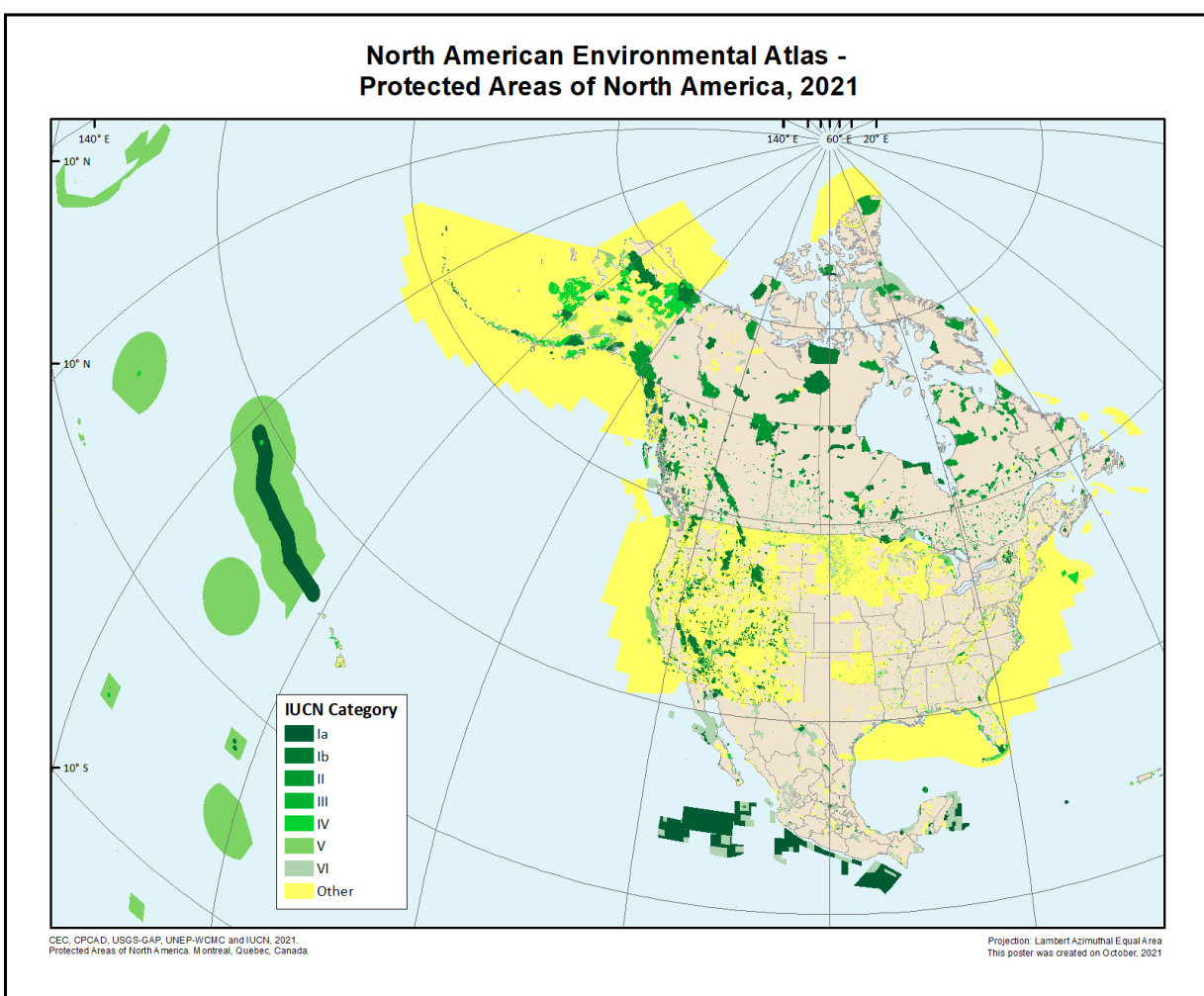


2021 North America Protected Areas, Map Sources and Attributes Description



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Introduction

The new map of the North America Protected Areas is an update of the map published in 2017 by the Commission for Environmental Cooperation. This new map integrates the most recent databases available as of August 2021 in Canada, the United States and Mexico.

