streams and rivers: river morphology, river process, discharge, hydraulic geometry and grain size.


Browse by


- [Titles](#)
- [Authors](#)
- [Subjects](#)
- [Date](#)


Browse Collections of Items

 [Church and Rood Alluvial River Channel Regime Data_collection1](#)

Recent Additions

[\[2012-11-28\] sip](#)
 (Submitted as part of SEAD project) (2012-11-28)
 XML (20KB)

[\[2012-11-28\] Church_and_Rood_Catalogue](#)
 (Submitted as part of SEAD project) (2012-11-28)
 PDF (9MB)

[\[2012-11-28\] Church_and_Rood_dataset](#)
 (Submitted as part of SEAD project) (2012-11-28)
 Microsoft Excel (266KB)

 [Show Statistical Information](#)

Successful automatic
ingest into UIUC IDEALS
repository

Communication with IRs

Data Search

Geo-Spatial Search

Upload Data

Browse

By location

- ☐ Angelo Coast Reserve (6)
- ☐ Eel River (4)
- ☐ St. Anthony Falls Lab (4)
- ☐ Richmond Field Station (1)

By object type

By metadata standard

By institutional repository

- ☐ IU SDA (31581)
- ☐ IU Scholarworks (92)
- ☐ Ideals (5)

By data contributor

Add field

Search

Total matches: 306684

1 [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [Next](#) >>

552

172

Datasets deposited into IU SDA, IU
Scholarworks and UIUC IDEALS

Primary digest
About:..
[Appears in:](#)

Role of Enhanced Metadata

- 20 NCED datasets encoded in FGDC metadata standard
 - Theme and place keywords, rights, data sources, etc.
 - Keywords and descriptors for faceted search
 - More ways to browse and discover!

```
<themekey>"EARTH SCIENCE","LAND SURFACE","TOPOGRAPHY","","","</themekey>
<theme>
  <themekt>None</themekt>
  <themekey>Experimental Earthscape Facility (XES)</themekey>
</theme>
<place>
  <placekt>None</placekt>
  <placekey>University of Minnesota</placekey>
</place>
</keywords>
<acccconst>Free to download and use data from the NCED Data Repository providing the user is registered, and includes
<useconst>Unknown</useconst>
<ptcontac>
  <cntinfo>
    <cntorgp>
      <cntorg>National Center for Earth-Surface Dynamics</cntorg>
      <cntper>Alessandro Cantelli</cntper>
```



Data Search

Geo-Spatial Search

Upload Data

Browse

+ By location

+ By object type

+ By format/standard

+ By institutional repository

- By keyword

- ☐ Active Remote Sensing (1)
- ☐ DIGITAL ELEVATION/DIGIT/
- ☐ EARTH SCIENCE (1)
- ☐ EARTH SCIENCE SERVICE
- ☐ Earth Remote Sensing Instru
- ☐ Lidar/Laser Altimeters (1)
- ☐ RIVERS/STREAMS (1)
- ☐ SURFACE WATER (1)
- ☐ TERRESTRIAL HYDROSPH

- By data contributor

- ☐ Bode, Collin (7)
- ☐ Power, Mary E. (4)
- ☐ Belugi, Dino (3)
- ☐ Paola, Christopher (3)
- ☐ Cantelli, Alessandro (2)
- ☐ Dietrich, William E. (2)

in

Geographic Location

Institutional Repository

FGDC keywords

Faceted
browsing



in

Entity

[Core metadata](#)

Title: [\[+\]](#) Angelo Basic GIS Coverages

Creators: [Power, Mary E.](#), [Bode, Collin](#), [Dietrich, William E.](#)

Contact: Bode, Collin

Subjects: SURFACE WATER, EARTH SCIENCE, TERRESTRIAL HYDROSPHERE, Active Remote Sensing, RIVERS/STREAM SERVICES, DIGITAL ELEVATION/DIGITAL TERRAIN MODELS

Type:

Rights:

Publication Date: 2007-01-01

Abstract: Projection: UTM, zone 10, datum NAD83. GIS file format: ESRI Shapefile for vector, ESRI arcinfo binary GRID form <http://ncalm.berkeley.edu>: Lidar DEM of the South Fork Eel watershed at Angelo reserve was created by NCALM. resolution). California Spatial Information Library (CASIL, <http://gis.ca.gov>): public and federal datasets, including U. Files start with their spatial scale and end with their projection. Maps will often end with their DPI resolution. Eel on

Site:

Entity type: Collection

Parents:

Collections:

Former refs

Metadata refs:

Surrogate: Unknown

Alternate Ids: <http://dx.doi.org/10.5967/M0X9287P>

Location: <https://scholarworks.iu.edu/xmlui/handle/2022/15478> IU ScholarWORKS

FGDC keywords and other information are part of each dataset description

Detailed metadata view

Subject Keyword Terms

Defined by: NASA Global Change Master Directory (GCMD) Instrument Keywords
Active Remote Sensing
Earth Remote Sensing Instruments
Lidar/Laser Altimeters

