VT Center for Geographic Information

Vermont Protected Lands Geospatial Data Standard

Version 1.4

Vermont Center for Geographic Information
A Division of the Agency of Digital Services

Updates

Date	Notes
November 30, 2020	v.1.4 Final - Removed leading 0's in PAGENCY field for Municipal Codes 0-29,999;
February 3, 2020	v.1.4 Draft (Includes all feedback to date – for final review)
November 9, 2016	v. 1.3 Final posted version approved by EGC
March 2015	v. 1.2 Changes based on input from contributing partners
September 2015	v. 1.1 Changes based on input from contributing partners
October 2015	v. 1.0 Initial Draft

Acknowledgements

This data standard was derived primarily from the coding scheme of the Vermont Conserved Lands Database project. The VCLD project was managed for many years by the Spatial Analysis Laboratory at the University of Vermont. Please see the Introduction to this standard below for more details about that project and the partners involved. The first version of the Protected Lands Geospatial Data Standard was drafted by VCGI staff following meetings of the Cooperating Technical Partners (CTPs) identified below:

Jon Osborne, VT Land Trust
Chris Moore, VT Land Trust
Dan Farrell, The Nature Conservancy
Sean McFaden, The UVM Spatial Analysis Lab
Diane Burbank, Green Mountain National Forest
Thomas Tenyah, Green Mountain National Forest
Kris Hammer, VT Housing and Conservation Board
Ryan Knox, VT Agency of Natural Resources
Reed Sims, USDA Natural Resources Conservation Service
Mike Brouillette, VCGI

The following, additional CTPs assisted with subsequent versions of the Standards (v.1.4+):

Mollie Klepack Flanigan, Green Mountain Club
Ann Ingerson, The Nature Conservancy
Mark Martin, VT Housing and Conservation Board
Andy Boyce, Upper Valley Land Trust

These individuals volunteered their time to hammer out a new Protected Lands data scheme as a first step towards instituting a new data update protocol for this data layer. Their tenacity, generosity, and thoughtful participation was essential, and much appreciated!

Statutory Authority and Standard Review/Approval

The Vermont Center for Geographic Information (VCGI) has the statutory authority[1] to craft and adopt VT GIS standards and guidelines. Over the past 20 years, VCGI has worked with the VT GIS community to carefully craft these standards and guidelines, helping to ensure that Vermont GIS (VGIS) data "is compatible with, useful to" others in the VT GIS community.

In 2015, VCGI was reformed as a Division under the Agency of Commerce and Community Development (ACCD) as defined in H.885 Sec. E. 800.1 10 V.S.A. § 122. VCGI's duties did not change, and therefore VCGI still has the authority to adopt VT GIS standards and guidelines.

The State's Enterprise GIS Consortium (EGC) has been established as the organization responsible for reviewing and approving Vermont GIS standards crafted by VCGI (in collaboration with the Vermont GIS Community).

Introduction

Property ownership is commonly considered to consist of a "bundle of rights" that define the social relationships between people in relation to that property. Conservation in this context involves selling, giving away or in some way limiting the expression of some of those rights. The Vermont Protected Lands Database (VPLD) contains lands that have some level of protection against permanent conversion to developed land uses. This protection is afforded by a wide range of landowner types and conservation measures but can be generalized into three primary categories: 1) public ownership by a government agency or entity committed to natural resources protection (e.g., national forests, state parks, town forests); 2) private ownership by a conservation organization (e.g., The Nature Conservancy); and 3) conservation easements on privately-owned lands (e.g., Vermont Land Trust easements on working farmland and forests). The first two categories focus on direct ownership of land (i.e., fee ownership) while the third focuses on transfer of a property's development rights to a third-party entity (e.g., a land trust) that will theoretically hold these rights in perpetuity. Other protection measures include deed restrictions and covenants. It is important to keep in mind that conservation does not imply public access.

The Vermont Protected Lands Database (VPLD) is based on the original Conserved Lands Database (CLD) project of the University of Vermont Spatial Analysis Lab and cooperating organizations including The Vermont Land Trust, The Nature Conservancy, the Vermont Housing and Conservation Board, the Vermont Agency of Natural Resources, and regional planning commissions throughout the state. The new VPLD coding scheme is based on a combination of the CLD and New Hampshire's GRANIT (Geographically Referenced Analysis & Information Transfer System) database of New Hampshire Conservation Lands.

This standard includes an updated version of the Coding Scheme reflecting decisions made by the Protected Lands Database Work Group during an effort to plan for a sustainable update process for this important geospatial data layer. VCGI has agreed to coordinate a somewhat distributed data maintenance and compilation effort once updates adhere to this data standard.

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[1] http://legislature.vermont.gov/statutes/fullchapter/10/008

What is Included in this Database

The Vermont Protected Lands Database includes land parcels that are expected to remain protected from land conversion or development. With the exception of state-owned boat and fishing access areas, the minimum size for inclusion in the CLD is two acres. Protection mechanisms range from fee-simple public ownership of lands managed to maintain natural resource features, private fee ownership with publicly owned easements, and private ownership with easements privately owned by conservation organizations, to fee-simple ownership by private conservation organizations. The information below provides a bit more detail about the types of conservation commonly used.

