

Report on the status of the original Adirondack Council 2020 Vision recommendations: a thirty-year update **REVISED**



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Report on the status of the original Adirondack Council 2020 Vision recommendations: a thirty-year update REVISED

Final Report

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Cover photos: Background; Red pine rocky summit on Huckleberry Mountain, one of the target sites in Volume 1 (Photo: Tim Howard). Upper inset; moose at Boreas Pond, one of the target sites in Volume 2 (High Peaks Wilderness area, photo Matt Schlesinger). Lower inset: Medium Fen at Newcomb Swamp, one of the target sites in Volume 3 (Vanderwhacker Wild Forest, photo Greg Edinger).

Contents

Table of Figures:	ii
Table of Tables	iii
Executive Summary	1
Definitions:	2
Introduction:.....	2
The state of public land in the Adirondacks in 1987	4
Methods.....	5
Target Delineation	5
Linking targets to parcels.....	6
Conservation status by parcel	7
Estimate state-owned lands in 1987.....	9
Analysis.....	10
Results.....	10
Target Delineation	10
Analysis.....	15
Discussion.....	24
Acknowledgements.....	25
Bibliography	26
Appendix A.....	28
Appendix B.....	30

Table of Figures:

Figure 1. The status of state lands within the Adirondack Park in 1987. Other state lands such as Administrative, Intensive Use, Historic, and lands pending classification are not depicted. Wilderness includes the Canoe Area in this figure.....	5
Figure 2. Generalized approach used for identifying conservation status of targets. Clockwise from the upper left: a. original drawing from page 25 of Volume 3. b. Real Property parcel polygons intersecting with the target areas. c. Our representation (pink line) of the original target sites. d. Parcel data clipped to our representation. e. Parcel data grouped by information about conservation status.	6
Figure 3. Sankey diagram showing the final result of classification groupings, with respect to the property type classification codes.....	9
Figure 4. Targets for Volume 1. Clockwise from the upper left: Biologically Rich Sites (32 sites total), Exemplary Communities (14 sites total), Core Area for wolf habitat, and Reserves (including the proposed Low Elevation Boreal Heritage Reserve on the western side of the park and the proposed Champlain Valley Reserve on the eastern edge of the park.	11
Figure 5. Proposed new Wilderness Areas and additions to existing Wilderness Areas as proposed in Volume 2. Gray shaded areas show existing Wilderness areas in 1987. Yellow shaded areas with thick outlines show proposed private land additions.....	12
Figure 6. Additions to Wild Forests as proposed in Volume 3. Gray shaded areas show an approximation of Wild Forests as they were in 1987, red shaded areas with thick boundaries show the proposed private land additions.....	14

Figure 7. The current conservation status of the Biologically Rich Sites from Volume 1. The top figure shows amount in acres, bottom figure shows the relative proportion of each class..... 16

Figure 8. The current conservation status of the Exemplary Communities sites identified in Volume 1. The top figure shows amount in acres, bottom figure shows the relative proportion of each class. 17

Figure 9. The current conservation status of the proposed reserves and the wolf habitat core area from Volume 1. The top figure shows amount in acres, bottom figure shows the relative proportion of each class. 18

Figure 10. The current conservation status of wilderness expansions and proposed new wilderness areas from Volume 2. The top figure shows amount in acres, bottom figure shows the relative proportion of each class. 19

Figure 11. The current conservation status of Wild Forest expansions and proposed new Wild Forests from Volume 3. The top figure shows amount in acres, bottom figure shows the relative proportion of each class. 20

Figure 12. Conservation status across all volumes, showing the current status of the original recommendations for Biologically Rich Sites and Exemplary Communities (left bar), Reserves, Wild Forests, and Wilderness. The top panel shows amounts in square miles; the bottom shows amounts in proportion of the total. 21

Figure 13. Conservation status summarized across all volumes, with redundant site recommendations and the Wolf Restoration Core Area removed. Values for each of these classes are provided in Table 5. 23

Table of Tables

Table 1. The different classes of land acquisition and land classification change recommended in the 2020 reports (Vols 1-3). 4

Table 2. Property type classification code groups. The classification by the Tax Assessors begins at this broad hundreds-level. Finer categories assign numbers within each level. 7

Table 3. Tallies of conservation levels for each volume in acres. BRS and EC comprises Biologically Rich Sites and Exemplary Communities from Volume 1, R and W comprises Reserves and Wolf Restoration Core Area from Volume 1, Wilderness covers all targets from Volume 2 and Wild Forest covers all targets from Volume 3. 22

Table 4. Stewardship levels summarized across Volumes 1, 2, and 3 of the Adirondack Council 2020 Vision Series. In these tallies, redundant site recommendations are removed as well as the Wolf Restoration Core Area. Groupings follow Table 3. 22

Table 5. Conservation status summarized across all volumes, with redundant site recommendations and the Wolf Restoration Core Area removed. These values directly correspond to the bar chart of Figure 13. 23

Table 6. Comparison, in square miles, of non-State lands converted to State lands between 1987 and 2018 for all lands within the Adirondack Blue Line (ADK-wide) and for lands only within the sites recommended by the 2020 Vision Series (Target sites only). All duplicate areas (locations recommended more than once by the three volumes) and the wolf core area were removed for this estimate. 24

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Executive Summary

The Adirondack Council released the first volume of its **2020 VISION** series 30 years ago. The goal of **2020 VISION** was to propose a long-range plan for the completion of the Adirondack Park – something state government hadn't done.

It is important to note that completion of the park doesn't mean full state ownership of all the Park's six million acres. The Adirondack Council has for more than 40 years envisioned an Adirondack Park of clean water and clean air, public and private lands including large, motor-free wilderness areas, additional "forever wild" wild forests, farms and working forests and more than 100 diverse, vibrant, rural communities. The task of **2020 VISION** was to show which lands and waters ought to be protected from development and intensive recreation, as the park's communities and tourism grow and change.

With the subtitle *Fulfilling the Promise of the Adirondack Park*, **2020 VISION** Volumes 1, 2, and 3 articulated clear and specific goals to support biodiversity conservation (Volume 1), to complete the park's network of motor-free Wilderness Areas (Volume 2), and to realize the full recreational potential of less remote and sensitive Wild Forest Areas (Volume 3). The goal of this report is to assess the conservation status of the lands targeted for protection in each of these volumes -- after 30 years of advocacy and effort.

Conservation science has matured since these volumes were first published. In this assessment, we recognize fee acquisition by New York State (addition to the constitutionally protected Forest Preserve) as the primary stated objective of these volumes, but also recognize conservation and forestry easements, ownership by conservation organizations, and other conservation stewardship, to the extent possible.

Updating the maps was a challenge, as the originals were all hand-drawn. To accomplish this assessment, we carefully digitized the recommendations from each of the first three Adirondack Council 2020 Vision series volumes into a Geographic Information System (GIS) and used data from federal, state and private sources to determine the conservation status of each parcel. In all, there were 99 site recommendations and more than 900,000 acres identified for protection by the Adirondack Council.

These data show a clear pattern of success in achieving the preservation actions needed to realize the conservation recommendations. Lands in good stewardship now make up 52 percent of the recommendations from Volume 1 (biological diversity), 48 percent of the recommendations from Volume 2 (Wilderness), and 29 percent of the recommendations from Volume 3 (Recreation). Overall (with redundant acreage from overlapping recommendations removed) 54 percent, or 492,300 acres of 907,300 acres, of lands within the recommendation sites appear to have good stewardship. Perhaps even more telling for the success of the **2020 VISION** series is a comparison across all private lands within the Adirondack Park. Over the last 30 years, the percentage of lands acquired by New York State was double the overall rate within the lands recommended by the Adirondack Council in comparison to acquisitions throughout the entire park.

While a diverse and rounded conservation strategy is critical for maintaining the overall health and sustainability of our biodiversity and ecological systems throughout the Adirondacks, our findings here show that an important component of this larger strategy, land conservation and stewardship, has advanced substantially over the last thirty years and that the insightful and progressive perspectives of the **2020 VISION** series have supported this activity in positive ways.

Definitions:

APA: The Adirondack Park Agency

Canoe Area: A state land classification with specific management goals. An area in a wilderness setting but where the watercourses and lakes make possible water-oriented recreation. For additional details, see <http://www.dec.ny.gov/lands/7811.html> .

Conservation Easement: An agreement between the landowner and another organization that places a restriction on the property to protect its natural resources. There are also a few agricultural easements in the Adirondacks intended to maintain a working agricultural system on the property. Easements are typically legally binding with permanent restrictions.

GIS: A Geographic Information System, or computer-based mapping system that allows for spatial mapping and analysis.

NYSDEC: The New York State Department of Environmental Conservation

Primitive Area: A state land classification with specific management goals. An area that is essentially wilderness in character but contains structures or other uses inconsistent with wilderness. For additional details, see <http://www.dec.ny.gov/lands/7811.html> .

Target: A specific area of land identified by the 2020 Vision Series. These are typically called “acquisition proposals” or “recommendations” in the Series.

Wilderness: A state land classification with specific management goals. “An area of state land or water having a primeval character, without significant improvement ...” For additional details, see <http://www.dec.ny.gov/lands/7811.html> .

Wild Forest: A state land classification with specific management goals. “An area where the resources permit a somewhat higher degree of human use than in wilderness, primitive, or canoe areas.” For additional details, see <http://www.dec.ny.gov/lands/7811.html> .

