

Protected areas data for the United States

Frequently Asked Questions

Key messages

The Protected Areas Database-US (PAD-US) is the official inventory of protected areas in the United States, produced by the US Geological Survey (USGS) Gap Analysis Program (GAP).

The PAD-US contains a) protected areas which meet the IUCN definition of a protected area and b) areas where protection of biodiversity is not the primary purpose, such as recreational or multiple use areas.

Protected areas from the PAD-US that meet the IUCN definition are incorporated into the World Database on Protected Areas (WDPA) on an annual basis with ad-hoc updates completed as necessary.

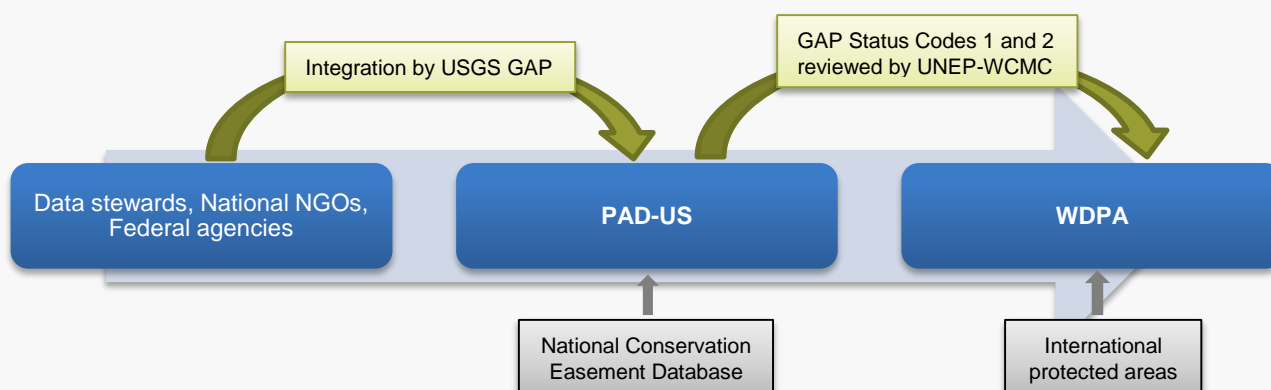
Areas which do not meet the IUCN definition of a protected area are removed by USGS before data are submitted to the WDPA.

The PAD-US is a high quality database, frequently used by Proteus Partners operating in the US, in complement to the WDPA. Data users have noted discrepancies between protected areas included in the PAD-US, and those included in the WDPA. This briefing note explains why the databases are not identical by answering a set of five frequently asked questions.

Practical guidance for data users:

1. The WDPA includes a subset of protected areas from the PAD-US, namely *GAP Status Codes 1 and 2*, because the WDPA only includes protected areas where biodiversity conservation is the primary purpose. This discrepancy does not indicate that the WDPA is incomplete.
2. IUCN management categories are attributed to 98% of US records within the WDPA, and 25% of records within PAD-US (all of which are GAP Status Codes 1 or 2). Lack of an IUCN management category (i.e. *Not Reported*) does not indicate that the protected area is of lesser importance or poorly managed. IUCN management categories may not have been reported because there is no requirement for US data providers to assign IUCN management categories. They are usually assigned by GAP or at the state-level.
3. The PAD-US contains a unique identifier field, *WDPA Code*, equivalent to the *WDPA_PID* in the WDPA (as of December 2016). This field is managed by GAP in cooperation with UNEP-WCMC, and has been completed for 26% of records in the PAD-US.
4. In the PAD-US many individual records make up a single protected area. This is different to the WDPA which stores protected areas as multipart polygons. Different approaches therefore need to be considered when seeking to identify the full extent of a protected area in each database.
5. Over 1,700 protected area designations are used in the USA. GAP assign one of 60 standardised *Designation Types* to protected areas following an established cross-walk. These are transferred to the WDPA in the *DESIG* field.

Process of adding protected area records into PAD-US and subsequently into the WDPA.



Introduction

The PAD-US is the official inventory of protected areas in the United States, produced by the US Geological Survey (USGS) Gap Analysis Program (GAP)¹.