- Public lands held by agencies with conservation or natural resource oriented missions. Public lands are not normally legally protected from sale, swap or conversion, but the likelihood of such disposition is low. Often, however, public lands are encumbered by private and/or public conservation easements or other conservation restrictions, as well.
- Municipal natural resource holdings. These may include town forests, fire district lands, watershed areas, and school wood lots having limited conversion threats and high ownership stability, although they may not be encumbered with legal protection mechanisms.
- Public boating and fishing access areas. Although these areas are often small and no longer contain natural cover, they provide important public access to natural resource features of adjacent lands and waters in the state, and are therefore included in the CLD. Most often these are owned in fee by the state and administered by the Agency of Natural Resources. Others may be municipally or federally owned, or public access may be encumbered on a private land parcel by easement.
- Public and private educational institution holdings with natural resource uses and protections. Examples include University of Vermont School of Natural Resources research forests and natural areas, Johnson State College woodlands, and Yale University School of Forestry lands.
- Publicly owned rights on private lands. These may include Agency of Natural Resources hunting rights, public access rights, and Forest Legacy conservation easements.
- Parcels owned in fee by nonprofit organizations dedicated to conserving land or resources. Although not necessarily legally protected from conversion, developing these holdings would breach organizational mission statements and/or nonprofit tax status.
- Private parcels with conservation easements held by nonprofit organizations. These include easements on agricultural lands, woodlands, or other "open lands." Note that many agricultural conservation easements protect against residential subdivision, but landowners may retain limited building and subdivision rights on their protected lands. Furthermore, farmers on such protected lands often are required to follow forest management plans but may be permitted to clear cut areas to reclaim additional pasture or cropland.

Purpose

1. Define attributes and acceptable attribute values for a geospatial database identifying protected land in Vermont.
2. Define data format and structure for the Protected Lands Database
3. Define Metadata requirements for the Protected Lands Database

4. Provide procedures for submitting new or updated Protected Lands Geospatial Data to VCGI, so that the data can be included in the next update to the Protected Lands Database.
5. Define the intended time frame for updates to the Protected Lands Database

Applicability

Compliance with this standard is recommended for any municipal, regional, state, federal, or nonprofit data creator who creates or updates geospatial data describing protected land. This requirement will not usually be burdensome for most data partners, as digital geospatial data developed by those experienced in the issues of GIS data and application development would comply with most, if not all, of the requirements as a matter of good professional practice. Any state agency that supplies funds to organizations or regional planning agencies to develop or update Protected Land's geospatial data should require that this standard be used.

There is no intent to provide a standard for developing the authoritative definition of property boundaries or to specify limits for legal boundary determination or property conveyance purposes. Matters related to those more definitive interests remain the purview of the professional title attorney and/or licensed land surveyor.

Most Recent Updates

PAGENCY1...5
  ● Removed leading 0's from the "0 - 29999 Vermont Municipalities" town FIPS Census Codes in the associated PROTECTEDLND_PAGENCY domain field. Removed ","s from 30000 - 39999 Federal entries causing truncation in domain table records, e.g., "US Dept. of Agriculture, Farm Services Agency (FSA)" to "US Dept. of Agriculture - Farm Services Agency (FSA)"; updated 33000 from "US Dept. of Defense - Army Corps of Engineers,**Army National Guard**") to "US Dept. of Defense - Army Corps of Engineers".

PAGENCY3…5
  ● Instead of adding the originally proposed FEEOWNER1..3 fields, additional PAGENCY fields enables a 1:1 relationship with corresponding PTYPE 1..5 fields, i.e., PAGENCY1 is the "holder" of PTYPE1, PAGENCY 2 the holder of PTYPE2, etc. This makes it easy to pull out fee conservation by owner.

PANOTES & SRNOTES:
  ● Updates to increase length from 80 to 200 characters to allow ANR to adopt VPLD standards for ANR lands.

SRCORG:
  ● No longer has its own domain (PROTECTEDLND_SRCORG removed) and instead uses PROTECTEDLND_PAGENCY to avoid updating two similar tables.

SUBMIT:

- New field to enable CTPs to control which features to share with VCGI for integration with publicly available VPLD, e.g., to exclude features still under development etc.

  PROTECTEDLND_DESIGNAT:
- Added "AGR" domain record (DESIG_DESC = "Agriculture").

PROTECTEDLND_PAGENCY
- Added "39900" domain record (PAGCY_DESC = "Tribal Land")
- Added "52330" domain record (PAGCY_DESC = "Green Mountain Conservancy")

PROTECTEDLND_PTYPE:
Removed records 10.1 - 10.9 as they are represented by the PAGENCY (avoids updating two similar tables).

Protected Lands Geospatial Data Standard Requirements

Templates are Available: VCGI provides metadata and geodatabase templates that can help in the conversion to or creation of data that meets this Data Standard: *http://vcgi.vermont.gov* or email: *vcgi@vermont.gov*

Minimum Deliverables: GIS data and metadata having the characteristics described below.