Introduction:

The 1894 New York Constitutional Convention included in the new Constitution a declaration that the Adirondack Forest Preserve would be Forever Wild, setting the stage for long-term conservation within the Adirondacks. New York State continued to acquire lands through the years, and recognizing the need for better long-range planning, management and stewardship of both public and private lands and forests, the state created the Adirondack Park Agency in 1971. In 1973, the APA adopted the Land Use and Development Plan, which was designed to direct future development in and around existing communities and protect the wild character of large parcels of private forest land. Thus the focus, in a general sense, was toward promoting where future growth should take place and where it should be avoided. Targeted conservation efforts focusing on ensuring appropriate representation within conserved lands of the full suite of species and natural communities was less of a priority. Land conservation efforts were driven more by opportunities than any effort to ensure full and rounded recreation opportunities, within the Wilderness and Wild Forest systems.

A new era of conservation in the Adirondacks began when the Adirondack Council worked with various partners and then released a series of publications designed to highlight conservation targets focused on biodiversity (Davis 1988), Wilderness Areas (Davis 1990), and Wild Forests (McMartin 1990). The goal of the recommendations in these documents was to close the gaps in conservation lands and, more importantly, to prioritize specific tracts of land needed to be acquired to fulfill the ultimate goal of the Adirondack Park. Subsequently, the State

with the Adirondack Council and others developed an open space conservation plan and established the Environmental Protection Fund as a mechanism to fund land protection and other environmental priorities.

To create Volume 1 (*Biological Diversity: Saving all the Pieces*; Davis 1988), the authors recognized the need for a classification system upon which to base their assessment of biodiversity in the Park. They worked closely with experts in the area, including staff from the Adirondack Park Agency, Department of Environmental Conservation, Natural Heritage Program, and local universities. Using the information they compiled about the ecosystems and natural communities occurring in the Adirondack Park, the authors focused on ensuring representation of the various types within the publicly held Forest Preserve system. A set of exemplary natural communities in private hands at the time of writing the volume were identified as conservation priorities. Similarly, a suite of biologically rich or unusual sites were also selected as conservation priorities to ensure the breadth of conservation success. Finally, two new potential reserves and a wildlife restoration zone were identified as important conservation priorities in Volume 1. The reserves were intended to cover two unique ecosystems that were poorly protected in 1989: the lowland boreal areas north of Tupper Lake and Cranberry Lake and the Champlain Valley habitats around Whallonsburg. Also, the authors recognized the loss of large carnivores in the natural systems of the Adirondacks and identified a possible large core area that could potentially support wolf re-introduction. This core area consists of 515,000 acres and was intentionally broad-bush in that recommendations were to minimize road density and maximize natural lands, but not to acquire all lands, within the boundaries.

The focus for Volume 2 (*Completing The Adirondack Wilderness System*; Davis 1990) was to expand the Adirondack Wilderness System in order to define a complete set of wilderness areas that could persist in perpetuity and that could be protected and managed appropriately. This included recommendations to convert some state lands designated as Wild Forest to Wilderness as well as creating three new wilderness areas. The proposed new Wilderness Areas focus on the lowland boreal areas (Boreal Wilderness), a concentration of wild and scenic rivers (Wild Rivers Wilderness), and a large block of forested areas in the western part of the park (Bob Marshall Great Wilderness).

The third volume in the set, Volume 3 (*Realizing the Recreational Potential of Adirondack Wild Forests*; McMartin 1990), focused on the tracts of State Land designated as Wild Forest. The goal was to maximize the recreation potential of the Wild Forest system. Thus, the focus is on access for fishing, hiking, horseback riding, camping, as well as motorized vehicle access to support these and other recreation opportunities. In all, recommendations for expansions to 33 Wild Forests were proposed in this volume.

Table 1. The different classes of land acquisition and land classification change recommended in the 2020 reports (Vols 1-3). Acreage recommended for direct acquisitions is noted in the final column. Different volumes sometimes recommended the same location for independent reasons, these overlaps are removed in the total estimate (bottom row). The wolf restoration habitat core area recommended in Volume 1 encompasses about 515,500 acres and is not included here.

Grouping	Number of sites	Additional acreage
Volume 1		
New Reserves	2	138,000
Exemplary Communities	14	13,700
Biologically Rich or Unusual Sites	32	73,400
Volume 2		
New Wilderness Areas	3	284,900
Wilderness Expansions*	13	161,300
Volume 3		
Wild Forest expansions	33	326,600
Total (overlaps removed)	98	907,300

Notes: *represents land acquisition acreage, not reclassification.

The state of public land in the Adirondacks in 1987

In 1987, there were about 3,700 square miles of Wild Forest, Wilderness Area, Canoe Area, and Primitive Area within the Adirondack Park [Figure 1, (Adirondack Park Agency 1987)]. This comprised about 40% of the 9,100 square miles (as calculated by GIS) within the Adirondack Park. The recommended additions of over 907,300 acres (or 1418 square miles; Table 1, after removing overlaps) would bring this to about 56% of the total.

Our goal of this project was to assess the current-day status of the recommendations made by Volumes 1, 2, and 3. As such, this report should be read with the three 2020 Volumes in hand to reference the reasoning and recommendations made by each. We do not review those components here. Recognizing the importance of private conservation and state and private conservation easements as part of today’s conservation landscape we made efforts to distinguish the degree of conservation within the private lands as much as possible.

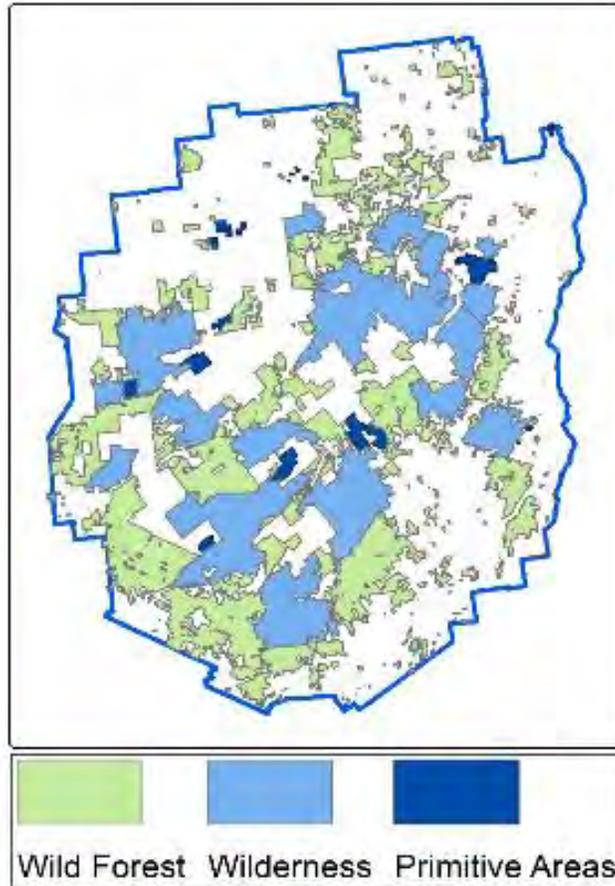


Figure 1. The status of state lands within the Adirondack Park in 1987. Other state lands such as Administrative, Intensive Use, Historic, and lands pending classification are not depicted. In this figure the Canoe Area is included as Wilderness.

Methods

Target Delineation

Our first goal was to create a GIS representation for every single item discussed in each of the three 2020 Vision Series volumes. This was relatively clear in Volumes 2 and 3 because a map was presented for each Wilderness Area (Vol. 2) and Wild Forest (Vol. 3) with both the late 1980s-era boundaries for existing state lands and the proposed acquisitions represented on the map. In most cases, we could reference these hand-drawn maps and recreate the locations targeted for acquisition, using the written descriptions as needed.

Volume 1, on the other hand, had maps for just under 1/3 of the 46 targeted exemplary natural communities and special biodiversity areas. When a map was not available we referred to the written descriptions, researched sites on-line, and referenced archive information from the Adirondack Park Agency.

The GIS data sources we used are listed in Appendix A.

Linking targets to parcels

In order to make the entire assessment process repeatable and transparent, we based our assessments on tax parcel information from the Real Property Service GIS system. The most recent data available in the Fall of 2017 was the RPS data sets for 2015 for all twelve counties that occur within the Adirondack Park. We built the initial target sites using these data. To build the target sites, we first selected all parcels that intersect with each proposed site for each of the 2020 Volumes. After merging the parcels, we then modified the final boundaries to match the targeted site as best as possible (Figure 2). In some cases, boundaries were left at the parcel boundary if it wasn't clear how the parcel should be divided up. We strove to follow the intent of the original authors. Thus, if written descriptions discussed a mountain, ridge, or wetland, we tried to create boundaries that followed topographic contours or wetland edges rather than hand-drawings from images in the volumes. We also tried to use parcel boundaries when they followed the intent of the original authors, even if the final shape may have appeared slightly different than the maps in the original volumes. Even so, parcel boundaries from the RPS were regularly split to match the goals of the Vision Series.

After creating a full set of target sites, the next step was to divide the targets again based on conservation status. By February of 2018, we had access to the 2016 RPS data for all counties but Clinton County. To ensure that we were using as up-to-date information as possible, we used the 2016 data despite the potential issues with boundary changes between the two RPS data sets.

