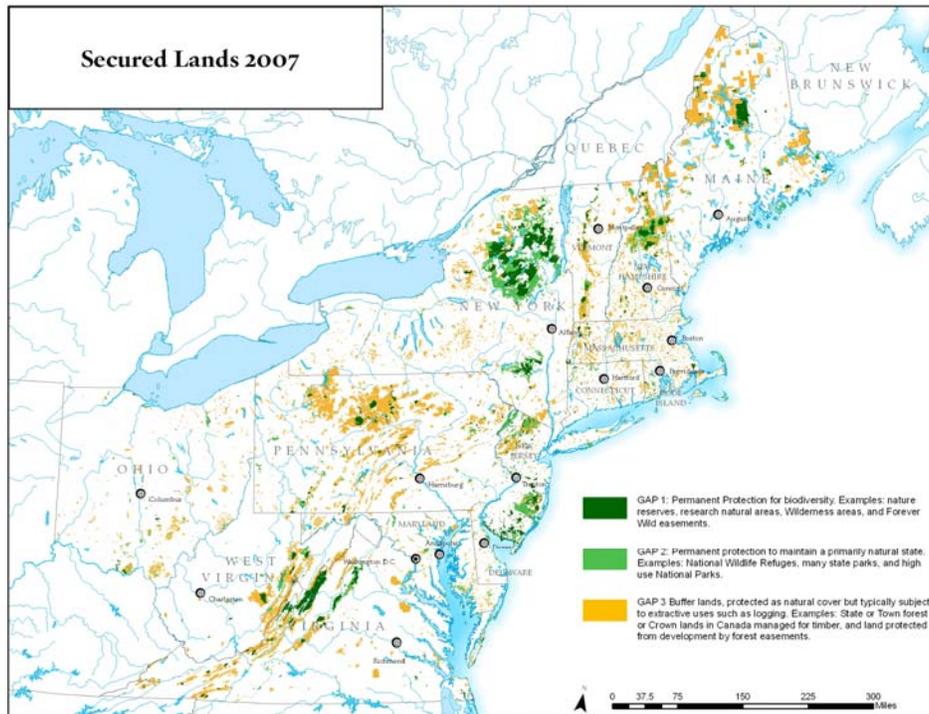


Secured Lands of the Northeast 2007



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In Collaboration with the
Northeast Association of Fish and Wildlife Agencies

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THE 2007 SECURED LANDS DATASET

The Secured Lands dataset is a cooperative project led by The Nature Conservancy's (TNC) Regional office, involving all the Conservancy's eastern state offices and relying on data from 14 state agencies and many private organizations. We began building this dataset in 2005 and are now on our third revision (2007 version). In scope it includes all public and private lands that are permanently secured against conversion to development. The land may be owned in fee or held with an easement but the protection must be permanent. Our geographic area includes Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, New Jersey, Delaware, Maryland, Virginia, West Virginia, District of Columbia and Ohio.

This 2007 revision was funded in part by a grant from the Northeast Association of Fish and Wildlife Agencies (NEAFWA) in collaboration with the Doris Duke foundation. The funding allowed us to significantly improve the extent and accuracy of state-owned secured lands as well as fee and easement holding by private conservation organizations. The Nature Conservancy also contributed funding to this project particularly for compiling private conservation lands and information on any areas (Ohio) outside of the geographic region covered by NEAFWA. This version has been modified for distribution by excluding those lands where the source of information requested that the parcel locations remain confidential. This distributable version may be used for assessing the status of conservation in the region without violating any data sharing agreements.

The dataset contains a spatial database (ESRI shapefile) with a record for each tract of land along with a set of standardized attributes describing the conservation management status, ownership, ownership type, designation, acreage and many other characteristics of the tract (Appendix 1 list of attributes and their definitions). Ensuring that the content of the attribute fields is consistent across the region has been our primary focus.

The process for revising and improving the data follows an annual cycle. Beginning in the fall we host monthly calls with all participants to encourage the collection of data on new acquisitions or easements within each state. The TNC state offices are the focal point for state compilations. They create their state datasets from the resources available and these vary from state to state. Ideally, the state GIS clearinghouse has a dataset containing public and private secured lands that is updated regularly. Often, state governments have a compiled dataset of public and private lands, which may or may not have been updated regularly. In this case, we encourage the TNC state offices to collect as much information on recent acquisitions as possible. Sometimes, there is no one data source for a state and the TNC state office collects information from each state agency that holds conservation land, as well as private/non-profit conservation land holders and federal land holdings. Once the TNC state offices collect the data, the datasets are compiled into a standardized database structure.

The state TNC offices submit their compiled state datasets to the Eastern Regional Office, which then merges all of the individual state datasets in GIS. There are three main steps to processing the dataset: 1) process the geography, 2) standardize the attributes and 3) analyze the content.