Coordinate System and Datum: Vermont State Plane Meters, NAD 83 (National Spatial Reference System (NSRS) or most current).

Characteristics, Features, and Format:

- Deliverable shall consist of one ESRI File Geodatabase (FGDB) in most recent version 10.x format. It shall contain all Protected Lands features maintained by that data partner (any additional data being submitted for "sub-partners", or of a miscellaneous nature, now requires a unique feature class to assist VCGI in the compilation effort).

- Data partners must use the Protected Lands FGDB template provided by VCGI.

- Geodatabases shall use the following naming conventions:

  o FGDB: PROTECTEDLND_<ORGANIZATION>_<YEAR>.gdb (e.g. PROTECTEDLND_VLT_2016.gdb)

  o Feature Dataset: CadastralConserved_PROTECTEDLND

  o Feature Class: Cadastral_PROTECTEDLND_<ORGANIZATION>_poly

  o Feature Class: Cadastral_PROTECTEDLND_<SUB-ORGANIZATION|THEME|OTHER>_poly (i.e., municipal forests|Miscellaneous features not included elsewhere etc.)

Attributes: <u>All features shall have the following attributes at a minimum.</u> The red shaded fields are of particular importance. Values refers to the actual number, code or characters that will appear in the attribute table for each feature. See more in-depth description of each attribute's values in the section below the overview table. NOTE: Domain tables detailed in *Appendix A: Domain Table Attribute Description*.

Table 1: Attribute Definitions for *Cadastral_PROTECTEDLND_poly*				
Field Name	**Values**	**Description**	**Text/ Short**	**Field Size**
POLYID (required)	POLYgon IDentifier Code	Unique value assigned by STEWARD using acronym + number, e.g., TNC4005867. VCGI fills in as default STEWARD pro tempore.	Text	15
NAME (required)	Project Name	For public lands, NAME is equivalent to the name of the public project (e.g., Green River Reservoir State Park, Bradford Town Forest, West Hill Pond Access Area). For private lands, NAME is equivalent to the protecting entity (e.g., The Nature Conservancy, Vermont Land Trust, McConnell Pond Conservation Fund).	Text	50
PTYPE1-5 (required)	See "PROTECTEDLND_PTYPE" Domain Table	Primary Protection TYPE codes PTYPE1...5 codes are listed in ascending numerical order based on ownership and/or legal restrictions associated with each polygon of a protected project. There is a 1:1 relationship between PTYPE and PAGENCY, e.g., PTYPE1 is "held by" PAGENCY1, PTYPE2 is held by PAGENCY2 etc.	Text	5
PAGENCY1-5 (required)	See "PROTECTEDLND_PAGENCY" Domain Table	Primary Protecting AGENCY or organization responsible for protection of the parcel. Pairs 1:1 with PTYPE, e.g., PAGENCY1 "holds" PTYPE1.	Text	6
GISACRES (required)		Area of polygons calculated in ArcGIS or other GIS program and converted to acres.	Numeric	10 (2 decimals)
SRCORG (required)	See "PROTECTEDLND_PAGENCY" Domain Table	Organization that originally developed the GIS shape and attributes	Text	6
SOURCE (required)	See "PROTECTEDLND_SOURCE" Domain Table	Sources of geospatial information comprising each polygon	Text	4
SRCNOTES		Used to clarify details about source data.	Text	200

STEWARD (required)	See "PROTECTEDLND_PAGENCY" Domain Table	Active data manager/submitter of feature, can be different than primary protecting agency.	Text	6
DATEAQRD	DATE	The date that all parties signed (closing). NOT date it was recorded at town. Closest to actual date or 0101YYYY if actual date is not known.	Date format	8
NOTES		Used to note problem polygons, specific site names, etc.	Text	80
GAPSTATUS	See "PROTECTEDLND_GAPSTATUS" Domain Table	Protection level.	Text	2
DESIGNAT	See "PROTECTEDLND_DESIGNAT" Domain Table	Description of the property related to its use or function	Text	4
PUBACCESS	See "PROTECTEDLND_PUBACCESS" Domain Table	Allows the cartographer to distinguish Public Ownership from Private Ownership to help protect the rights of private landowners.	Short Integer	1
PANOTES		Notes field regarding public access clarifications and restrictions	Text	200
UPDACTION	See Domain "PROTECTEDLND_UPDACTION" Table	Type of update made to polygon (e.g.: Added, Moved, Split, etc.).	Text	1
UPDDATE		Date of UPDACTION	Date	8
UPDNOTES		Update notes	Text	254
SUBMIT	See Domain "PROTECTEDLND_SUBMIT" Table	Provides CTP internal tracking of features to be submitted	Text	7

Metadata Required: the format shall meet the Content Standard for Digital Geospatial Metadata (CSDGM): http://www.fgdc.gov/metadata/geospatial-metadata-standards#csdgm and shall be provided in digital format.