Defined by: NASA Global Change Master Directory (GCMD) Science Keywords
DIGITAL ELEVATION/DIGITAL TERRAIN MODELS
EARTH SCIENCE
EARTH SCIENCE SERVICES
RIVERS/STREAMS
SURFACE WATER
TERRESTRIAL HYDROSPHERE

Defined by: NASA Global Change Master Directory (GCMD) Location Keywords
California
North America
United States Of America

Defined by: None
Angelo Coast Range Reserve

When and Where

Date: 2007

Bounding Coordinates:
North: 39.7632
South: 39.6857
East: -123.5717
West: -123.6661



VIVO Data Citation

Admin Panel [Edit this individual](#) Verbose property display is **off** [Turn on](#)

Resource URI: <http://vivo-vis-test.slis.indiana.edu/vivo/individual/n5813>

Angelo Basic GIS Coverages | [Research Dataset](#)

Web Pages

- [Link to collection in ACR](#)
- [NCED Data Repository download](#)

[Overview](#) | [Research](#) | [Time](#) | [Identity](#) | [Additional Document Info](#) | [Other](#)

Overview

authors

[Dietrich, William E.](#)
[Power, Mary E.](#)
[Bode, Collin](#)

has subject area

[DIGITAL ELEVATION/DIGITAL TERRAIN MODE](#)
[Earth Science](#)
[TERRESTRIAL HYDROSPHERE](#)

features

Research

geographic focus

[Angelo Coast Range Reserve](#)

DOI
Authors
Subject areas
Abstract
Geographic focus
Rights information

doi

<http://dx.doi.org/10.5967/M0X9287P>

related research data

description

<http://ncalm.berkeley.edu>): Lidar DEM of the South Fork Eel water NCALM.

This data is new and still is being post processed. The dem is ext California Spatial Information Library (CASIL, <http://gis.ca.gov>): pr USGS drg, doqq, and blue-line datasets." class="useTinyMce" role="text"

GIS file format: ESRI Shapefile for vector, ESRI arcinfo binary GRID

Data Sources: National Center for Airborne Laser Mapping (NCALM DEM of the South Fork Eel watershed at Angelo reserve was creat

This data is new and still is being post processed. The dem is ext California Spatial Information Library (CASIL, <http://gis.ca.gov>): pr USGS drg, doqq, and blue-line datasets.

Naming Conventions: This is not strictly followed. Files start with tl projection. Maps will often end with their DPI resolution. Eel: entire North Fork Eel Angelo: Angelo Reserve

rights and restrictions

Free to download and use data from the NCED Data Repository p includes the citation for all datasets.

[About](#)[Participate](#)[Resources](#)[Education](#)[Data](#)

A DataONE Search Tool for Scientific Data

[Return to Search](#)

Query: * AND has data AND (datasource :{ urn:nodel:mnTestSEAD })

[Hide Filters](#)

Filter by author

NCED (3)
Bode, Collin Belugi, Dino (1)
Bode, Collin Power, Mary E. (1)
Cantelli, AlessandroPaola,
ChristopherParker, Gary (1)
Collin Bode (1)
Power, Mary E. (1)

Filter by keywords

Angelo Reserve (7)
Eel Watershed (7)
North Fork Eel (6)
South Fork Eel (6)
Active Remote Sensing (1)
Angelo Coast Range Reserve
(1)

Filter by Originator

National Center for Earth Surface
Dynamics (1)

Sort By:

[Relevance](#)[Start Date](#)[Most Recent](#)

Viewing Documents: 1 - 8 out of 8

Collin Bode; Mary Power; William Dietrich. 01/01/2007. Angelo Basic GIS Coverages.

Identifier: seadva-bode-98125d5c-f769-46e3-88a2-4b6a985bacc0 **Datasource:** SEAD Virtual Archive

Projection: UTM, zone 10, datum NAD83. GIS file format: ESRI Shapefile for vector, ESRI arcinfo binary GRID format for raster. Data Sources: National Center for Airborne Laser Mapping (NCALM, <http://ncalm.berkeley.edu>): Lidar DEM of the South Fork Eel watershed at Angelo reserve was created by NCALM. This data is new and still is being post processed. The dem is extremely high quality (1m resolution). California Spatial Information Library (CASIL, <http://gis.ca.gov>): public and federal datasets, including USGS drg, doqq, and blue-line datasets. Naming Conventions: This is not strictly followed...

[View full metadata](#)[Download](#)

Datasets can be searched and filtered in DataONE

Details, metadata and download links

Summary

- IRs can be a viable solution for data management and preservation
- Sustainability data need exposure via multiple means of access and discovery

SEAD VA can help, but...

- More work is needed to move SEAD VA forward
- To move IU to the position of leadership in data stewardship and exchange closer collaborations between IU libraries, UITs and research centers are needed