The database was first released by GAP in April 2009 and the latest version, 1.4, was released in May 2016.

The PAD-US contains 198,774 features in total (Figure 1). The USGS, via the PAD-US, provides more than 99% of the national data from the United States to the World Database on Protected Areas (WDPA). As of December 2016, the WDPA includes 221,418 protected area records of which 34,068 (15%) are located in the United States². Data for sites designated under international conventions and agreements are provided by the relevant secretariats.

Users may note discrepancies between the two databases. This is because not all protected area features contained in the PAD-US meet the requirement for inclusion in the WDPA. This briefing note answers five frequently asked questions on the differences between the PAD-US and the WDPA.

FAQ 1. Are both definitions of protected areas equivalent within the PAD-US and the WDPA?

The PAD-US defines protected areas as areas “dedicated to the preservation of

Table 1. Description of GAP Status Codes and number of features assigned to each within the PAD-US version 1.4.

GAP Status Code	Number of features	Description
GAP1	5,745	An area having permanent protection and a mandated management plan within which natural disturbance events are allowed to proceed without interference or are mimicked through management.
GAP2	45,597	An area having permanent protection and a mandated management plan, but which may receive uses that degrade the quality of existing natural communities.
GAP3	68,541	An area having permanent protection for the majority of the area, but subject to extractive uses, yet conferring protection to federally listed species.
GAP4	78,891	An area having no known public or private institutional mandates or legally recognised easements or deed restrictions held by the managing entity to prevent conversion.

biological diversity and to other natural, recreation and cultural uses, managed for these purposes through legal or other effective means.”

Protected areas included in the WDPA conform to the definition of a protected area by the International Union for the Conservation of Nature (IUCN): “A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of

nature with associated ecosystem services and cultural values.”

While both definitions overlap to a large extent, they are not equivalent. Both definitions include areas designated and managed for the purposes of conserving biodiversity, including associated ecosystem services and cultural values. The PAD-US definition, however, also includes other areas where protection of biodiversity is not the primary purpose, such as recreational or multiple use areas.

The PAD-US therefore includes protected areas which do not conform to the more strict IUCN definition. This is the reason for the difference in the number of records included in each database.

FAQ 2. How and when are protected areas in the PAD-US integrated in the WDPA?

The selection of features from the PAD-US meeting the IUCN definition of a protected area is completed by GAP, using the *GAP Status Codes*. One of four GAP Status Codes is assigned to each record in the PAD-US to indicate an area’s level of protection (Table 1). GAP Status Codes 1 and 2 cover over 7 million square kilometres in total; a similar area

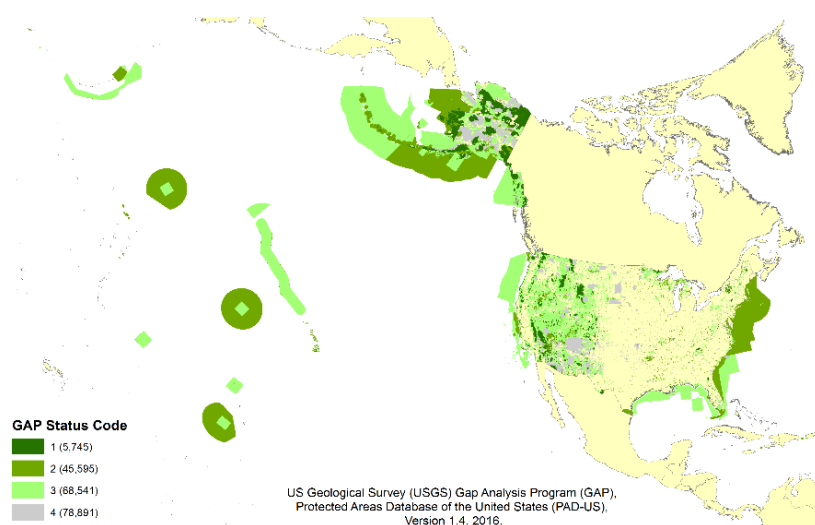


Figure 1. Protected areas in the PAD-US version 1.4. See Table 1 for GAP Status Code descriptions.