Detailed Descriptions of Attributes and Values

POLYID
Each polygon in the database representing a protected land parcel has a unique POLYID = SRCORG (acronym) + Unique Number. Unique legacy numbering can be retained by simply adding the prefix acronym, e.g., TNC + 4005867 = "TNC4005867". Contributing STEWARD must verify POLYID numbering is unique before

submitting/updating VPLD data. Suggested acronyms examples: (new CTPs should email VCGI with their desired acronyms):

GMC	Green Mountain Club
TNC	The Nature Conservancy
USFS	US Forest Service
UVLT	Upper Valley Land Trust
VANR	VT Agency of Natural Resources
VCGI	VT Center for Geographic Information
VHCB	VT Housing and Conservation Board
VLT	Vermont Land Trust

NAME

For public lands, NAME is equivalent to the name of the public project (e.g., Green River Reservoir State Park, Bradford Town Forest, West Hill Pond Access Area). For private lands, NAME is equivalent to the protecting entity (e.g., The Nature Conservancy, Vermont Land Trust, McConnell Pond Conservation Fund). Names of private landowners (as in the case of many conservation easements) are not indicated in the database.

PTYPE1-5

Primary Protection TYPE codes PTYPE1...5 codes are listed in ascending numerical order based on ownership and/or legal restrictions associated with each polygon of a protected project. While this numerical order generally reflects ownership (if conserved in fee) first, then easements (if present), then restrictions of various kinds, the order does not necessarily imply descending strength of conservation. In the case of publicly-owned parcels, PTYPE1 reflects the public ownership, even where a private mechanism on the same parcel may be more restrictive. Protecting agency records and deeds should be consulted for specific details about protection mechanisms.There is a 1:1 relationship between PTYPE and PAGENCY, e.g., PTYPE1 is "held by" PAGENCY1, PTYPE2 is held by PAGENCY2 etc.

PTYPE	PTYPE_DESC
01	**Fee Ownership**
02	Fee Ownership Except Timber Rights
02.1	Fee Ownership Except Lifetime Wood Rights
03	Fee Ownership Except mineral rights
04	Fee Ownership Except Oil Rights
05	
06	Fee Ownership Except Hunting Rights
07	
08	
09	Fee Ownership Except Multiple Rights

10   **Conservation Easement (general)**

    11   Trail Easement

        11.1   Winter Trail Easement

    12   Historical Preservation Easement

    13   Scenic Easement

    14   Flowage Easement

    15   Rails to Trails Easement

    16   Ecological Protection Zone

    17   River Corridor

      17.1   Stream Bank

    18   Agricultural Easement

    19   Hunting Rights Conservation Easement

20   **Deed Restrictions (General)**

    21   Agricultural Preservation Deed Restrictions

    22   Archeological Preservation Deed Restrictions

    23   Set Aside area of Development Deed Restriction

    24   Flowage Deed Restrictions

    25   Act 250 Deed Restrictions

    26   Conservation Deed Restrictions

    27   Recreation easement

    28

    29

30   **Reverter**

    31   Management Agreement

    32   State of Vermont 'Natural Area' Designation

    33   Executory Interest

    34   Remainder Interest

    35   Lease

    36

    37   Covenant

      37.1   No Development Zone within Covenant

    38   Parcel to be conveyed to other entity

    39

      39.1 No Development Zone within Easement

50   **Topo Features - general**

    51   Topo feature - lake

        51.1   Topo feature - All shores protected

    52   Topo feature - pond

    53   Topo feature - reservoir

    54   Topo feature - double bank waterway

    59   Topo feature – Wetland

60   **Partially protected through current land use**

70   **Limited Development permitted (general)**
    71   Homestead or building complex
    72   Reserved housesite or development zone
    73   Subdividable parcel
    74   Internal right-of-way access
    75   Farmstead complex
        75.1   Barn complex
    76   Farm labor housing area
    77   Farmstand
    78   Public Access Easement
    79   Utility right-of-way

80   **Designated Mineral extraction area**
    81   Designated wood lot
    82
    83
    84
    85   Vermont Use Value Appraisal Program
    86
    87
    88   NA (see PTYPE)
    89

90   **Miscellaneous**
    91
    92
    93
    94
    95
    96
    97
    98
    99   NA (See EXCLUDED)

PAGENCY1-5
Primary Protecting AGENCY or organization responsible for protection of the parcel. Pairs 1:1 with PTYPE, e.g., PAGENCY1 "holds" PTYPE1. All agencies or organizations involved should be indicated by PAGENCY1-5. A public agency that owns the land is usually listed as the PAGENCY1.

