

PAD-US 1.1 (CBI Edition): Frequently Asked Questions

1. What is the PAD-US 1.1 (CBI Edition)?

PAD-US 1.1 (CBI Edition) is a comprehensive geospatial data set of United States protected areas, including detailed information on land ownership, management and conservation status. Our goal is to regularly compile and publish national, state and local protected areas information (public and private) that we obtain through an established network of data providers. Protected areas data are collected from these sources and aggregated into a standard framework. Challenges related to the incompleteness of source data, varied formats, data structures, and accuracy are reconciled as much as possible, but this effort is an ongoing process of steady improvement. A unique collaborative process with leading data providers across the nation ensures that source information flows into this database and back to the providers in an iterative fashion. This version substantially improves our national inventory of protected lands. PAD-US 1.1 (CBI Edition) provides the spatial foundation by which users can conceptualize our national conservation landscape. CBI will release an updated version of PAD-US annually.

2. What are the primary features of PAD-US 1.1 (CBI Edition)?

Primary Features of PAD-US 1.1 (CBI Edition):

- CBI aggregates all available, spatially explicit information on protected areas in the continental U.S., Alaska and Hawaii. This version integrates the CBI PAD 4.5, PAD-US 1.0 and TNC Secured Lands for Eastern North America datasets. Relying on a strong network of data providers, a substantial number of new federal, state, local and private protected area polygons are also added to our national portfolio, including aggregations for the states of: VA, CO, FL, IA, IN, VT, NH, MA, MN, WI, MO and AR. We also publish a new compilation of TNC preserves and conservation easements. We do not include protected areas data for U.S. territories at this time.
- CBI supports free downloads of PAD-US 1.1 (CBI Edition) in multiple formats, including an ESRI GeoDatabase, shapefile and layer packages. Users can visualize and download the entire national data set or individual states. Using our Data Basin Protected Areas Center tools, PAD-US 1.1 (CBI Edition) data can also be combined with other conservation related datasets right on this site.

- CBI maintains high standards regarding consistent and comprehensive attribution of protected area attributes, such as ownership, management responsibilities, designations, and conservation intent. For example, secondary and tertiary designations are included to represent protected lands with multiple management categories. This allows for precise representation of complex conservations patterns (e.g., a Wilderness Area within a National Forest).
- CBI retains and publishes all information from our source data regarding the agencies that own and manage each protected area, along with local designations and local names. CBI also includes generalized and standardized fields to facilitate easy searches of common protected area designations and ownerships across political boundaries. The [PAD-US 1.1 \(CBI Edition\) User Guide](#) provides dataset organization and search tips.
- CBI publishes one “flat file” of U.S. Protected Areas by carefully correcting the minor overlaps and gaps that result from the aggregation of multiple datasets. These errors are reconciled with permission from the source. Error correction is guided by set standards outlined in our [Protocols and Procedures](#) document. Where possible, we also attempt to identify and correct major topology corrections in collaboration with the original source of the data.
- CBI identifies and aggregates unprotected lands into a “private lands matrix” feature. A standardized base map of shorelines/boundaries is used to identify these areas. It is developed using the NOAA Medium Resolution Shoreline-contiguous US, NAD 83 Alaska and NAD 83 Hawaii coast. The private lands matrix provides users an opportunity to perform acreage calculations of unprotected land surrounding or within protected areas (“inholdings”). The national boundary can also be utilized for spatial representation purposes. This feature can be easily removed for those users who prefer to only represent protected lands.

3. Why was the PAD-US 1.1 (CBI Edition) created?

PAD-US 1.1 (CBI Edition) provides the most complete picture of protected area coverage in the United States to date. It was created to help people integrate protected areas data into their daily work (e.g. mapping, planning, analyses, and problem-solving). For example, this database makes it easy for users to address important conservation and resource questions pertaining to climate change adaptation, green energy development, infrastructure planning, and wildlife connectivity. State and regional planners and managers will appreciate this dataset as it provides critical contextual

information for their work. Institutions responsible for national and international reporting will find this database full of reliable, accurate information for their purposes. The scientific and conservation community will similarly benefit from having this standardized base map to carry out their research and planning objectives.