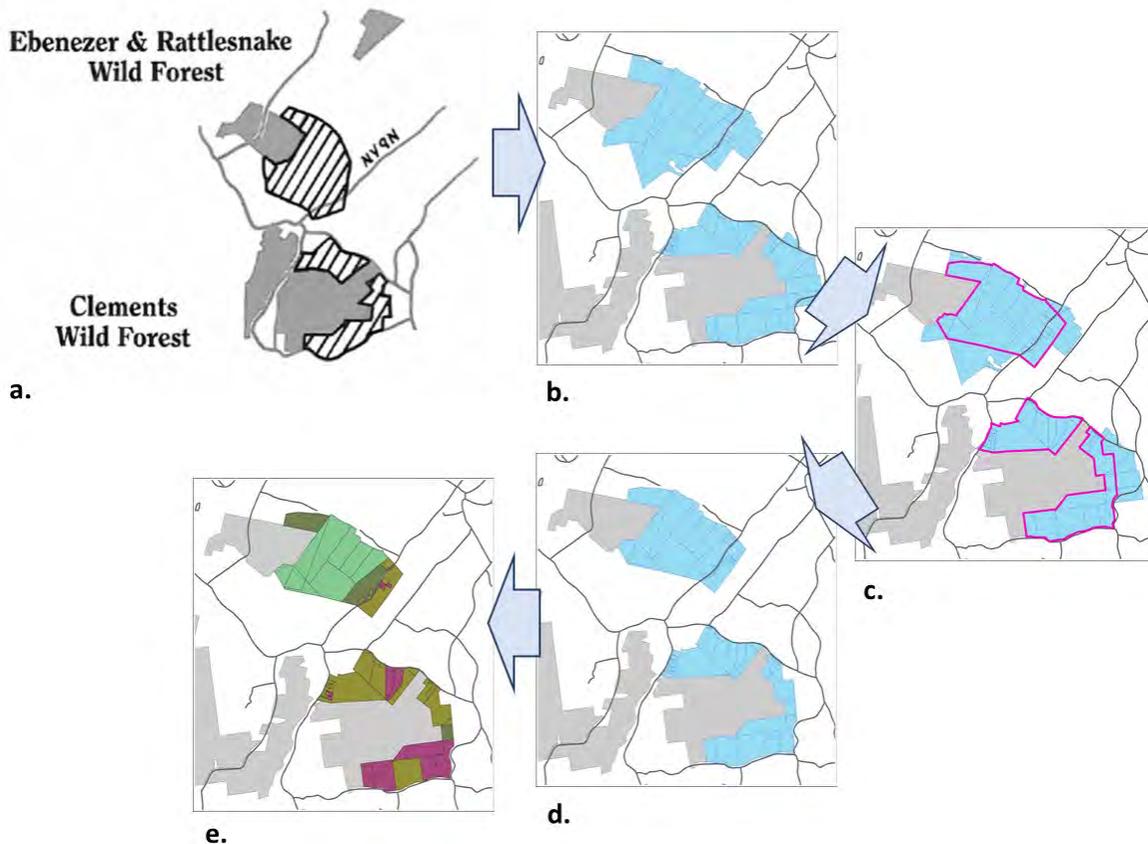


Figure 2. Generalized approach used for identifying conservation status of targets. Clockwise from the upper left: **a.** original drawing from page 25 of Volume 3. **b.** Real Property parcel polygons intersecting

with the target areas. **c.** Our representation (pink line) of the original target sites. **d.** Parcel data clipped to our representation. **e.** Parcel data grouped by information about conservation status.

Conservation status by parcel

To determine the conservation status of each tax parcel, we began with the Property Type Classification and then supplemented this information with other GIS datasets. The Property Type Classification is a consistent, hierarchical set of codes developed by the NYS Department of Taxation and Finance and used by Tax Assessors throughout New York State. Each parcel is assigned a classification code based on the current land use, with broad categories ranging from “Agricultural” and “Industrial” to “Wild, Forested, Conservation Lands & Public Parks” (Table 2). These broad categories are further subdivided into more details as described at the Assessor’s Manual website (<https://www.tax.ny.gov/research/property/assess/manuals/prclas.htm>).

We supplemented the information from the Property Type Classification with conservation easement information from NYSDEC, The USGS Protected Areas Database (2016), the New York Protected Areas Database (NYPAD, New York Natural Heritage Program 2017), and The Nature Conservancy (see Appendix A). Finally, when questions arose about the land use of specific parcels we also referred to the most recent aerial imagery to see if we could discern the current status of the parcel.

Table 2. Property type classification code groups. The classification by the Tax Assessors begins at this broad hundreds-level. Finer categories assign numbers within each level.

Class	Category	Description
100	Agricultural	Property used for the production of crops or livestock.
200	Residential	Property used for human habitation.
300	Vacant Land	Property that is not in use, is in temporary use, or lacks permanent improvement.
400	Commercial	Property used for the sale of goods and/or services.
500	Recreation & Entertainment	Property used by groups for recreation, amusement, or entertainment.
600	Community Services	Property used for the well-being of the community.
700	Industrial	Property used for the production and fabrication of durable and nondurable man- made goods.
800	Public Services	Property used to provide services to the general public.
900	Wild, Forested, Conservation Lands & Public Parks	Reforested lands, preserves, and private hunting and fishing clubs.

We assigned each parcel into one of eleven groups that highlighted our assessment goals, as follows:

- **Public Conserved.** The parcel is owned and protected by NYSDEC and managed as Wild Forest, Wilderness Area, or other similar status. Also included here are lands owned for maintaining clean drinking water (municipal water), and county and town lands managed in a natural state.

- **Conservation Org.** The parcel is owned by a non-profit organization for purposes of environmental preservation or is owned by another private owner and subject to a conservation easement held by an organization, such as The Nature Conservancy, Audubon, The Lake George Land Conservancy, the Clearwater Trust, or The Adirondack Land Trust. Parcels held in easement for sustaining agricultural use are also included here.
- **NYS Easement.** The parcel is owned by a private owner and subject to a conservation easement held by the NYS DEC. This does not include parcels enrolled in the Section 480 and 480-a NYS tax laws.
- **Conservation Steward.** The parcel is owned by a private party, does not have a conservation or forestry easement attached to it, but we understand the owners tend to be good stewards of the land.
- **Open Land.** The parcel is publicly or privately held but with low levels of current development. This includes town and county lands listed as Vacant, powerline rights-of-way, undeveloped power company lands, railroad corridors, private forest lands, hunt and fish clubs, and summer camps (and similar) that do not have an easement.
- **Forest Tax Law program.** The parcel is enrolled in the Section 480 or 480-a NYS tax law programs.
- **Homesite GTE 200ac.** The parcel is privately held and there is a home or other structure on it. Also, the parcel is greater than or equal to 200 acres, indicating the parcel is mostly forested.
- **Homesite LT 200ac.** The parcel is privately held and there is a home or other structure on it. Also, the parcel is less than 200 acres in size.
- **Agriculture and Cleared.** The parcel is privately held and is classified as agricultural or is otherwise unforested.
- **Public Developed.** The parcel is publicly held but developed in some manner including State Penitentiaries, University Biological Station facilities, ball fields, and Town and County Facilities.
- **Private Developed.** The parcel is privately held and has a higher level of development than residential.

Two other sections of the target area, listed below, were not included in the analysis.

- **Road.** Larger roads passing between parcels were removed from the analysis.
- **Open Water.** Tax maps often stopped at the edge of large lakes and rivers or contained polygons attributed as water with no ownership information. Most large bodies of water are considered to be public, navigable waters, but because of ongoing debates about this (Sax 1988, Nadeau and Fuller 2014) we tried to remove larger water bodies from the analysis.

In our analysis, we consider areas designated as Public Conserved, Conservation Org, NYS Easement, and Conservation Steward as protected or conserved. Even so, note that management or stewardship of a parcel, which is very difficult to discern for all parcels from the information available, is a large factor in determining if the natural resource features and characteristics of a property are really conserved. Areas designated as Forest Tax Law program, Open Land, Homesite GTE 200ac, and Agricultural, Other Cleared should be considered as mostly undeveloped lands with high conservation potential remaining.

The condition and precision of the tax polygon (RPS) data varied considerably among the different counties. Some counties had good polygon coverage with no overlapping areas and no

gaps. Others had open gaps or overlaps that needed to be rectified. Similarly, the edges of each data set (county boundaries) generally did not align with the adjacent data set. Within our target areas, we cleaned up these differences as best as possible by the most parsimonious means possible. In most cases, gaps were classified to Road and Open Water and small slivers were merged with the adjacent polygon or removed if they occurred at the edge of the site.

Figure 3 shows how the Tax Assessor classification system lined up with our final group assignments. The small lines coming from many sources to “Conservation Org,” for example, show the benefits of including additional sources to ascertain conservation status. The thick lines, however, show the general consistency, overall, of the classification system and how it was applied in this study.

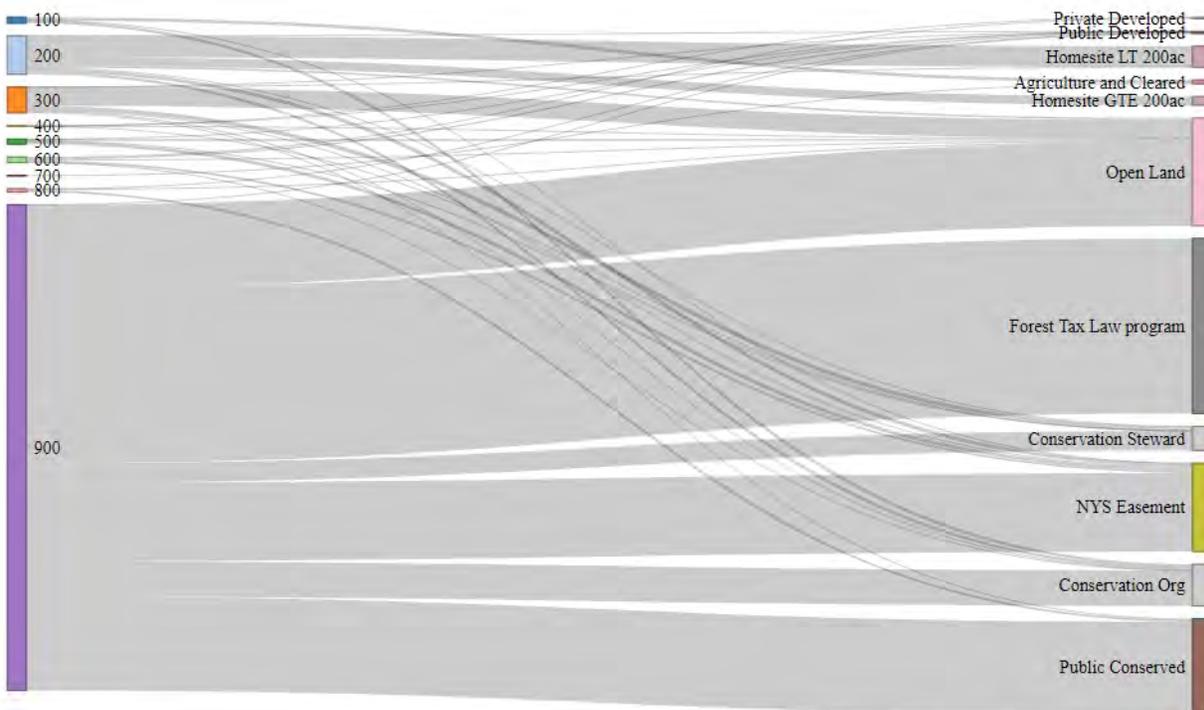


Figure 3. Sankey diagram showing the final result of classification groupings, with respect to the property type classification codes.