    PAGENCY   **PAGCY_DESC**

    0 - 29999 Vermont Municipalities: FIPS Census Codes 01005 - 27120
        [See APPENDIX B - VERMONT TOWN CODES]

30000 - 39999 Federal:
30000   US GOVERNMENT (General)
31000   US Dept. of Interior - Fish & Wildlife Service
31100   US Dept. of Interior - National Park Service
32000   US Dept. of Agriculture - Forest Service
   32010   Forest Legacy Program
32100   US Dept. of Agriculture - Natural Resource Conservation Service (NRCS)
32200   US Dept. of Agriculture - Farm Services Agency (FSA)
33000   US Dept. of Defense - Army Corps of Engineers
33050   US Dept. of Defense - Army National Guard
39900   Tribal Land

40000 - 49999 State:
40000   STATE OF VERMONT (General)
41000
42000   VT Division for Historical Preservation
43000   VT Agency of Agriculture Foods and Markets
44100   University of Vermont
44200   Johnson State College
44300   Castleton State College
44400   Lyndon State College
45000   VT Agency of Natural Resources (ANR)
45100   VT ANR - Dept. of Fish and Wildlife (DFW)
45200   VT ANR - Dept. of Forest Parks and Recreation (FPR)
45300   VT ANR - Dept. of Environmental Conservation (DEC)
46000   VT Agency of Transportation
47000   VT Housing and Conservation Board (VHCB)
48000   VT Dept. Buildings and General Services
49000   VT Dept. of the Military

50000 - 59999 Private Organizations:
50000   Private Individuals
50100   A
   50105   Addison County Community Trust
   50110   Appalachian Trail Conference
   50120   Atlas Timberlands Partnership
   50150   American Farmland Trust
50200   Brattleboro Retreat
   50210   Boy Scouts of America Inc. Green Mountain Council
   50220   Big Basin Forest Trust
50300   C
   50310   Catamount Trail Association

	50315	Center for Northern Woodlands Education
	50320	Central VT Community Land Trust
	50330	Charlotte Land Trust
	50340	Colchester Land Trust
	50350	Connecticut River Watershed Council
	50360	Cross Vermont Trail Association
	50370	The Conservation Fund
50400		D
	50450	Duxbury Land Trust
50500		Equinox Preservation Trust
	50510	East Montpelier Trails
50600		Fort Ticonderoga Association
	50610	Farm and Wilderness Foundation
	50620	Friends of the Mad River
50700		Green Mountain Club
	50715	Greensboro Land Trust
	50720	Green Mountain Audubon Society
	50730	Guilford Preservation Inc.
50800		Hinesburg Land Trust
	50810	HOWL-Vermont Women's Land Trust
	50850	Habitat For Humanity
50900		Isle La Motte Reef Preservation Trust
51000		J
	51010	Jericho Underhill Park District
	51020	Jericho/Underhill Land Trust
51100		K
	51110	Keeping Track Inc.
51200		Landmark Trust
	51210	Lake Champlain Land Trust
	51220	Lewis Creek Association
51300		Meadowsend Timberlands Partnership
	51305	Mount Anthony Preservation Society
	51310	Merck Forest Foundation
	51320	McConnell Pond Conservation Fund
	51330	Middlebury Area Land Trust
	51340	Mad River Planning District
	51350	Mad River Watershed Conservation Partnership
	51360	Manchester Community Land Trust
51400		New England Forestry Foundation
	51405	New England Power Corporation
	51410	Northern Rivers Land Trust
	51415	Northeast Wilderness Trust
51500		Otter Creek Gorge Land Trust
51600		Passumpsic Valley Land Trust

	51610	Putney Mountain Association
	51620	Preservation Trust of Vermont
51700		Q
51800		Richmond Land Trust
	51810	Roxbury Land Conservation Association
51900		Smoky House Foundation
	51905	Sterling Falls Gorge Natural Area Trust
	51910	Stowe Land Trust
	51920	Shelburne Farms
	51930	South Burlington Land Trust
	51940	South Hero Land Trust
52000		T
	52010	The Nature Conservancy
	52020	The Trust for Public Land
	52030	Tinmouth Land Trust
	52100	Upper Valley Land Trust
52200		Vermont Land Trust
	52220	Vermont Institute of Natural Science (VINS)
	52230	Vermont River Conservancy
52300		Whipstock Hill Preservation Society
	52305	Winooski Valley Park District
	52310	Windmill Hill Pinnacle Association
	52320	Weston Land Conservation Trust
	52330	Green Mountain Conservancy
	52400	X
52500		Y
	52600	Z
59998		Other
59999		Unknown

GISACRES
Area of polygons calculated in ArcGIS or other GIS program and converted to acres.

SRCORG
Organization that originally developed the GIS shape and attributes. Domain values are identical to PAGENCY1

SOURCE
Sources of spatial information comprising each polygon. This field is intended to delineate the specifics of each source, facilitating the prioritization of future update efforts. Note that it is appropriate to list multiple sources.

1.0   orthophoto
2.0   1:24,000 USGS topoquad-based map
3.0   Other georeferenced map (explain in SOURCE_NOTES)
4.0   Survey map, digitized and georeferenced to 1:5000 orthos
4.1   COGO entry of survey data
4.2   COGO entry of deed data
5.0   Other analog map,
7.2   Vermont Town Parcel Data
7.3   CAD Data
9.0   On-screen modification
9.1   Unknown source
10.0   Other Map Interpretation (explained in SRCNOTES)
11.0   GPS Data

SRCNOTES
Used to clarify details about source data. Used often to illuminate poor quality data (e.g. "SW corner is confusing"). SRCNOTES allows targeting data most in need of revision.