For the more casual user or question, we have constructed the database to answer questions such as: How many acres does my town consider 'protected'? Where is the nearest wild and scenic river? How many acres does the BLM have designated as Wilderness Study Area in the Pacific Northwest.

4. How does CBI define the term 'protected area'?

PAD-US 1.1 (CBI Edition) defines protected area to include all lands dedicated to the preservation of biology diversity and to other natural, recreation and cultural uses, and managed for these purposes through legal or other effective means (adapted from IUCN definition). The database represents the full range of conservation designations to preserve these natural values in the United States. Our database does not distinguish a protection threshold above which biodiversity is considered secure. Instead, a complete suite of protected area attributes are provided for each polygon with the purpose of providing users the information they need to define the most relevant conservation thresholds for their own objectives and requirements.

5. Who created PAD-US 1.1 (CBI Edition)?

PAD-US 1.1 (CBI Edition) is being designed and implemented by the Conservation Biology Institute (CBI). This edition is built in partnership with numerous data providers and reviewers (See next question for a detailed list). The project is generously funded with support from the USDA Forest Service FIA, USDA Forest Service Legacy Program, and the United States Air Force.

6. How do I properly cite this dataset?

National coverage: The Conservation Biology Institute. May 2010. PAD-US 1.1 (CBI Edition). Corvallis, Oregon.

Single state: The Conservation Biology Institute. May 2010. Protected Areas - [state name], USA. Corvallis, Oregon.

7. What was within the scope of PAD-US 1.1(CBI Edition)?

- Available protected areas data for the continental U.S., Alaska, and Hawaii. It does not include protected areas data for U.S. territories at this time.
- All known, spatially explicit polygons with formal designations to protect natural values to some degree
- Accurate conservation-related attributes, including ownership, management responsibilities, designations, and conservation intent
- Precise representation of complex ownership and management, including many nested polygons (e.g., Wilderness Areas within a national forest)
- A private land matrix of all non-protected polygons used to distinguish the geographic context of land protection
- Data source documentation and contact information
- Topology corrections in collaboration with the source in most instances.

8. What was outside the focus for PAD-US 1.1(CBI Edition)?

- Conservation easement data is being compiled in a compatible database under development by the National Conservation Easement Database (NCED) project. Some conservation easement data are included in PAD-US 1.1 (CBI Edition). The two projects will be fully integrated in future versions
- Unprotected water features
- Marine protected areas
- Many lands proposed but not yet designated
- Most developed recreation lands (e.g., sports complexes, golf courses, and shooting ranges)

9. Who provides protected areas datasets to CBI?

This update is the result of a unique collaboration with leading data providers across the nation, who continue to work closely with our team to ensure source information flows

seamlessly into PAD-US 1.1 (CBI Edition). The following is a list of contributors or reviewers:

- Mark Anderson, Director of Conservation Science, Eastern U.S. Region, The Nature Conservancy
- Chris Canalos, Coordinator of Geographic Information Systems, Georgia Department of Natural Resources
- Sarah Bogen, GIS Analyst, Wisconsin Department of Natural Resources - Forestry Division
- David Boyd, Conservation Lands GIS Planner, Virginia Department of Conservation and Recreation
- Melissa Clark, Spatial Data Planner, Eastern U.S. Region, The Nature Conservancy
- David Cooper, Chief of Resource Management, Grand Portage National Monument
- Jennifer M. Delisle, Information Manager, Kansas Natural Heritage Inventory
- Joe Fargione, Lead Scientist, North American Region, The Nature Conservancy
- Ty Guthrie, Senior Spatial Analyst, Conservation Information and Data Systems, World Wide Office, The Nature Conservancy
- Seth Hendrick, GIS Specialist, National Park Service
- Mike Jezierski, GIS Division, Arkansas Game and Fish Commission
- Sally Jue, Conservation Lands Biologist, Florida Natural Areas Inventory (FNAI)
- Dr. Liz Kramer, Director, Natural Resources Spatial Analysis Laboratory (NARSAL), College of Agriculture and Environmental Sciences, University of Georgia
- Tara Kieninger, Program Manager, Division of Natural Heritage, Illinois Department of Natural Resources
- Denise Kamradt, GIS Specialist, Santa Monica Mountains National Recreation Area
- Anthony Laslowicz, GIS Data Transfer Specialist, AZ State Land Department
- Rebecca Lilja, Nebraska State & Private Forestry Division, USDA Forest Service
- Tom Luther, Northeast Region GIS Specialist, USDA Forest Service
- Robb Mcleod, Senior GIS Manager, Ducks Unlimited
- Jim Merchant, Professor in the Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln
- Ed Montegomery, Manager, Poison Springs State Forest
- Larry Orman, Executive Director, GreenInfo Network
- Chris Phaneuf, GIS Analyst, New Hampshire GRANIT Statewide GIS Clearinghouse
- Janel Pike, GIS Development Specialist, Wisconsin Department of Natural Resources - Forestry Division
- Scott Pugh, Northern Research Station, USDA Forest Service
- Sudhir Ponnappan, Head of the Realty Division, Nebraska Game and Parks

Commission

- Tina Rotenbury, GIS Specialist, USAD Forest Service
- John Reitsma, GIS Coordinator, Bureau of Land Management
- Dr. David Theobald, Professor, Department of Human Dimensions of Natural Resources and Natural Resource Ecology Lab, Warner College of Natural Resources, Colorado State University
- Karen Walker, Biological Data Systems Coordinator, Montana Natural Heritage Program

10. I have data to contribute to your next version. What should I do?

Aggregating a nation's protected areas into a national standard is a collaborative process. Only by working together can we assure the highest quality. If you feel you have important additions to make to the next version, please contact Kai Henifin (khenifin@consbio.org).

11. I found an error in this version. What should I do?

With a large database of this type, errors do occur. For our vision to be achieved, the conservation landscape represented in PAD-US 1.1 (CBI Edition) should match your understanding. Feedback on errors allows us to establish the proper communication channels and relationships to ensure the corrections are made and future errors are avoided.

Please contact Kai Henifin (khenifin@consbio.org) about errors. Include the state the county of the feature with geometric or attribution error, and if possible, a low-resolution .JPG image.

12. How are conservation easements handled in your dataset?

PAD-US 1.1. (CBI Edition) focuses on fee protected lands only. CBI, Ducks Unlimited, Defenders of Wildlife, NatureServe and The Trust for Public Land are collaboratively assembling a compatible National Conservation Easement Database (NCED). Key

partners providing support, advice, and data include the Land Trust Alliance, representing the views and concerns of the nation's 1,700+ local and regional land trusts, The Nature Conservancy, the U.S. Fish and Wildlife Service, the Natural Resources Conservation Service, and the U.S. Forest Service. The U.S. Endowment for Forestry and Communities and the Gaylord and Dorothy Donnelley Foundation generously fund the NCED project.

For more information, visit the NCED website: <http://www.conservationeasement.us/> If you have data to contribute to this project, please contact Allison Anderson at allison@consbio.org.

13. What is the history of protected areas dataset publication at CBI?

CBI published its first protected areas dataset (PAD) in 1999, creating the first national data inventory of federal, state and local lands, with conservation rankings (GAP and IUCN scores). Four updates have been published over the past decade with support from federal agencies and private foundations.

14. How are other national PAD-US mapping efforts related to PAD-US 1.1 (CBI Edition)?

The PAD-US Partnership is suspending its current work as of May 1, 2010 and will revisit its organizational options in the fall of 2010. All organizations involved in the Partnership continue to support the vision outlined in A Map for the Future, and are making efforts to secure the resources needed to accomplish this. As of mid-2010, there are two national inventories of protected areas: the Conservation Biology Institute maintains PAD-US 1.1 (CBI Edition); the USGS GAP Analysis Program maintains a separate PAD-US edition. We can help in anyway possible to clarify specific questions