Estimate state-owned lands in 1987

We used the 1987 version of the APA Land Use Map (<https://adirondack.maps.arcgis.com/home/item.html?id=286cb52a386d4319ad5e79882d273aba>) to estimate the lands held by DEC in 1987. We created polygon datasets for the Wilderness Areas, Wild Forests, and Primitive Areas identified by the Land Use Map in 1987 (Figure 1). A small number of areas targeted by the 2020 Volumes overlapped with land that was already in state hands in 1987. We accounted for these overlaps by using the data from the 1987 Land Use Map to identify parcels that had been in DEC hands at this time. These parcels were removed from the analysis. The final boundaries for each target are presented in Appendix 1.

Analysis

We used the final groupings to assess the conservation status of the lands since the 2020 Vision documents had been written. We summarized conservation status by the 2020 targets and rolled up these summaries by volume. We used the rough estimates of state land from 1987 to evaluate the relative acquisition of state land within the Adirondack Park as a whole and within the recommended sites from the 2020 Vision Series.

Mapping, digitizing, and some of the spatial components of this assessment were conducted in ArcMap 10.3. All the remaining components of this assessment, including production of graphs and maps, were conducted using the R statistical software using R version 3.4.4 (R Core Team 2018), RStudio (version 1.1.447), and packages broom (Robinson 2018), ggmap (Kahle and Wickham 2013), ggplot2 (Wickham 2016), ggsn (Santos Baquero 2017), gridExtra (Auguie 2017), networkD3 (Allaire et al. 2017), RColorBrewer (Neuwirth 2014), sf (Pebesma 2018), tidyr (Wickham and Henry 2018), tidyverse (Wickham 2017) and viridis (Garnier 2018).

Results

Target Delineation

We delineated fourteen sites designated as “Exemplary Community” in Volume 1 (Figure 4b). These fourteen sites ranged in size from 88 acres (Brighton Bog) to 4,265 acres (Kildare Old Growth) with the number of parcels within the site varying from 1 (Brighton Bog, Huntington Forest) to 106 (Schroon River Oxbows). The total area of the Exemplary Community sites is 13,675 acres. Each site is depicted in Appendix A.

We delineated 32 sites designated as a “Biologically Rich Site” in Volume 1 (Figure 4a). These sites ranged in size from 66 acres (Brant lake Bog) to 9,861 acres (Ireland Vly) with the number of current-day parcels within the target area ranging from one (Third Burnt Hill) to 97 (Oregon Plains and Cold Brook). The total area of the Biologically Rich Sites is 70,762 acres.

The Low Elevation Boreal Heritage Reserve proposed in Volume 1 (Figure 4c) totals 116,792 acres and has 333 current-day parcels within it. The Champlain Valley Reserve is 19,457 acres with 572 parcels within it. Finally, the suggested Core Area recommended for wolf restoration totals 515,500 acres (Figure 4d). Over half of that was already in State hands in 1987, however, so the total that should be targeted for this assessment comes to 239,841 acres. The recommended wolf re-introduction area should also be placed in a different class than the other recommendations: the original authors were not suggesting complete fee acquisition within its boundaries, but that the road density remain low, the overall natural character be maintained, and that further research be conducted into the appropriateness of re-introductions (Davis 1988). Therefore, we have included the wolf core area in the component analysis but have tried to keep it separate from the final summary analyses.

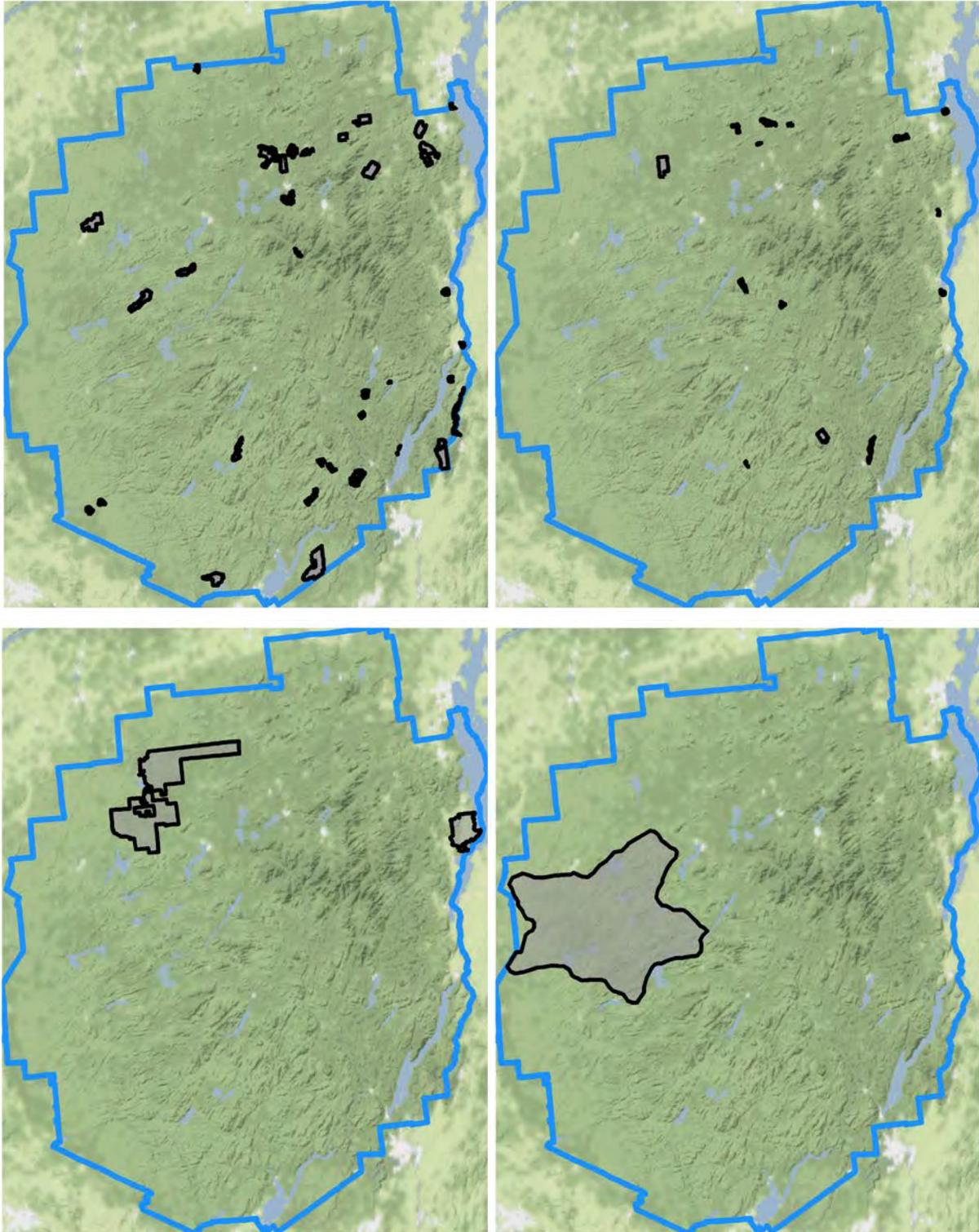


Figure 4. Targets for Volume 1. Clockwise from the upper left: Biologically Rich Sites (32 sites total), Exemplary Communities (14 sites total), Core Area for wolf habitat, and Reserves (including the proposed Low Elevation Boreal Heritage Reserve on the western side of the park and the proposed Champlain Valley Reserve on the eastern edge of the park).