STEWARD
Active data manager/submitter of feature, can be different than primary protecting agency.

DATEAQRD
Date of acquisition. This is the date that all parties signed (the closing). NOT date it was recorded at town. Closest to actual date or 0101YYYY if actual date unknown.

NOTES
Notes field often used to note problem polygons, specific site names, etc. (e.g., "CONFIRM STATUS, SHELBURNE POND SITE")

GAPSTATUS
Protection Level on a scale from 1 to 4. U.S. National Gap Analysis Program definitions with examples adjusted for Vermont (National Biological Survey Gap Analysis Program Handbook, version 1).

GAPSTATUS GAPSTATUS_DESC

1   **Short Description:** Permanent protection from conversion, no interference
Long Description: 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. Examples: Wilderness Areas, National Parks, Nature Conservancy Preserves, Audubon Society Preserves, Wilderness Areas, Forest Service Research Natural Areas.

2   **Short Description**: Permanent protection from conversion, some interference allowed
Long Description: 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. Examples: State Parks, State Wildlife Management Areas with low intensity forest management.

3   **Short Description:** Permanent protection from conversion, some extraction allowed
Long Description: 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, OHV recreation) or localized intense type (e.g., mining). It also confers protection to federally listed endangered and threatened species throughout the area. Examples: Managed Forests, non-reserved National Forest areas, wetland easements.

4   **Short Description**: No known protection from conversion to unnatural land cover
Long Description: 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. See the PADUS Standards Manual for a summary of methods. Examples: Land that could be permanently developed, state school land, Department of Defense land, & agricultural easements.

DESIGNAT – description of the property related to its use or function

DESIGNAT	DESIG_DESC
AA	Access Area
AGR	Agriculture
DAM	Dam
EASE	FWD easement property
FCS	Fish Culture Station
FLP	Forest Legacy Program
GMCC	Green Mountain Conservation Camp
MF	Municipal Forest
MISC	FWD miscellaneous property
ML	Municipal Land
MP	Municipal Park
MDOS	Municipally Designated Open Space
NAT	Nature Reserve/ Preserve/ Sanctuary
NF	National Forest
NP	National Park
NRA	National Recreation Area

NS	National Seashore
NWA	National Wilderness Area
NWR	National Wildlife Refuge
OTH	Other Land (use only if everything else does not apply)
PCL	Private Conserved Land
RCE	River Corridor Easement
RNA	Research Natural Area
SB	Stream Bank
SDNA	State Designated Natural Area
SF	State Forest
SL	State Land
SP	State Park
TL	Tribal Land
UNK	Unknown
WMA	Wildlife Management Area
WSL	Water Supply Land

PUBACCESS

Many protected land parcels are privately owned with legal conservation restrictions held by private entities. Other parcels are privately owned with public easements or public rights held. The display of protected lands data should always distinguish Public Ownership from Private Ownership to help protect the rights of private landowners. Extremely sensitive delineations should be coded as proprietary data (i.e., 4) and not distributed to the public.

PUBACCESS	PUBACC_DESC
1	Public Access
2	Privately Owned: easements allow limited public access
3	Privately Owned: no public access
4	Publicly Owned: access limited

PANOTES – explanation of property access limitations

UPDACTION

This field documents what kind of update (if any) has been made to the polygon.

UPDACTION	UPD_DESC
A	Added polygon
M	Moved or adjusted polygon
S	Split polygon
U	Updated attribute only

UPDDATE
Date when the UPDACTION was made.

UPDNOTES
Notes about the UPDACTION as needed for clarity.

SUBMIT
Provides CTP internal tracking of features to be submitted

SUBMIT	SUB_DESC
Yes	CTP polygon submittal to VPLD;
Pending	A new or modified polygon to be submitted to VPLD;
No	Internal CTP polygon not to be submitted.

Data Submission Procedure

VCGI will compile Protected Lands Geospatial Data that meets this standard on an annual basis (initiated in 2016). During the first year after this first compilation, the protected lands data committee will convene 6 months after the data is published, in order to review domain table values and add/edit as needed. Thereafter, such changes will be made as part of the annual data submission and compilation effort.

VCGI will only accept data submitted by one of the following identified Protected Land Geospatial Data partners:
- The Green Mountain Club
- The Vermont Land Trust
- The Nature Conservancy
- The VT Housing and Conservation Board
- The VT Agency of Natural Resources
- The Natural Resources Conservation Service
- The Green Mountain National Forest
- Any Regional Planning Commission in VT
- Upper Valley Land Trust

Other entities can request to be included in the list of Protected Land Geospatial Data Partners by contacting VCGI. They must demonstrate that they have the technical ability to meet the data standard described above. If they do not have the technical ability necessary, an attempt will be made to pair them up with an existing Data Partner who can submit data for them.