As defined by the International Union for Conservation of Nature (IUCN), a protected area represents: “A clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystems services and cultural values”.

This new version is delivered in two vector layers of spatial information, a layer that shows all the areas that have been categorized in the International Union for Conservation of Nature (IUCN) classification scheme, and a layer with other effective area-based conservation measures (OECMs), areas that do not meet the formal definition of protected areas but are managed in a way that conserves biodiversity over the long term and are subject to special protection.

Protected areas shown in this updated map include areas such as National Parks, Provincial or State Parks, Territorial Parks, Indigenous Protected Areas, National Wildlife Areas and Refugees, Migratory Sanctuaries and Marine Protected Areas in Canada. In the United States, the map encompasses areas dedicated to the preservation of biological diversity by means of legal structures such as Fees, Easements and other types of legal designation actions. In Mexico, the map reports important areas dedicated to preservation such as Biosphere Reserves, National, State and Municipal Parks, Voluntary Conservation Areas and other conservation establishments such as UNESCO World Heritage sites and Ramsar sites.

The main data sources for this new map are comprised by the Canadian Protected and Conserved Areas Database (a databases that replaces the previous Conservation Areas Reporting and Tracking System (CARTS)), the Protected Areas Database of the United States (PAD-US), and the Mexican protected areas reported by the World Database on Protected Areas (WDPA).

The new map standardizes 23 information attributes on protected areas across North America. Adding information on other conservation areas not categorized by the International Union of Conservation of Nature (IUCN), the full description of IUCN categories, link to source information for all polygons, comments reported by the source data provider, definition of sub-surface rights status (only in Canada), areas counted towards the Aichi Biodiversity Target 11 (only in Canada), Governance type describing the decision-making structure of protected or conserved areas (Canada and Mexico only), and the codes describing the USA classification for protected areas (only in the USA).

This new map version reduces the number of redundant polygons, as areas belonging to the same protected area with same attributes have been dissolved into more larger polygons. Geometry errors from the source data have been repaired, allowing a more accurate report on areas calculated with GIS tools. The new CEC map reports a total 261,302 protected areas of different types (include World Heritage or Ramsar Sites) in contrast with 99,379 areas reported in the 2017 CEC map.

Canada Protected Areas

Canadian Protected and Conserved Areas Database (CPCAD)

Environment and Climate Change Canada

Spatial Domain: Canada

Geometry: Polygon

Data: <https://www.canada.ca/en/environment-climate-change/services/national-wildlife-areas/protected-conserved-areas-database.html>

Source metadata: 2020_CPCAD_User_Manual_EN.pdf (acquired upon request to Geomatics and Information Management, Canadian Wildlife Service, ec.scf-geocarto-cws-geomapping.ec@canada.ca)

Source file name: CPCAD-BDCAPC_Dec2020.gdb

File name: CPCAD_Dec2020.shp

Date of Publication: December 2020

Description

"The Canadian Protected and Conserved Areas Database (CPCAD) contains the most up to date spatial and attribute data on marine and terrestrial protected areas and other effective area-based conservation measures (OECM) in Canada. It is compiled and managed by Environment and Climate Change Canada (ECCC), in collaboration with federal, provincial, and territorial

jurisdictions. CPCAD evolved from the Conservation Areas Reporting and Tracking System (CARTS). CARTS was jointly managed between Environment and Climate Change Canada (ECCC) and the Canadian Council on Ecological Areas (CCEA). CCEA developed the original tools and guidance to recognize and report on protected areas. CPCAD includes protected areas (PAs) in all International Union for Conservation of Nature (IUCN) categories and other effective area-based conservation measures (OECMs). Indigenous protected and conserved areas (IPCAs) are also included when recognized as PAs or OECMs. Following a formal data call, jurisdictions send their data to the CPCAD technical team, including geospatial boundary and attribute data using the CPCAD data schema. The CPCAD team compiles the jurisdictional submissions, produces national reports in various formats and makes the data available on the Canada.ca Website.”