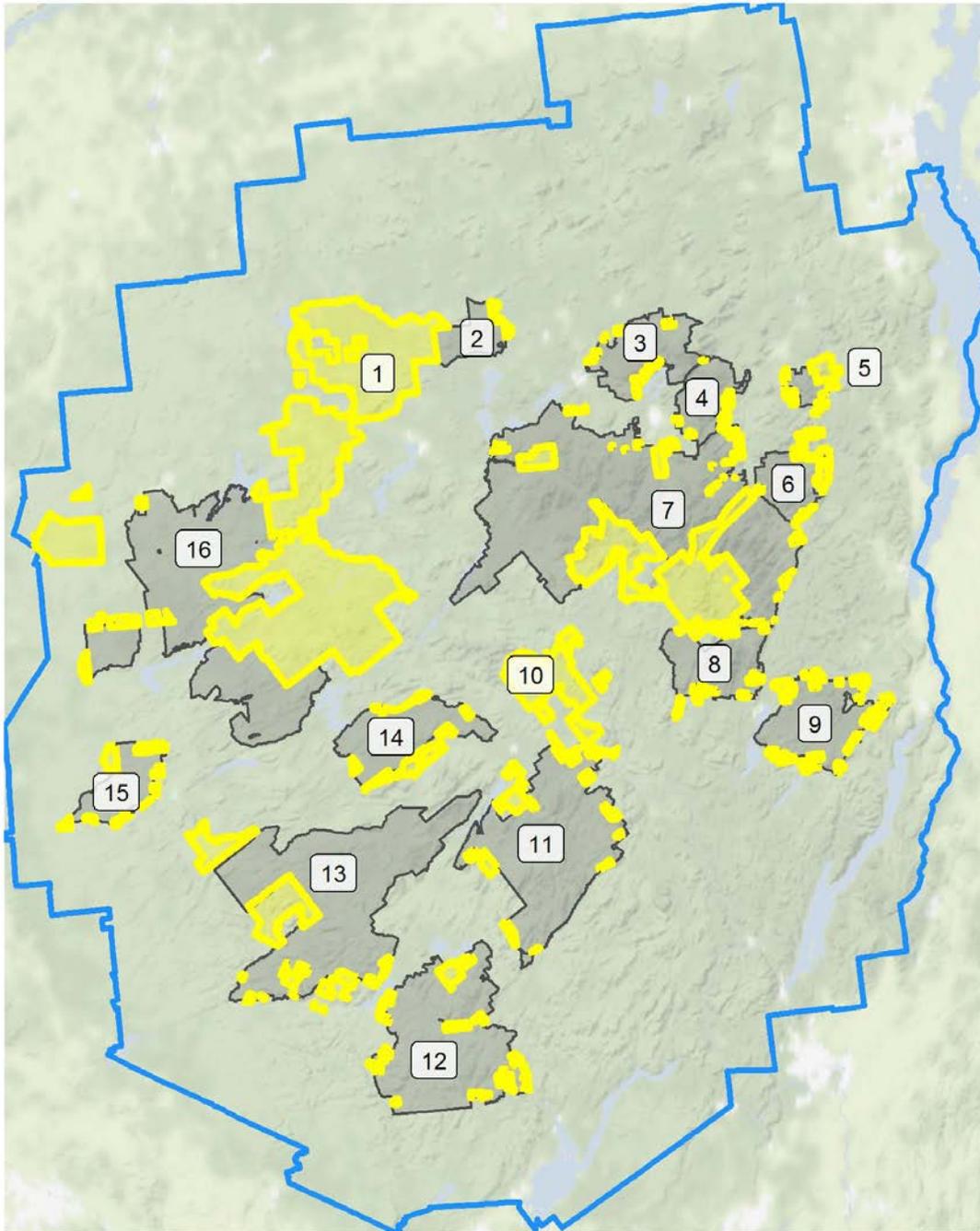


Figure 5. Proposed new Wilderness Areas and additions to existing Wilderness Areas as proposed in Volume 2. Gray shaded areas show existing Wilderness areas in 1987. Yellow shaded areas with thick outlines show proposed private land additions. Labeling follows the original volume:

- | | | |
|------------------------------------|--------------------------------------|--------------------------------------|
| 1. Proposed Boreal Wilderness | 7. High Peaks (& Dix Mt.) Wilderness | 12. Silver Lake Wilderness |
| 2. St. Regis Canoe Area Wilderness | 8. Hoffman Notch Wilderness | 13. West Canada Lake Wilderness |
| 3. McKenzie Mt. Wilderness | 9. Pharaoh Lake Wilderness | 14. Blue Ridge Wilderness |
| 4. Sentinel Range Wilderness | 10. Proposed Wild Rivers Wilderness | 15. Ha-de-ron-dah Wilderness |
| 5. Jay – Hurricane Wilderness | 11. Siamese Ponds Wilderness | 16. Proposed Bob Marshall Wilderness |
| 6. Giant Mountain Wilderness | | |

The first of the three proposed new Wilderness Areas in Volume 2 is the Bob Marshall Great Wilderness (Figure 5). The proposal was to consolidate all or part of ten existing Wilderness Areas, Primitive Areas, and Wild Forests and then add additional lands to consolidate the Wilderness Area. We mapped these additional lands as about 183,700 acres comprising 237 current-day parcels. The second proposed new area is the Boreal Wilderness, which we mapped as 71,674 acres (consisting of 123 parcels). The new acquisitions proposed for the Wild Rivers Wilderness total 29,014 acres and consist of 65 parcels. Proposals for the thirteen existing Wilderness Areas ranged from 680 acres (St. Regis Canoe Area) to 73,000 acres (High Peaks and Dix Mountain Wilderness) of recommended additions.

In all, recommendations were made for 34 Wild Forests. One of those was a proposed new one, the Raquette River Wild Forest where 66,271 acres of new lands were proposed for acquisition. Recommendations for the 33 existing wild forests totaled 260,306 acres with a range from 190 acres (Clear Pond Wild Forest) to 20,000 acres (Fulton Chain Wild Forest).

Details for each Biologically Rich Site, Exemplary Community, Proposed Reserve, Proposed New Wilderness area, Wilderness Area addition, or Wild Forest addition are provided in Appendix B.

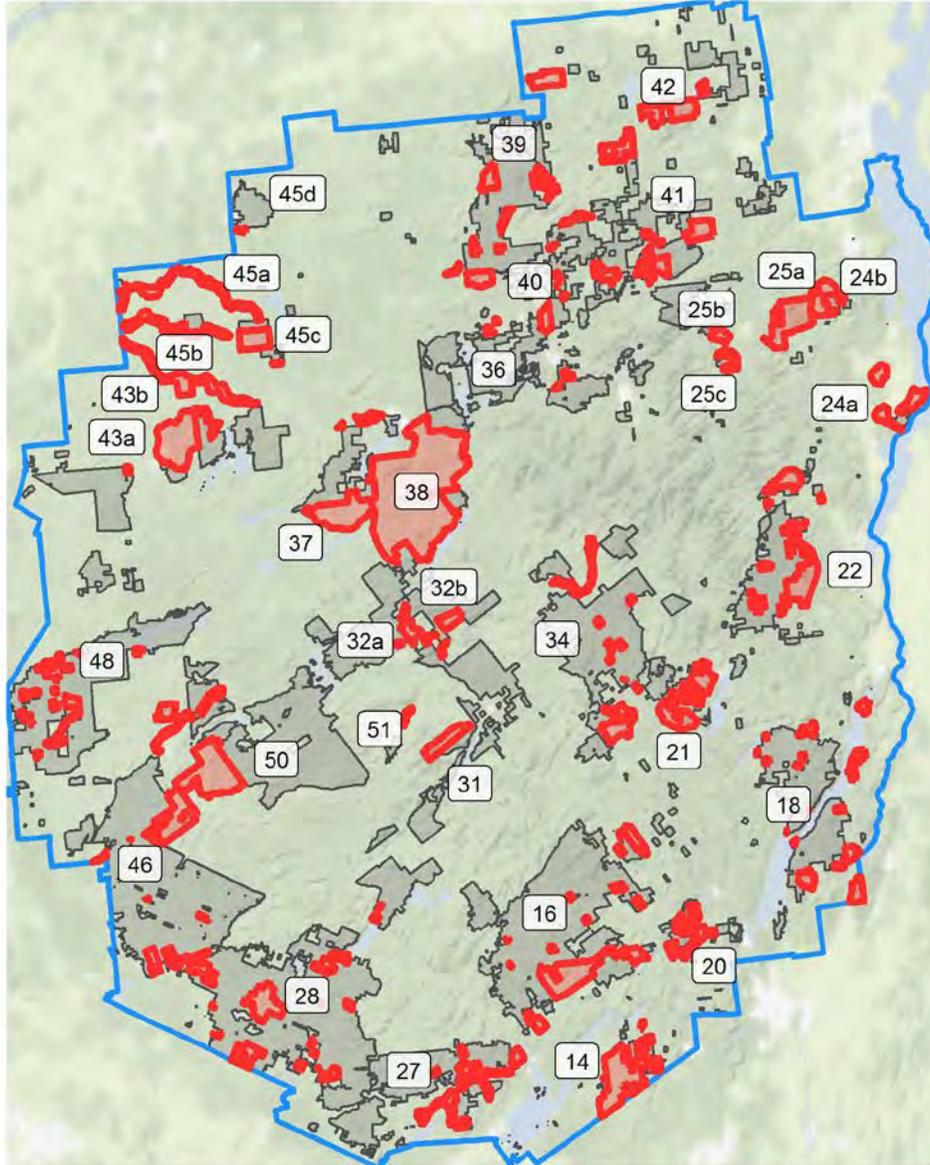


Figure 6. Additions to Wild Forests as proposed in Volume 3. Gray shaded areas show an approximation of Wild Forests as they were in 1987, red shaded areas with thick boundaries show the proposed private land additions. Reference numbers represent page numbers (lower-case letters added when more than one forest is discussed on a single page) in the original 2020 Volume, and indicate the target forest areas as follows:

- | | | |
|----------------------------------|--|---------------------------------|
| 14. Kayaderosseras Hills WF | 28. Ferris Lake WF | 42. Disjointed Northern Parcels |
| 16. Wilcox Lake WF | 31. Jessup River WF | 43a. Cranberry Lake WF |
| 18. Lake George / Brant Lake WF | 32a. Sargent Ponds WF | 43b. Tooley Pond WF |
| 20. Warrensburg WF | 32b. Blue Mountain WF | 45a. Grass River WF |
| 21. Trout Brook WF | 34. Vanderwhacker and Upper Hudson WF | 45b. Stone Dam WF |
| 22. Hammond Pond WF | 36. Saranac Lakes WF | 45c. Chandler Pond WF |
| 24a. Split Rock WF | 37. Horseshoe Lake WF | 45d. Clear Pond WF |
| 24b. Pok-O-moonshine WF | 38. Raquette River WF | 46. Black River WF |
| 25a. Daby, Jug, and the Gulf WF | 39. Debar Mountain WF | 48. Independence River WF |
| 25b. Ebenezer and Rattlesnake WF | 40. Bloomingdale Bog and Vermontville WF | 50. Fulton Chain WF |
| 25c. Clements WF | 41. Taylor Pond WF | 51. Moose River Plains WF |
| 27. Shaker Mountain WF | | |

Analysis

In the following figures, we provide visualizations of the current status of the targets set forth in the 2020 Vision series. There are many moving variables and many ways to assess the thirty years of change in the conservation environment and conservation status of lands in the Adirondacks. Here, we begin with simple visualizations to help tell the story.