VCGI will provide Geodatabase and Metadata templates to data partners on request.
Data partners are expected to include only those parcels for whom:
- They are the primary protecting agency, or
- They are serving as data manager

When questions arise as to which data partner is responsible for data from non-data partner sources (e.g. smaller land trusts, municipalities) data partners and VCGI will communicate with one another to resolve the question of who shall submit parcels.

Appendix A: Domain Table Attribute Description

Table 2: Domain Table Attributes: "PROTECTEDLND_DESIGNAT"			
Field Name	**Description**	**Text/Short**	**Field Size**
DESIGNAT	Domain key	Text	4
DESIG_DESC	Description of the property related to its use or function	Text	80

Table 3: Domain Table Attributes: "PROTECTEDLND_GAPSTATUS"			
Field Name	**Description**	**Text/Short**	**Field Size**
GAPSTATUS	Protection level.	Text	2
GAPSTATUS_DESC	Description of the protection level	Text	120

Table 4: Domain Table Attributes: "PROTECTEDLND_PAGENCY"			
Field Name	**Values** **Description**	**Text/Short**	**Field Size**
PAGENCY	Domain key	Text	5
PAGCY_DESC	Primary Protecting AGENCY or organization responsible for protection of the parcel.	Text	80

Table 5: Domain Table Attributes: "PROTECTEDLND_PTYPE"			
Field Name	**Values** **Description**	**Text/Short**	**Field Size**
PTYPE	Domain key	Text	5
PTYPE_DESC	Primary Protection TYPE codes assigned based on the legal restrictions and/or ownerships associated with each polygon of a protected project.	Text	80

Table 6: Domain Table Attributes: "PROTECTEDLND_PUBACCESS"			
Field Name	**Values** **Description**	**Text/Short**	**Field Size**
PUBACCESS	Domain key	Short Integer	1
PUBACC_DES C	Allows the cartographer to distinguish Public Ownership from Private Ownership to help protect the rights of private landowners.	Text	80

Table 7: Domain Table Attributes: "PROTECTEDLND_SOURCE"			
Field Name	**Description**	**Text/Short**	**Field Size**
SOURCE	Domain key	Text	4
SRC_DESC	Sources of geospatial information comprising each polygon	Text	80

Table 8: Domain Table Attributes: "PROTECTEDLND_UPDACTION"			
Field Name	**Description**	**Text/Short**	**Field Size**
UPDACTION	Domain key	Text	1
UPDDATE	Type of update made to polygon (e.g.: Added, Moved, Split).	Text	40

Table 9: Domain Table Attributes: "PROTECTEDLND_SUBMIT"			
Field Name	**Description**	**Text/Short**	**Field Size**
SUBMIT	Data Partners internal control for managing feature sharing (e.g.: Yes, No, Pending).	Text	7
SUB_DESC	Submittal type description	Text	80

Appendix B: Vermont Town Codes

"01005", "Addison"
"19005", "Albany"
"13005", "Alburgh"
"27005", "Andover"
"03005", "Arlington"
"25005", "Athens"
"09005", "Averill"
"09010", "Averys Gore"
"11010", "Bakersfield"
"27011", "Baltimore"
"27015", "Barnard"
"05005", "Barnet"
"23005", "Barre City"
"23010", "Barre Town"
"19010", "Barton"
"15005", "Belvidere"
"03010", "Bennington"
"21005", "Benson"
"11015", "Berkshire"
"23015", "Berlin"
"27020", "Bethel"
"09015", "Bloomfield"
"07005", "Bolton"
"17005", "Bradford"
"17010", "Braintree"
"21010", "Brandon"
"25010", "Brattleboro"
"27025", "Bridgewater"
"01010", "Bridport"
"09020", "Brighton"
"01015", "Bristol"
"17015", "Brookfield"
"25015", "Brookline"
"19015", "Brownington"
"09025", "Brunswick"
"07010", "Buels Gore"
"05010", "Burke"
"07015", "Burlington"
"23020", "Cabot"
"23025", "Calais"
"15010", "Cambridge"
"09030", "Canaan"
"21015", "Castleton"
"27030", "Cavendish"
"19020", "Charleston"
"07020", "Charlotte"

"17020", "Chelsea"
"27035", "Chester"
"21020", "Chittenden"
"21025", "Clarendon"
"07025", "Colchester"
"09035", "Concord"
"17025", "Corinth"
"01020", "Cornwall"
"19025", "Coventry"
"19030", "Craftsbury"
"21030", "Danby"
"05015", "Danville"
"19035", "Derby"
"03015", "Dorset"
"25020", "Dover"
"25025", "Dummerston"
"23030", "Duxbury"
"09040", "East Haven"
"23035", "East Montpelier"
"15015", "Eden"
"15020", "Elmore"
"11020", "Enosburg"
"07030", "Essex"
"21035", "Fair Haven"
"11025", "Fairfax"
"11030", "Fairfield"
"17030", "Fairlee"
"23040", "Fayston"
"09045", "Ferdinand"
"01025", "Ferrisburgh"
"11035", "Fletcher"
"11040", "Franklin"
"11045", "Georgia"
"03018", "Glastenbury"
"19040", "Glover"
"01030", "Goshen"
"25030", "Grafton"
"09050", "Granby"
"13010", "Grand Isle"
"01035", "Granville"
"19045", "Greensboro"
"05020", "Groton"
"09055", "Guildhall"
"25035", "Guilford"
"25040", "Halifax"
"01040", "Hancock"