*Citation: Environment and Climate Change Canada (2020). Canadian Protected and Conserved Areas Database (CPCAD). Geodatabase file available at:
<https://www.canada.ca/en/environment-climate-change/services/national-wildlife-areas/protected-conserved-areas-database.html#toc2>*

Preprocessing

- The source geodatabase has two polygons layers, one describing all the protected areas of Canada as for December 2020 and a layer with the delisted areas by the time the data was released. The first layer was defined as the main input data.
- The protected areas layer was projected from its native reference system to the standard Commission for Environmental Cooperation reference system (Lambert Azimuthal Equal Area).
- The standard attribute names from the 2017 CEC protected areas map were added to the layer file and the fields with names and descriptions in French were deleted.
- The zone IDs were removed, as these represent areas within the same protected area. This aims to standardize the same level of generalization across the protected areas in Canada, the United States and Mexico. The attribute field of local description was also removed as this refers to polygons with a unique zone ID that were subsequently dissolved into de parent IDs of each protected area.
- The standard attribute fields from the 2017 CEC protected areas map were populated with the information contained in the original CPCAD map layer. The classes in the Biome attribute field were changed from T and M to Terrestrial and Marine respectively.
- Finally, a dissolve process was conducted to merge polygons with the same set of attribute values. This mainly merges polygons within the same protected areas that previously described different zone IDs.

United States Protected Areas

Protected Areas Database of the United States (PAD-US)

U.S. Geological Survey (USGS) Gap Analysis Project (GAP)

Spatial Domain: United States

Geometry: Polygon

Data: https://www.usgs.gov/core-science-systems/science-analytics-and-synthesis/gap/science/pad-us-data-download?qt-science_center_objects=0#qt-science_center_objects

Source metadata: PADUS2_1_Metadata_xml_FGDC.html

Source file name: PAD_US2_1.gdb

File name: PADUS2_1Combined_Proclamation_Marine_Fee_Designation_Easement.shp

Version: 2.1

Year of Origin: 2005

Date of Publication: September 2020

Description

"The USGS Protected Areas Database of the United States (PAD-US) is the nation's inventory of protected areas, including public land and voluntarily provided private protected areas, identified as an A-16 National Geospatial Data Asset in the Cadastre Theme. The PAD-US is an ongoing project with several published versions of a spatial database including areas dedicated to the preservation of biological diversity, and other natural (including extraction), recreational, or cultural uses, managed for these purposes through legal or other effective means. The database was originally designed to support biodiversity assessments; however, its scope expanded in recent years to include all public and nonprofit lands and waters. Most are public lands owned in fee (the owner of the property has full and irrevocable ownership of the land); however, long-term easements, leases, agreements, Congressional (e.g. 'Wilderness Area'), Executive (e.g. 'National Monument'), and administrative designations (e.g. 'Area of Critical Environmental Concern') documented in agency management plans are also included. The PAD-US strives to be a complete inventory of public land and other protected areas, compiling "best available" data provided by managing agencies and organizations. The PAD-US geodatabase maps and describes areas using over twenty-five attributes and five feature classes representing the U.S. protected areas network in separate feature classes: Fee (ownership parcels), Designation, Easement, Marine, Proclamation and Other Planning Boundaries. Five additional feature classes include various combinations of the primary layers (for example, Combined_Fee_Easement) to support data management, queries, web mapping services, and analyses. The PAD-US Version 2.1 dataset includes a variety of updates and new data from the previous Version 2.0 dataset (USGS, 2018 <https://doi.org/10.5066/P955KPLE>), achieving the primary goal to "Complete the PAD-US Inventory by 2020" (<https://www.usgs.gov/core-science-systems/science-analytics-and-synthesis/gap/science/pad-us-vision>) by addressing known data gaps with newly available data. The following list summarizes the integration of "best available" spatial data to ensure public lands and other protected areas from all jurisdictions are represented in PAD-US, along with continued improvements and regular maintenance of the federal theme. The general 'Category' for the protection mechanism associated with the protected area. 'Fee' simple is the most common way real estate is owned. A conservation 'easement' creates a legally enforceable land preservation agreement between a landowner and government agency or qualified land protection organization (i.e. land trust). 'Other' types of protection include leases, agreements, or deed restrictions. 'Designation' is applied to management boundaries not tied to title documents (e.g. 'National Monument', 'Wild and Scenic River', and some 'State Wildlife Management Area') overlapping fee ownership parcels. 'Marine' includes outer continental shelf lands managed by the Bureau of Ocean Energy Management and Marine Protected Areas identified by the National Oceanic and Atmospheric Administration. 'Proclamation' defines the outer boundaries of areas without internal ownership defined: Tribal Lands (Census AIA), Military Lands (Department of Defense), Proclamation (National Park Service and Forest Service) and Approved Acquisition Boundaries (U.S. Fish and Wildlife Service)"