All of the following bar charts use the same color schematic. Green tones depict intact open lands with the darker tones showing properties that are now owned by NYSDEC. Progressively lighter green tones indicate lands that are owned by a conservation organization, have a conservation easement, or are owned privately by individuals or organizations with land stewardship interests, respectively. Gray tones depict open lands with no known long-term conservation or stewardship attributes, large private parcels (greater than 200 acres), and agricultural and cleared lands. Parcels identified in these classes (gray tones) might be the most accessible for conservation action. Finally, orange tones depict smaller home sites (less than 200 acres), and public and private developed lands. While additional parcel-specific research is always required, parcels identified in this way (orange tones), may be least accessible for conservation action. For more discussion about these classification groupings, see the “Conservation status by parcel” section on pages 7 and 8.

Each figure consists of paired bar charts. The upper chart sums the total acres in each class for each target site. Thus, the height of each bar represents the total targeted area for the site. This style has the benefit of depicting the relative size of each targeted area and also allowing direct comparison of real size (acres) among classes and sites. Charts with a wide range in the total size of targets, however, result in having the information for the smaller sites obscured. The lower chart fixes this by normalizing the data and depicting the proportion, in area, of each class out of the total area for each site. Thus, bar height for all sites is always 1.0, and each class is more clearly depicted as a proportion (or percentage divided by 100) of the total area. Both charts in tandem provide extra information that either alone cannot provide. Similar detail with an accompanying map is provided for each site in Appendix B.

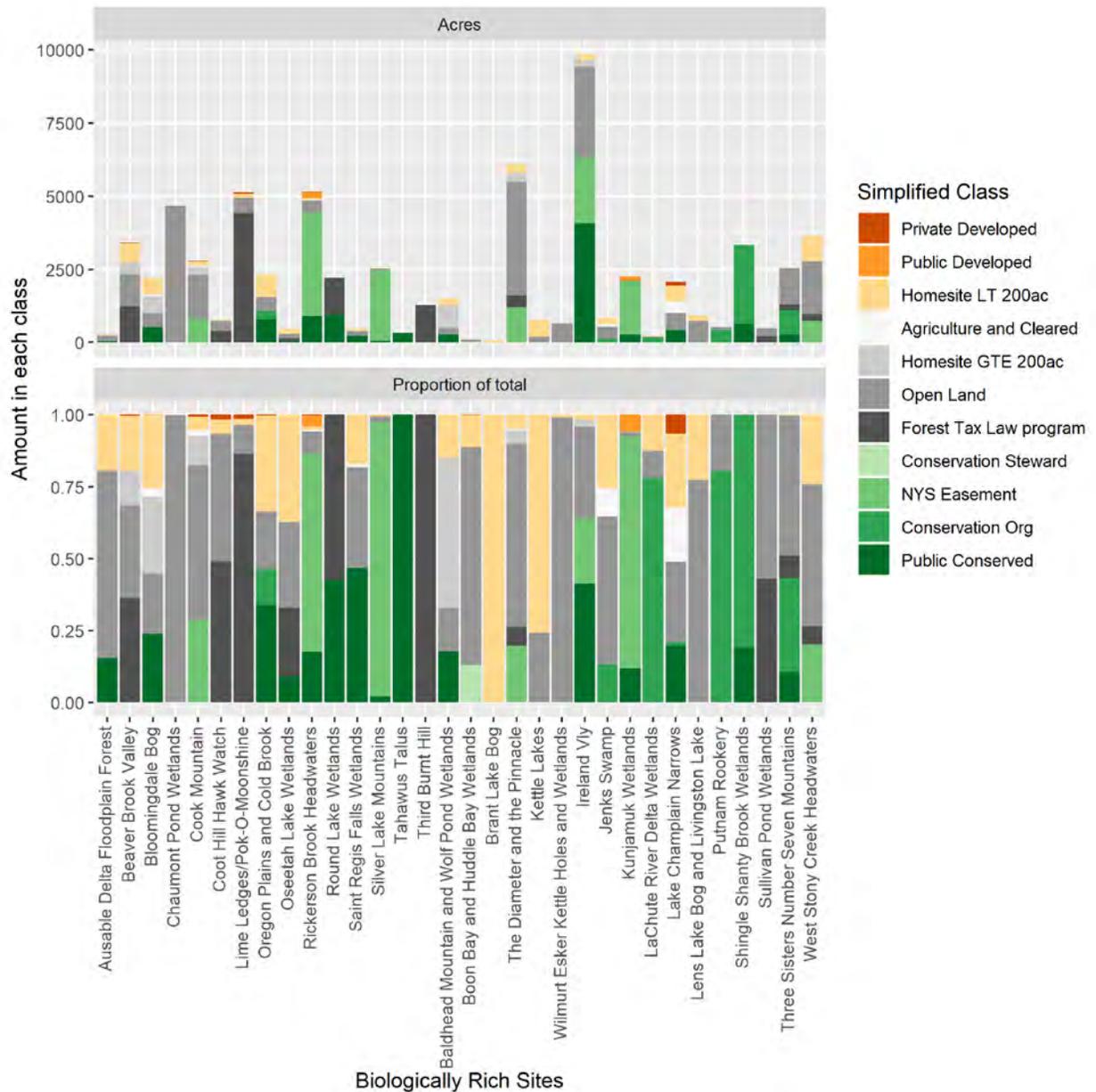


Figure 7. The current conservation status of the Biologically Rich Sites from Volume 1. The top figure shows amount in acres, bottom figure shows the relative proportion of each class.

The current conservation status of the Biologically Rich Sites (Figure 7) varies from greater than 95% conserved (Silver Lake Mountains, Tahawas Talus, Shingle Shanty Brook Wetlands) to having much higher development pressure (Brant Lake Bog, Lake Champlain Narrows). Interestingly, many sites still have considerable open space or involvement in the Forest Tax Law program (dark grays) where protection status could not be confirmed but conservation still appears to be a viable option (e.g. Ausable Delta Floodplain Forest, Chaumont Pond Wetlands, Cook Mountain, Boon Bay and Huddle Bay Wetlands, The Diameter and the Pinnacle, Jenks Swamp, Sullivan Pond Wetlands, Three Sisters Number Seven Mountains, West Stony Creek Headwaters).

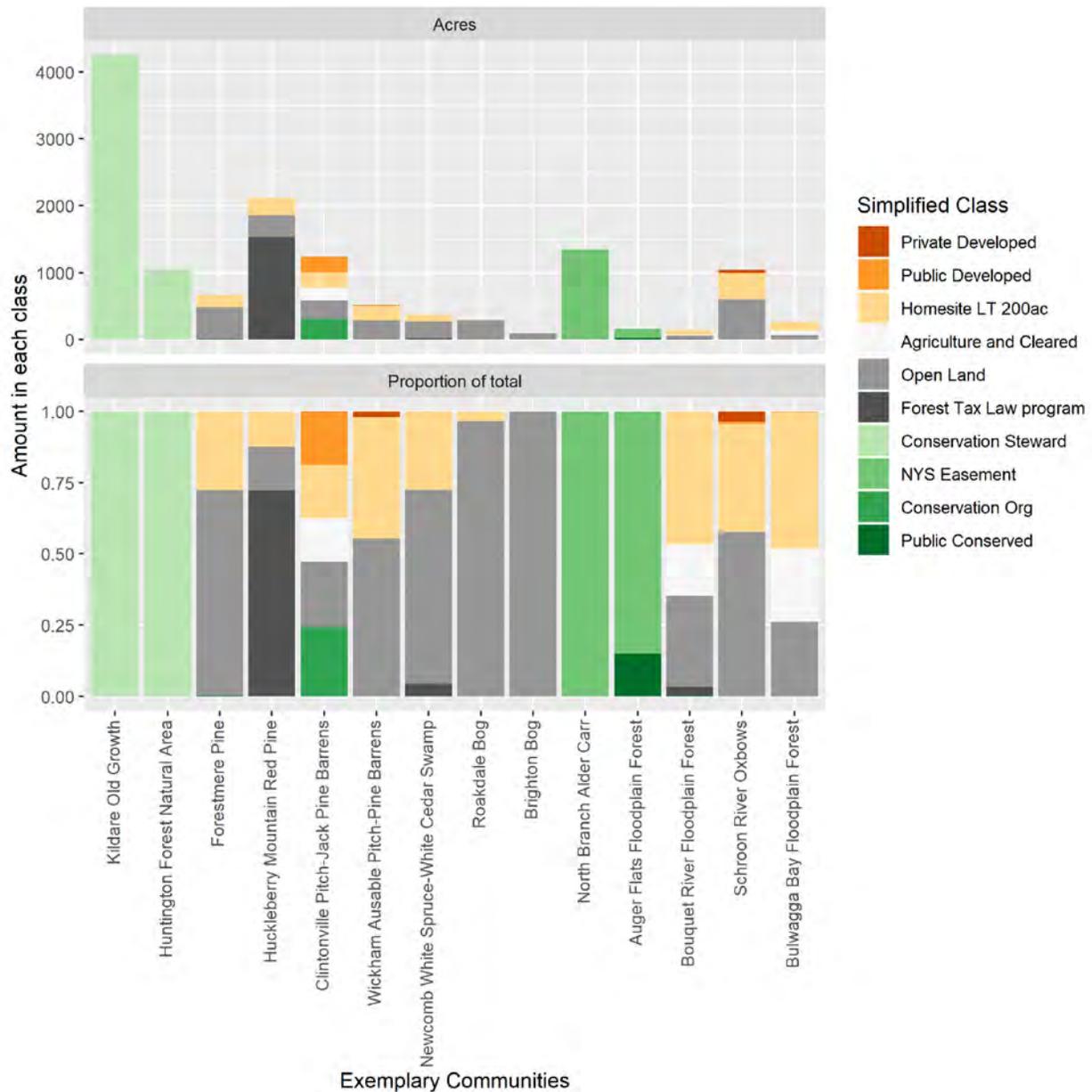


Figure 8. The current conservation status of the Exemplary Communities sites identified in Volume 1. The top figure shows amount in acres, bottom figure shows the relative proportion of each class.