"05025", "Hardwick"
"27040", "Hartford"
"27045", "Hartland"
"11050", "Highgate"
"07035", "Hinesburg"
"19050", "Holland"
"21040", "Hubbardton"
"07040", "Huntington"
"15025", "Hyde Park"
"21045", "Ira"
"19055", "Irasburg"
"13015", "Isle La Motte"
"25045", "Jamaica"
"19060", "Jay"
"07045", "Jericho"
"15030", "Johnson"
"21047", "Killington"
"05030", "Kirby"
"03020", "Landgrove"
"01045", "Leicester"
"09060", "Lemington"
"09065", "Lewis"
"01050", "Lincoln"
"25050", "Londonderry"
"19065", "Lowell"
"27050", "Ludlow"
"09070", "Lunenburg"
"05035", "Lyndon"
"09075", "Maidstone"
"03025", "Manchester"
"25055", "Marlboro"
"23045", "Marshfield"
"21050", "Mendon"
"01055", "Middlebury"
"23050", "Middlesex"
"21055", "Middletown Springs"
"07050", "Milton"
"01060", "Monkton"
"11055", "Montgomery"
"23055", "Montpelier"
"23060", "Moretown"
"19070", "Morgan"
"15035", "Morristown"
"21060", "Mount Holly"
"21065", "Mount Tabor"
"01065", "New Haven"

"05040", "Newark"
"17035", "Newbury"
"25060", "Newfane"
"19075", "Newport City"
"19080", "Newport Town"
"13020", "North Hero"
"23065", "Northfield"
"09080", "Norton"
"27055", "Norwich"
"17040", "Orange"
"01070", "Orwell"
"01075", "Panton"
"21070", "Pawlet"
"05045", "Peacham"
"03030", "Peru"
"21075", "Pittsfield"
"21080", "Pittsford"
"23070", "Plainfield"
"27060", "Plymouth"
"27065", "Pomfret"
"21085", "Poultney"
"03035", "Pownal"
"21090", "Proctor"
"25065", "Putney"
"17045", "Randolph"
"27070", "Reading"
"03040", "Readsboro"
"11060", "Richford"
"07055", "Richmond"
"01080", "Ripton"
"27075", "Rochester"
"25070", "Rockingham"
"23075", "Roxbury"
"27080", "Royalton"
"03045", "Rupert"
"21095", "Rutland City"
"21100", "Rutland Town"
"05050", "Ryegate"
"01085", "Salisbury"
"03050", "Sandgate"
"03055", "Searsburg"
"03060", "Shaftsbury"
"27085", "Sharon"
"05060", "Sheffield"
"07065", "Shelburne"
"11075", "Sheldon"
"01090", "Shoreham"
"21110", "Shrewsbury"

"25073", "Somerset"
"07070", "South Burlington"
"13025", "South Hero"
"27090", "Springfield"
"11065", "St. Albans City"
"11070", "St. Albans Town"
"07060", "St. George"
"05055", "St. Johnsbury"
"03065", "Stamford"
"05065", "Stannard"
"01095", "Starksboro"
"27095", "Stockbridge"
"15040", "Stowe"
"17050", "Strafford"
"25075", "Stratton"
"21115", "Sudbury"
"03070", "Sunderland"
"05070", "Sutton"
"11080", "Swanton"
"17055", "Thetford"
"21120", "Tinmouth"
"17060", "Topsham"
"25080", "Townshend"
"19085", "Troy"
"17065", "Tunbridge"
"07075", "Underhill"
"01100", "Vergennes"
"25085", "Vernon"
"17070", "Vershire"
"09085", "Victory"
"23080", "Waitsfield"
"05075", "Walden"
"21125", "Wallingford"
"01105", "Waltham"
"25090", "Wardsboro"
"09090", "Warners Grant"
"23085", "Warren"
"09095", "Warren Gore"
"17075", "Washington"
"23090", "Waterbury"
"05080", "Waterford"
"15045", "Waterville"
"27100", "Weathersfield"
"21130", "Wells"
"17080", "West Fairlee"
"21135", "West Haven"
"21140", "West Rutland"
"27110", "West Windsor"

"19090", "Westfield"
"07080", "Westford"
"25095", "Westminster"
"19095", "Westmore"
"27105", "Weston"
"01110", "Weybridge"
"05085", "Wheelock"
"01115", "Whiting"
"25100", "Whitingham"
"17085", "Williamstown"
"07085", "Williston"
"25105", "Wilmington"
"25110", "Windham"
"27115", "Windsor"
"03075", "Winhall"
"07090", "Winooski"
"15050", "Wolcott"
"23095", "Woodbury"
"03080", "Woodford"
"27120", "Woodstock"
"23100", "Worcester"