Citation: U.S. Geological Survey (USGS) Gap Analysis Project (GAP), (2020). Protected Areas Database of the United States (PAD-US) 2.1: U.S. Geological Survey data release, available at: <https://doi.org/10.5066/P92QM3NT>.

Preprocessing

- The source geodatabase contains 10 different layers that show individual designation categories, and several combinations of them. The layer showing all different designation types (PADUS2_1_Combined_Proclamation_Marine_Fee_Designation_Easement) was selected as the main input for the North American Protected areas update.
- The selected protected areas layer was projected from its native reference system to the standard Commission for Environmental Cooperation reference system (Lambert Azimuthal Equal Area).
- The standard attribute names from the 2017 CEC protected areas map were added to the layer file and populated with the information contained in the original PAD-US map layer. The state names reported in the original map layer were modified to meet the naming scheme of the CEC North America map layers.
- Different typos were corrected in all attribute fields to ensure consistency in the naming structure of each. Most of the corrections were made in the names of the protected areas, their type and local owners, this prevents polygons with identical names but different spelling (upper-case and lower-case combinations, different used of colons and hyphens, etc.) to create unnecessary categories based on features description. Attribute field of Manager Name and Local Owner were merged into a new attribute field to describe management agency in the new map.

Mexico Protected Areas

World Database on Protected Areas (WDPA)

The UN Environment Programme World Conservation Monitoring Centre and the International Union for Conservation of Nature

Spatial Domain: Global

Geometry: Polygon

Data: <https://www.protectedplanet.net/en/thematic-areas/wdpa?tab=WDPA>

Source metadata: WDPA_WDOECM_Metadata_1_6.pdf

Source file name: WDPA_Aug2021_Public.gdbPAD_US2_1.gdb

File name: PADUS2_1Combined_Proclamation_Marine_Fee_Designation_Easement.shp

Version: 1.6

Date of Publication: August 2021

Description

"The World Database on Protected Areas (WDPA) is a joint project of UNEP and the International Union for Conservation of Nature (IUCN). It is compiled and managed by the UN Environment Programme World Conservation Monitoring Centre (UNEP WCMC), in collaboration with governments, non-governmental organizations, and other data providers. The databases store information on the global distribution of terrestrial and marine protected areas and other effective area-based conservation measures (OECMs). The databases contain protected areas and OECMs designated at the national level and under regional and international conventions and

agreements, in addition to those not legally designated. International designations include those under the Ramsar Convention, the World Heritage Convention (United Nations Educational, Scientific and Cultural Organization, UNESCO), and sites under the UNESCO's Man and the Biosphere Programme (MAB). Regional agreements include sites under the Natura 2000 network (European), as well as Marine Protected Areas designated under regional conventions such as the Convention for the Protection of the marine Environment of the North-East Atlantic (OSPAR) and many others.”

The WDPA dataset was selected as the main source for Mexico protected areas as it reports a most updated (August 2021) dataset than the publicly available spatial layer provided by the National Commission of Protected Natural Areas (May 2021). WDPA data also offers a higher number of information attributes that facilitate standardization with attributes available in the Canada and United States protected areas maps.

Citation: UNEP-WCMC (2021). Protected Area Profile for Mexico from the World Database of Protected Areas, August 2021. Available at: www.protectedplanet.net

Preprocessing

- All polygons corresponding Mexican protected areas with the code ISO == “MEX” were selected from the global protected areas layer. A new layer with selected features was created and projected from its native reference system to the standard Commission for Environmental Cooperation reference system (Lambert Azimuthal Equal Area).
- The standard attribute names from the 2017 CEC protected areas map were added to the layer file and populated with the information contained in the original WDPA map layer.
- The attribute containing information on criteria to define UNESCO World Heritage and Ramsar sites was included in a “comments” attribute field. The “management agency” attribute field was populated with information from “owner” field in the input data.
- The official area was originally reported in squared kilometers in the input layer, this attribute field was converted to hectares to match with the official area reported in the rest of the polygons representing protected areas across North America.