The collection of fourteen Exemplary Community sites have similar patterns (Figure 8). Two sites appear to be fully under state easement or state owned (North Branch Alder Carr, Auger Flats Floodplain Forest) and two sites are privately held with conservation stewardship intent (Kildare Old Growth, Huntington Forest Natural Area). Other sites have heavy development pressure (Clintonville Pitch-Jack Pine Barrens, Bulwagga Bay Floodplain Forest). Similar to the Biologically Rich Sites (Figure 7), many of the sites have a high proportion of open private lands remaining, which continues to offer conservation possibilities (Forestmere Pine, Huckleberry Mountain Red Pine, Wickham Ausable Pitch Pine Barrens, Newcomb White Spruce-White Cedar Swamp, Roakdale Bog, Brighton Bog).

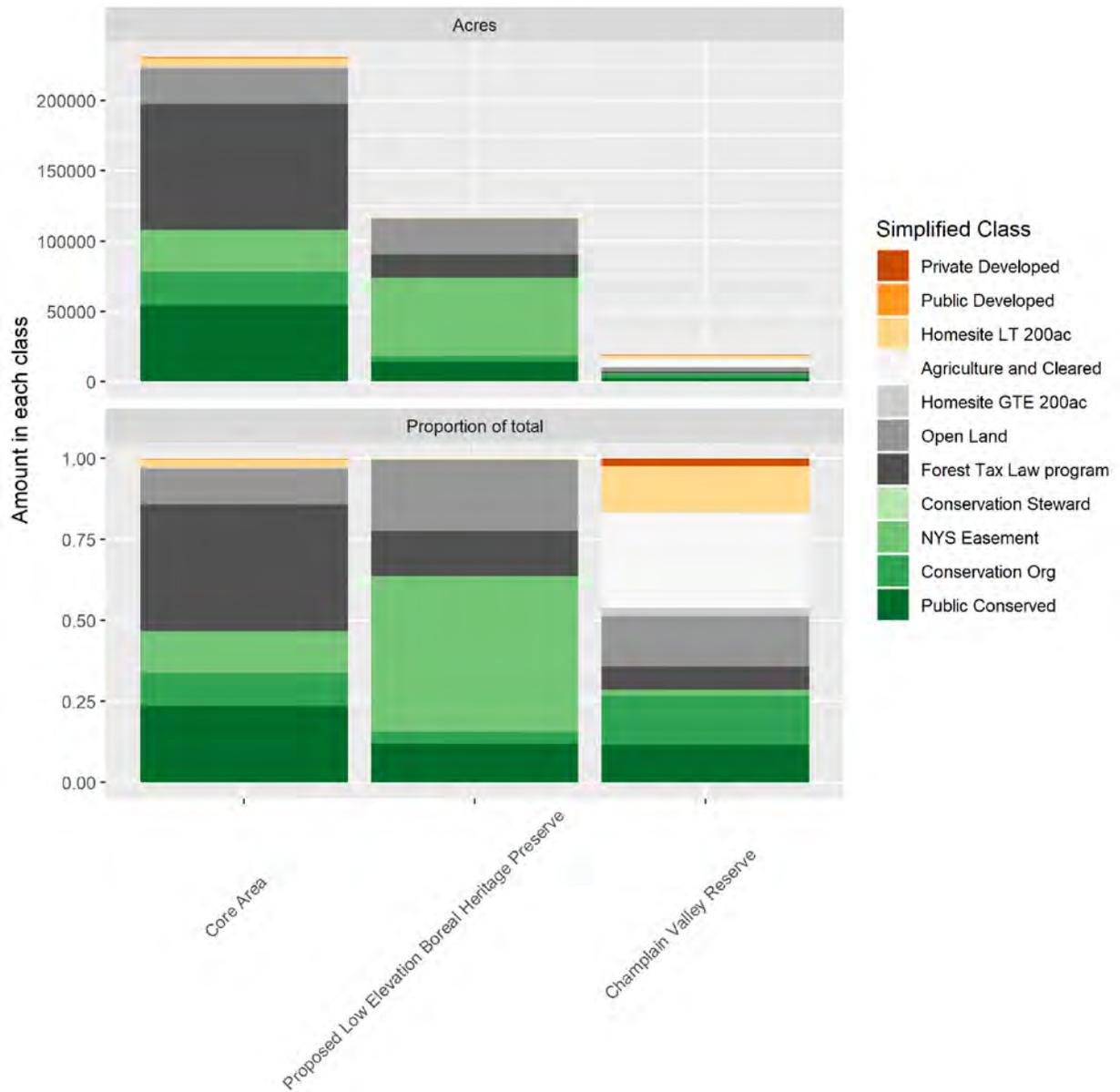


Figure 9. The current conservation status of the proposed reserves and the wolf habitat core area from Volume 1. The top figure shows amount in acres, bottom figure shows the relative proportion of each class.

The final targets discussed in Volume 1 are the two preserves and the potential wolf restoration Core Area. A large part of these sites have come under conservation protection in the past 30 years (Figure 9), particularly the Core Area and the site that was proposed as the Low Elevation Boreal preserve. The site for the Champlain Valley Reserve has had more development and has more agriculture, but nevertheless conservation action has occurred there.

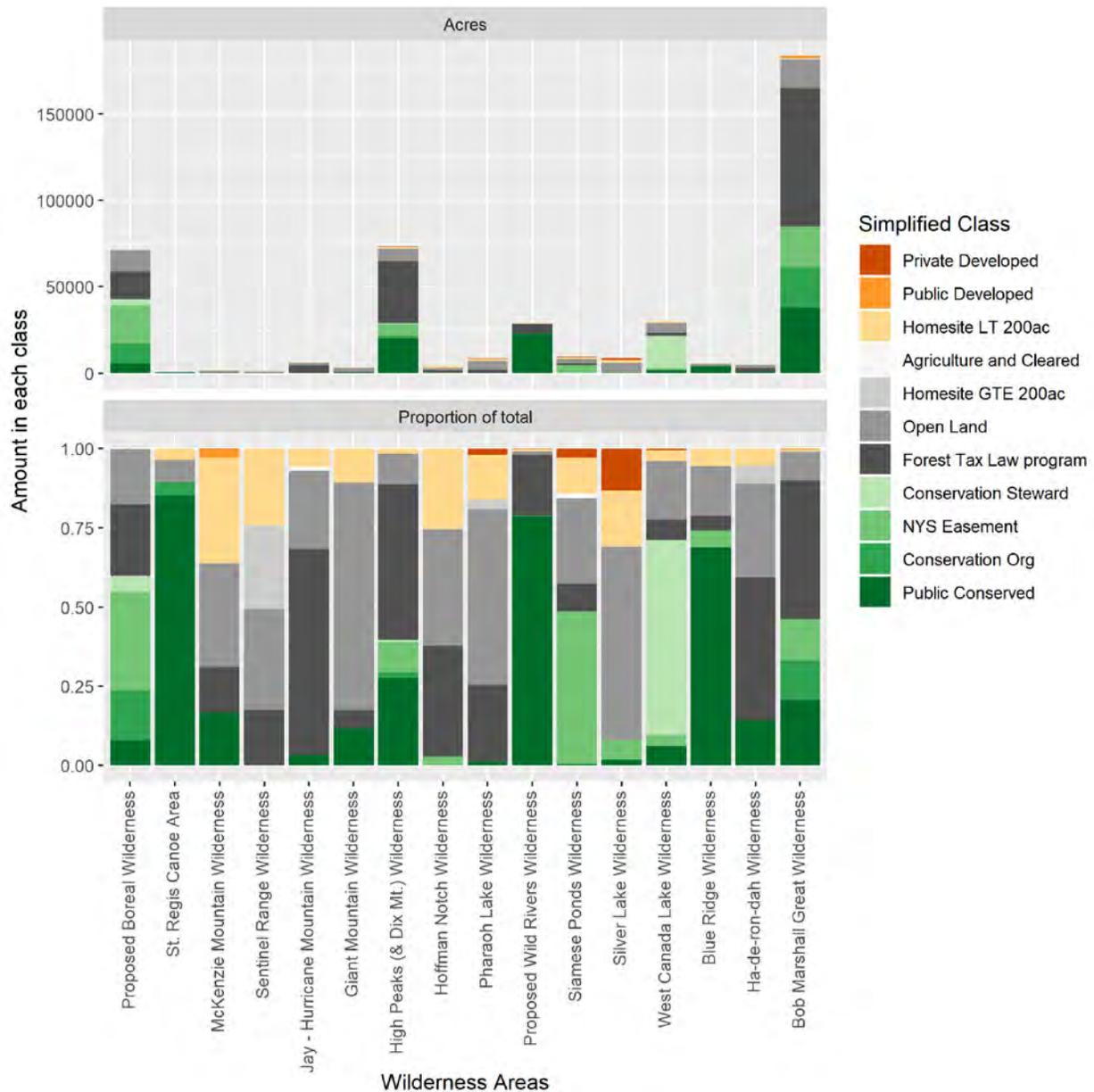


Figure 10. The current conservation status of wilderness expansions and proposed new wilderness areas from Volume 2. The top figure shows amount in acres, bottom figure shows the relative proportion of each class.