Geography: Having clean geography makes the dataset easier to work with. The goals of this year's processing were to keep the integrity of TNC-owned parcels, identify GIS overlaps and slivers, and remove the overlapping geography. Although the dataset still may have some of these issues, the majority of the geography problems have been resolved.

Attributes: The basic attributes were agreed upon in 2005. This year we focused on standardizing the terminology and removing miscellaneous attributes unless they were justified. These database maintenance tasks allow for easier querying, classifying and sorting of the data. Some of the main changes in the 2007 version were:

- Changing entries in all caps to proper format
- Standardizing fee and interest owner names
- Standardizing fee organization type and interest organization type fields to one of the following types: EDU, FED, LOC, PFP, PLO, PNP, STP, TRB, UNK (see Table 1 for definitions)
- Standardizing the way private citizens with easement on their land were listed
- Standardizing the designation field. Although standard designations were suggested, there were many additional designation used. These additional designations were reviewed and placed into one of the original designation fields.

Content: The content in several fields was reviewed in detail by TNC state staff members during the 2007 secured lands cycle. The field definitions for fee organization type, interest organization type, and designation were discussed and agreed upon. The majority of this year's discussion was about assigning GAP status. The TNC state staff members compile and assign GAP codes to parcels that do not have GAP code assigned by the GAP Program, or update codes assigned by the national GAP program if the TNC staff members have added knowledge about the land.

The GAP definitions TNC uses are derived from *Mapping and Categorizing Land Stewardship. A Handbook for Conducting Gap Analysis* by Crist, P.J., B. Thompson, T. C. Edwards, C. G. Homer, S. D. Bassett. 1998.

(<http://www.gap.uidaho.edu/handbook/Stewardship/default.htm>). They are as follows:

Status 1: An area 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 allowed to proceed without interference or are mimicked through management.

Status 2: An area 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.

Status 3: An area having permanent protection from conversion of natural land cover for the majority of the area, but subject to extractive uses of either a broad, low-intensity type (e.g., logging) or localized intense type (e.g., mining). It also confers protection to federally listed endangered and threatened species throughout the area.

Status 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.

Each TNC state office used these definitions to assign their GAP codes in the dataset. In the dataset there is a field for the original GAP code (GAP_ORIG), a field for the GAP status codes compiled and assigned by TNC following the above protocol (GAP_TNC), and a field for the final GAP code to use (GAP_STATUS). GAP_TNC overrides GAP_ORIG when present. The GAP codes were analyzed by designation and fee owner type to make sure that they were applied consistently across the states. In the past a major issue has been the discrepancies in application of the GAP status.

We made considerable progress this year on applying the code consistently by breaking the GAP status down into three components 1) Intent, 2) Duration and 3) Potential to Manage effectively. *Intent* is the degree that a tract is focused on explicitly securing biodiversity (GAP 1) as opposed to being intended for multiple uses including extraction (GAP 3), albeit usually with some implicit biodiversity conservation. *Duration* is the temporal commitment to a given conservation tract. By definition all tracts in this dataset are focused on achieving permanent legal protection. *Potential to Manage Effectively* is the apparent capability of an entity (e.g. agency, owner, manager) to implement those management activities necessary to achieve the stated conservation intent based on governance, planning, and resource levels. Please note that TNC, and TNC alone, determined the values of the Conservation Status attributes (e.g. the fields: GAP Status, GAP_TNC, IUCN_Cat, Cons_Intnt, Cons_tenur, Pot_Ef_Mgt, and Cons_Mf_st). These values are TNC expert opinion, informed by discussion with the owners of the source data. They were not reviewed or approved by NEAFWA or member organizations.

Within The Nature Conservancy we now refer to the integration of the three components as the Conservation Management Status and in the Eastern region dataset it crosswalks directly to GAP status.