North America Protected Areas

Map Integration Process

1. Three national protected areas map layers previously preprocessed were merged into a single North American protected areas map.
2. Based on standard information available in the three input map layers, a series of 23 attributes was defined. Characteristics of all attributes are described in the last section of this document.
3. A dissolve process was performed, considering all attribute fields except “GIS area” which was subsequently calculated. This way connected polygons with identical information in 22 out of 23 attribute fields were merged into new polygons, multipart polygons were allowed in this process. The dissolve process reduced the number of polygons in the initial North American map layer from 447,291 to 345,083 polygons without compromising the spatial representation of all reported protected areas.

4. A repair geometry process was performed to fix internal geometry conflicts in the input datasets, mostly related to null geometry and incorrect ring ordering.
5. The GIS area was calculated in its corresponding field, using the map reference system (Lambert Azimuthal Equal Area).
6. Official area and GIS area attribute fields were rounded up to the closet integer value and thousands were separated by commas.
7. A spelling checkup was conducted over each attribute field, correcting double or triple spaces, incorrect combinations of upper-case and lower-case letters and meaningless text symbols.
8. The map including all North American protected areas was split into two map layers. One layer containing all polygons describing protected areas that meet the requirements of the International Union for Conservation of Nature (IUCN) classification, and another map layer for all areas that are considered as other conservation areas.

Notes and Disclaimers

- The final maps report all polygons representing protected areas including either their national classification or their characterization in international classification schemes, thus, more than one polygon may spatially depict the same protected areas (overlapping polygons) but with different set of attributes in relation to their corresponding classification scheme.
- Total area calculation must not be performed by means of the sum of all individual areas, as the different descriptions of similar areas leads to spatial overlaps that might produce spatial redundancy and double area counting.
- Official area is not reported for polygons in the source map of the United States, only GIS area in acres. The attribute field reporting Official Areas in the final North American map, shows "0" for all polygons in the United States.
- The "comments" field was populated with information reported in comments from the input map layers. The text described in the "comments" attribute field is not responsibility of the Commission for Environmental Cooperation.

Attribute fields descriptions

ID	Attribute Field	Short Description	Data Type	Values Range	Example
01	SOURCE_ID	Identification ID taken from the input map layer	Long	0 - 990000100	730003600
02	COUNTRY	Three-letter code describing country name	String	"CAN", "USA", "MEX"	MEX
03	STATE_PROV	Code describing provinces or states	String	"CA-AB" – "US-WY"	MX-MOR
04	PA_NAME	Name of the Protected Area	String	"Ahihi Kina'u Natural Area Reserve" – "Zyskowski Farm Conservation Area"	Yellowstone National Park
05	TYPE_PA	Type of Protected Area	String	"A - Park" – "World Heritage Site (natural or mixed)"	Marine National Wildlife Area
06	MGMT_AGENCY	Management Agency	String	"Agricultural Research Service" – "Vuntut Gwitchin First Nation"	City Land - Verona Township
07	BIOME	Type of Biome defining main ecosystem characteristic	String	"Terrestrial", "Marine", "Marine/Terrestrial"	Marine
08	IUCN_CAT	Category meeting IUCN criteria	String	"Ia" – "VI"	III
09	IUCN_DES	Short description of the IUCN category	String	"Habitat/Species Management Area" – "Wilderness Area"	National Park
10	DATE_ESTAB	The year when the area was established as protected	Long	0 – 2020	1985
11	STATUS	Legal status of the protected area	String	"Designated" - "Unknown"	Proclamation
12	LEGISLAT	Official name of the legislation that provides protection to the area	String	"Alberta Land Stewardship Act" – "Yukon Wildlife Act"	National Capital Act
13	OECM	Other effective area-based conservation measures	String	"Yes", "No", "N/A"	No
14	WDPAID	Site identification number taken from the world database on protected areas	String	"1000" – "Not Reported"	103166_B
15	DATASOURCE	Source data used to compile protected areas	String		Protected Areas Database of the United States (PAD-US) - Edition: 2.1, 2020
16	ORGSRC_URL	Source URL reported in input data	String	http://albertaparks.ca/ - www.ontarioparks.com/english/	http://albertaparks.ca/
17	OFICIAL_HA	Official size of the protected area in hectares	Double	0 - 31941137	24774
18	GIS_HA	Sizes of the protected area in hectares calculated in a GIS software	Double	0 - 151223264	141.64
19	COMMENTS	Comments reported in the input datasets	String		Conflict with Maryland Ag Land Preservation Fdn 44948
20	SUBS_RIGHT	The Sub-Surface Right Status	String	"Extinguished" – "Withdrawn, Provincial Crown"	Indigenous Owner
21	AICHI_T11	Decision on whether the area should be counted or not towards the Aichi Biodiversity Target 11	String	"Yes", "No", "N/A"	Yes
22	GOV_TYPE	Governance Type	String	"Collaborative Governance" – "Sub-national ministry or agency"	Indigenous Government
23	GAP_STS	Status code of the USA Gap Analysis Project	String	"1" – "N/A"	3