¹ <http://gapanalysis.usgs.gov/padus/>

² <https://www.protectedplanet.net/country/US>

to that covered by GAP Status Codes 3 and 4 (Figure 2).

GAP Status Codes 1 and 2 within the PAD-US are considered to meet the IUCN definition, and are submitted by GAP for inclusion in the WDPA. Protected areas from the PAD-US which meet the IUCN definition are typically incorporated into the WDPA on an annual basis with ad-hoc updates completed as necessary. Those that do not meet the IUCN protected areas definition, i.e. GAP Status Codes 3 and 4, and are therefore not submitted to the WDPA, may become protected for biodiversity in the future, and subsequently re-evaluated as GAP Status Codes 1 or 2.

FAQ 3. Are the same protected area designations recorded within the PAD-US and the WDPA?

Reflecting the federal nature of the US, designations for protected areas are not standardised across the country.

The original designation of protected areas is provided by *Data Stewards* (agencies, universities or organisations that oversee the collection of authoritative state and local information on protected areas). These are recorded in the PAD-US as the *Local Designation*. Over 85% of features (169,350) have been assigned a Local Designation, with 1,783 unique Local Designations in PAD-US version 1.4.

In order to standardise naming conventions, GAP assigns one of 60

standardised designations, *Designation Types*, to protected areas following an established cross-walk (Standards and Methods Manual for Data Stewards³). The structure of the cross-walk table relies largely on the existence of regulatory drivers behind the establishment of protected areas for specific management purposes (e.g. the Wilderness Act stipulating the creation of Wilderness Areas).

FAQ 4. How are IUCN management categories attributed to protected areas in the PAD-US?

IUCN management categories⁴ are used to classify protected areas according to their management objectives. Protected areas which meet the IUCN definition, i.e. GAP Status Codes 1 and 2, may be classified according to one of the six IUCN categories. Since GAP Status Codes 3 and 4 do not meet the IUCN definition, they should not be assigned an IUCN management category.

There is no requirement for US data providers to assign GAP Status Codes or IUCN management categories. Within the PAD-US, both values are assigned either at the state-level or by GAP. GAP follow a classification scheme to assign GAP Status Codes based on the Designation Type. They also follow a classification scheme to assign an IUCN management category based on the Designation Type and size of the protected area.

It is possible that the assigned IUCN category may not accurately reflect the

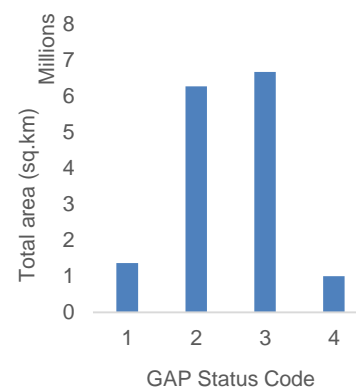


Figure 2. Total area (in sq.km) covered by each GAP Status Code.

management approach adopted on the ground. But through engagement with data providers in the US, GAP are reviewing the assignment of IUCN categories.

FAQ 5. Do protected areas share a unique identifier within the WDPA and the PAD-US?

The PAD-US contains a unique identifier field, *WDPA Code*, which is equivalent to the *WDPA_PID* in the WDPA (as of December 2016). This field is managed by GAP, in cooperation with UNEP-WCMC, prior to PAD-US data being submitted for inclusion in the WDPA. The WDPA Code has been attributed to 26% of records (51,342 records) in the PAD-US version 1.4. Data Stewards are encouraged to maintain the WDPA Code field.

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Authors: Katie Leach, Kerstin Brauner, Brian MacSharry, Matt Jones.

Available online at: www.proteuspartners.org/

Contact: businessandbiodiversity@unep-wcmc.org

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<http://www.unep-wcmc.org/>



³ [PADUS_Standards_Oct2013_USGSreview.pdf](#)
(New version will be available in 2017)

⁴ <http://www.biodiversitya-z.org/content/iucn-protected-area-management-categories>