

University of Vermont

UVM ScholarWorks

Rubenstein School Masters Project
Publications

Rubenstein School of Environment and Natural
Resources

2019

New Hybrid Protected Lands Layer for Vermont Conservation Design Analysis (February 2019)

Carolyn D. Loeb

Anthony W. D'Amato

Follow this and additional works at: <https://scholarworks.uvm.edu/rsmpp>



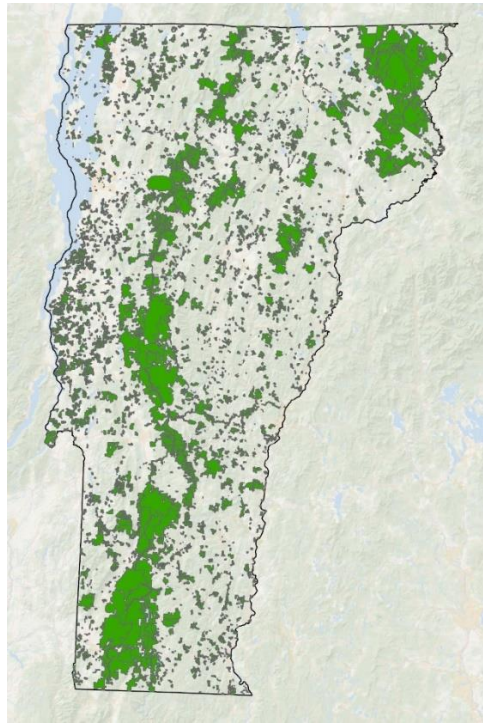
Part of the [Natural Resources and Conservation Commons](#), and the [Natural Resources Management and Policy Commons](#)

Recommended Citation

Loeb, Carolyn D. and D'Amato, Anthony W., "New Hybrid Protected Lands Layer for Vermont Conservation Design Analysis (February 2019)" (2019). *Rubenstein School Masters Project Publications*. 23.
<https://scholarworks.uvm.edu/rsmpp/23>

This Project is brought to you for free and open access by the Rubenstein School of Environment and Natural Resources at UVM ScholarWorks. It has been accepted for inclusion in Rubenstein School Masters Project Publications by an authorized administrator of UVM ScholarWorks. For more information, please contact scholarworks@uvm.edu.

New Hybrid Protected Lands Layer for Vermont Conservation Design Analysis (February 2019)



New Hybrid Protected Lands Layer for Vermont Conservation Design Analysis (February 2019) shapefile preview

Dataset Abstract

This shapefile (.shp) is a hybrid of the March 2017 Edition of the Vermont Center for Geographic Information's (VCGI) Vermont Protected Lands Database (VPLD) (2018), the Vermont Land Trust's February 2019 Protected Lands database (obtained through private correspondence with VLT's Jon Osborne), and The Nature Conservancy's Secured Areas (SA 2018+) database (obtained through private correspondence with TNC's Dan Farrell). The VLT and SA 2018+ datasets were used as the scaffolding for the hybrid protected lands layer, with some VCGI VPLD polygons retained if they contained unique contributions. These datasets were combined by C.D. Loeb because each input dataset was missing some protected lands polygons in the state of Vermont. Additionally, the VCGI VPLD dataset contained many overlapping polygons, making it unusable for the area calculations of interest to our study on the overlap between formally protected lands and Vermont Conservation Design landscape-level targets (see publication reference below).

This hybrid protected lands layer creates a more complete snapshot of Vermont's protected lands for our study's purposes than any other known, publicly available dataset as of February 2019, and also corrects for all improperly overlapping polygons. However, we know that this hybrid product still does not capture all of Vermont's protected lands. Specifically, some Upper Valley Land Trust-protected parcels are missing from this hybrid protected lands layer, and there are probably other protected parcels that could not be captured by the input datasets. Thus, our hybrid product will likely underrepresent actual protections.

This layer was created to intersect with Vermont Conservation Design (2019) targets for input into the software Tableau (2019). Its purpose was to perform cross tabulations to compare Vermont

Conservation Design targets with protected lands in Vermont to-date, and to calculate acreages of protected lands that are also design targets by primary protecting agency. All parcel attributes and delineations in the hybrid output are only as good as the parent datasets. In areas where parcels were digitized differently between parent datasets, “slivers” may have been generated by merging them. Our study objectives originally included an analysis of the GAP Status of protected lands in Vermont (reflected in this layer's metadata); however, some serious errors were detected in parent datasets with regards to GAP Status, so GAP Status was discarded as an analysis object. Please note author-identified GAP Status issues if using this dataset.

Please see the shapefile's metadata for detailed creation steps. The user implies knowledge of the limitations of this dataset. This dataset should not be used to ascertain boundaries or legal acreages for any parcels.

Note: This version of the hybrid protected lands layer does not have county boundaries embedded in it nor waterbodies excluded from it, since it was created to capture all formally protected lands in the state of Vermont to the best of the authors’ abilities. Prior to use in our analysis, this layer was modified to exclude waterbodies and to introduce county boundaries. To obtain the same hybrid protected lands layer with county boundaries embedded in it and waterbodies excluded from it, please contact C. D. Loeb at Carolyn.Loeb@uvm.edu.

Study Publication Reference

Loeb, C.D. and A.W. D’Amato. 2020. Large landscape conservation in a mixed ownership region: opportunities and barriers for putting the pieces together. *Biological Conservation*: Issue TBA. <https://doi.org//10.1016/j.biocon.2020.108462>

Other References

Tableau. 2019. Tableau Desktop: Professional Edition Version 2019.1. <<https://www.tableau.com>>

Vermont Agency of Natural Resources. 2019. Vermont Conservation Design. <<https://vtfishandwildlife.com/conservation/vermont-conservation-design>> (Accessed 10 April 2019).

Vermont Center for Geographic Information. 2018. Vermont Protected Lands Database (March 2017 Edition). State of Vermont Open Geodata Portal. https://geodata.vermont.gov/datasets/072bb8ad3c454b0e9cb0f517e9a296a3_10 (Accessed 5 December 2018).

Access Notes

To download the shapefile “New Hybrid Protected Lands Layer for Vermont Conservation Design Analysis (February 2019)”, please see the “Additional Files” section at <https://scholarworks.uvm.edu/rsmpp/23/>. File name is “New_VT_Hybrid_Protected_Lands_Layer.zip” (10912 kB).

The shapefile was created in ESRI Arc GIS Pro version 2.2 and should be usable with most GIS platforms than can process the .shp file type.