Long Descriptions

01. SOURCE_ID

Unique identifier defined by the data source. Only available in Canada, Mexican and US areas do not have source IDs.

02. COUNTRY

The country in which protected area falls. Countries are defined by a three-letters code.

CAN = Canada	MEX = Mexico	USA = United States of America
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03. STATE_PROV

State or province code defining the location of each protected area (two letters country code + two or three letters state/province code). If the protected area falls in more than one state or province, all applicable values are listed. Marine protected areas are described by the country code and the general location where they fall.

CA-AB = Alberta	MX-JAL = Jalisco	US-DC = Washington DC	US-NH = New Hampshire
CA-BC = British Columbia	MX-MEX = State of Mexico	US-DE = Delaware	US-NJ = New Jersey
CA-MB = Manitoba	MX-MIC = Michoacán	US-FL = Florida	US-NM = New Mexico
CA-NB = New Brunswick	MX-MOR = Morelos	US-FM = Fed States of Micronesia	US-NV = Nevada
CA-NL = Newfoundland and Labrador	MX-NAY = Nayarit	US-GA = Georgia	US-NY = New York
CA-NS = Nova Scotia	MX-NLE = Nuevo León	US-GU = Guam	US-OH = Ohio
CA-NT = Northwest Territories	MX-OAX = Oaxaca	US-HI = Hawaii	US-OK = Oklahoma
CA-NU = Nunavut	MX-PUE = Puebla	US-IA = Iowa	US-OR = Oregon
CA-ON = Ontario	MX-QUE = Querétaro	US-ID = Idaho	US-PA = Pennsylvania
CA-PE = Prince Edward Island	MX-ROO = Quintan Roo	US-IL = Illinois	US-PR = Puerto Rico
CA-QC = Quebec	MX-SIN = Sinaloa	US-IN = Indiana	US-PW = Palau
CA-SK = Saskatchewan	MX-SLP = San Luis Potosí	US-KS = Kansas	US-RI = Rhode Island
CA-YT = Yukon	MX-SON = Sonora	US-KY = Kentucky	US-SC = South Carolina
MX-AGU = Aguascalientes	MX-TAB = Tabasco	US-LA = Louisiana	US-SD = South Dakota
MX-BCN = Baja California	MX-TAM = Tamaulipas	US-MA = Massachusetts	US-TN = Tennessee
MX-BCS = Baja California Sur	MX-TLA = Tlaxcala	US-MD = Maryland	US-TX = Texas
MX-CAM = Campeche	MX-VER = Veracruz	US-ME = Maine	US-UM = Minor Outlying Islands
MX-CHH = Chihuahua	MX-ZAC = Zacatecas	US-MH = Marshall Islands	US-UT = Utah
MX-CHP = Chiapas	US-AK = Alaska	US-MI = Michigan	US-VA = Virginia
MX-CMX = Mexico City	US-AL = Alabama	US-MN = Minnesota	US-VI = Virgin Islands
MX-COA = Coahuila	US-AR = Arkansas	US-MO = Missouri	US-VT = Vermont
MX-COL = Colima	US-AS = American Samoa	US-MS = Mississippi	US-WA = Washington
MX-DUR = Durango	US-AZ = Arizona	US-MT = Montana	US-WI = Wisconsin
MX-GRO = Guerrero	US-CA = California	US-NC = North Carolina	US-WV = West Virginia
MX-GUA = Guanajuato	US-CO = Colorado	US-ND = North Dakota	US-WY = Wyoming
MX-HID = Hidalgo	US-CT = Connecticut	US-NE = Nebraska	