Table 1

Secured Area attribute fields

updated 09/30/08

Field	Priority	Description	W	T
Area_Name	desired	Common name of secured area	50	C
Fee_Owner	required	Name of fee owner if known	50	C
Fee_Orgtyp	required	Organization type of the Fee Owner: FED= federal, STP=state/province, LOC=local, PNP=Private Non-Profit, PFP=Private For-Profit, TRB=tribal, UNK=unknown, PLO=Private Land Owner (mainly for easements))	3	C
Int_Holder	required	Name of Entity holding additional interest in property	50	C
Int_Orgtyp	required	Organization type of the Interest Owner: FED= federal, STP=state/province, LOC=local, PNP=Private Non-Profit, PFP=Private For-Profit, TRB=tribal, UNK=unknown, OTH=Other	3	C
Int_Type	required	Type of Interest held by Int_Holder: F=Fee, E=Easement, R=Restriction	3	C
GAP_ORIG	required	GAP Status as assigned by the GAP Program: 1, 2, 3, 4, 9	1	I
GAP_TNC	required for edits	GAP status codes compiled and assigned by TNC following GAP protocol of Crist et al. 1998 http://www.gap.uidaho.edu/handbook/Stewardship/default.htm	1	I
GAP_STATUS	required for edits	The Final GAP code to use. TNC GAP overrides original GAP when present.	1	I
IUCN_Cat	desired	IUCN management objective category: I, II, III, IV, V, VI Used outside US. See http://www.unep-wcmc.org/protected_areas/categories/	4	C
Cons_Intnt	ERO populates	Conservation Intent - An indicator of the degree to which a conservation situation is intended to secure biodiversity. Used with pot_Ef_Mgt and Cons_Tenur to measure Conservation Management Status.	2	C
Cons_Tenur	ERO populates	Conservation Tenure - An indicator of the length of commitment to the conservation situation. This indicator is used to distinguish variations in the permanence of the conservation work. Used with Cons_Intnt and Pot_Ef_Mgt to measure Conservation Management Status.	2	C
Pot_Ef_Mgt	ERO populates	Potential for Effective Management - an indicator of the ability for an entity (e.g. agency, owner, manager) to implement the intended focus of a conservation situation, based on governance planning and resource levels. Uses with Cons_Intnt and Cons_tenur to measure Conservation Management Status.	2	C
Cons_Mg_St	ERO populates	Conservation Management Status - A measure of the likelihood that an existing conservation situation is sufficient to secure biodiversity and allow for its persistence. This measure is based on Cons_Intnt, Cons_Tenur, Pot_Ef_Mgt.	2	C
State_Prov	ERO populates	two-letter Postal abbreviation	2	C
Designatn	ERO populates from state submitted data	Designation for management unit: NP=National Park, NF=National Forest, NWR=Wildlife Refuge, NRA=Recreation Area, NS=Seashore, NWA=Wilderness Area, RNA=Research Natural Area, FO=Federal Other (including Military), SP=State Park, SF=Forest, SL=Other State Land, TL=Tribal Land, MP=Municipal Park, MF= Municipal Forest, NAT=Nature Reserve/ Preserve/ Sanctuary, PCL = Private Conserved Land, AGE = Agricultural Easement, CE=Conservation Easement, EDU=Educational Lands (Schools, University), WSL=Water Supply Lands, WAT=Water, OTH=Other, UNK=unknown	4	C
Statedes	required - states populated	The original designation as populated by the states - should be from designation field list, but often is not		
GIS_Acres	ERO populates	Polygon's area * 0.0002471	7.1	F
Source	required	Official citation or internet address of agency responsible for maintaining this polygon	100	C

DATA SOURCES:

TNC compiled managed areas from its own records and the following sources:

ME: Maine conservation lands database (MEOGIS), 2007.

NH: NH GRANIT Conservation/Public Lands Data Layer (GRANIT), 2006.
White Mountain National Forest (USFS), 2000.

VT: Vermont Conservation Lands Database (UVM/VCGIS/VTGAP), 2004.
White Mountain National Forest (USFS), 2000.

MA: Protected and Recreational Open Space, 2007.

RI: Local & NGO Conservation and Park Lands (RIGIS), 2006.
State Conservation and Park Lands layer (RIGIS), 2006.

CT: Municipal and Private Open Space (CT DEP/ CT OPM), 1997.
DEP Property (CT DEP), 2007.

NY: Adirondack Park Agency Land Use (APA), 2005.
TNC-ANC-ALT preserves (TNC), 2007.
NY State Forests and Wildlife Management Areas (DEC), 2002.
NY State Parks (NYSP), 2007.

NJ: Power Company Properties (PSEG), 2007
Highlands Regulatory Areas (NJDEP), 2002
Green Acres Program – State Owned Conservation Easements (NJDEP), 2007
Green Acres Program – State Owned Land (NJDEP), 2007
Green Acres Program – Local and Nonprofit Lands (NJDEP), 2007
Farmland Preservation (NJDA/SADC), 2006

DE: Delaware Outdoor Recreation Inventory (DNREC), 2007.
Nature Preserves (DNREC), 2007.
Conservation Easements (DNREC), 2007.
Forest Easements (DE Forest Service), 2007.