Many of the recommendations for Wilderness Area expansions had high rates of public acquisition or conservation organization action (Figure 10). The St. Regis Canoe Area had greater than 89% of its target areas conserved. While new Wilderness Areas were not designated in the process, the new areas recommended by Volume 2 had high conservation levels nonetheless. The Proposed Boreal Wilderness now has about 60% protection, the Proposed Wild Rivers Wilderness has 79%, and the Bob Marshall Great Wilderness has about 46% protection. While housing and development is common in many of the targeted areas, it does not seem to be extensive and the amount of remaining open lands is significant.

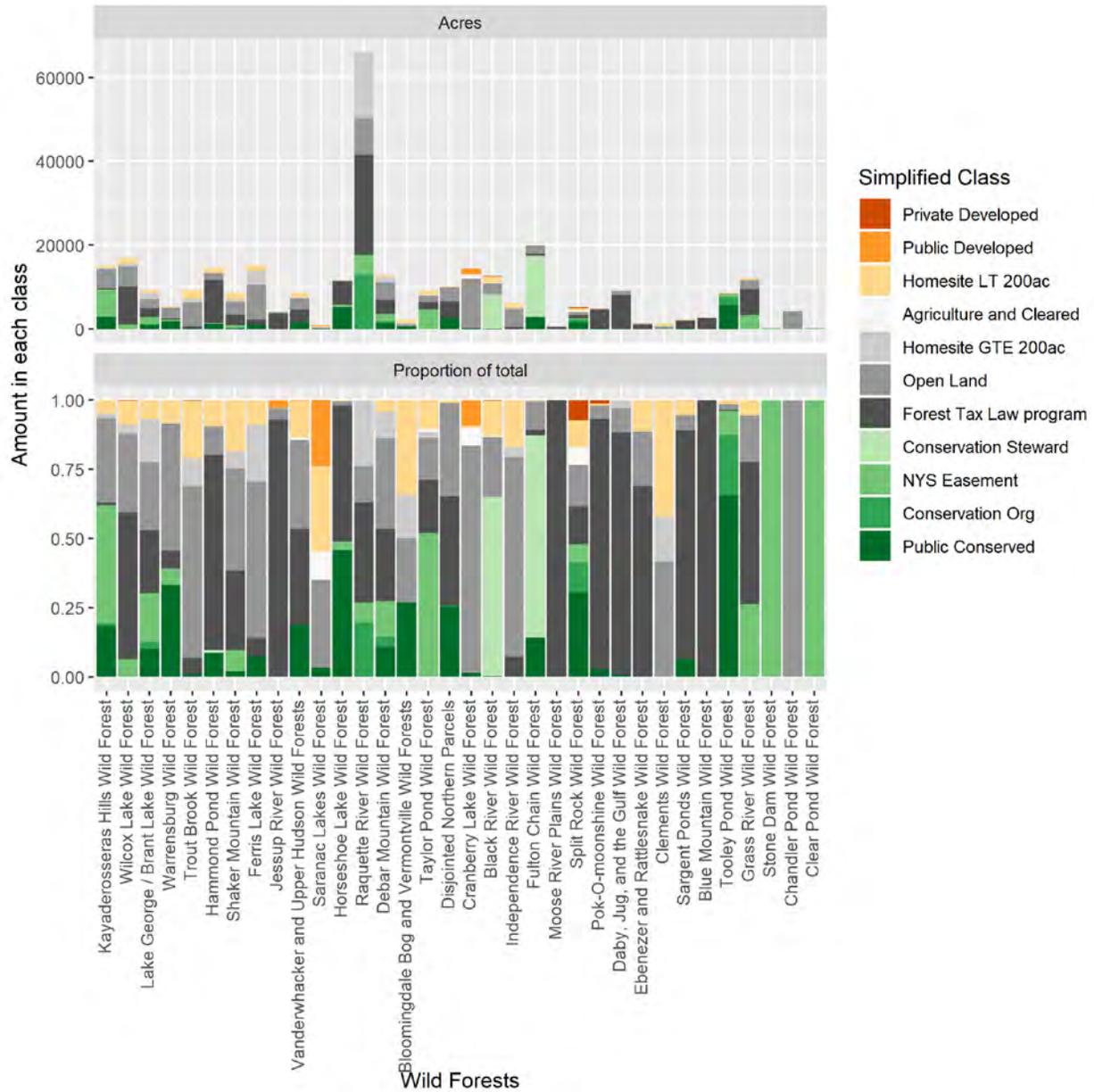


Figure 11. The current conservation status of Wild Forest expansions and proposed new Wild Forests from Volume 3. The top figure shows amount in acres, bottom figure shows the relative proportion of each class.

The current conservation status of the Wild Forests also varies with some having high levels of conservation (Figure 11), such as Tooley Pond Wild Forest (96% conserved), Stone Dam Wild Forest (100%), and Clear Pond Wild Forest (100%). Saranac Lakes Wild Forest has the highest development pressures of all the targeted areas, which makes sense since as the recommendations were focused on small areas near Ray Brook and Lake Clear, this area includes the villages of Lake Placid and Saranac Lake. Again, note the high percentage of Open Land and lands enrolled in the Forest Tax Law program (dark grays) at many of the sites. This suggests remaining potential for continued conservation action at many of the sites.

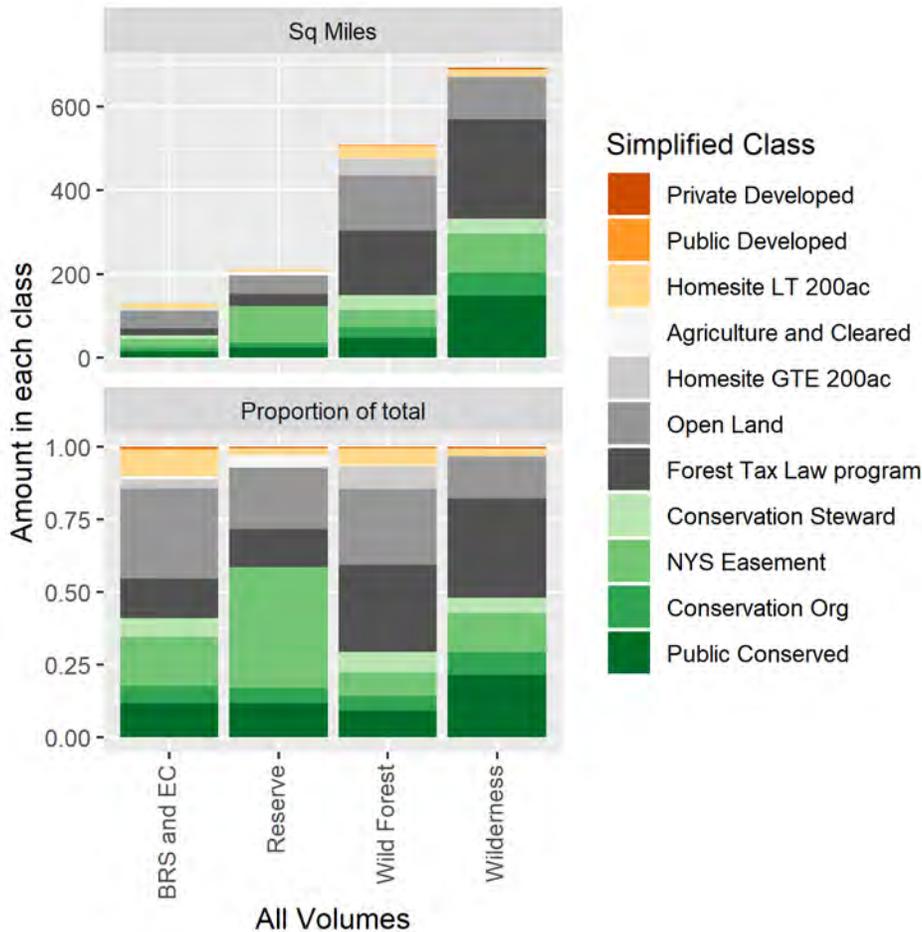


Figure 12. Conservation status across all volumes, showing the current status of the original recommendations for Biologically Rich Sites and Exemplary Communities (left bar), Reserves, Wild Forests, and Wilderness. The top panel shows amounts in square miles; the bottom shows amounts in proportion of the total.

Summarizing by each of the volumes, lands held by state conservation easement often played a large role with 17% of the targets in Biologically Rich and Exemplary Community sites (BRS and EC; Volume 1), 41% of the targets for Reserves (Reserve; Volume 1), 8% of the targets for Wild Forests (Volume 3), and 13% of the targets for Wilderness areas falling in this class (Volume 2). The amount of land picked up by DEC (fee purchases, darkest green in Figure 12) was 11.8% for BRS and EC (9,800 acres), 11.9% for Reserves (16,100 acres), 9.3% for Wild Forest targets (30,300 acres), and 21.4% for Wilderness (94,900 acres). Table 3 provides additional summary information. Redundant recommendations among volumes (Wolf Core Area [Vol. 1] overlaps with Shingle Shanty [Vol. 1], the Bob Marshall Great Wilderness [Vol. 2], and the Horseshoe Lake Wild Forest [Vol. 3]) precludes merging these data across volumes directly; we eliminate these redundancies and explore overall success further below. Because of the different recommendation intent for the wolf restoration area, numbers related to this target are not included in these summaries.