See complete list in:

Commission for Environmental Cooperation (2005) Guidelines for Geo-spatial data for Compatibility with the North American Atlas Framework. CEC: Montreal pp.5-11

04. PA_NAME

The name given to the protected area by the administrator or owner. There is no predefined set of valid protected area names. Names were extracted from the source data sets.

05. TYPE_PA

The type of protected area. There is no predefined set of valid protected area types. The types were taken from the source data sets, which contain values as supplied by the data contributors.

06. MGMT_AGENCY

The primary agency responsible for the management of the area, or the type of agency responsible for the area. There is no predefined list of valid agencies or agency types. The agency

or agency type was taken from the source data sets. This field combines manager name and local owner in the United States.

07. BIOME

Whether a protected area is marine, terrestrial, or both marine and terrestrial.

08. IUCN_CAT

The International Union for the Conservation of Nature (IUCN) classification of the protected area, which indicates the management objective.

IUCN Category	IUCN Category Name	IUCN Category Description
Ia	Strict Nature Reserve	Protected areas that are strictly set aside to protect biodiversity and also possibly geological-geomorphological features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of the conservation values. Such protected areas can serve as indispensable reference areas for scientific research and monitoring.
Ib	Wilderness Area	Protected areas that are usually large unmodified or slightly modified areas, retaining their natural character and influence, without permanent or significant human habitation, which are protected and managed so as to preserve their natural condition.
II	National Park	Large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities.
III	Natural Monument or Feature	Protected areas set aside to protect a specific natural monument, which can be a landform, sea mount, submarine cavern, geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value.
IV	Habitat/Species Management Area	Protected areas aiming to protect particular species or habitats and management reflects this priority. Many category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category.
V	Protected Landscape/Seascape	A protected area where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.
VI	Protected area with sustainable use of natural resources	Protected areas that conserve ecosystems and habitats, together with associated cultural values and traditional natural resource management systems. They are generally large, with most of the area in a natural condition, where a proportion is under sustainable natural resource management and where low-level non-industrial use of natural resources compatible with nature conservation is seen as one of the main aims of the area.
Other Conservation Area	Other Conservation Area	Other effective area-based conservation measures or other sites that do not meet the protected area definition.

Not Applicable	Not Applicable	Not Applicable.
Not Reported	Not Reported	Not reported.
Unassigned	Unassigned	Site that meets the standard definition of a protected area, but the category of protection has not yet been determined.

09. IUCN_DES

IUCN category name that describes the main characteristics of the protected area.

10. DATE_ESTAB

The date legislation established the area as protected.

11. STATUS

The legal status of the protected area. Status values are taken from the source data; there may be overlap between status categories.

Status	Description
Designated	In the United States, this is applied to management boundaries not tied to title documents (e.g. 'National Monument', 'Wild and Scenic River', and some 'State Wildlife Management Area') overlapping fee ownership parcels. In Canada and Mexico, this represents a site recognized or dedicated through temporary or permanent legal means, implies specific binding commitment to conservation in the long term.
Easement	In the United States, it creates a legally enforceable land preservation agreement between a landowner and government agency or qualified land protection organization (i.e. land trust).
Established - ENGO or Private	In Canada, a site recognized or dedicated through other effective means. Implies commitment to conservation outcomes in the long term, but not necessarily with legal recognition.
Established - Interim	In Canada, a site in a process to gain recognition or dedication through legal or other effective means that meets the three following conditions: the area is geographically defined; there is a clear public commitment and intent to complete formal establishment as soon as possible; there are interim protection measures in place that the governing body has deemed effective and appropriate.
Fee	The most common way real estate is owned.
Inscribed	Only applicable to protected areas designated under the World Heritage Convention.
Marine	Outer continental shelf land.
Proclamation	Defines the outer boundaries of areas without internal ownership defined (e.g. Tribal Lands, Military Land and Approved Acquisition Boundaries)
Proposed	A site in a process to gain recognition or dedication through legal or other effective means. The protected area or OECM is in the process of being legally/formally designated. It should be noted that sites may sometimes be functioning as protected areas or OECMs while proposed, as the legal processes of designation may take a long time.
Other	Types of protection that might include leases, agreements, or deed restrictions.
Unknown	No clear status is reported in the data source.