MD: Agricultural Land Preservation Foundation Easements/Districts (MALPF) 2006
County Parks (MD DNR) 2006
DNR Lands (MD DNR) 2006
Environmental Trust Easements (MET) 2002.
Federal Lands (MD DNR) 2006.
Forest Legacy Easements (MD DNR) 2006
Private Conservation Properties (MD DNR) 2004.
Rural Legacy Areas (Maryland Department of Planning) 2005

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PA: PA Spatial Data Access, 2004. Updated by TNC 2005.
Western Pennsylvania Conservancy, 2006.
State Forest Lands (DCNR), 2006.
Protected Lands Inventory: Federal Lands (The Conservation Fund) 2004
Protected Lands Inventory: Nonprofit and Private Lands (The Conservation Fund) 2004

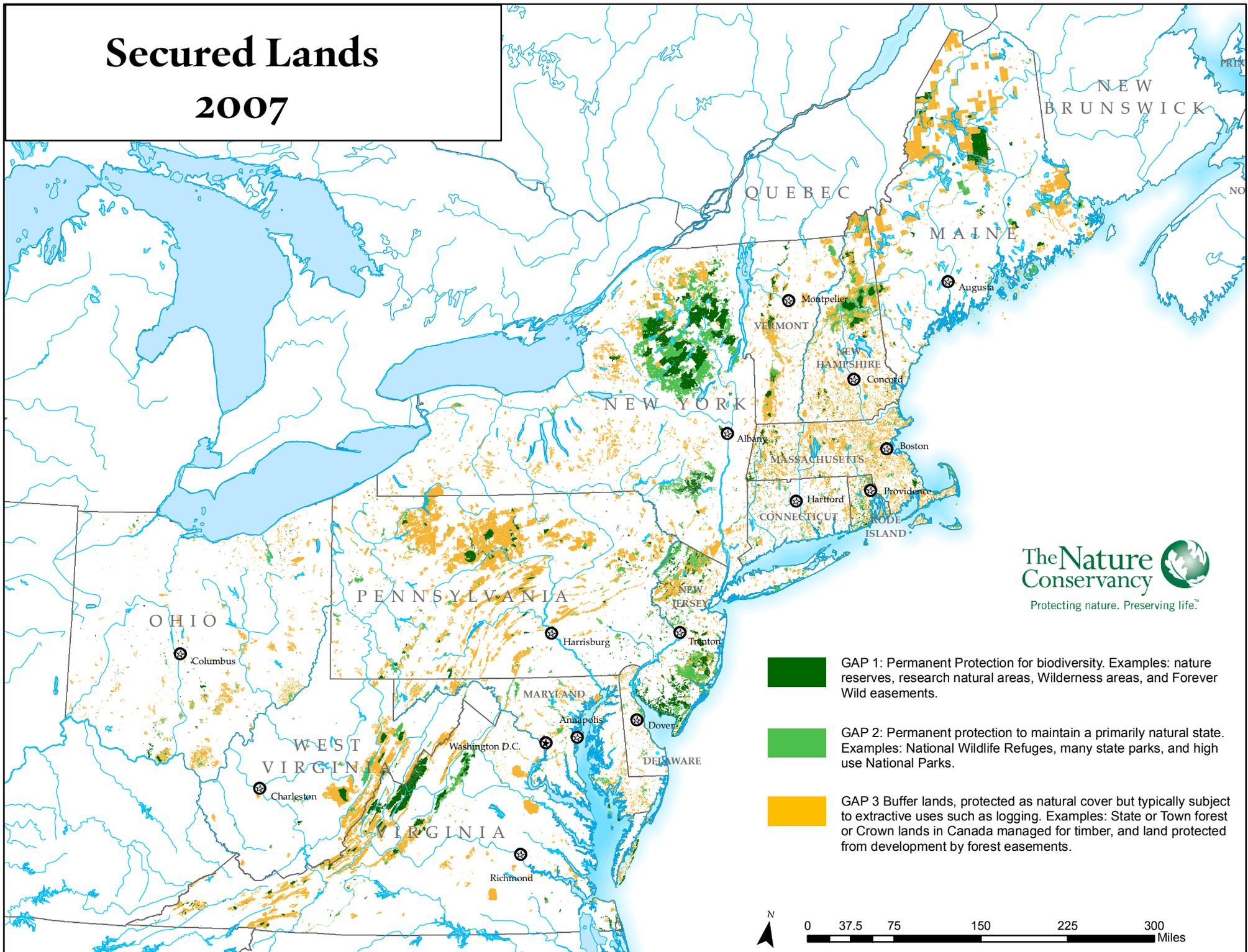
OH: GAP, 2003.

WV: West Virginia Secured Lands 2007.

VA: Conservation Lands Database (VA DCR), 2007.

Additionally each state's Nature Conservancy field office updated their respective
ownerships and easements.

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- GAP 1: Permanent Protection for biodiversity. Examples: nature reserves, research natural areas, Wilderness areas, and Forever Wild easements.
- GAP 2: Permanent protection to maintain a primarily natural state. Examples: National Wildlife Refuges, many state parks, and high use National Parks.
- GAP 3: Buffer lands, protected as natural cover but typically subject to extractive uses such as logging. Examples: State or Town forest or Crown lands in Canada managed for timber, and land protected from development by forest easements.