12. LEGISLAT

The official name of the legislation that provides protection for the Canadian protected area. This information is only included for data drawn from the Canadian Protected and Conserved Areas Database (CPCAD). There is no predefined set of valid legislation names. Legislation names were taken from the CPCAD data set.

13. OECM

Other effective area-based conservation measures. This attribute describes if a protected area does not meet the criteria to be categorized in the IUCN classification and then is considered as other conservation area.

14. WDPAID

The site identification number for the protected area, taken from the World Database on Protected Areas (WDPA). This field only contain valid values for the Mexican portion of the map.

15. DATASOURCE

The source data set from which the protected area was compiled. This field describes three sources of information.

Canadian Protected and Conserved Areas Database (CPCAD), 2020
Protected Areas Database of the United States (PAD-US) - Edition: 2.1, 2020
World Database on Protected Areas (WDPA), August 2021

16. ORGSRC_URL

The Source URL reported in input data when available.

17. OFICIAL_HA

The official size of the protected area, in hectares. The precision of the measurements varies; values were taken from the source data sets.

18. GIS_HA

The size of the protected area, in hectares, as calculated by the GIS software. Areas with a value of 0 actually have very small values that have been rounded to 0.

19. COMMENTS

This attribute is an open text field to report general comments stated in the original datasets. In Mexico, comments mainly report UNESCO criteria to qualify a protected area as World Heritage or Ramsar sites, criteria definitions are available at [World Heritage criteria](#) and [Ramsar criteria](#). The text described in this field is not responsibility of the Commission for Environmental Cooperation.

20. SUBS_RIGHT

The Sub-Surface Right Status indicates the agencies, organizations, and/or individuals who hold sub-surface rights to the land in the protected or other conserved area for exploration and exploitation, including oil and gas. This field only contains information for Canadian protected areas.

21. AICHI_T11

This field identifies the decision on whether the protected or other conserved area should be counted or not towards the Aichi Biodiversity Target 11. The Aichi Biodiversity Targets were adopted by the Conference of the Parties to the Convention on Biological Diversity in 2010. Aichi Biodiversity Target 11 states that “By 2020, at least 17 per cent of terrestrial and inland water, and 10 percent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.” This field only contains information for Canadian protected areas.

22. GOV_TYPE

The Governance Type is a description of the decision-making structure of a protected or other conserved area. It should describe where the decision-making power of delegating management authority rest.

23. GAP_STS

Status code of the USA Gap Analysis Project. This field only contains information for US protected areas.

GAP Status	Description
GAP Status Code 1	An area in the United States having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a natural state within which disturbance events (of natural type, frequency, intensity, and legacy) are permitted to proceed without interference or are mimicked through management.
GAP Status Code 2	An area in the United States having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a primarily natural state, but which may receive uses or management practices that degrade the quality of existing natural communities, including suppression of natural disturbance.
GAP Status Code 3	An area in the United States having permanent protection from conversion of natural land cover for most of the area, but subject to extractive uses of either a broad, low-intensity type (e.g., logging, Off Highway Vehicle recreation) or localized intense type (e.g., mining). It also confers protection to Federally listed endangered and threatened species throughout the area.
GAP Status Code 4	There are no known public or private institutional mandates or legally recognized easements or deed restrictions held by the managing entity to prevent conversion of natural habitat types to anthropogenic habitat types. The area generally allows conversion to unnatural land cover throughout or management intent is unknown.